

Quality of Care and Burnout: Individual and Organizational Factors

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Aims: This symposium will focus on the association between wellbeing (occupational stress, interpersonal relationships, burnout and engagement), organizational factors (job characteristics, team work, organizational culture) and quality of care in health care professionals (HPs). Specifically, the symposium will: 1. highlight how burnout and quality of care are interrelated 2. identify the role of individual factors and the organizational context in shaping HPs' work experience and strain 3. demonstrate how complementary methodological approaches are necessary 4. argue for an organizational-level perspective in designing interventions to reduce burnout and improve quality of care. **Rationale:** One of the biggest risks in patient safety today is HPs themselves. The symposium invites both academics and practitioners to reflect on how the quality of HPs impacts on their patients' care. There is a need to strategically link HPs wellbeing and performance outcomes. Complementary qualitative and quantitative research designs have the potential to better show the relationship between the individual and organizational levels of a health care system. **Summary:** Despite the resources spent in preventing burnout across Europe, the incidence of burnout among HPs keeps increasing. Five presentations illuminate the nexus between HPs wellbeing and quality of care. We will discuss: the role of interpersonal relationships in connecting occupational stress, quality of care, and the organizational culture in nurses (Todorova et al.), the association between quality of work, burnout, and perceived quality of care of the disabled (van der Doef et al.), how goal orientation predicts burnout and engagement in emergency nurses (Adriaenssens et al.), the effects of teamwork in predicting burnout and engagement using a multilevel design (Spânuet al.) and how physician burnout can be an indicator of the organizational functioning (Montgomery).

Goal Orientation Predicts Work Engagement and Burnout in Emergency Nurses.

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Introduction: This study, carried out in 13 emergency departments (ED) in Belgium, investigated to what extent goal orientation (GO) adds to the explanation of burnout (BO) and work engagement (WE) in ED-nurses after controlling for job characteristics (demands, control and social support). **Method:** 170 out of 274 ED-nurses (RR 62%) completed the Leiden Quality of Work Questionnaire for Nurses, Goal Orientation Questionnaire, Maslach Burnout Inventory and Utrecht Work Engagement Scale. Hierarchical regression analyses were conducted. **Results:** Work characteristics and GO explained 38% and 37% of variance in BO and WE respectively. Job control and social support predicted both outcomes ($p < .001$). Job demands predicted BO only ($p < .001$). Mastery-Approach GO was related to increase in WE ($p < .001$) and a decrease in BO ($p < .05$). Performance-avoidance GO was related to a decrease in WE ($p < .01$) and an increase in BO ($p < .001$). Performance-approach and mastery-avoidance GO were not predictive for BO and WE. **Conclusion:** A mastery-approach GO is beneficial for occupational well-being while a performance-avoidance GO has a negative effect. Suggestions for hospital management are formulated.

The Inevitably of Physician Burnout: Implications for Interventions

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Abstract: This article will be a conceptual/narrative approach where I will be arguing that physician wellness researchers need to start from the perspective that burnout is the inevitable consequence of the way that medical education is organised and the subsequent maladaptive behaviours that are reinforced in healthcare organisations via the hidden curriculum. Thus, burnout is an important indicator of how the organisation (and not just the individual) is functioning. A central theme in this paper will be the degree to which the organisation (and its associated systems) are responsible for behaviour. Healthcare is an industry that pays considerable "lip-service" to systems approaches, but in practice they tend to valorise the role of the individual physician in terms of both success and failures. Thus, there is an interesting contradiction that needs to be addressed.

Job Demands, Burnout, and Engagement Among Nurses: a Multilevel Analysis Investigating the Role of Teamwork

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Background: Extensive research has investigated the impact of job demands and resources on burnout and engagement among nurses. However, few studies have used multilevel designs looking at both individual and department level variables explaining the relationship. Our aim was to investigate the main and moderating effects of teamwork in predicting burnout and engagement. **Methods:** The sample consisted of 1156 nurses in 93 departments from seven European countries. Cross-sectional survey data were collected measuring Job Demands, Teamwork within Hospital Units, Burnout and Engagement. **Findings:** Workload, emotional and organizational demands predict emotional exhaustion, depersonalization and vigor. Emotional and organizational demands were found to predict dedication also. Teamwork was not found to reduce burnout, but it was strongly associated with engagement. We found no evidence for the moderating effect of teamwork in reducing the individual perceptions of job demands. **Discussion:** Our findings suggest that interventions aiming at facilitating work engagement among nurses should address department characteristics such as teamwork and collaboration between health professionals.

Nurses Constructing and Reconstructing Interpersonal Relationships and Their Relevance to Wellbeing in Bulgarian Hospitals

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Background: Healthcare reform in Bulgaria has been on-going for two decades. We are conducting an international EC Framework 7 project: "ORCAB: Improving quality and safety in the hospital". We focus on nurses' perceptions of interpersonal and inter-professional relationships which they connect to experiences of occupational stress and quality of care. **Methods:** We conducted eight focus groups (21 nurses) in three hospitals. Data were analysed through thematic and discourse analysis. **Findings:** Themes identified from the perspective of nurses: Intensification of traditional hierarchical relationships and the creation of new ones through health reform; Being voiceless in interactions and thus in organizational issues; Negotiating the place and boundaries of the nursing profession in contrast with others; Cohesion within the profession - constructing nurses as a supportive team, minimizing differences among themselves. Interpersonal and interprofessional relationships are continuously (re)constructed through language and practices and also redefined through agency and resistance. **Discussion:** Discussion will address implication of nurses' experiences of interpersonal relationships for wellbeing and for quality of care.

Relationships Between Quality of Work, Burnout, and Quality of Care in Health Care

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Background: This study examines the relationship of quality of work (psychosocial job characteristics and organizational factors) with staff burnout and perceived quality of care provided. **Methods:** 3,981 employees of 7 organisations providing care for mentally and/or physically disabled filled in self-report questionnaires assessing quality of work, burnout, and perceived quality of care provided by their unit. **Findings:** Unfavourable individual scores on psychosocial job characteristics and organizational factors are associated with higher levels of burnout and lower quality of care scores. Moderate support for a mediating role of burnout in the association between quality of work and quality of care was found. Aggregated data on unit level also show a significant association between quality of work, burnout, and perceived quality of care provided. **Discussion:** the findings underscore that both health care staff and recipients of care may benefit from efforts to improve quality of work in health care organisations.

How Item Response Theory can Help Improve Measurement and Theory Testing in Health Psychology

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This symposium aims to showcase the benefits of Item Response Theory (IRT) for measurement and theory testing in Health Psychology. It will provide the audience with a theoretical overview of its advantages and versatility via various practical IRT applications from scale development to theory testing. Good measurement is fundamental for Health Psychology research and practice. Although IRT is often more appropriate for scale development, it is still underused in our field and many researchers are unfamiliar with its methods. As IRT is currently gaining momentum, this symposium will give the EHPS community an opportunity to better assess the benefits of IRT and discuss the research opportunities it offers. The symposium will start with a general presentation of IRT methods and their uses for scale developers compared to other techniques (C. Gibbons). An example

of using Rasch scaling for improving measurement of medication adherence will be presented next (M. Kleppe). IRT as a framework for theory testing will be illustrated by a Rasch analysis of health behaviors (K. Byrka). Non-parametric IRT applications will be discussed as an alternative strategy for scale development and validation (A. Dima). The symposium will end with a discussion of the opportunities IRT offers to Health Psychology researchers (M. de Bruin).

Conveners and Discussant Details

conveners and discussant details

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Health Performance Within the Campbell Paradigm: irt Models for Testing new Approaches in Health Psychology

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In health psychology, behaviors such as screening for cancer, calories counting or fastening seatbelts have been traditionally considered independent. Behaviors' independence is commonly judged on the basis of inter-correlations. If we, however, conceptualize health behaviors as steps of different difficulty towards achieving a particular goal (i.e., being healthy) health behaviors appear interdependent. This claim, coined the Campbell paradigm, was verified in two studies, with samples of Dutch (N = 391) and Polish adults (N = 436). A one-parameter logistic Rasch model within IRT was applied to corroborate one-dimensionality of a comprehensive health performance measure composed of behavioral self-reports. Self-reported behaviors associated with different domains such as sustenance, hygiene, and physical exercise formed a homogenous class. A more complex five-dimensional model did not predict the data significantly better than a parsimonious one-dimensional version. Predictive, divergent and convergent validity of the health performance measure was verified in the context of health-behavior relevant variables, personality traits and objective indicators of health such as body composition. Our findings speak of the psychological and formal unity of health performance that would be hard to establish with standard methods within the Classical Test Theory.

Mokken Scaling Analysis: Scale Development the Nirt way

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Many questionnaires in Health Psychology consist of ordered items (e.g. behaviors of varying difficulty, beliefs or attitudes of varying intensity) and are thus appropriately examined via IRT methods. However in some studies researchers only aim for ordinal level measurement, as some psychological constructs only claim to differentiate between respondents in terms of degree, not quantity. In these studies nonparametric IRT methods (NIRT) such as Mokken Scaling Analysis (MSA) allow more flexible modeling than parametric IRT, as they require less strict assumptions and are applicable to smaller item pools and sample sizes. This talk aims to demonstrate the flexibility of MSA in scale development in three different research contexts: assessing patient preferences (treatment beliefs in low back pain), health communication processes (HIV status disclosure), and quality of care (routine asthma management in primary care). I will give examples of both confirmatory and exploratory MSA using the mokken R package, and illustrate how it can be applied to examine the dimensionality of item sets and important item properties such as homogeneity, monotonicity and invariant item ordering. I also discuss its limitations and some ways in which NIRT results can be complemented with other analyses.

How can Item-response Theories Improve Questionnaire Research in Health Psychology?

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Questionnaire-based research is ubiquitous in Health Psychology. However a large number of widely-used questionnaire measures were developed and validated using 'classical' techniques that, when used alone, are not sufficiently sensitive to uncover important measurement issues; which may lead to inaccuracies and biases in the results of studies that rely on these measures. Modern psychometric techniques including item-response theory (IRT) can ensure that questionnaires are capable of 'fundamental measurement' potentially increasing the accuracy and reliability of Health Psychology research. This

talk will briefly introduce item-response theories, including the Rasch model, and describe how these methods may be used alongside classical techniques to improve the quality of questionnaire measures in Health Psychology. The talk will give illustrative examples of the successful application of item-response theories to develop and validate a number of questionnaires including the Hospital Anxiety and Depression Scale (HADS), the Patient Health Questionnaire-9 (PHQ-9), the Multimorbidity Illness Perceptions Scale (MULTIPLEs) and the Relationship Styles Questionnaire (RSQ).

Using the Rasch Model to Compare Medication Adherence Questionnaires

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Medication adherence questionnaires often provide heavily skewed results with limited variance, suggesting that most participants are highly adherent, contrasting with findings from objective adherence measures. We argue that one of the main limitations of the existing questionnaires is the limited range covered by the behaviours assessed. We have resolved this issue by developing a new questionnaire (the ProMAS) using IRT (the Rasch model). With use of the concept of 'item difficulty', items could be selected that better matched the behaviours performed. In the current study we compared the range of the non-adherence behaviours assessed in the ProMAS and the existing MARS. Elderly receiving medication for chronic conditions (N=370) completed both questionnaires. Results from the Rasch analysis indicated that the ProMAS covered a wider range of adherence behaviours than the widely used MARS. While the MARS only provided one item to distinguish between the 50% most adherent patients, the ProMAS provided six items. This resulted in adherence scores more in line with those obtained with objective adherence measures, showing more variance and less skewness. We conclude that the ProMAS is more capable of discriminating between people with different adherence rates than the widely used MARS, in particular in the high adherence range, illustrating the advantages of using IRT.

The Burden of Chronic Pain in Children and Adults Across the Lifespan

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Aims: This symposium aims to highlight the significant problem of chronic pain across the lifespan. Data will be presented on the prevalence, impact and cost of chronic pain amongst children aged 5-12 years. The impact of chronic pain will also be described amongst adults working in a high risk environment (prison settings). The symposium will also highlight effective psychological interventions for working with young people and adults - three controlled clinical trials for chronic pain will be presented: 1. A cognitive behavioural intervention is described for management of menstrual pain in young women with an intellectual disability. 2. A mindfulness and progressive muscular relaxation was evaluated for treatment of chronic headache. 3. A cognitive behavioural activation programme was evaluated for people with chronic low back pain. **Rationale:** Chronic pain is a significant problem in terms of personal impact and health service burden. **Summary:** Psychological research is helping us to understand the scale of the problem of chronic pain across the lifespan and to develop effective interventions. **Running order:** 1. Siobhan O'Higgins: Chronic pain in school-aged children in Ireland: Results from the PRIME-C study on prevalence, impact and economic costs. 2. Susan Kennedy: Evaluation of a cognitive behavioural programme for menstrual pain management in women with an intellectual disability. 3. John Bogue: Chronic pain among prison officers: Prevalence, impact and predictors of pain-related disability. 4. Jonathan Egan: Online Mindfulness vs Progressive Muscle Relaxation vs a combination of both as a treatment of migraine: Empowering clients in their choice of treatment to control their chronic headache. 5. Sara Hayes: Effectiveness of a CBT-based rehabilitation programme (Progressive Goal Attainment Program) for people who are work disabled due to back pain.

Chronic Pain Among Prison Officers: Prevalence, Impact and Predictors of Pain-related Disability

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Background: Prison officers work in a unique and potentially hazardous environment and are a high-risk occupational group for physical ill health and psychological difficulties. They face an increased likelihood of assault leading to acute and chronic pain conditions. The present study examined the experience of chronic pain conditions among Irish prison officers with particular reference to psychosocial predictors of pain outcomes. **Methods:** 152 Irish prison officers took part in the study with 48% of participants reporting chronic pain as defined by the International Association for the Study of Pain. **Findings:** Of the respondents reporting chronic pain, 38% of participants met the criteria for 'probable depression' while 51% met the criteria for 'probable anxiety disorder'. In regression analyses, depression emerged as a prominent predictor of poor pain outcomes, with higher symptom ratings associated with increased levels of reported pain severity and significantly greater pain related interference in their daily lives. **Discussion:** Chronic pain among prison officers appears to

be a widespread and debilitating condition. Significantly, none of the participants in the present study had availed of any psychological therapies in managing their pain despite both the significant evidence-base in support of these treatments and the high levels of co-morbid psychological distress reported by the participants.

Online Mindfulness vs Progressive Muscle Relaxation vs a Combination of Both as a Treatment of Migraine: Empowering Clients in Their Choice of Treatment to Control Their Chronic Headache.

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Background: It is unclear as to whether online mindfulness or progressive muscular relaxation (PMR) or a combination of both result in the best outcomes for people with chronic headache (Tension, Migraine & Cluster Headaches). **Method:** An online study which randomised people to one of three treatment groups; PMR, Mindfulness or combined PMR & Mindfulness (approximately 30 in each group). Groups were compared before and after 6 weeks of treatment and at one month follow-up across a number of pain, QOL & mental health measures. **Findings:** Both mindfulness and combined mindfulness with PMR performed significantly better than PMR alone. This effect was repeated across pain interference, medication usage, perceived illness threat and levels of pain catastrophization. PMR alone was more successful at lowering levels of anxiety than Mindfulness or the combined treatment. **Discussion:** These initial results suggest that mindfulness alone or with PMR may be an effective intervention to improve symptom severity and related disability in people with chronic headache

Effectiveness of a CBT-based Rehabilitation Programme (Progressive Goal Attainment Program) for People who are Work Disabled due to Back Pain

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Background: To evaluate the effectiveness of a CBT-based active rehabilitation programme in a randomised controlled trial with people who were work-disabled due to back pain. **Methods:** People (N=110) aged 18+ with non-malignant back pain who were work-disabled and had at least one elevated psychosocial risk factor (pain disability, fear-based activity avoidance, fatigue, depression or pain catastrophising) were randomised to intervention or usual care. The intervention condition comprised 10 weekly individual sessions of structured CBT-based active rehabilitation. Sessions were delivered by a clinical psychologist and focused on graded activity, goal setting, pacing activity and cognitive behavioural techniques to address possible barriers to rehabilitation. **Findings:** Results showed that those in the intervention group had significant reductions in fatigue, fear avoidant beliefs, and catastrophising post-intervention compared to controls. Those in the intervention group also had higher rates of return to full-time work and improvement in overall work status. Participants reported the therapeutic relationship and enhanced sense of control as particularly important agents of change. **Discussion:** The results suggest that this type of rehabilitation programme is beneficial in improving return to work outcomes in patients with chronic back pain.

Evaluation of a Cognitive Behavioural Programme for Menstrual Pain Management in Women With an Intellectual Disability

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Background: The aims were to develop and evaluate a theory-based cognitive behavioural therapy (CBT) programme for menstrual pain management in women with an intellectual disability. Process evaluation was conducted to examine which elements of the programme were most successful in promoting change. **Methods:** Using a mixed methods study design, the programme was delivered to 36 women aged 12 – 30 years with a Mild - Moderate Intellectual Disability. Participants were split between two conditions: (1) the CBT treatment condition (2) treatment as usual. Information was gathered on pain variables including pain impact, pain knowledge, pain self-efficacy and pain coping. Qualitative analysis of information from focus groups was analysed using thematic analysis. **Findings:** Participation in the CBT group had a positive impact by

increasing pain knowledge over time and increasing the use of wellness-focused coping strategies to manage pain in everyday situations. Key themes identified from qualitative analysis included the importance of social support in normalizing the experience of menstrual pain and in the implementation of pain management strategies. Discussion: The results suggest that a CBT programme is effective in achieving improved menstrual pain management amongst women with an intellectual disability

Chronic Pain in School-aged Children in Ireland: Results From the PRIME-C Study on Prevalence, Impact and Economic Costs

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Background: The aim of this study was to determine the prevalence, impact and economic costs of chronic pain in school-aged children (5-12 years) in Ireland. Method: Data collected from 3000 primary school children and their caregivers in Ireland. Data was collected on prevalence, impact (using the KINDL to measure health-related quality of life [HRQoL]) and healthcare costs. Findings: Overall, 9% of children aged 5-12 years reported having chronic pain, with a higher prevalence among girls and older children. In terms of HRQoL, children aged 5-8 years (n=1422) with chronic pain were significantly more likely to feel alone and not get along as well with their parents. Children with chronic pain aged 9-12 were significantly more likely to feel bored, feel alone, feel scared, feel different, worry about doing school work than children without chronic pain. In terms of cost, childhood chronic pain incurs an incremental increase in family healthcare costs of up to €500 per year. Discussion: This is the first study to explore chronic pain extensively in children in Ireland. Results suggest that chronic pain occurs in up to 10% of children and impacts on several aspects of QoL

Effective Self-regulation Strategies in Health Behavior Change

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Symposium overview abstract: Self-regulation comprises several strategies to enhance health behavior change (e.g. planning, action control), and thus promote or maintain health and well-being. This symposium aims at presenting new empirical research on the effectiveness of self-regulation for behavior change in various contexts, utilizing diverse research methods. This provides a basis for a fruitful dialogue on the future directions of research in this field. Jennifer Inauen will first discuss the need for self-regulation based on results from a diary study on unhealthy snacking that investigated intention-behavior relations from an intraindividual perspective. Aleksandra Luszczynska will then provide insight into the effects of self-efficacy and planning interventions on adolescents' physical activity and body fat. Next, Urte Scholz will present intensive longitudinal data on the reciprocal effects of mastery experience and self-efficacy, and their role in the success of an attempt to quit smoking. Corina Berli will then show results from a randomized controlled trial, highlighting potential benefits of a dyadic approach in self-regulation. In the end, Paschal Sheeran will critically reflect the session. Timetable: 1. Jennifer Inauen: Intention-behavior relations: An intraindividual perspective – 15' talk + 5' discussion 2. Aleksandra Luszczynska: Self-efficacy or planning? Effects of a change in cognitions on adolescents' behavior and body fat – 15' talk + 5' discussion 3. Urte Scholz: Reciprocal effects of self-efficacy and mastery experience during smoking cessation: A daily diary study – 15' talk + 5' discussion 4. Corina Berli: Promoting physical activity in overweight couples: Effectiveness of a dyadic action control trial (DYACTIC) – 15' talk + 5' discussion 5. Discussion by Paschal Sheeran – 10' summary + 10' plenary discussion

Promoting Physical Activity in Overweight Couples: Effectiveness of a Dyadic Action Control Trial (DYACTIC)

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Background: Health behavior change models identify effective self-regulatory skills for behavioral change, but the social

context is usually neglected. This study investigated the effectiveness of a dyadic conceptualization of action control for promoting physical activity. Methods: 121 overweight individuals and their partners were randomly allocated to one of two experimental (dyadic vs. individual action control) and two control conditions. Participants completed questionnaires at baseline (T1) and four weeks later (T2) including measures of action control and 7-day recall physical activity. Findings: Results showed that action control significantly increased from T1 to T2 and was overall higher in the experimental conditions compared to control conditions. In terms of physical activity, no overall intervention effect emerged. However, post hoc analyses revealed higher mean levels of sport activities in the dyadic intervention group compared to all other groups. Discussion: Overall, findings provide first support for the usefulness of a dyadic action control intervention, and suggest further investigation of objective measures of physical activity and secondary outcomes.

Intention-behavior Relations: an Intraindividual Perspective

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Background: A key finding that has spurred self-regulation research in health behavior change is the intention-behavior gap; people often do not enact intended behaviors. However, this has mostly been studied based on interindividual differences. It is unclear whether these relationships also hold at the intraindividual level. We aimed at investigating this at the example of unhealthy snack consumption. Methods: After completing a baseline questionnaire, N=50 students of the University of Konstanz were prompted five times a day to fill in a 7-day online diary assessing snack consumption and cognitions via their smartphones. Findings: At the interindividual level, multilevel models indicated the intention-behavior gap: differences in person-averaged intentions were not significantly associated with the amount of unhealthy snacks consumed. Intraindividual level results, however, did not. On days with stronger intentions to avoid unhealthy snacks than usual, unhealthy snacking was reported less. Discussion: The results underline the importance of behavioral intentions and of investigating behavior change mechanisms at the intraindividual level in daily life.

Self-efficacy or Planning? Effects of a Change in Cognitions on Adolescents' Behavior and Body fat

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Background: The study tested the influence of intervention promoting exercise and healthy diet on behaviors and body fat among adolescents. We evaluated the effects of three types of interventions (addressing self-efficacy, planning, and a combination of planning and self-efficacy), compared to changes in a control (education) group. Methods: Data were collected among 1258 adolescents (aged 14-18; 22.1% overweight), who were allocated to four study groups. Behavior, cognitions, body weight, height, and fat tissue were assessed at three measurement points (the baseline, 2-, and 14-month follow-ups). Findings: Significant effects on physical activity were found in the intervention groups which included self-efficacy component. A reduction in body fat at 14-month follow-up was observed in overweight girls participating in self-efficacy or combined (planning + self-efficacy) groups. Among overweight boys, a significant decrease in body fat was found in the combined intervention group. The effects were mediated by changes in self-efficacy and physical activity. Discussion: Self-efficacy was identified as the active ingredient of a healthy lifestyle promotion intervention for adolescents.

Reciprocal Effects of Self-efficacy and Mastery Experience During Smoking Cessation: a Daily Diary Study

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Background: Self-efficacy beliefs and mastery experience are assumed to develop following a reciprocal relationship. So far, however, there is a lack of studies examining this reciprocity in everyday life during a behavior change episode at the intrapersonal level. Moreover, most studies focus on self-report only, facing potential problems with shared method variance. These points were addressed in the present study. Methods: Overall, 100 smokers and their non-smoking partners completed daily diaries during the self-set quit date and 21 days later assessing mastery, smoking-specific self-efficacy and partner-rated efficacy. Cross-lagged multilevel modelling was applied. Findings: Controlling for previous day mastery experience, previous days with higher than usual self-efficacy were followed by days with higher mastery. The same pattern of results emerged for self-efficacy as outcome. These results were fully replicated when partner-rated smoking-specific efficacy was used instead of smoker-reported self-efficacy. Discussion: This study provides evidence for the reciprocal

association between self-efficacy and mastery during a behavior change episode in everyday life.

Discussion by Paschal Sheeran

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Discussion

Compensatory Health Beliefs and Health Behaviour

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Aims: The aim of the symposium is to: (a) bring together researchers that work on Compensatory Health Beliefs (CHBs) to discuss new research and developments within the area; (b) bridge the topic of CHBs with cognate areas of research into self-regulation; (c) discuss the impact of CHBs on health behaviours; and (d) discuss the application of CHB theory within different behavioural contexts (i.e. bicycle helmet use, exercise, and overeating). **Rationale:** It is now 10 years since the first publication (2004) on CHBs, which presents a good opportunity to discuss the progress of research into CHBs (in terms of theory and application) and to discuss the concept alongside other theories of self-regulation. By doing so, we stand to generate new research directions for research in this field. **Summary:** The symposium will present research looking at the application of CHB theory to a number of key health behaviours (i.e., bicycle helmet use, exercise and overeating). The presentations will delve into more detail as to how CHBs are influenced by self-efficacy, and the role that CHBs play within health behaviour theory. The role of dispositional and situational CHBs will be discussed, as will the impact of negative affect on over-eating behaviour. Finally, the symposium will also examine the predictive validity of exercise-specific CHBs and their role within health behaviour. **Running order:** 1. Compensatory Health Behaviour in Bicycle Helmet Use 2. Effects of dispositional and situational compensatory health beliefs on high calorie snack consumption 3. Negative affect as a justification for overeating 4. Southern Fried Jogging: Exercise specific compensatory health beliefs and health behaviour 5. "When I exercise regularly it is easier for me to eat healthily": The role of transfer and compensatory health cognitions in health behaviour theory

"When I Exercise Regularly it is Easier for me to eat Healthily": the Role of Transfer and Compensatory Health Cognitions in Health Behavior Theory

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Background: Usually, theories have been applied in research on single health behaviors, giving insights into that specific behavior but providing little knowledge on how individuals pursue a healthy lifestyle. The present study sought to apply the health action process approach to the prediction of healthy nutrition intentions and behavior and to test whether cross-behavior cognitions (i.e., transfer and compensatory health cognitions) explain additional variance in behaviour. **Methods:** In an online study, behavior, self-efficacy, outcome expectancies, risk perception, intentions, planning, social support, transfer and compensatory health cognitions were assessed in 259 adults. Regressions were performed to predict a) intentions and b) behavior. Sex, age, and body mass index served as covariates. **Findings:** Overall, the variables explained 29% of the variance in nutrition intentions, with behaviour-specific variables and cross-behavior cognitions making significant contributions. On the contrary, nutrition behaviour was associated with behaviour-specific variables only (i.e. planning). **Discussion:** The results provide preliminary support that cross-behavior cognitions are associated with intentions rather than behaviour. Single health behaviour theories can benefit from the inclusion of cross-behavior cognitions to explain how individuals regulate more than one health behavior.

Southern Fried Jogging: Exercise-specific Compensatory Health Beliefs and Health Behaviour

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Background Compensatory health beliefs (CHBs) are beliefs that an unhealthy behaviour (e.g. chocolate cake) can be compensated for by a healthy one (e.g. exercise). The aim of this study was to test the predictive validity of an exercise-

specific CHB questionnaire on self-reported health behaviour. Method In an online study, 625 UK participants completed the exercise-specific CHB questionnaire at two time points with a one month interval (N=212 at follow-up). Results Overall, endorsement of exercise CHBs significantly predicted vigorous exercise, fast food and alcohol consumption over a one-month period, while controlling for baseline measures. Inactive and minimally active participants endorsed significantly more CHBs than those who were physically active at both time points. Discussion: Exercise CHBs are associated with a range of unhealthy behaviours, implying that CHBs are used as a means of justifying unhealthy behaviour. Analysing exercise specific CHBs would appear to be useful in understanding physical (in)activity and other health behaviours. Further research is required to identify ways in which CHBs can be challenged to bring about health promoting behaviours.

Compensatory Health Behavior in Bicycle Helmet use

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Background: Compensatory health behavior (e.g. safer cycling without helmet) is used to compensate for risky behavior and is facilitated by self-efficacy. To which extent compensatory health behavior is influenced by self-efficacy in cyclist remained unclear. Methods: A total of 134 cyclists with different helmet wearing frequencies (occasionally (OH) or never helmet (NH)) were asked to fill out a questionnaire on their compensatory health behavior when cycling without a helmet and on their general self-efficacy. Findings: An interaction between self-efficacy and use of a helmet on compensatory health behavior was found. OH-users with high self-efficacy showed more compensatory health behavior than OH-users with low self-efficacy. This effect was not present in NH-users. Discussion: We assume that OH-users engage in compensatory health behavior, whereas NH-users do not adapt their behavior and face higher risk for accidents. These persons may require specific attention in preventive actions.

Negative Affect as a Justification for Overeating

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Background Self-regulatory conflicts involve choosing between immediate gratification (chocolate) and adhering to long term goals (a slim figure). Just like compensatory health beliefs, justifications are used to resolve such conflicts so that temporary abandonment of the long term goal is made acceptable for oneself. We examined if negative affect can serve as a justification for overeating. Methods Ninety female students participated in a lab study. Aversive pictures were shown for a longer vs. shorter duration (strong vs. weak affective recall condition). Affect was measured at baseline and after the presentation of the pictures. Next, unhealthy food intake was measured in a bogus taste test. Findings Although participants in both conditions experienced negative affect equally intensely, participants in the strong affective recall condition memorized more aversive pictures and ate more unhealthy foods compared to participants in the weak affective recall condition. Discussion These findings suggest that negative affect can serve as a justification to overeat. Also, identifying different justification types is of vital importance for understanding health behavior.

Effects of Dispositional and Situational Compensatory Health Beliefs on High Calorie Snack Consumption

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Background Compensatory health beliefs (CHBs) - beliefs that an unhealthy behaviour can be compensated for by a healthy behaviour - can be distinguished into trait- and state-beliefs. Trait-CHBs are defined as stable individual differences, whereas state-CHBs are activated in tempting situations, for example when faced with a delicious snack. The aim of this study was to test whether diet-specific trait- and/or state-CHBs are predictive for high calorie snack consumption. Method An experiment was created in which 66 women aged 16 to 50 were faced with chips and chocolate cookies as high caloric snack. Trait- and state-CHBs, habitual snacking, goal intention, hunger, thirst and the calories consumed were assessed. Results Regression analyses revealed that diet-specific trait-CHBs which include exercise as the compensatory behaviour were significantly predictive for high calorie snack consumption, over and above control variables, whereas state-CHBs were

not. However, neither diet-specific trait- nor state-CHBs which include reduced intake as the compensatory behaviour were associated with high calorie snack consumption. Discussion Results showed that trait-CHBs are relevant for the prediction of high calorie snack consumption. Future studies might want to further refine the measurement of CHBs, especially state-CHBs.

On the Interaction of Interoceptive Processes and Health – Implications for Research With Adults, Children and Psychopathological Groups

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Aims: Recent research on embodiment suggest that the body and its representations play an important role for psychological as well as physical health. In this context it is important that internal signals like one's heartbeats are centrally processed via specific pathways and both their neural representations as well as their conscious perception (interoception) provide key information for many emotional and cognitive processes. In this symposium we want to elucidate ongoing research on interoception both in healthy adults, in children and in psychopathological groups. We want to point out that interoceptive processes can be measured reliably both in adults and in children, and that they are associated with important other variables like physical activity, emotional processes or abnormal eating behavior. **Rationale:** Interoception is a topic almost neglected in health psychology as it roots in biological and experimental psychology. Nevertheless, it is of high importance for applied research and questions targeting fundamental processes related with health, e.g. its relationship to eating behavior or physical activity or its recovery during therapeutic treatment or its stability over time. **Summary:** The great variety of research on interoception should be introduced and new research avenues should be outlined. **Order:** Ellen Matthias, Anne Koch, Eleana Georgiou, Sarah weiss **Discussant:** Prof. Dr. Stefan Duschek

Interoception and Physical Activity in Children and Adolescents

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Background Undoubtedly, physical fitness is of great importance to the children's health status. Moreover, processing of bodily signals that lead to body perception plays an important role for adults in the general development of self-regulation. On the other hand, there are no relevant data available for children and adolescents. **Methods and Results** Aim of this study was to investigate whether there are differences among children regarding interoceptive sensitivity in different levels of physical activity. Therefore, within the framework of the health promotion program: "Join the healthy boat " of the university hospital of Ulm and the Baden Württemberg Foundation gGmbH, a study has been conducted with a sample consisted of third and fourth grade pupils. The results revealed a positive significant relationship between physical fitness and interoceptive sensitivity. On the contrary no correlation was confirmed related to the BMI. Those findings resulted from long-term measurements (in three days period of time), using the Actiheart. In this measur

On the Relevance of Interoceptive Sensitivity for Overweight and Eating Behavior in Middle Childhood

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Background: Previous research indicates that interindividual differences in the ability to perceive own bodily signals seems to be a crucial intrapersonal factor for disordered eating behavior and weight problems. But representative and prospective data in children is lacking and questions remain, as to whether it is a cause or a consequence. **Methods:** On the basis of two measurement points, data on interoceptive sensitivity (IS), measured by cardiac sensitivity (perception of the number of own heartbeats in three given time intervals while the actual heart rate is recorded) in 1657 children between 6 and 11 years of age were collected. Stability of the construct and its longitudinal association with different eating behaviors (assessed via parent questionnaires (CEBQ and DEBQ)) as well as with weight status were analyzed via SEMs. **Findings:** It was found that only in overweight children external and emotional eating behavior was predictive for later IS, whereas no such relation was found in normal weight children or in the total sample. **Discussion:** For the first time we could show that eating behavior and objective IS in middle childhood are prospectively related to each other. But surprisingly, our data indicate that low IS is rather a consequence than a cause of eating behavior patterns in overweight children, which suggests a possible crucial role of faulty learning mechanisms in eating behavior undermining the trust in one's body.

Interoception, Social Exclusion and Emotion Regulation

E. Matthias¹, O. Pollatos¹

Background Social exclusion is associated with adverse effects for health. The ability to regulate emotional responses to such events is therefore essential for our well-being. As individual differences in detecting bodily signals (interoceptive sensitivity) have been associated with advantages in emotion regulation, we aimed at exploring whether interoceptive sensitivity is associated with better coping of social exclusion and more flexibility in emotion regulation. **Method** The first study investigated subjective feelings in response to ostracism using a cyberball paradigm. Sixty participants were assessed who differed with respect to interoceptive sensitivity. The second study examined habitual emotion regulation processes focusing on suppression and reappraisal in 116 participants. **Results** Higher interoceptive sensitivity was accompanied by reduced negative affect during social exclusion. Interoceptive sensitivity was associated with greater use of both reappraisal as well as suppression. **Discussion** We conclude that having access to bodily signals helps reducing aversive states provoked by social exclusion, probably by the more flexible use of emotion regulation strategies.

Ocd and Interoception

S.Weiss, O. Pollatos

Background Obsessive-compulsive disorders (OCD) are characterized by intrusive thoughts or images (obsessions), which increase anxiety, and by repetitive or ritualistic actions (compulsions), which decrease anxiety. The classification of obsessive-compulsive disorders includes the idea of an overlap with anxiety disorders, especially regarding the use of repetitive rituals to decrease anxiety in the sense of a form of a maladaptive homeostatic regulation. In addition there is a common overlap with anxiety disorders and depression. Other psychiatric disorders significant differences in heartbeat perception ability have been observed in several clinical samples: Many studies (Eley, Stirling, Ehlers, Gregory, & Clark, 2004; Pineles & Mineka, 2005;) have shown that interoceptive sensitivity is closely associated with anxiety disorders. Interestingly Dunn and colleagues (2007) found that interoceptive sensitivity is reduced in depressed patients. Deficits in interoceptive sensitivity might therefore play an important role in the etiology and maintenance of OCDs. The question as to whether interoceptive sensitivity measured by a heartbeat perception task is reduced in obsessive compulsive disorders is still open. **Methods:** Based on this we conducted a study to have a closer look at the ongoing bodily processes in a sample of patients with OCD using a well-validated heartbeat perception task (Schandry, 1981). Measures included the State Trait Anxiety Inventory (STAI) and the Beck Depression Inventory (BDI). Symptoms of the OCD were assessed with the Yale-Brown Obsessive Compulsive Scale (YBOCS). The main objective of the present study was to investigate the degree of interoceptive awareness in OCD. Additionally we examined the interoceptive awareness over the time of the ongoing therapy. As former data indicated that interoceptive sensitivity is related to anxiety and depression these variables were also assessed and included as possible mediators for observed differences. Participants were recruited in the Clinic for Psychosomatic in Windach and observed during their stationary therapy. The control group was matched for sex, age and educational level. We measured the interoceptive awareness in the beginning (first or second week), in the middle (fifths or sixths week) and at the end (between eighths and tenths week) of the therapy. The protocol for the control group was in line with this procedure. **Results:** We found significantly reduced interoceptive awareness in the group of OCD patients compared to the controls. OCD patient showed poorer ability of heartbeat detection at every data collection time. Additionally there was no effect over time for the interoceptive awareness, both groups did not differ in their interoceptive awareness compared between the outcome of the heartbeat perception of the first, second and third investigation. The effects remained significant while controlling for anxiety and depression. Correlations between obsessive-compulsive symptoms, measured with the YBOCS, and the heartbeat detection was significant for the first data collection time. At the second and third data collection time no significant correlation between heartbeat detection and obsessive-compulsive symptoms could be found. **Discussion** Our results are the first to show that OCD patients have difficulties in detecting their bodily signals measured via the heartbeat detection task, an effect that remains significant even when controlling for anxiety and depression. Furthermore we found that the interoceptive awareness of the OCD patients did not improve over the time of therapy. These findings might be useful as prognostic information concerning etiology and maintenance of the disorder. In the context of therapy concepts of the OCD further studies should focus on the impact of the ability of detecting bodily signals. A next step could be to create therapy concepts that include a heartbeat detecting training, maybe combined with techniques of biofeedback to support the development of a healthier homeostatic regulation. **Conclusion** The interrelation between different levels of physical activity (low, medium, high) in school and in leisure time as well as interoceptive processes was taken into account. **Discussion and Conclusion** In conclusion, our results highlight the importance of interoceptive awareness among children and adolescents in terms of self-regulation of behavior.

A cue to Eating: Social and Biological Influences on Eating Behavior

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Aims: This symposium will (1) enhance comprehension how social and biological factors impact eating behavior, (2) uncover who is affected, (3) illustrate effects of conflicting social and biological influences, (4) target interplaying sources of social influences, and (5) suggest opportunities how biological factors might be used to improve eating behavior. **Rationale:** Unhealthy eating patterns are common and associated with a large burden of disease. Understanding the factors underlying eating behavior is essential for the prevention of diet-related diseases. Hereby, social and biological factors play an important role. **Summary & timetable:** This symposium brings together latest research results combining diary, longitudinal, and experimental data. The first

presentation (de Ridder) demonstrates who is affected by social pressures to be thin, that is dieting. Second, it is shown how the conflict between diet goal and the biological goal of eating enjoyment impacts weight (Keller). The third presentation (Sproesser) targets when social factors serve as cue to eating. Forth, it is illustrated how biological food cues attract attention in different eaters suggesting opportunities to improve eating behavior (Meule). The last presentation (Renner) complements this research by showing how depriving people from visual information can shift attention towards interoceptive cues.

Who Diets? Most People and Especially When They Worry About Food

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Background. Dieting is generally not effective in establishing weight loss and research has focused on documenting these negative consequences of dieting. Much less is known about who diets and why people diet. The present study set out to examine the hypothesis that food concerns increase the chance of considering oneself a dieter. **Methods.** Participants from a community sample (N = 1113) completed an internet survey on dieting and its demographic and psychological correlates, with a specific focus on food concerns. They also completed a 7-day snack diary to determine their food intake. **Findings.** 63% of the participants qualified as a dieter, defined as having elevated scores on the DEBQ-R restraint scale. Women and older people more often reported to diet, as did people with higher weights. In line with our hypothesis, food concerns (weight concerns and concerns about the diet-health link) were most strongly associated with dieting. Considering oneself as a dieter was very weakly related to actual snack consumption whereas food concerns were unrelated to snack intake. **Discussion.** Considering oneself as a dieter in terms of endorsing items on a restraint scale is an expression of food concerns that is virtually unaccompanied by changes in snack intake. These findings suggest a reinterpretation of the dieting concept in terms of a strategy for coping with food concerns.

Ambivalence Toward Eating and Emotional Eating Predict Weight Fluctuations: a Longitudinal Study in Four Waves

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Background: Excessive weight fluctuations pose serious challenges to people's health. Research suggests that the interplay between cognitive dietary restraint and counter-regulative overeating impairs weight control. However, there is little longitudinal research. We examined the causal influence of eating styles on weight fluctuations. In addition, the counter-regulative effects of ambivalence toward eating due to the incompatibility of the two goals of dieting and enjoying food were examined. **Methods:** In a random sample from the general population (N = 2733, 49% males in 2013) a longitudinal survey was conducted over four consecutive years (2010-2013). Self-reported weight was used to calculate the variance of (three) weight changes from one wave to the next. **Findings:** Separate regression models controlling for age revealed similar results for men and women: high levels of ambivalence and emotional eating in the beginning of the study resulted in significantly increased weight fluctuations in consecutive years. Restraint and external eating had no effect. **Conclusion:** Counter-regulative aspects, as opposed to dietary restraint, resulted in weight fluctuations. Ambivalence toward eating due to the conflict between dieting and enjoying food, as well as eating in order to cope with emotional distress, need to be addressed in order to prevent health-damaging weight fluctuations.

A Healthy Diet is Associated With an Attentional Bias Towards Low-calorie Food Stimuli

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Background: Attentional bias towards high-calorie food-cues is associated with overeating. Attentional retraining can reduce attentional bias for chocolate as well as subsequent chocolate consumption. **Methods:** Attentional bias for low- or high-calorie food stimuli was investigated in young women (N = 55) using a dot-probe task. **Findings:** Reaction times in response to dots replacing pictures of low-calorie foods were faster than in response to dots replacing pictures of high-calorie foods. Attentional bias score (reaction times to dots replacing low-calorie foods minus reaction times to dots replacing high-calorie foods) was negatively correlated with eating a healthy diet (assessed with the Diet Quality Index of the Food Frequency List), indicating an attentional bias for low-calorie foods in individuals eating more healthy foods and, vice versa, an attentional bias for high-calorie foods in individuals eating more unhealthy foods. **Discussion:** Results provide a basis for future avenues in attentional bias modification research. That is, attentional retraining may not only reduce consumption of high-calorie foods, but may also induce more healthy food choices.

Eating in the Dark: Although we eat Less, we Think we eat More

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Background: According to folk intuition, 'Eye appeal is half the meal'. This raises the question how the absence of vision or 'visual flavor' affects food perception and intake (Linné et al., 2002; Wansink et al., 2005; see Spence & Piqueras-Fiszman, 2012). The present experiment assessed food experience, perceived and actual food intake in blindfolded and non-blindfolded participants. Methods: 82 students took part in bogus ice cream taste test and were randomly assigned to either the blindfolded or non-blindfolded condition. Taste perceptions were assessed during the taste test, and actual and perceived total amount of ice cream eaten measured afterwards. Findings: Overall, participants in the blindfolded condition rated the ice cream as being more unique and interesting; they had a significantly lower intake rate (gram/minute) and ate less ice cream (total gram), $F_s(1, 81) > 25, p < .001$. Although eating in the dark lead to a reduced actual intake, blindfolded participants overestimated their intake by 122% while non-blindfolded overestimated their intake only by 40%, $F(1,81) = 8.82, p = .004$. Conclusion: Depriving participants from visual input dissociated perceived from actual eating behavior. Shifting attention towards interoceptive cues of eating may provide unobtrusive and naturalistic means to change eating behavior.

Can we eat Social Belonging? the Dynamic Interplay Between Person and Situation

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Background. Human eating behavior is regulated by multiple factors. The present study investigated how the desire for social belonging affects the consumption of a socially laden food in different social contexts. Methods: 123 participants with high or low trait need to belong took part in this experimental study. To activate the need to belong, participants experienced either a social-exclusion, neutral, or social-inclusion situation. Next, ice cream was associated with positive social relationships and consumption measured in a bogus taste test. Findings: A significant person-situation interaction was observed, $F(2,111) = 4.5, p = .01$. After being socially excluded, people with high need to belong ate significantly more ice cream than people with low need to belong. A reversed pattern emerged for the social inclusion condition while no group differences were seen in the neutral condition. Discussion: These data suggest that social effects on the consumption of socially laden food depend on the need for belongingness. While social exclusion triggers consumption in people with a high need for belongingness, the soft spot emerge for people with low need for belonging in a positive situation.

Social Exchange Processes and Health: Evidence From Dyadic Designs

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Aims: This symposium aims to present state-of-the-art research on social exchange processes in couples, with a focus on dyadic designs with implications for health and well-being. Rationale: There is only a limited number of studies with dyadic longitudinal designs in couples so far, despite the great interest in the role of social processes for physical and emotional well-being. Carefully conducted observational studies provide the basis for developing effective interventions - not only for improving physical health but also well-being in couples. Summary: First, Lüscher et al. will focus on dyadic social support effects in smoking-smoking couples after a self-set quit attempt. Rackow and colleagues will then present effects of different kinds of social support on affect and physical exercise. Afterwards, Badr and colleagues will switch to spouses social control and patients symptom management during cancer treatment. Stadler et al. will talk about another social exchange factor, companionship, in healthy couples and smoker-nonsmoker couples. Karen Rook will provide a concluding discussion. Symposium timetable: 1. Lüscher et al., Less Received and Provided Social Support is Associated with Higher Quit Success in Smoker-Smoker Couples 2. Rackow et al., Promoting Exercise Behaviour and Well-being: The Kind of Received Social Support makes the Difference 3. Badr et al., Spouse Positive Social Control is Linked with Better Patient Mood and Self-efficacy During Cancer Treatment 4. Stadler et al., Role of Companionship for Relationship and Health Outcomes: Evidence From Two Daily Dyadic Studies 5. Discussant: Karen Rook

Spouse Positive Social Control is Linked With Better Patient Mood and Self-efficacy During Cancer Treatment

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BACKGROUND: Head and neck cancer (HNC) patients experience debilitating side effects, including abnormally reduced salivation and difficulty swallowing. Intensive self-care protocols are prescribed to control side effects, but non-adherence rates are high. Spouses can encourage adherence, but the effects of spouse social control (i.e., attempts to influence

patient behavior to support adherence) on HNC patient mood and self-efficacy for symptom management are not well-understood. **METHODS:** In this mixed-methods study, 125 patients (86% male) and their spouses were recorded as they discussed a cancer-related concern of their choosing. **FINDINGS:** 68 couples chose to discuss side-effects; spouses engaged in social control in 61 of these discussions. Although spouses engaged in both positive and negative social control, only the number of spouse positive control attempts during couples' discussions was associated with better patient self-efficacy and mood after the discussions. **DISCUSSION:** Programs that teach spouses to maximize their use of positive social control tactics may boost HNC patients' positive mood during treatment and empower them to engage in recommended self-care behaviors.

Less Received and Provided Social Support is Associated With Higher Quit Success in Smoker-Smoker Couples

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Background: Availability of social support has shown positive effects across health outcomes while enacted support has shown mixed effects. Smokers who perceived high support had better quit outcomes. However, if support came from a fellow smoker they were less likely to achieve abstinence. So far, there are few studies using truly dyadic designs. Therefore, the present study aims at examining the role of received and provided support in smoking couples applying a dyadic perspective. **Methods:** Overall, 170 smokers in 85 committed couples reported their smoking behavior as well as received and provided support in a questionnaire four weeks after a self-set quit attempt. **Findings:** Between-couple differences in received and provided support were associated with continuous abstinence four weeks after a self-set quit attempt. Specifically, less received and provided support predicted a higher probability of continuous abstinence for the couples one month after their self-set quit date. **Discussion:** Results do not confirm benefits of support in the context of smoking cessation in smoker-smoker couples. Further research should clarify the effectiveness of social support for smoking couples.

Promoting Exercise Behaviour and Well-being: the Kind of Received Social Support Makes the Difference

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Background. The facilitating role of social control and support for exercising is well documented. The dual effects model of social control presumes that social control is linked to better health behaviour, but also enhances negative well-being. Receiving social support has also been found to be negatively related to the well-being of the receiver. Results on health behaviour are equivocal. The study aims at testing the possibility of transferring the dual effects model to different kinds of received social support. **Methods.** Participants (N=182; 69.1% female; age: M=34.3, SD=11.1) filled out nine weekly online-questionnaires. Received Emotional (ESS) and instrumental social support (ISS), positive (PA) and negative affect (NA), and exercise behaviour were assessed. Multilevel modelling was applied. **Findings.** Both, ESS and ISS, were positively related to PA and negatively with NA. Only ISS was positively linked to exercise. **Discussion.** In contrast to the assumptions of the dual effects model, our results show positive associations of received social support on PA and exercising, but also highlight the distinct contribution of the received ESS and ISS on well-being and exercising.

Role of Companionship for Relationship and Health Outcomes: Evidence From two Daily Dyadic Studies

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Background: Positive social interactions include companionship (i.e., pleasurable social interaction; Buunk & Verhoeven, 1991; Fischer, 1982; Rook, 1987) and social support. Despite evidence for independent contributions of both constructs to relationship and health outcomes, social support has been studied extensively while companionship has received far less attention. We provide evidence from two dyadic longitudinal studies for the important role of companionship. **Methods:** Both partners of committed couples (Study 1: N = 90, Study 2: N = 99) filled out daily diaries for one month. **Findings:** In both studies, companionate activities and support receipt occurred frequently. Daily fluctuations in companionship and support made independent contributions toward explaining emotional well-being and relationship satisfaction. In Study 2, companionship was also related to health behavior change. **Discussion:** The findings underscore the need for studying the links between companionship as well as support to relationship and health outcomes.

Improving Health Through Work Design

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Aims and rationale: Acceleration and intensification of work is reflected by an increase of health problems of the work-forces (e.g., musculoskeletal problems, depression). Interventions to protect and improve work ability and health in organizations should reach beyond an individual improvement of health behaviour and resilience. Sustainable interventions should take approaches of psychological work design into account. We aim to advance knowledge and good practice of health-oriented work design interventions in different organizational contexts. All intervention studies are grounded in work and organizational psychology. Evaluation designs are longitudinal and controlled (intervention vs. control groups). Content: The four research groups bring together applied interdisciplinary work and have a common tradition in intervention research in different occupational settings. The presented five studies will • provide evidence for changes in psychosocial work characteristics and employee health due to different work design interventions • offer insights into intervention topics and processes in practice • discuss challenges and benefits of health-oriented work design Included studies: B. Lampert, M. Weigl & J. Glaser, Work-redesign and well-being in nursing homes for the elderly: a cross-sectional and controlled-intervention study; A. Müller, B. Heiden, F. Poppe, B. Herbig & P. Angerer, Successful ageing in hospital nursing by the efficient use of individual resources – results of an intervention based on the model of selection, optimization and compensation; M. Weigl, S. Hornung, J. Glaser & P. Angerer, Well-being effects of an intervention for work re-design in hospital doctors; B. Herbig & J. Glaser, Promoting creativity and health in knowledge work – development and evaluation of a participatory intervention; J. Glaser, A. Barrech, C. Seubert & H. Gündel, Reduction of job insecurity and health promotion through leadership training in a chemical industry.

Reduction of job Insecurity and Health Promotion Through Leadership Training in the Chemical Industry

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Background: Organizational restructuring is often accompanied by job insecurity. The fear of losing either the job (quantitative job insecurity) or important job features (qualitative job insecurity) is associated with mental (e.g., psychomental distress) and somatic health impairment (e.g., musculoskeletal disorders). Methods: Objectives of our longitudinal study were to examine the relation between job insecurity and psychomental health and to evaluate effects of a leadership intervention designed to reduce job insecurity during restructuring at the production site of a chemical company. Job insecurity and health indicators (e.g., anxiety, depression) were examined by well-established measures. A leadership training was developed and customized to the organization, subsuming health-oriented work design, change-oriented leadership, and stress management. Findings: N=46 supervisors participated in the program and N=140 employees in the questionnaire study at both measurement times (T1 before, T2 after intervention). Effects of the intervention were estimated by analysis of covariance (intervention vs. control group; T1 vs. T2). Conclusions: Results provide evidence for a causal relationship between job insecurity and health impairment. Moreover, the leadership intervention alleviated job insecurity and certain health problems. Limitations and recommendations for further interventions will be discussed.

Promoting Creativity and Health in Knowledge Work – Development and Evaluation of a Participatory Intervention

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Background: Creativity is a major asset in a globalized economy but changing demands at work are also reflected in increasing psychological problems. Meta-analyses show that autonomy, complexity, learning demands and creative requirements correlate with health and creativity. We developed a participatory intervention to promote both outcomes: Create!health circles consist of a creativity training and sessions on learning demands, team work, and stressors in relation to their impact on daily work. Methods: All 36 employees of a SME in knowledge-intensive services participated in the study. In a controlled design the evaluation comprised pre- and post-analyses of work conditions. Objective creativity tests, creativity and personal initiative ratings from participants, colleagues and supervisors as well as health indicators were assessed at 4 different times. Findings: Results show positive effects for creativity as reported by supervisors and colleagues as well as for personal initiative reported by colleagues. Emotional irritation and musculoskeletal pain decreased due to the intervention. There was an increase in learning demands and autonomy in the company. Discussion: The create!health circles led to the initiation of a lot of measures in the company in a short period of time. Acceptance was high and the résumé of employees and management was very positive. Necessary preconditions for the positive results are discussed.

Work-redesign and Well-being in Nursing Homes for the Elderly: a Cross-sectional and Controlled-intervention Study

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Background: Job conditions in the field of nursing imply high risk factors for impaired well-being of employees. To analyse the associations between stressors, resources and well-being of nurses, we used a two-stage procedure including a cross-sectional study followed by a health-oriented work-redesign intervention. **Methods:** In Study 1, based on self-reported questionnaires we analysed the working conditions and indicators of psychophysical health of N=1848 nurses. In Study 2, based on data of shift observations and questionnaires a participatory work redesign intervention was conducted over a period of eight months using a baseline and follow-up assessment in the intervention (N=14) and control unit (N=14). **Findings:** Study 1 revealed significant associations between work stressors and caregivers' psychophysical health. Concerning procedural outcomes in Study 2, an unexpected change of leadership negatively influenced the organization and implementation of the developed solutions. Work-related stressors (e.g., time pressure) significantly increased in the control but not in the intervention ward at follow up evaluation. **Discussion:** We will discuss study limitations as well as specific critical challenges and implications for the evaluation of work-redesign interventions in nursing homes for the elderly.

Maintaining the Well-being of Employees – Results of a Randomized Intervention Based on the Model of Selection, Optimization and Compensation.

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Background: Available studies show that action strategies like selection (S), optimization (O) and compensation (C) (SOC, Baltes and Baltes, 1990) can help to maintain the well-being of employees. Aim of the present study is to assess the effects of a new established SOC-training-program. **Methods:** A stratified randomized control group design was used. 70 nurses working in a Community hospital (94% women; mean age 43.7 year; SD = 9.6) have been enrolled in the study. 36 nurses formed the intervention group (IG), 34 formed the control group (CG). Based on the SOC-model each participant of the IG selected a goal to cope more effectively with an important personal stressor at work (S), developed an action plan to achieve this goal in an optimal way (O), and considered potential alternative strategies to compensate for potential external or internal hindrances (C). **Findings:** The majority of participants in the IG reported that they transferred SOC strategies in their daily work (about 85%), and were able to translate their personal project successfully (about 75%). Pre-post comparisons showed a significant improvement of well-being in the IG compared to the CG over time ($p < .05$). **Discussion:** Results suggest that the well-being of employees can be effectively promoted through the SOC-training. In addition, the study yielded important insights about critical success factors of SOC-trainings.

Well-being Effects of an Intervention for Work Re-design in Hospital Doctors

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Objective: Adverse work conditions contribute to impaired well-being in hospital doctors. Drawing on a participatory work-design intervention that aimed to improve work conditions and quality of patient care, we investigated if the intervention also revealed effects on hospital doctors' well-being. **Methods:** A prospective, controlled intervention study was conducted in two surgical and two internal departments of a hospital. N=57 hospital doctors participated. The intervention was a structured, participatory intervention based on health circles; in which doctors actively analysed problematic working conditions, developed solutions, and initiated their implementation. Work conditions and well-being were assessed by standardized questionnaires. **Results:** Several work-related problems were identified and solutions were implemented. At follow up, doctors in the intervention department reported improved work conditions, i.e., supervisory feedback, participation, personnel and material improvements. In regard to well-being, small effects for emotional exhaustion and work engagement were identified. **Conclusions:** Our participatory intervention was associated with effects on doctors' well-being. The presentation concludes with a discussion of limitations and needs for further research.

Supporting People With Long-term Conditions

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Long-term conditions including cardio-metabolic, severe mental illness such as bipolar disorder and neurological disorders carry the risk of poor wellbeing, social isolation and distress. Associated with these problems are poor care and self-care, resulting in poor health outcomes and shortened life expectancy. The symposium will bring together researchers from the UK, Canada and Pakistan with the aim to highlight some of the challenges which people with serious long term conditions experience and the factors which impact on the wellbeing of these groups: integration of service provision for people with dementia, the role of social support in relation to adherence in adults with type 2 diabetes, and in adolescents with type 1 diabetes, the role of personality factors and stress on quality of life in diabetes, and finally the role of a simple training programme in improving services for people with severe mental illness. The latter is a much-neglected group with a life expectancy frequently estimated at 20 years shorter than that of people without severe mental illness. The symposium will provide a practical overview on the range of factors and interventions relevant to wellbeing and medical outcomes for a wide range of serious long term conditions, in a range of cultural contexts.

The Impact of Illness Centrality on Social Support in Adolescents With Type 1 Diabetes

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Background: Type 1 diabetes (T1DM) is a lifelong metabolic disorder managed with insulin, diet and exercise. Self-care for adolescents with T1DM does not occur in isolation; a large part of it takes place in a social world. The behaviour of peers can have a significant impact on the adolescent's self-care and subsequent health outcomes. Therefore, the aim of the study was to qualitatively investigate the impact of diabetes management on peer relationships in adolescence. Methods: Semi-structured interviews were conducted with 12 adolescents aged 15-18 with T1DM, recruited through a local outpatient clinic. The interviews were analysed using thematic analysis. Findings: Differences between male and female adolescents were noted in the impact on relationships. Themes such as "being different" and "being a burden" were identified. Females were more comfortable than males to involve and inform friends in relation to their self-care. An influential factor appeared to be "being a burden," whereby the females felt that their disease restricted what activities their friends were able to engage in. Males often hid their diabetes due to a fear of stigmatisation. Discussion: It is concluded that a social support intervention focusing on the normalisation of diabetes and open discussion about illness management with peers has the potential to improve life with diabetes for both females and males.

Training Practice Nurses to Care for People With Severe Mental Illness to Reduce the Risk of Cardio-metabolic Disease

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Background: People with severe mental illness (SMI) have poorer physical health and die at a younger age than the general population, due to a high risk of cardiovascular disease and a threefold increased risk of developing diabetes. Practice nurses presently have little contact with people with SMI but are skilled in providing care for people with long term physical conditions. We report on the evaluation of a novel four hour course for practice nurses to provide appropriate screening and lifestyle advice for this disadvantaged group. Methods: The course designed for practice nurses was offered on 12 occasions to practice nurses (n=105). Mental health nurses were also invited to attend. The course covered the need for glucose testing as part of the annual screening for all patients. Practice nurses' perceived knowledge and skills were measured pre and post training using questionnaires. Findings: Perceived knowledge of physical care for people with SMI and related skills improved significantly (pre: mean 27.2, SD 6.9, SEM .85; post: mean 38.5, SD 4.7, SEM .57, p<0.0005). Responses to open-ended questions and an e-mail questionnaire around 2 months after the training indicated that many nurses improved their practise. Discussion: The short course has made a difference to practice nurses' self-perceived knowledge and skills, and facilitated changes to daily practise.

Psychological Correlates of Self-care, Distress and Quality of Life of Patients With Diabetes: Preliminary Findings

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Background: Psychological correlates i.e. stress, personality traits, coping strategies and readiness to change were studied as predictors of self-care, distress and quality of life in patients with diabetes. Methods: A sample of 44 patients with

equal numbers of type I and type II diabetes was recruited from the diabetes clinics of major teaching hospitals in Lahore, Pakistan. The Rahe and Holmes Stress Inventory, Big Five Personality Inventory, Coping strategies Questionnaire, Readiness to change Questionnaire, Diabetes Distress Scale, the Summary of Diabetes Self Care Activities, and Quality of Life Scale were used for assessment. Individual assessments were carried out at the premises of the clinics. Findings: Type II patients scored higher on neuroticism and type I patients scored higher on foot care and were significantly more distressed compared to type II patients. High stress and distress were correlated. Personality traits and coping strategies were significantly correlated with distress, self-care and quality of life. Regression analysis identified avoidance focused coping ($B = -.49$; sig) and blood sugar ($B = .46$; sig) to be significant predictors of quality of life. Discussion: Findings highlight personality traits and coping strategies as important factors in adherence to self-care strategies and improving quality of life in patients with diabetes.

Towards Integrated Services for Dementia: Formal Carer Perspectives

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Purpose: Past research has identified the need for integrated dementia services in order to enable people with dementia to stay independently at home for as long as possible. However, the formal carer role within an integrated framework of service delivery has not been well articulated in practice. This paper presents qualitative understandings of the experiences of formal carers working within the context of an integrated dementia service delivered in the North of England. Methods: Experiences of formal carers working within the service were captured via observations, semi-structured interviews and focus groups. Findings: Working within an integrated care context brings individual, social and organisational rewards and challenges to the role of the formal carer, in terms of: delivering flexibility and responsiveness, providing continuity of care, ensuring cross-organisational commitment and acquiring skills, knowledge and expertise. Discussion: To facilitate the successful delivery of integrated care, the emerging role of the formal carer needs to be more clearly articulated and supported within the service context.

General Perception of Diabetes, Social Support and Outcome Expectancies Related to Adherence Among People With Type 2 Diabetes

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Background: Diabetes is a chronic disorder and requires life style changes which include diet, medication, exercise, regular check-ups, social support and adherence to the regime instructed by health care providers. This study aimed to examine general perceptions of diabetes, related social support and outcome expectancies in relation to adherence among type 2 diabetes patients. Method: A cross-sectional survey recruited 100 diabetes patients from Government Hospitals. The Multidimensional Diabetes Questionnaire and Summary of Diabetes Self-Care Activities were used. Findings: General perceptions of diabetes, social support and outcome expectancies were positively related to adherence. General perceptions and outcome expectancies predicted levels of adherence. No gender differences were found for general perceptions, social support, outcome expectancy and subsections of adherence except for smoking with males more likely to smoke. Discussion: The findings highlight the importance of counselling and education to aid adherence to treatment recommendations for diabetes patients attending hospital clinics.

Different Perspectives on Social Support and Health Determinants

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Aims: Social support plays a crucial role in health-promotion and well-being. This symposium aims to examine how health determinants are affected by social support. Rationale: To obtain a complete picture of social support and its associations to health determinants and well-being, findings from different perspectives, i.e. mobilization, provision and receipt of support will be presented. Summary: First, Laireiter et al. identify mobilizers' and providers' characteristics to predict the willingness to provide support. Keller et al. apply social support to the planning of health-behavior, investigating how individual and dyadic planning strategies are used in adopting pelvic-floor exercise, followed by Burkert et al. who examine the dependence of individual planning or received social support on further interpersonal determinants in the context of smoking cessation. The influence of received social support for the promotion of self-efficacy and physical activity in patients with obesity is presented by Hohl et al. Finally, referring to the providers' perspective, again, König et al. show how invisible support may affect providers' well-being. 1. Laireiter et al., 2. Keller et al., 3. Burkert et al., 4. Hohl et al., 5. König et al.

The Role of Partners' Support and Smoking Status in the Context of Smoking Cessation

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Smoking cessation is affected on the individually and interpersonally level. This study combines both levels, investigating effects of action planning and received social support on changes in cigarette consumption by considering smokers' intentions and partner's smoking status as moderators. In this longitudinal study, a sample of 122 smokers living in a partnership was recruited in an emergency department. All central variables and covariates were assessed at t1 by questionnaire; the number of cigarettes smoked per day was again assessed in a one month follow-up-telephone interview. Data were analyzed by means of 3-way moderation analyses. Action planning was related to an increased number of cigarettes smoked per day in individuals with higher intentions and non-smoking partners. Received partner-support was related to a decreased number of cigarettes smoked per day in individuals with higher intentions and a smoking partner. The results underline the importance of the interpersonal level in the context of smoking cessation. Partners' support and smoking status should be considered in research and practice of health promotion.

Received Partner Support, Self-efficacy and Their Interplay: Changes in Physical Activity in Patients With Obesity

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Increasing regular physical activity (PA) plays a central role in the treatment of obesity. Unfortunately, patients have difficulties engaging in PA. In accordance with the enabling hypothesis of support, we assumed that received partner support increases patients' self-efficacy (SE) beliefs and therefore fosters their PA. A total of 91 patients (age 21-74; 78% female) with obesity reported on received partner support, motivational, maintenance, and recovery SE and PA at 3 assessments, each 3 months apart. Autoregressive models with cross-lagged effects showed that T1 support was associated with increases in T2 motivational and maintenance SE. However, T2 support was related with decreases in T3 maintenance and recovery SE. Finally, T1 motivational and maintenance SE had positive effects on T2 PA, whereas T2 recovery SE was related with higher T3 PA. Results indicate that received support may initially be helpful by increasing motivational and maintenance SE. Later, when sustaining PA, support may weaken maintenance and recovery SE. Patients with obesity may thus benefit more from support at earlier stages of behavior change while at later stages other resources may be needed.

Individual and Dyadic Planning as Correlates of Pelvic-floor Training: a Study With Prostate Cancer Patients

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Radical prostatectomy, a standard treatment for prostate cancer, is often associated with sequelae including urinary incontinence. To control incontinence, regular pelvic floor exercise (PFE) is recommended. Individual and dyadic planning and their potential reciprocal relations were investigated as predictors of adoption and maintenance of regular PFE. In contrast to individual planning, dyadic planning refers to creating plans together with a partner on when, where, and how the individual target person will implement a new behavior. A total of 209 prostate-cancer patients participated in a study with 4 post-surgery assessments, each 2 months apart. Individual and dyadic planning, PFE, and incontinence were assessed by self-reports. Results from autoregressive models revealed sequential effects of both planning strategies on PFE while controlling for incontinence. Individual planning was related with increases in PFE at T2 whereas dyadic planning was associated with increases in PFE at T3. Findings indicated that individual planning seemed to be more important for adoption and early maintenance PFE, whereas dyadic planning seemed more important for medium-term maintenance of PFE.

Provision of Invisible Support: the Other Side of the Coin

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Social support, which is unnoticed by the receiver (i.e., invisible support) seems to be most beneficial for the receiver's well-being. The provider's perspective has rather been neglected so far. This study sheds light on how invisible support is related to the provider's well-being. Around a self-set quit attempt we examined 106 smokers and their non-smoking partners, assessing their smoking-related received and provided support to determine the degree of invisible support. In addition, the partner's relationship satisfaction and three weeks after the smoker's quit attempt the partner's positive and negative affect were assessed. Invisible support was negatively related to partners' positive affect. Relationship satisfaction moderated the relation of invisible support and negative affect: For partners with higher relationship satisfaction more invisible support was related to less negative affect, while for partners with lower relationship satisfaction no such association emerged. The study's results emphasize that invisible support might have emotional costs for the provider. Relationship satisfaction seems to serve as a protective factor.

Mobilization of Social Support in Everyday Stress – Coping, Emotions and Social Competencies as Moderators

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How people present their need and cope with stress as well as characteristics of the supporter are critical in receiving positive or negative social support. This assumption was tested in a vignette-study manipulating the way a close friend communicates his/her needs (directly vs. hidden) and deals with his/her (work-related) stress (actively vs. passively). The helper's (reader of the vignette) emotions generated by the help-seeker as well as his/her social skills and his/her willingness to give positive or negative support was measured by questionnaire. 300 subjects, 77% females in early adulthood ($M=29.1$; $SD=10.2$ years), participated. Offering positive support was related to active coping, sadness and compassion with the friend's stress, perceived consternation, social orientation and reflexivity, being glad of the trust received and not feeling scared of own helper-stress. Non-/negative support most often was shown by males who perceived anger because of passive coping, had low social orientation and felt intensively sad. Getting social support in stress is not an easy task; people in need should be trained psycho-educationally to fully use their social resources without risk.

Self-regulation and Pain Medication: Evidence About Risk Factors for Development of Painkiller Dependence

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Symposium aims: • To present emerging evidence about self-regulatory influences on painkiller dependence • To identify the basis for potential interventions to improve self-regulation of painkiller use • To apply multiple areas of health psychology theory • To promote multidisciplinary, collaborative research and practice Rationale: Dependence on over-the-counter and prescribed analgesic (painkiller) medication is a significant and growing self-regulatory problem that requires an integrated, multidisciplinary approach, drawing on multiple areas of health psychology including theories of addiction and the psychology of pain. Summary: The symposium will present complementary presentations focusing on different aspects of a multi-faceted problem, including studies of social, cultural, cognitive and behavioural risk factors for self-regulatory problems in pain self-medication. Timetable: Presentation 1: Introduction to the symposium and presentation of an inter-disciplinary, self-regulatory model of painkiller dependence (Presented by James Elander) Presentation 2: Cultural dimensions of painkiller use and dependence (Presented by Omimah Said) Presentation 3: Impulsivity and self-compassion: cognitive, behavioural and metacognitive self-regulatory influences on painkiller dependence (Presented by Mayoora Dhokia) Presentation 4: Anxiety about pain and pain medication as predictors of painkiller dependence among people with chronic pain (Presented by Hayley Page) Discussant session (Chaired by Claire Hampson)

Impulsivity and Self-compassion: Cognitive, Behavioural and Metacognitive Self-regulatory Influences on Painkiller Dependence

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Background: Cognitive and behavioral facets of impulsivity are well established risk factors for addiction to alcohol, nicotine and illicit opiates, but less is known about their influence on the use of prescribed opiates among people with chronic pain. Methods: Painkiller users ($n=259$) recruited from the general population completed self-report measures including impulsivity and self-compassion, and then undertook a behavioral measure, the delay-discounting task, to quantify impulsive decision making. Findings: Hierarchical multiple regression revealed impulsivity and self-compassion to make significant independent contributions towards the prediction of painkiller dependence. Delay discounting scores predicted painkiller dependence independently of self-reported impulsivity, and self-compassion moderated the influence of pain frequency on painkiller dependence. Discussion: Cognitive-behavioral interventions for painkiller addiction among

people who are self-medicating for chronic pain could aim to improve self-regulation by reducing impulsive decision making and increasing self-compassion.

Introduction to the Symposium and Presentation of an Inter-disciplinary, Self-regulatory Model of Painkiller Dependence

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Background: In many countries the mortality and morbidity associated with misuse and abuse of prescribed medication exceeds that associated with illicit drug use. However, for people with pain, dependence on painkillers is not a straightforward substance use disorder, for pain medications have positive functions and abstinence is often not a realistic goal. **Methods:** This presentation will set the scene for the symposium by a) reviewing the multidisciplinary nature of the problem, b) clarifying concepts and definitions, and c) presenting a preliminary self-regulatory model of painkiller dependence, based on a survey of painkiller users in the general population. **Findings:** Multiple regression revealed multiple independent influences on painkiller dependence, including more frequent use of prescription painkillers (standardised Beta weight 0.21), prior personal and family addiction problems (Beta weight 0.31), and pain acceptance (Beta weight -0.29). The preliminary model has three pathways towards painkiller dependence: a) more severe pain leading to greater painkiller use, b) risk factors for substance-related problems irrespective of pain, and c) self-regulatory responses to chronic pain. **Discussion:** The model can guide interventions and further research, and the findings suggest pain acceptance-based interventions could help to prevent and treat painkiller dependence by improving self-regulation of self-medication for pain.

Discussant Session

C. Hampson¹

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This session will aim to draw out and integrate inter-disciplinary issues, and engage the audience in a discussion of issues including: • Ways that health psychologists can contribute to improving self-management and self-regulation among people with painful chronic conditions • Development of evidence-based public health and health education interventions to improve public knowledge and guidance about pain self-medication and risks of painkiller dependence • Development of specialist treatment services for people with chronic pain conditions who are also addicted to pain medication • Improving understanding of cultural influences on self-regulation and self-management of pain • Tailored interventions and treatment approaches for different cultural and clinical settings

Anxiety About Pain and Pain Medication as Predictors of Painkiller Dependence Among People With Chronic Pain

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Background: Anxiety is a key factor in the pain-avoidance model of chronic pain, and could help to understand how people use painkillers in response to chronic pain. This study examined the roles played by anxieties about pain and pain medication in the development of painkiller dependence. **Methods:** People with chronic pain conditions recruited from online chronic pain forums completed questionnaire measures of pain anxiety, concerns about pain medication, and painkiller dependence. **Findings:** Pain anxiety, especially fear of pain, and concerns about need for medication were the strongest independent predictors of painkiller dependence. Those factors also mediated the influence of exceeding recommended doses of prescribed painkillers. **Discussion:** For people with chronic pain conditions, anxieties about pain and concerns about pain medication are important influences on the development of painkiller dependence, and could be targeted by interventions that aim to improve pain self-regulation by reducing anxiety and reducing unfounded concerns about addiction to pain medication.

Cultural Dimensions of Painkiller use and Dependence

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Background: Painkiller misuse, abuse, and dependence are international problems, but attitudes and beliefs about pain and self-medication for pain, as well as access to painkillers, differ significantly between different cultures and different countries. **Methods:** A large scale, international online survey of attitudes and beliefs about pain, and patterns of painkiller

use and dependence, among over 1,500 people with pain in the UK, US, Australia, New Zealand, Germany, Egypt, China and Hong Kong. Findings: There were significant differences between countries in painkiller misuse, abuse and dependence (multiple p values <0.001), with the highest rates in Egypt and the lowest in the UK. Those differences were only partially explained by national differences in painkiller availability, but were partially accounted for (mediated by) national differences in attitudes to pain, pain medication, and self-medication. Discussion: Prevention and treatment initiatives for painkiller dependence should take account of beliefs and attitudes related to pain and self-medication, which influence the risk of painkiller dependence in different ways in different cultural contexts.

Social Support and (chronic) Pain: its Impact Upon Well-being and Psychosocial Functioning Across the Life-span

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Aims: This symposium highlights the role of social support (SS) on (chronic) pain (CP) across the life-span, involving a range of life dimensions, e.g., school functioning, relational quality and functional autonomy. It will also stir up the discussion on the implications of a life-span perspective for SS interventions to promote pain patients' quality of life and well-being. **Rationale:** CP often has a huge toll on individuals' well-being and SS may play a pivotal role in protecting and promoting it. The role of SS has been under-investigated in the context of pain, especially from a life-span perspective. **Summary and Timetable:** The first two presentations (P1 & P2) will explore the role of SS on child/adolescent pain; P1 shows the buffering role of teachers' SS on the adverse effects of pain severity on school functioning and P2 describes desire for, frequency and characteristics of peer SS of teenagers with CP. P3 & P4 explore the role of SS on (older) adults' pain; P3 explores the association between a partner's motivation to provide SS and relational quality and well-being; finally, P4 highlights the role of formal SS on the promotion of functional autonomy of elders in pain.

P2 -To Befriend or Not: Naturally Developing Friendships Amongst a Group of Teens With Chronic Pain

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Background: Adolescent friendships are a major source of social support but teens with chronic pain may have friendship challenges. We aimed to quantify the desire for, frequency and characteristics of peer support friendships amongst teens with chronic pain. **Methods:** An online descriptive study in adolescents with chronic pain captured internalizing behaviors, support from existing friends, and questions on peer-to-peer friendships. **Findings:** Despite 85% of teens being interested in meeting another with chronic pain only 32% developed a friendship. Amongst those who established a friendship 92% rated feeling understood as the greatest benefit. These friendships were highly characterized by pain talk, and were short term, and rarely integrated into existing friendships. **Discussion:** Feelings of belonging are critical during adolescence. Teens with chronic pain often feel misunderstood, but before clinicians actively recommend peer support amongst this population further research is needed. Negative outcomes such as co-rumination and overly solicitous behaviors may be risks. Strategies to address social support needs of teens with chronic pain will be discussed.

P1: Teacher Autonomy and Competence Support may Buffer Against School Absenteeism in Children Reporting Severe Pain

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Background: Based upon Self-Determination Theory, the current study investigated the association between child/adolescent pain severity and school functioning, and the buffering role of teacher support of child autonomy and competence. **Methods:** As part of the 2009-2010 Flemish survey of the Health Behaviour in School-aged Children study, 10650 children/adolescents completed questionnaires assessing pain, disability, school absenteeism, academic achievement, school-related pressure/satisfaction, bullying experiences, and teacher's autonomy and competence support. **Findings:** Analyses showed that greater pain severity was associated with worse school-related functioning. Interestingly, perceived teacher support of competence and autonomy moderated the impact of pain severity upon school absenteeism. Teacher competence support was also found to protect against the harmful effects of severe pain upon instances of bullying experiences at school. **Discussion:** The current findings suggest that teachers' support of child autonomy and competence may buffer against the adverse effects of pain severity upon school functioning. Implications for school-based interventions will be discussed

P3 -Partners' Social Support: Does Motivation Matter in Coping With Chronic Pain?

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Background: Pain is not a private experience, it affects spouses too. However, little is known why partners are distressed and how partners impact patient outcomes. The current study aimed at investigating associations between partners' motivation to help and partner/patient outcomes. Method: 48 couples, recruited through patient groups, in which one partner (36 female patients; Mage = 52.98) has chronic pain participated. Questionnaires were administered to assess affect, life satisfaction, anxious and depressive feelings and relational quality. Additionally, partners completed an adapted version of the Motivation to Help Scale. Findings: This study indicates that partners who help for autonomous reasons report better well-being, less distress and better relational quality than partners who help out of external or internal pressure. Effects are explained by a higher relational need satisfaction and experiencing less helping exhaustion. Partners' helping motivation also affects patients' relational quality, but only for those with high pain intensity. Discussion: Results will be discussed in the context of Self-Determination Theory. Directions for future research will be outlined.

P4-Formal Social Support for Autonomy/dependence of Elders in Pain: the Mediating Role of Physical Functioning

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Background: Chronic pain (CP) is prevalent among elders and usually associated with high functional disability. Formal social support for autonomy/dependence promotion (PPA/PPD) influences pain experiences. However, little is known about the processes underlying this relationship. Thus, we aimed to explore the mediating role of physical functioning (PF) in the relationship between PPA/PPD and pain among older adults with CP. Methods: 118 elders (Mage=82) with CP completed the Formal Social Support for Autonomy and Dependence in Pain Inventory (Matos & Bernardes, 2013), the Brief Pain Inventory (Cleeland, 1989) and the PF scale of the 36-SF Health Survey (Ware & Sherbourne, 1992). Findings: PF partially mediated the relationship between PPA/PPD and Pain Disability. Higher PPA predicted lower pain disability and part of this effect was accounted for by PF ($B=-.767$, $p<.001$ decreased to $B=-.485$, $p<.01$). Higher PPD predicted higher pain disability and part of this effect was also accounted for by PF ($B=.889$, $p<.01$ decreased to $B=.597$, $p<.05$). Discussion: These results highlight the importance of considering the functions of PPA/PPD in managing elders' CP experiences.

Risk of Bias in Health Behaviour Change Trials: Evidence, Practices and Challenges

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Aims: To discuss the various sources of bias in health behaviour change (HBC) RCTs; causes and strategies to overcome these; and how to proceed and enhance the quality of the evidence-base of HBC interventions. Background: Results from randomized controlled trials (RCTs) can be threatened by multiple sources of bias. Reviews suggest that behavioural trials have a relatively high risk of bias. It is largely unclear whether this is due to poor trial design, incomplete trial reports, or because instruments for assessing the risk of bias do not map well on health behaviour change trials. Summary: We will present the studies included in a special issue of Psychology and Health. An overview will be provided on sources of bias and strategies for reducing the risk of bias in RCTs evaluating the effectiveness or cost-effectiveness of interventions. Two speakers will examine specific sources of bias, namely differential attrition and content/context of controls groups. Finally, after a brief overview of the results of the complete special issue, all speakers contribute to a discussion on how to proceed to enhance the quality of the evidence-base provided by HBC RCTs.

Context Effects and Behaviour Change Techniques in Randomised Trials: a Systematic Review Using the Example of Trials to Increase Adherence to Physical Activity in Musculoskeletal Pain

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Objective: To describe and explore the effects of contextual and behaviour change technique (BCT) content of control and

target interventions in clinical trials. Design: Review and meta-analysis of 42 trials from a Cochrane review of physical activity in chronic musculoskeletal pain (Jordan, Holden, Mason, & Foster, 2010). Main Outcome Measures: Two researchers coded descriptions of target and control interventions for (a) 93 BCTs and (b) whether target and control interventions shared each of 5 contextual features (practitioners' characteristics, patient-practitioner relationship, intervention credibility, superficial treatment characteristics e.g. delivery modality, and environment). Quality of study reporting was assessed. Effect sizes for adherence to physical activity and class attendance were computed (Cohen's d) and analysed separately. Results: For physical activity outcomes, after controlling for reporting quality, larger effect sizes were associated with target and control interventions using different modalities ($B = -.34, p=.030$), target and control interventions involving equivalent patient-practitioner relationship ($B=.40, p=.002$), and target interventions having more unique BCTs (i.e. more BCTs not also in the control) ($B=.008, p=.030$). There were no significant effect moderators for class attendance outcomes. Conclusion: Contents of control conditions can influence effect sizes and should be considered carefully in trial design and systematic reviews.

Differential Attrition in Health Behaviour Change Trials: a Systematic Review and Meta-analysis

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Objective: Attrition is a common problem in health behaviour change (HBC) trials. When the degree of attrition differs between treatment conditions, then this is called differential attrition and is regarded as a major threat to internal validity. The primary research question of this study was: How often and to what degree does differential attrition occur in HBC trials? Design: A systematic review and meta-analysis of a random selection of HBC trials ($k=60$). We meta-analysed the relative attrition rates using a random-effects model and examined the relationship between the relative attrition rates and potential moderators: the amount of human contact in delivery and the intensity of the intervention/control condition, the type of control condition, and the follow-up intensity and duration. Main Outcome Measures: Relative attrition rates. Results: The average attrition rate was 18% ($SD=0.15$; median=0.15) in the intervention and 17% ($SD=0.13$; median=0.13) in the control conditions. The estimated average relative attrition rate was 1.10 (95%CI: 1.01-1.20, $p=.02$), suggesting an overall higher attrition rate of 10% in intervention conditions. This relative attrition rate was not related to any of the potential moderators. Conclusion: There is indication of a slightly higher amount of attrition on average in the intervention conditions of HBC trials.

Addressing the Risk of Bias in Health Behaviour Change Trials: an Overview and Case Study

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Objective: It has been suggested that health behaviour change (HBC) trials are less rigorously designed than –for example– drug trials. Is this due to poor trial design, incomplete trial reporting, or incompatibility between risk of bias assessment criteria and HBC trials? Design: An overview of the risk of bias literature is used as a framework against which the design process of a multi-site, cost-effectiveness trial of an HIV-treatment adherence intervention is compared (case study). Main Outcome Measures: Common risk of bias strategies that (1) could be implemented or (2) could not be implemented; (3) Alternative/additional strategies applied; (4) Arguments for discrepancies between the framework and case study. Results: Most of the common risk of bias strategies could be implemented. Alternative strategies were developed for minimizing the risk of performance bias and contamination. Several additional, trial-specific risk of bias strategies were identified. Conclusions: It seems that HBC trials can be developed more rigorously and reported more comprehensively. Yet, HBC trial designers may face specific challenges that require alternative/additional measures for reducing the risk of bias. Adoption of the approach presented by other HBC trial designers may contribute to better trial design, reporting and publication of the data required for tailoring risk of bias assessments to HBC trials.

Discussion: Risk of Bias in Health Behaviour Change Trials: do we Need Agenda for Research and Research Practice?

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¹Health Psychology Institute of Applied Health Sciences

In this discussion, we will briefly explain the findings from the other studies included in the special issue, and the final editorial to which all authors contributed.

Risk of Bias in Trial-based Economic Evaluations

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Objective: The objective of this article is to give first an overview of the risks of bias in trial-based economic evaluations, and second to identify how key sources for bias can be revealed and overcome (bias-reducing strategies) in future trial-based economic evaluation in the field of health psychology. **Design:** Narrative reviews discussing a particular source of bias in trial-based economic evaluation and bias-reducing strategies. **Results:** The different forms of bias are presented, and assigned to a particular trial phase. A distinction is made between pre-trial biases, biases during the trial and biases that are relevant after the actual trial. All potential forms of bias are discussed in detail and strategies are shown to detect and overcome these biases. **Conclusion:** In order to avoid bias in trial-based economic evaluations, one has to be aware of all of the possible forms of bias and all stakeholders have to examine trial-based economic evaluations in a rigorous and stringent manner. This article can be helpful in this examination as it gives an overview of the possible biases which researchers should take into account.

Addressing Stigma, Promoting Health and Wellbeing: Challenges and Opportunities in Relation to Interventions for Stigmatised Health Conditions

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Negative stereotypes, behaviours and attitudes present many challenges for people living with various mental and physical health conditions. Stigma can introduce additional co-morbidities for the individual such as low-mood, low self-esteem, stress, anxiety, sleep deprivation and even suicidal ideation. Public stigma contributes to poor access and reduced uptake of health care supports and services and compromises concordance with necessary treatments and other preventative interventions. This symposium presents health issues and conditions that are commonly stigmatised such as depression, tobacco addiction, and overweight and obesity. It aims to report the lived experiences of individuals confronted with a stigmatised health issue, barriers to providing effective care by health professionals and challenges and opportunities of health promotion activities that are attenuated by stigmatised perceptions of the health condition. Recommendations are made on how to improve current interventions through promoting empathy and inclusivity, building better education and training as well as informing policy and decision-making in specific cultural contexts and societal settings.

Smoking, Pregnancy and Stigma in England: Challenges of an Incentivised Smoking Cessation Programme

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Smoking is understood to be the primary cause of preventable morbidity and premature death in the UK. In Northamptonshire, UK, rate of smoking among adults was 20.9% (~ 144,607 people) in 2011/12. Among pregnant women, rate of smoking at time of birth was higher in Northamptonshire (16%) compared to the national average (13.2%) in 2011/12. Figures suggest the need to generate new knowledge and understandings on how to safely and effectively help women, particularly those living in the margins of society, with tobacco addiction. This presentation discusses how pregnant women who smoke face multiple layers of stigmatization in relation to gender, age, and socio-economic status and how these act as either facilitators or barriers to accessing services. A mixed quantitative (cross-sectional analysis) and qualitative (in-depth interviews) approach was applied to assess aggregated effectiveness of the program and understand individual-level positive and negative experiences of the program. Findings report gendered influences on smoking such as partner influence, socioeconomic impact of lone-motherhood and individual, societal and structural stigma surrounding mothers that smoke.

Reducing Stigmatising Barriers to Physical Activity: Findings From a Workplace Health Incentive Programme in England

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Stigma associated with overweight and obesity is a barrier to engaging in regular physical activity. Overweight and obese individuals tend to engage less in physical activity due to personal and public perceptions of being 'fat', despite the well-established positive physical and psychological health outcomes of physical activity. This study presents a workplace health promotion scheme that encourages people to be more physically active through an organisational incentives programme. The main objectives of this 'health reward scheme' are to encourage employees to adopt positive health behaviours through incentive-based motivation. To evaluate the effectiveness of the programme, a comparative pre- and post-intervention trial (N=100) was conducted, using ANOVA analysis adjusted for demographics and baseline characteristics. Follow-up interviews are analysed thematically. Findings presented will include before and after measures of physical activity levels, health and wellbeing, pro-social behaviours and testimonials of successes and challenges. Adopting an inclusive and supportive approach in built environments such as the workplace can reduce stigma-related barriers to physical activity.

Perceived Stigmatisation in Patients With Depression in Pakistan: a Qualitative Analysis

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The stigma associated with depression is a major concern for patients with depression. Patients experience the double burden of poor mental health as well as stigma associated with mental illness. The study explored stigmatized experiences of patients with major depression through case studies. In-depth interviews were conducted with patients (N=3; Age range=25-40 yrs.) living with major depression. Data was analysed by applying an interpretative phenomenological approach. The analysis revealed that individuals frequently experience negative attitudes from family members, relatives and friends; harsh temperaments and intolerance of husbands; discriminatory comments the generic public and social exclusion and isolation. Participants expressed that family members perceived them as burdens both emotionally and financially. It was also reported that stigma impacted on access to health services. Findings highlight the significant impact of mental illness stigma in Pakistan on health service utilization patterns and behaviours. There is an important need to address negative public perceptions of major depression through educating families, community and health professionals in primary care health settings.

The Influence of Beliefs About Causes of Depression on Perceived Stigma and Social Distance in Iranian Adolescents

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Depression frequently first emerges during adolescence. Evidence suggests that young people's knowledge about causes of depression, preventative strategies and treatment are important factors in seeking timely professional help. However, a significant barrier to seeking out care is the perceived stigma surrounding mental illness, particularly in non-Western cultures. In this study, Iranian adolescents (N=1984, Age=12-17 yrs) were presented with a vignette depicting a character with depression. Approximately half the adolescents correctly recognised depression as the problem. Participants also rated the likelihood of different causes of the problem. Perceived stigma was predicted by causal attributions to upbringing, bad luck and mental illness, whereas the most significant predictors of personal social distance were causes under the affected person's control, such as the 'normal ups and downs of life' and 'bad character'. It is important to address beliefs about causes of depression as part of a mental health literacy programme in order to reduce stigma associated with common misconceptions of mental illness improve health seeking behaviour in adolescents.

"Others Might see it as Someone who has Been Bewitched": Comparing Constructions of Mental Health and Approaches to Treatment in Zambia and the United Kingdom

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While a number of grass-roots, NGO and government campaigns have attempted to dispel myths surrounding mental illness, evidence suggests that people living with mental illness still experience heightened stigma and discrimination. This study examines commonalities and differences of mental illness stigma in Western (UK) and Non-Westernised (Zambia) societies. In-depth, semi-structured interviews were conducted with Mental health workers in the UK and in Zambia to explore various constructions of stigma and mental illness based on their professional and community experience. A number of commonalities were identified in the stigmatised constructions of mental illness in the UK and Zambia and their impact on help-seeking and help-receiving patterns and behaviours was explored. Our analysis revealed stigmatising perceptions of

mental illness emerged out of specific cultural contexts. In Zambia, the imposition of dominant models of Westernised psychology was not adequate to counter these stigmatising perceptions and practices. Improved understandings of organic, traditional meanings and understandings of mental illness were identified as ways forward to tackling stigma.

How Should Psychologists Model Socio-economic Influences on Health Behavior Patterns?

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Convenor & chair: Nelli Hankonen; University of Helsinki, Social Psychology Unit, Unioninkatu 37, 00014 Helsinki, Finland, nelli.hankonen@helsinki.fi. Discussant details: Martin Hagger; Curtin University; Health Psychology and Behavioural Medicine Research Group, School of Psychology and Speech Pathology, Curtin University, GPO Box U1987, Perth, Western Australia 6845; Martin.Hagger@curtin.edu.au. Aims: 1. To discuss the potential of research on socioeconomic status (SES) and health behavior to increase intervention effectiveness across socioeconomic groups. 2. To discuss the relevance of measuring SES when investigating behavioural regulation mechanisms. 3. To present diverse empirical studies that will demonstrate how sociostructural/SES measures can be combined with health psychological theories. 4. To demonstrate moderation and mediation effects of SES in relation to psychological antecedents of health behaviour. 5. To discuss future directions of how to model socio-economic influences in health psychological research. Rationale: Socioeconomic status (SES) is a key determinant of health and health behaviours, yet, only recently have health psychology researchers explicitly included SES in their investigations. APA task force on SES in 2006 called for increased focus on SES in psychological research, and governments increasingly target efforts to decrease socioeconomic health inequalities. Summary: This symposium provides examples of how health psychological research meaningfully incorporates sociostructural aspects in its models, and discusses what value this can provide in enhancing our understanding of health psychological processes in various demographic groups and the potential of increasing intervention effectiveness to reduce health inequalities. Timetable: • Prof. Charles Abraham • Prof. Mark Conner • Dr. Benjamin Schuez • Dr. Nelli Hankonen • Discussant: Prof. Martin Hagger

Exploring the Relationship Between Socioeconomic Status and Cognitions in Modelling Antecedents of Condom use

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The potential of measures of socioeconomic status, gender and educational/lifestyle aspirations to enhance the predictive utility of a theory of planned behaviour model of condom use was assessed. Analyses of survey data from 824 sexually active sixteen year olds tested three hypotheses. First, social structure measures will correlate with behaviour-specific cognitions that predict condom use. Second, cognition measures will not fully mediate the effects of social structural indices and, third, the effects of cognitions on condom use will be moderated by social structure indices. All three hypotheses were supported. Socioeconomic status, gender and aspirations accounted for between 2% and 7% of the variance in behaviour-specific cognitions predicting condom use. Aspirations explained a further 4% of the variance in condom use, controlling for cognition effects. Mother's socioeconomic status and gender added an additional 5%, controlling for aspirations. Overall, including significant moderation effects, of social structure indices increased the variance explained from 20.5% (for cognition measures alone) to 31%. Social structure measures should be investigated in addition to cognitions when modelling antecedents of behavior.

Moderating Effect of Socioeconomic Status on the Relationship Between Health Cognitions and Behaviors

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Background: There is an established link between socioeconomic status (SES) and performance of health behaviors with more health protective and fewer health risking behaviors in higher SES groups. Purpose: This research is novel in testing the moderating effect of SES on the relationship between intention, self-efficacy and subsequent behavior. Methods: Effects were tested on data from three prospective correlational studies examining smoking initiation in adolescents (N = 826); breastfeeding in primiparous women (N = 202); and physical activity in working adults (N = 509). Results: Despite examining different behaviors, samples, time intervals, and measures of SES, each study showed significant interactions between intention and SES in predicting behavior. In all three tests the intention-behavior relationship was attenuated among individuals from lower SES groups. No moderation effects of SES were found for self-efficacy. Conclusions: The intention-health behavior relationship can be attenuated in lower SES samples. This finding may contribute to our understanding of SES differences in health behaviors.

What Explains the Socioeconomic Status gap in Youth Physical Activity?

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Background: We have a limited understanding of factors that explain socioeconomic differences in physical activity (PA) and sedentary behaviors: Studies have investigated a narrow range of determinants at a time, and so far only few investigated whether SES moderates determinant-behaviour associations. **Methods:** A range of known psychological, social and environmental determinants for PA and screen time, in line with the COM-B model domains of capability, opportunity and motivation, were measured among Finnish vocational and high school students (N= 659), including validated measures for the behaviours. **Results:** Significant differences between vocational and high school students were found in 13 out of 18 PA determinants, e.g. less PA self-monitoring, lower injunctive norms and intentions among vocational school students. There were fewer socioeconomic differences in the levels of screen time determinants. Associations to behaviours were however largely similar between groups. **Conclusions:** The results help explain SES differences in health behaviours and aid in building better targeted interventions that are sensitive to socioeconomic differences in the mediators of the intervention effect.

Illness Experience and the Socioeconomic Environment: Primary Care Supply and Illness Perceptions in Older Adults

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Background: The common-sense model (CSM) assumes that illness perceptions determine individual adjustment to illness. In previous research, symptoms such as functional limitations and individual factors predicted illness perceptions, but the role of cultural and socio-structural factors outlined in the CSM has received less attention. This study examines the role of primary care supply in illness perception development. **Methods:** 6-month longitudinal study in 271 older adults with multiple illnesses. Functional limitations and illness perceptions were assessed using the SF-36 PF and B-IPQ. Multilevel analyses were used in which district-level primary care supply was matched to individual data. **Findings:** Functional limitations predicted identity, consequences, coherence, concerns, and emotional response illness perceptions. Primary care supply moderated the impact of functional limitations on identity and emotional response, with better supply acting as a buffer. **Discussion:** Primary care supply affects illness perceptions, mainly through interacting with functional limitations. This buffering effect suggests a pathway how socio-structural factors impact on individual illness experience.

Patient-reported Outcomes in Patients With Ischaemic Heart Disease

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This symposium, titled "Patient-reported outcomes in patients with ischaemic heart disease", will address participants' awareness and understanding of health-related quality of life assessment in cardiology by 1] explaining the value of patient-reported outcomes in patients with ischemic heart disease, 2] describing international normative values for the SF-36 in patients with ischemic heart disease, 3] discussing data on the HeartQoL questionnaire, a new core health-related quality of life questionnaire for patients with ischemic heart disease, and 4] hearing a cardiologist's perspective of assessing health-related quality of life patients with ischemic heart disease.

Clinical Relevance of Patient-reported Outcomes – the Cardiologists' Perspective

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Reductions in cardiovascular disease (CVD) mortality and morbidity are intended as major targets in cardiology. However, patient-reported outcomes (PROs) such as symptoms of angina or dyspnoea and improvement of health-related quality of

life (HRQL) are increasingly accepted as treatment targets for patients with CVD. An important issue is whether information for health care decision making can be derived from HRQL assessment and analyses. We found that increased mortality and poor HRQL scores in patients with ischemic heart disease are associated making information on the relative impact on HRQL of different CVD diagnoses and treatments important. We have found that assessment of HRQL in routine clinical practice to be of limited value in making initial treatment decisions but provides clinical cardiologists with useful additional information about a patient's perception of comprehensive treatment and the impact of different interventions for the same disease. The major issue remaining is whether HRQL provides sufficient valuable information for cardiologists in routine clinical practice. Currently treatment decisions are primarily determined by haemodynamics or expected prognosis of the disease. However, PRO measures provide additional useful information in the clinical decision-making process and in assessing the benefits of treatment.

Patient-reported Outcomes: Pros and Cons

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Huge progress has been made over the past decades in introducing patient reported outcomes (PROs) in medicine. Such measures capture the patient's own perspective of disease and health. PRO measurement includes multiple domains (i.e. physical, mental and social life aspects), do not only focus on disorders, and include well-being. PRO instruments can be generic or disease-specific, investigator-driven or individualized. Individualized instrument enhance the relevance of assessment by allowing the patient to determine the content, may have a higher clinical relevance, but reduce the comparability of results. Investigator-driven instruments are well suited for clinical trials but may neglect specific individual needs. Generic PRO measures are independent of a particular health condition allowing across-disease comparisons. However, they may lack sensitivity for a particular condition and may be less relevant to patients than disease-specific measures. Further, using more than one outcome measure creates problems for traditional methodological and statistical approaches. Therefore a single measure to determine the effect size and power of a study is over simplistic. Choosing a measure that is likely to change over time may lead to underpowered results for other outcome measures used. However, by using the measure that is least likely to change, the trial may become impractical

International Normative Values for the SF-36 in Patients With Ischemic Heart Disease

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Background: Health-related quality of life (HRQL) has become an important health care outcome in the past decades, especially in patients with chronic diseases. The aim of the study was to generate normative data for patients with ischemic heart disease, i.e., angina, myocardial infarction, or heart failure, for the most widely used generic HRQL measure, the Short Form 36 Health Survey. Methods: Cross-sectional data were collected in 22 countries including patients from Western and Eastern Europe, Scandinavia, Mediterranean, and English-language regions with speaking one of 15 languages (N=7647; age 62 years; female 24,9%). Mean scores and standard deviations were calculated to identify heart-specific normative HRQL data; linear regressions and T-tests were used to explore specific patterns. Findings: Females report lower HRQL for all scales; younger patients report better physical HRQL whereas older subjects report better mental HRQL. Mean scores of the eight scales (1-100) for the countries range from 21.5 (role-physical, Hungary) to 83.6 (social functioning, Denmark). Discussion: The key to the interpretation of HRQL is having normative data for patients with ischemic heart disease.

Heartqol Questionnaire: a new Patient-reported Outcome in Cardiology

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Background: Patient-reported outcomes such as health-related quality of life (HRQL) improve patient care quality. Methods: The HeartQoL Project, designed to develop and validate a core ischemic heart disease (IHD) HRQL questionnaire, enrolled 6,384 patients (33.1% angina; 36.8% myocardial infarction; 30.1% heart failure) speaking 15 languages in 22 countries. Findings: The 14-item HeartQoL questionnaire, developed using Mokken scaling and scored from 0 (poor HRQL) to 3 (good HRQL), has a global scale with 10-item physical and 4-item emotional subscales. Mean global score (2.2±0.5) in the total group differed by diagnosis (p<0.001). Cronbach's alpha was consistently =0.80; convergent validity between similar HeartQoL and SF-36 subscales was confirmed (r=0.60, p<0.001) as was discriminative validity with SF-36 health transition, HADS anxiety and depression, and functional status. HeartQoL score changes were significant (p<0.001) with effect sizes from 0.37 to 0.51 with invasive intervention and 0.47 to 0.64 with cardiac rehabilitation. Discussion: The HeartQoL questionnaire is reliable, valid, and responsive to change in an international cohort of patients with angina, myocardial infarction, or heart failure allowing clinicians and researchers to assess, compare, and evaluate HRQL with a single IHD HRQL instrument that still needs language-specific validation.

Online Interventions: Effective Methods, Games and Social Media.

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Aims: - Increase insight in effectiveness of online interventions and games and the specific effects of BCTs - Increase insight in the use of social media for recruitment, retention and intervention - Discuss future development for online interventions and recommendations for developing, recruiting, reporting and evaluating online interventions. **Rationale:** The amount of online interventions has increased rapidly during the past two decennia. However, it remains unclear when, how and for whom the interventions are effective. This symposium aims to provide up-to-date insight in these factors as well as to provide recommendations for evaluation methods. **Summary:** First, Rik Crutzen will present a recent knowledge synthesis on online interventions, including gaps in the current knowledge and direction for future research. Next, Lenneke van Genugten will present a meta-analysis on the interactive effects of BCTs. Third, Jonathan van 't Riet will present a meta-analysis on the effectiveness of serious games. Specifically, he will focus on the effects of behavior change techniques within the game. Fourth, Kristin Schneider will present her review on the use of social media for recruitment. The discussion will be led by Pepijn van Empelen, and focus on the integration of the above presentations, as well as new directions for the study of effectiveness of online interventions. **Timetable** Presentation 1: Rik Crutzen Presentation 2: Lenneke van Genugten Presentation 3: Jonathan van 't Riet Presentation 4: Kristin Schneider Discussant: Pepijn van Empelen

Online Prevention Aimed at Lifestyle Behaviors: a Systematic Review of Reviews

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Background: Interventions aimed at behaviour change are increasingly being delivered over the Internet. Although research on intervention effectiveness has been widely conducted, their true public health impact as indicated by reach, effectiveness, and use is unclear. The aim of this paper is to review the current literature on online prevention aimed at lifestyle behaviours in terms of public health impact. **Methods:** A systematic search revealed 41 eligible reviews on Internet-delivered behaviour change interventions, which were analysed in terms of reach, effectiveness, and use. **Findings:** Evaluations are predominantly effect-focused and overall effects are small, variable, and not sustainable. Effectiveness cannot yet be unambiguously attributed to isolated elements. Actual reach of interventions is undiversified, mostly reaching participants who are female, highly educated, white, and living in high-income countries. One of the most substantial problems in online prevention is the low use of the interventions. **Discussion:** Identified research gaps regarding reach, effectiveness, and use will be discussed.

Which Combinations of Techniques in Internet Based Interventions Effectively Change Health Behavior? a Meta-analysis

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Background: Many online interventions designed to promote health behaviors combine multiple behavior change techniques (BCTs) and additional modes of delivery (MoD, e.g. text messages) to maximize effectiveness. Also, usability factors may influence effectiveness. This study aims to identify synergistic effects of BCTs, MoDs and usability factors. **Methods:** A re-analysis of data from Webb (2010) was performed. Eighty interventions ($I^2 = 0.16$) were included, targeting a variety of health behaviors. 26 BCTs and 11 MoDs were coded in the interventions, and a usability taxonomy was developed. Meta-CART (Classification and Regression Trees) analyses were performed using the BCTs and MoDs as predictors, and effect size as outcome. **Findings:** Meta-CART identified one synergistic effect: Interventions that included barrier identification/ problem solving and prompted participants to plan social support/ social change but did not provide normative information about the behavior of others had an average effect size of 0.25 (95%CI=0.08-0.42). No synergistic effects were found for MoDs, or MoDs combined with BCTs. **Discussion:** The present analyses provide guidance on developing effective online interventions for promoting health behavior change. Only one combination was effective, indicating most BCTs did not have synergistic effects above their univariate effect found by Webb et al.

How Effective are Active Videogames? Adding Meta-analyses to two Recent Systematic Reviews

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Objective: Two meta-analyses investigated the existing evidence for the effectiveness of active videogames in children/adolescents and in elderly people. **Method:** Studies were included that investigated the effectiveness of active

videogames, employed an experimental design, and used BMI as the outcome measure in the children/adolescents domain (N=5), or physical function in the elderly domain (N=7). Findings: The average effect of active videogames in children and adolescents was small, but significant ($r = .10$; 95% CI: $.02 - .19$). For the effect of active videogames on physical function in the elderly, the analyses revealed a medium-sized, but non-significant effect of $r = .26$ (95% CI: $-.33 - .85$). Significant heterogeneity was observed, but intervention duration, number of sessions per week, type of control group, usage of an off-the-shelf game, sample size, study quality and dropout did not significantly moderate the effectiveness of active videogames for the elderly. Discussion: The results of these meta-analyses provide preliminary evidence that active videogames can have positive effects on relevant outcome measures in both children and adolescents, and elderly individuals.

Like This Study? use of Social Networking Sites in Behavioral Medicine

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Background: The reach of social networking sites (SNS) creates unique research opportunities. In behavioral research, SNS may be used for recruitment, retention and intervention delivery. Methods: We conducted a review of SNS uses for recruitment, retention and intervention in behavioral medicine using pubmed. Search terms included: social media, online social network, social network site, social web, as well as specific SNS (e.g., Facebook, Twitter, MySpace), and pertinent research terms (e.g., recruit, intervene). Findings: Results suggest that SNS can improve recruitment and retention, particularly when SNS target specific populations. Limitations include concerns about representativeness and privacy. While a variety of SNS have been used for intervention, the majority of studies utilize Facebook. Most studies recruited college students, but intervened on a variety of behaviors (e.g., smoking, condom use, weight loss). Few interventions integrated multiple SNS. Some intervention challenges may be unique to SNS (e.g., spread of misinformation). However, SNS can objectively track intervention use, which can be used to identify the most effective aspects and further hone the intervention. Discussion: SNS offer distinct ways to support behavioral medicine research, though barriers exist. SNS may provide an inexpensive and sustainable way to disseminate interventions.

Salutogenesis and Resilience: State of the art and new Perspectives in Theory and Research

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¹University of Flensburg, Health Psychology and Health Education

Rationale: The model of salutogenesis developed by Antonovsky more than three decades ago has stimulated extensive research, controversial debates and many practical approaches especially in the area of health promotion. As a global theory on the determinants of health, in particular questions on the role of the sense of coherence and resistance resources in predicting diverse health outcomes and in coping with different stressors and life events have been studied. Recently, new attention has been directed at the concept of resilience that seems rather similar to the model of salutogenesis. Aims: Where are we and what should be the next steps? In this symposium, 4 experts with wide experience in salutogenic theory and research have been invited to review the state of art, to discuss crucial problems and to indicate new perspectives of research that are especially relevant for health psychology. Questions on the contributions of salutogenesis and resilience research will be addressed in the area of work, in longitudinal studies, and in the development of salutogenic theory integrating subjective and social factors. What are the crucial questions for future salutogenic research and what are the next steps to further developing salutogenic models? Timetable and participants: 4 oral presentations, each 17 minutes + 3 minutes discussion (4 x 20 = 80 minutes), common discussion of all participants, 20 minutes Participants: Toni Faltermaier (University of Flensburg, Germany) Georg Bauer (ETH Zürich, Switzerland) Taru Feldt (University of Jyväskylä, Finland) Lydia Lyssenko (University of Freiburg, Germany) Common discussion

Advancing the Salutogenic Model: Lessons Learned From Research on Salutogenic Working Conditions

G.F. Bauer, G.J. Jenny, D. Füllemann, R. Brauchli

Background: In health research, the salutogenic model is mostly used to study the sense of coherence as a personal resistance resource preventing dis-ease of demanding life situation – a resilience perspective. By combining the health development model (Bauer et al. 2006) and the job-demands resource model (Demerouti et al. 2001), the authors developed the job-demands-resource health (JDRH) model. The paper empirically tests this model and draws conclusions for advancing the salutogenic model. Methods: The JDRH model has been tested in a longitudinal study of 6 large companies from diverse economic sectors. Structural equation modeling (SEM) was conducted with baseline survey data of 2'159 employees. Validated scales measured key job demands, job resources, negative as well as positive health outcomes. Findings: As predicted by the JDRH Model, the pathogenic path from job demands to negative health ($\beta = .41$) and the parallel, salutogenic path from job resources to positive health ($\beta = .89$) were positive. Furthermore, the cross-link between job resources and negative health ($\beta = -.36$), was negative as predicted. Discussion: this model suggests to expand the salutogenic model by considering (job) resources both as a resistance resource buffering negative health outcomes of (job)

demands, and simultaneously as health enhancement resources improving positive health outcomes.

The Model of Salutogenesis: Strengths and Missing Subjective and Social Factors

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The model of salutogenesis has contributed much to our understanding of the determinants of health and has got widespread influence in designing practical approaches especially in health promotion. This contribution reviews the theoretical strengths and limitations of the model salutogenesis in the light of our empirical evidence and gives some suggestions for future research. Although some postulated connections between stress, coping, sense of coherence (SOC) and health have been studied extensively, the role of resources and sense of coherence in the complex long-term pathways to health is still an open question. In particular, the model does not include subjective and social mechanism to health that would be crucial for health psychological approaches, as for example preventive health behaviors and health beliefs. And it does not sufficiently explain the health differential effects of social groups according to SES, age and gender. An extended and integrated model of salutogenesis is suggested that could overcome these limitations. In this framework, new questions for empirical research are formulated including health psychological concepts and social contexts (e.g. worksite, community). Implications for health promotion approaches are discussed.

The Model of Salutogenesis: Strengths and Missing Subjective and Social Factors

T. Faltermaier¹

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The model of salutogenesis has contributed much to our understanding of the determinants of health and has got widespread influence in designing practical approaches especially in health promotion. This contribution reviews the theoretical strengths and limitations of the the model salutogenesis in the light of empirical evidence and gives some suggestions for future research. Although some postulated connections between stress, coping, sense of coherence (SOC) and health have been studied extensively, the role of resources and sense of coherence in the complex long-term pathways to health is still open. In particular, the model does not include subjective and social mechanism to health that would be crucial for health psychological approaches, as for example preventive health behaviors and health beliefs. And it does not sufficiently explain the health differential effects of social groups according to SES, age and gender. An extended and integrated model of salutogenesis is suggested that could overcome these limitations. In this framework, new questions for empirical research are formulated including health psychological concepts and social contexts (e.g. worksite, community).

Development of Sense of Coherence in Adulthood

T. Feldt

Sense of coherence (SOC) describes a health-protective life orientation with feelings of comprehensibility, manageability, and meaningfulness (Antonovsky, 1987). Although SOC is a construct that is assumed to remain relatively stable throughout the adult life, some modifications in the level of SOC are expected to occur. At least two hypotheses have been proposed to describe the changes in SOC in adulthood. First, in later adulthood after the age of 30, SOC is assumed to be relatively stable whereas among younger adults fluctuation in SOC is more expected. This stabilization of SOC at age 30 is called the "Age-hypothesis". Second, the achieved level of SOC is assumed to play a role in the stability of the SOC: Stability is hypothesized to be higher among people with a high SOC than those with a low SOC, referred to as the "Level-hypothesis". Although these hypotheses represent fundamental parts of the SOC theory, there are only few studies which have been tested empirically these assumptions within a single study. The aim of this presentation is to discuss the stability of SOC based on the evidence provided large longitudinal studies collected among Finnish adults. The results of these studies show that there is a general upward trend in SOC with increasing age, and that the achieved level of SOC in adulthood plays a crucial role in regard to stability. More specifically, SOC is found to be particularly stable among high-SOC individuals. Age also seems to play a role in stability of SOC, but to a lesser extent.

Bringing Resilience to Practice: Chances, Difficulties and Concepts

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¹Central Institute of Mental Health, Mannheim, Germany

The concept of resilience is of widespread interest not only in science, but also in public health care and organizations for two reasons: First, mental illness is not only associated with a serious individual burden and reduced quality-adjusted life years, but has also proved to be increasingly relevant in terms of societal and economic costs. Second, there is growing awareness that the absence of mental illness does not necessarily imply the presence of mental health and effective psychosocial functioning. Existing treatments that are effective in alleviating mental illness are not necessarily effective in

promoting mental health. The important challenge is to strengthen the interdisciplinary transfer of empirical research on resilience to the development of empirically and theoretically profound prevention strategies. The chances and difficulties involved in this transfer process are illuminated by the presentation of a newly developed prevention program called "Live in Balance" (Bohus, Berger, Wenner, Lyssenko, 2013). Questions of evaluation in terms of effectiveness and acceptance are discussed.

Abstracts for oral presentations

Can Specific Health-related Memories aid Symptom Management in Chronic Fatigue Syndrome/ME and Asthma?

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Background: A cognitive approach to chronic illness management proposes that biased information processing distorts symptom perception and undermines recovery. Accordingly, a biased memory for health- and illness-related information may lead to negative illness cognitions, maladaptive coping and prolonged symptom suffering. **Methods:** Web-based study investigated autobiographic recall in CFS/ME (N = 87), Asthma (N = 56), and healthy (N = 60) participants of events when they experienced pain, fatigue, physical activity, and happiness. Participants were also assessed on illness cognitions, activity, and mood. **Findings:** CFS/ME and asthma participants recalled more specific memories of activity, while controls recalled more overgeneral memories. The specificity of health-related (pain, fatigue, activity) memories predicted more active coping and adaptive cognitions in illness groups. **Discussion:** The results indicate the importance of memory processing in relation to health- and illness-related information, suggesting overgeneral memories of health-related information may undermine people's ability to cope in the context of a chronic condition.

Exploring the Experiences of Stress Related to Immigration to the uk and Coping Strategies

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¹Leeds Metropolitan University

Background: This study explored Eastern European immigrants' stressful experiences regarding immigration to the UK and the coping strategies they applied to reduce such stress. **Methods:** Eight Eastern European (e.g., Russia, Latvia and Lithuania) participants took part in semi-structured interviews. Thematic analysis was employed in analysing the data. **Findings:** Four themes were identified: 'Pre-immigration factors and life quality in the UK', 'Post-immigration stress', 'Resources for coping' and 'Coping strategy'. Participants were dissatisfied with their lives in the UK and experienced loneliness, depressive feelings, discriminatory behaviour of the host society, language difficulties and work-related stress. Pre-immigration factors such as reasons to immigrate, expectations and preparation contributed to the stressful experiences and the possession of resources for coping with stress. **Discussions:** Coming from the Post-Soviet countries, participants' mentality differed greatly from the one in the UK. They had poor psychological preparation and high expectations of the host country, which subsequently influenced their experiences of stress and coping strategies applied.

Stop-signal Task Training Improves Inhibitory Control but Does not Change Eating Behaviour Outside the Laboratory

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²Curtin University, School of Psychology and Speech pathology, Australia

Background: Stop-Signal Task (SST) training to improve inhibitory control can improve eating behaviour in the laboratory. However, these findings have not been replicated using externally valid measures, nor has the longevity of these effects been assessed. **Methods:** Seventy-one participants completed baseline, post-intervention and follow-up measures of inhibitory control, fat intake and body-mass index (BMI). Participants were randomly assigned to complete one of three SST daily for ten days: In group one participants inhibited their response to unhealthy food stimuli only, in group two participants inhibited their responses regardless of the stimuli. Group three was the control. **Results:** Neither fat intake nor BMI decreased post-intervention or at follow-up. Inhibitory control improved in both training conditions post-intervention ($p < .01$; partial $\eta^2 = .427$) but these effects were not maintained at follow-up. **Discussion:** It appears that SST training does not generalise to everyday eating behaviour and improvements in inhibitory control may not be long lasting. SST training may not be sufficient as a stand-alone behaviour change technique to change eating behaviour.

Health Behaviour Change Interventions for Couples: a Systematic Review

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¹University of Southampton, UK

Background: Partners are a significant influence on health. This review aimed to determine the effectiveness of couple-based interventions in improving health relative to control conditions, and identify factors contributing to their effectiveness. **Methods:** A systematic review using standardised search methods identified RCTs or quasi-randomised trials for health behaviour change (HBC) in couples with at least one member at risk of chronic illness (excluding HIV), published from 1990-2014. **Findings:** The 19 included studies targeted cancer prevention, obesity, diet, smoking in pregnancy, mental health postpartum, breastfeeding, physical activity, and cardiovascular risk. Results suggested that adherence was better in couples than individuals, and couple-based interventions were more effective than usual care. Only one RCT demonstrated enhanced benefit for including couples relative to individuals alone, although gender differences were identified. **Discussion:** Couple-based interventions are at least as effective as individual interventions. RCTs comparing couple-based and individual interventions for HBC are needed to determine any added benefit of targeting the couple.

Links Between Learner Drivers' Fear of Driving and Risky Driving Intentions

R. Arlauskienė¹, A. Endriulaitienė¹

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Background. In comparison to EU countries, the number of road traffic deaths in Lithuania is one of the most highest. 260 deaths occurred in 2013, while 3654 persons were injured (Lithuanian Road Administration, 2014). Scientists have found that risky driving and emotions are important factors that affect the occurrence of traffic accidents (Begg 2009; Falk, 2010). However, the fear of driving has not received a lot of attention in scientific research so far (Taylor, 2002). Thus, this research aims to find links between the fear of driving and risky driving intentions. **Methods.** The DCQ (Taylor et al., 2007) is used to evaluate fear of driving that stems from the fear of car accidents and unexpected situations. It also evaluates a social fear of driving and is an instrument to assess expression of risky driving intentions (Parker et al., 1992). **Subjects.** 240 learner drivers from Lithuania. **Findings.** Learner drivers' intention of speeding increases when the fear of driving that stems from the fear of car accidents increases as well. The same applies to the fear of driving that stems from unexpected situations and social driving fear. In addition, when the fear of driving that stems from the fear of car accidents increases, intentions not to maintain a safe distance and dangerous overtaking increase as well. **Discussion.** The research shows that fear is not a preventive measure to reduce risky driving behaviour.

Subjective age and Health in Later Life: the Moderating Role of Posttraumatic Symptoms

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²Bob Shapell School of Social Work

³Tel Aviv University

Background: The study examines the impact of trauma on subjective age and on its relationship with health. **Methods:** Israeli veterans of the 1973 Yom Kippur War (mean age 57), including 111 ex-prisoners of war (ex-POWs) and 167 matched controls were assessed in 2008 for subjective age, war-related PTSD, and health (physical symptoms; somatization; health-risk behaviors; and self-rated health). **Findings:** Controlling for age, ANCOVAs showed that ex-POWs had higher subjective age than controls ($F_{1, 275} = 24.55, p < .001$) and that ex-POWs with PTSD had higher subjective age than controls and ex-POWs without PTSD ($F_{2, 267} = 19.55, p < .001$). Linear regression models using standardized variables revealed that PTSD and self-rated health (but not other health measures) predicted subjective age. Significant interactions were found between PTSD and each health measure (B s ranged between .06, $p < .05$ and .12, $p < .001$). Health only predicts subjective age for those reporting high levels of PTSD symptoms. **Discussion:** PTSD symptoms appear to have implications on the links between health and subjective age in later life, pointing to the long-term effect of captivity and wartime stress on aging.

Enduring Effects of Childhood Adversities: Evidence From Adult Health Behaviors and Health Outcomes

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Background: As part of a WHO programme to improve child health across Europe, we conducted a study to evaluate the prevalence of exposure to adverse childhood experiences (ACE), and examine relationships between ACE exposure and harming health behaviours and health status in young adults. **Methods:** The sample consisted from 2088 Romanian university students, aged 18-25. ACE Survey measures emotional, physical and sexual abuse, as well as family dysfunction (e.g., an incarcerated or substance-abusing family member). Individuals were categorised according to number of ACEs experienced. **Findings:** Modelling identified proportions of health harming behaviours and health complains independently associated with ACEs. The odds of

engaging in alcohol and drug consumption, as well sexual risk behaviors were higher as the number of ACEs increased. Increasing of exposure to ACEs has increased significantly the odds for experiencing depression, suicidal behavior, insomnia, as well as digestive symptoms, headaches, low back pain. Discussion: Considering the high prevalence of ACEs, several preventive and health promotion recommendations are presented.

Gradual Versus Abrupt Quitting Among French Treatment-seeking Smokers.

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Background: Until recently, smoking cessation guidelines only recommended abrupt quitting. Yet, almost half of smokers interested in quitting plan to quit gradually. This study examined predictors of gradual quitting among treatment-seeking smokers. Methods: We examined quit attempts of 28156 adult smokers who attended French cessation services nationwide in 2007-2010. Predictors of gradual quitting were determined with multivariate regression models. Findings: Only 4.4% quit gradually while 48.7% quit abruptly. Gradual quitting was associated with: older age, heavy smoking at baseline, no previous quit attempts, low self-efficacy, baseline intake of anxiolytics, symptoms of depression and history of depressive episodes. Gradual quitters had a similar anxio-depressive profile than continued smokers. Gradual quitters were twice more likely to be prescribed oral nicotine replacement therapy than abrupt quitters. Odds of gradual quitting vs. continued smoking improved with the number of follow-up visits. Discussion. Hard-to-treat smokers may be more likely to quit gradually than abruptly. However, intense follow-up with adapted treatment seems crucial to achieve cessation gradually.

The Effect of Non-specific Response Inhibition Training on Alcohol Consumption: an Intervention

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Background: Excessive alcohol consumption places individuals at risk of acquiring harm from alcohol-related disease and injury (Jennison, 2004). A number of studies have reduced alcohol consumption by manipulating the neurocognitive processes underlying self-control ability and specifically, by training response inhibition (Houben, Havermans, Nederkoorn, & Jansen, 2012; Houben, Nederkoorn, Wiers, & Jansen, 2011; Jones & Field, 2013). The rationale for this approach is that response inhibition training leads to an increase in self-control strength, which allows individuals to control the urge to drink alcohol excessively and stay within moderate levels of consumption. The aim of the present study was to clarify if non-specific response inhibition training could improve response inhibition and reduce alcohol consumption. Method: Sixty first-year students were randomly assigned to one of two conditions (inhibition, disinhibition) in which they completed one stop-signal task a day, for four consecutive days. Participants in the inhibition condition completed a stop-signal task with a high target density (50% stop-signals) and were instructed to inhibit their response at the sound of a stop-signal. Participants in the disinhibition condition completed a stop-signal task with a lower target density (25% stop-signals) and were instructed to never inhibit their response. Before and after the intervention, participants completed measures of response inhibition (stop-signal task, stroop task), and alcohol consumption (timeline follow-back questionnaire). Additionally, alcohol consumption was measured after one month and all parts of the study were completed online. Findings and Discussion: Contrary to the hypotheses, the intervention had no significant effect on response inhibition or alcohol consumption. Future studies could test the effect of the intervention among a population of only binge drinkers and explore the role of factors such as intention and motivation.

Smoking Susceptibility Measure Predicts Smoking Behaviour 3 Years Later in French Schoolchildren

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Background: France has one of the highest rates of adolescent smokers in Europe. Effective predictors of smoking onset are necessary both for evaluating interventions and identifying at-risk individuals. This study examined the effectiveness of the smoking susceptibility measure (at 11yrs) in predicting having ever tried smoking 3 years later (at 14yrs), in French schoolchildren of different socio-economic status (SES). Methods: A 3-item smoking susceptibility measure was administered to 404 (235 female) French schoolchildren, along with demographic measures. Self-reported smoking behaviour was recorded 3 years later. Findings: Sex, SES, and parental smoking at 11 years did not significantly predict having ever tried smoking at 14 years, however smoking susceptibility did, $b = 0.77$, $p < .001$, such that the odds of a child whose scores designated them "susceptible" of having tried smoking 3 years later were 3.24 times higher than a child who was not susceptible. Susceptibility did not significantly interact with SES. Discussion: The smoking susceptibility measure represents an important and effective means of predicting smoking experimentation, and is robust across SES groups.

Perception of Artificial Sweeteners' Health Risk and Benefits

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Artificial sweeteners offer a variety of health benefits compared to conventional sugar in terms of energy density, nutritive value or tooth decay prophylaxis. However, many people hesitate to consume artificially sweetened products due to their perception of potential health risks. Thus, the goal of this study was twofold: to investigate people's health risk and benefit perceptions and to identify important predictors for avoiding or using artificial sweeteners. A mixed method design was applied. Firstly, in-depth qualitative interviews were conducted with 6 experts and 17 consumers. Secondly, a quantitative survey was conducted (N = 487, 45% male, Mage = 56). The following variables were included in the questionnaire: risk and benefit perceptions, avoidance, trust in regulators, and knowledge of the risk assessment process. Based on the survey data, a model predicting risk and benefit perceptions and avoidance was subjected to path analysis, identifying knowledge and trust as important predictors. The study offers insights into people's risk and benefit perceptions and reasons for avoiding artificial sweeteners, despite their health benefits.

Effects From Using a Hypertension Specific Mobile Phone Based Self-management Support System

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Background A multi-module mobile phone self-management system for hypertension was developed. System components were derived in interviews with patients and providers and included modules for 1) wellbeing, blood pressure (BP)/pulse, lifestyle, medication and side effect self-reports; 2) reminders/encouragements; 3) feedback of relationships between self-report variables; 4) home-based BP device. We report on evaluations of self-report variables in relation to each other and on effectiveness of the system in reducing BP. **Methods** 50 primary care hypertensives (m=60 yrs, 48% female) self-reported daily during 8 weeks. Patients were interviewed about their experiences during and at the end of study. **Findings** A mean decrease in systolic BP of 4.9mmHg was observed between the first and last week. Patients regarded the self-management system usable and felt they had gained insight into relationships of wellbeing, BP, symptoms, medication, physical activity and stress, and a feeling of control over their BP in daily life. **Discussion** Seeing relationships between BP and self-report variables and feeling own control over the BP may have motivated patients to follow treatment recommendations.

Disclosing Epilepsy to Others: Challenges Children Face

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Background: Epilepsy is an example of a concealable stigmatised identity. Yet, little is known about the disclosure experiences of families living with epilepsy. This study sought to address this gap in epilepsy literature. This paper will focus on children's epilepsy disclosure to others. **Method:** Phase one, of this two-phased mixed method study, consisted of qualitative interviews with 29 children (6-16 years) with epilepsy and 30 parents to investigate epilepsy disclosure experiences for children (self- and proxy-reported). Data were thematically analysed. **Findings:** Specific challenges to epilepsy disclosure for children were; 1) fear of the reactions of others; 2) feelings of differentness; 3) invisibility of the condition; and 4) difficulty to understand and explain the condition to others. **Discussion:** This qualitative data provides insight into factors that promote or prevent epilepsy disclosure in children; and subsequently highlight areas for appropriate psychological interventions to improve openness about epilepsy. Such openness could assist in tackling epilepsy-related stigma and consequently enhance life quality and wellbeing for children living with epilepsy.

Pain, Pain Identity, and Self-rated Health Among Adults With Chronic Pain Before and After Treatment

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Background: To assess changes in pain levels, self-rated health (SRH) and identity of a pain patient in adults with chronic pain

from referral to implantation of a spinal cord stimulation (SCS) device to ~6 weeks following implantation. Methods: Patients with chronic pain (N=148) filled in questionnaires at referral to SCS (T1) and ~8 months later (T2; n=119), including ratings of pain and general health (SRH), acceptance of pain (indicating identification with being a pain patient), and the IPQ-R. Findings: 20% did not undergo SCS (no SCS=nSCS), 29% underwent only temporary implantation of a SCS device and discontinued ("disappointed"=dSCS), and 51% continued to permanent SCS (pSCS). Repeated measures ANOVA showed that pain levels significantly decreased in the dSCS and much more so in the pSCS but remained the same in the nSCS. SRH and pain perceptions improved only for the pSCS whereas stronger pain identity was reported only by the dSCS. Discussion: Continuous use of SCS relieves pain and leads to improved SRH yet pain still dominates these patients' lives and thoughts. Failing treatment leads to even stronger pain identity and intrusion, despite some improvement in pain level.

Models of Behaviour Change in a Cardiac Rehabilitation Sample

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Background: The aim of this study was to examine exercise and relaxation in cardiac rehabilitation patients with the Theory of Planned Behaviour (Ajzen, 1991) and Temporal Self-Regulation Theory (Hall and Fong, 2007). Methods: Design: longitudinal; 6 months follow-up. Participants: cardiac rehabilitation inpatients with acute ischemic heart disease aged 65 or below. N=302, 278 (75%) males, mean age 55.61 (SD=7.31). Measures: self-report questionnaire about the variables of the theories. Three versions of TPB and two versions of TST were tested using path analyses. Findings: TPB explained 4–9% of variance in exercise and 14–15% in relaxation. TST explained 9–10% and 19–21% respectively. Model fits (exercise/relaxation): TPB complete model CFI .62/.82, RMSEA .18/.13; basic model: CFI .97/1.00, RMSEA .11/.00, third model CFI .99/.99, RMSEA .09/.05. TST original version CFI .94/.97, RMSEA .12/.09, TST modified model CFI .98/.99, RMSEA .09/.04. Discussion: The predictive powers of the models were low. TST had higher predictive power than TPB; relaxation was better predicted than exercise. The modified TST showed the best model fits. TST is a promising recent model.

Happiness and Life Satisfaction in Romanian Adolescents Transitioning to Adulthood. a Three Year Longitudinal Study.

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Background: The purpose of the study was to investigate the relative importance of adolescent pathways to subjective satisfaction with life and happiness. Methods: Data were drawn from a 2 wave (3 year) longitudinal study of the health and development of around 2000 Romanian, nationally representative sample of adolescent and young adults. In the first wave, a series of risk behaviors and positive resources were assessed by an online questionnaire that including aspects of social support and socioeconomic status. Findings: Romanian adolescents reported average risk factors close to European averages satisfactory levels of resources and social support. Levels of subjective happiness and life satisfaction were lower compared to European averages. Discussions: Inequalities in happiness and life satisfaction were mostly related to low socio-economic situation, lack of appropriate social cohesion and presence of risk factors

Is Burnout a Distinct Syndrome? a Study of the Intertwining of Burnout, Anxiety, and Depression

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Background. Burnout is usually defined as a combination of emotional exhaustion, depersonalization, and reduced personal accomplishment (RPA). Our aim was to examine the intertwining of burnout with anxiety and depression. Methods. This study included 5575 teachers. The Maslach Burnout Inventory was used to assess burnout. Depression was assessed with the 9-item depression-dedicated module of the Patient Health Questionnaire and anxiety with the 7-item Generalized Anxiety Disorder scale. Findings. Emotional exhaustion, the core of burnout, was more strongly associated with (job-unrelated) anxiety ($r = .68$) and depression ($r = .72$) than with (job-related) depersonalization ($r = .53$) and RPA ($r = .35$), all $ps < .001$. When combining emotional exhaustion and depression into a single scale (18 items), a Cronbach's alpha of .91 was reached (mean between-item correlation (MBIC): .39). When combining emotional exhaustion, depersonalization, and RPA into a single scale (22 items), a Cronbach's alpha of .72 was reached (MBIC: .11). Discussion. This study confirms the ambiguous conceptual status of burnout and questions the dimensions that have been selected to define it as a syndrome.

Self-regulation of Recovery From Work

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Background: The study aims at evaluating a proposed model of self-regulation of recovery from work. Three variables, "recovery related awareness", "recovery motivation" and "ability to detach from work" are assumed to affect self-regulation and consequently recovery outcome. **Methods:** In two cross-sectional studies (n=308/383; study 1&2) the association of these recovery related variables with fatigue, exhaustion and sleep were investigated in employed individuals. In one longitudinal study (n=103; study 3), the impact of these variables on the change of well-being during a 12 hour day-shift in nurses was addressed. Data was analyzed using correlational and/or regression analyses. **Findings:** In study 1&2, awareness, motivation and detachment were negatively associated with prolonged fatigue and emotional exhaustion and positively with quality of sleep. In study 3, recovery motivation dampened the increase of distress and the decrease of vigor observed during the day. **Discussion:** The results provide first evidence for the validity of the model of recovery self-regulation from work. The model provides a theoretical underpinning for the assessment and training of recovery from work.

Mindfulness Intervention for People With Multiple SCLEROSIS: Mims Trial

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Background: Mindfulness based interventions have been shown to effectively reduce anxiety, depression and pain in patients with chronic physical illnesses. The aim of this study is to assess the effectiveness of an easy to access mindfulness based intervention, which aims to reduce distress for people affected by primary and secondary progressive MS. **Methods:** Forty participants were randomly assigned to the 8week intervention (n=19) or a waitlist control group (n=21). One-hour sessions were delivered to groups of 3-5 people using SKYPE videoconferencing. Participants completed standardized questionnaires to measure mood, impact of MS and symptom severity at baseline, post-therapy and 3 months follow-up. **Findings:** Health related distress scores were lower in the intervention group compared to control group at post-therapy and follow-up (p<0.05), effect size -.64 post-therapy and -.94 at follow-up. Mean scores for pain, fatigue, anxiety, depression, impact of MS were reduced for the mindfulness group compared to control group at post-therapy and follow-up; effect sizes, -.27- -.99 post-therapy and -.29 - -1.12 at follow-up. **Discussion:** Accessibility and feasibility of distance-delivered mindfulness interventions and the challenges of adapting a mindfulness course for people with progressive MS will be discuss.

Identifying Subgroups of Hard-core Smokers With a Latent Profile Approach

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Background: Hard-core smokers are smokers who have smoked for a considerable number of years and show little to no intention to quit. They might differ in their perceived pros and cons of smoking and quitting, which influence their intention to quit. Identifying distinct subgroups (profiles) based on these pros and cons could help to tailor information and improve approach and treatment efforts. **Methods:** 510 hard-core smokers completed an online survey on the perceived pros and cons of smoking and quitting. To identify possible profiles of hard-core smokers, we performed a latent profile analysis on these pros and cons. **Results:** We found three profiles among hard-core smokers. 'Receptive' hard-core smokers (36%) perceived many cons of smoking and saw many benefits of quitting. 'Ambivalent' hard-core smokers (59%) were rather ambiguous towards quitting. 'Persistent' hard-core smokers (5%) saw few pros of quitting, but many pros of smoking. **Discussion:** Hard-core smokers are not homogeneous in their perceived pros and cons of quitting and smoking. Results from this study may help to develop individualized tobacco-control messages for this hard-to-reach group of smokers.

Reporting of Group-based Behavioural Interventions: a Checklist and Tool for Assessing the Quality of Descriptions

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Background: Comprehensive reporting of group interventions is important for comparing effectiveness, identifying 'active ingredients' and replicating interventions. Since group interventions are often inadequately described we developed a checklist for improving reporting. **Methods:** Based on a review of group-based interventions, and using pre-specified criteria, we identified elements that constitute the minimum content of a good description. Two authors independently coded 55 reports of different types of group interventions, and reliability statistics were calculated. A coding manual was developed to facilitate using the checklist. **Findings:** The checklist comprises 26 reporting elements related to intervention design, content, participants and facilitators. Inter-rater reliability was acceptable (91% agreement, Kappa=0.82). The frequency and quality of reporting varied

considerably, and examples of comprehensive and insufficient reporting will be presented. Discussion: Our checklist can be used alongside other reporting guidelines to ensure comprehensive reporting of group-based health interventions. It can be also used to assess reporting quality.

The use of Multiple Perspectives and ipa in Cardiovascular Research.

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Background: Multiple-perspective designs can aid researchers to develop a more multifaceted account of that phenomenon, and also as a form of triangulation of data. Oral anticoagulation reduces stroke risk in patients with atrial fibrillation however it is underutilized and sometimes refused by patients. Two inter-linking studies aimed to explore patients' and physicians' experiences of AF and OAC. Methods: Study 1: Three AF patient sub-groups were interviewed (n=11); accepted, refused, or discontinued OAC. Study 2: Four physician sub-groups (n=16) were interviewed: consultant cardiologists, general physicians, general practitioners and cardiology registrars. Data was analysed using IPA. Results: Three main themes comprised patients' experiences: the initial consultation, life after the consultation, and patients' reflections. Two main themes emerged from physicians' experiences: communicating information and challenges with OAC prescription for AF. Discussion: By engaging in an 'intra-study' triangulation and at the same time, an 'inter-study' triangulation, a more thorough understanding of patients' and physicians' experiences of AF and OAC therapy was obtained

Youth Drinking Norms and Individual Alcohol use in Europe – the Social Contagion Effect

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Background: According to health behavior models, significant others determine behavior, e.g. by providing norms. Especially adolescents tend to conform to peers (social contagion effect). Multilevel analysis can assess the impact of a health behavior's prevalence of a group on the individual behavior. The purpose of this study is to determine the influence of proportions of problematic alcohol users per country on individual alcohol use. Methods: Self-reported data from 47.790 12 to 16 year olds from 25 European countries was analyzed within a two-level logistic regression. Findings: An individual's chance to be a problematic alcohol user instead of not is higher if the prevalence rate of problematic alcohol use in a country increases (OR=1.08, p<.001). Thus, in countries like Germany where the proportion of problematic users is high (21%) a student has a higher chance to be a problematic user regardless of any other risk or protective factors than in countries with lower proportions (France, 6.6%). Discussion: In addition to specific risk/protective factors, preventive efforts targeting individual alcohol use should respect the drinking norms within the respective social context.

Emdr - eye Movement Desensitization and Reprocessing - Therapy use in Chronic Pain Management: Comparison of two Protocols

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Background: Chronic pain is a major healthcare issue. As a multifactorial issue, chronic pain includes four key components, namely sensory, cognitive, behavioural and emotional aspects. Considering the use of EMDR (Eye Movement Desensitization and Reprocessing) therapy is an innovative approach in chronic pain management, the main focus of this research was to compare the use of EMDR therapy versus eclectic healthcare in a hospital unit specialized in the management of chronic pain. Methods: Forty-five patients divided into three groups were treated by standard protocol of EMDR therapy, pain protocol of EMDR therapy and eclectic therapy. Findings: Results show the effectiveness of EMDR therapy on sensory, cognitive, behavioural and emotional but also traumatic components of pain. Discussion: EMDR standard protocol being most efficient after five sessions, and a reduction of pain extending one month after therapy has been discontinued. While painkillers have been proven effective in treating acute pain, their long-term use has negative side-effects. But psychotherapeutic schemes like EMDR therapy can improved quality of life of chronic pain patients.

Correlates of Change in Quality of Life From 79-90: the Lothian Birth Cohort 1921.

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Quality of life (QoL) decreases in very old age & is related to negative health outcomes and mortality. Little is understood of the predictors of QoL change. This study investigated the correlates of QoL change in nonagenarians using a longitudinal cohort design. Participants (n=129, 39% male) were members of the Lothian Birth Cohort 1921. All completed assessments at approx age 79 & 90. Measures included QoL (WHOQOL-BREF), current anxiety & depression, objective health & functional status,

self-rated health, sociodemographics & personality. QoL decreased significantly over time for the physical, psychological & environment domains & two general QoL items. Decline in psychological QoL was significantly associated (all $p < .001$) with decline in grip strength ($r = .357$) & Townsend functional ability (.270) & lower current self-rated health (.243), and decline in physical QoL with decline in functional ability ($r = -.424$) and increased depression (.419). There were no significant associations with baseline personality, disease history or living alone. The findings suggest that declining functional ability, mood & QoL are correlated in the 9th decade, implying potential intervention targets.

Fatigue After Myocardial Infarction: Relations to Stress, Coping and Sleep Quality

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Background: Fatigue after myocardial infarction has been described as an unpleasant and incomprehensible symptom that is difficult to cope with because it is unpredictable and not related to effort. The aim of the present study was to identify how post-myocardial infarction fatigue is related to stress, coping strategies and sleep quality. Methods: The sample consisted of 140 persons who, two months earlier, had been treated for myocardial infarction at a coronary care unit. They completed questionnaires with items on fatigue, perceived stress, coping strategies, and sleep quality. Findings: Fatigue was correlated with stress, sleep quality and coping strategies. Further, stress was the strongest predictor ($p < 0.001$) of post-myocardial infarction fatigue after two months. Moreover, reevaluation ($p < 0.01$), isolation ($p < 0.05$), and minimization ($p < 0.05$) of coping strategies were predictors associated with fatigue. Discussion: Ordinary heart disease rehabilitation programmes include advice about diet, smoking, physical activity and emotions. Thus, for all those who are limited in their daily activities by fatigue, standard care does not provide adequate support.

Family Caregivers' Health Capability: Contribution of, and Relations Between its Dimensions

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Background Being family caregiver poses risks for physical, mental and social health. The health capability paradigm (Ruger, 2010) explores the capacity to achieve one's optimal health. Family caregivers' health capability partly consists of 8 dimensions: physical and psychological functioning, lifestyle value, self-efficacy, family support, social capital, socio-economic conditions and access to health services. Which relations exist between these dimensions, and which ones contribute the most to health capability? Methods Home-based structured interviews were led among 62 family caregivers living in Luxembourg 2 years after their relatives' stroke. Twenty items measured the 8 dimensions of health capability. Using a Bayesian approach, a structural equation modelling was applied. Findings Socio-economic conditions were positively correlated with all the other dimensions. Family caregivers' fatigue and feeling abandoned by their families impeded their health capability the most. Discussion Enhancing family caregivers' well-being involves finding interventions relieving them physically and fostering family networking around the ill, giving priority to the socially disadvantaged.

The Systematic Literature Review Investigating Barriers to Uptake Cervical Cancer Screening.

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Background: Cervical cancer is a considerable public-health problem. A broad range of perceived barriers is related to cervical cancer screening (CCS; Tanner-Smith & Brown, 2010). It is important to conduct a summary of research on individual perceived barriers related to CCS uptake. Methods: The systematic literature review using the Cochrane Group methodology was conducted (Higgins & Green 2008). The following key words was used: cervical cancer, screening, pap, barriers, pros, cons, decisional balance and the combinations and consequently searched articles published in scientific journals between 1979 and 2011. Findings: Use the TREND criteria (Kmet, Lee & Cook, 2004) 6 systematic reviews, 7 experimental design studies, 52 cross-sectional and 2 longitudinal design studies were found. It was identified 54 different kind of barriers related to CCS uptake. Discussion: Most studies did not examine the role of age as a moderator for the content barriers. The cultural and ethnic differences should be investigated more as well.

Health Status Predicts Mortality and Hospital Admissions 6-years Later Among Cardiac Patients Attending General Practice

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Background: Patient rated health status may be a useful risk stratification tool to effectively target secondary prevention behavioural programmes to patients with coronary heart disease (CHD). **Methods:** We examined the relationship between baseline patient rated health status (SF-12) and health outcomes (mortality (n 748); hospital admissions (n 588)) at 6 year follow up among primary care patients with CHD, using multivariate analysis and controlling for confounding variables. At 6 years, outcome data were collected from practice records and postal questionnaire. **Findings:** At follow-up, the odds ratio (OR) for a one point improvement in baseline SF-12 mental component score for mortality was 0.97 (95% CI 0.95-0.99; p 0.03) and for hospital admissions was 0.98 (95% CI 0.96-0.99; p 0.04). The OR for a one point improvement in the SF-12 physical component score for mortality was 0.97 (95% CI 0.95-0.99; p 0.04); for hospital admissions the OR was 0.99 (95% CI 0.98-1.01; p 0.06). **Discussion:** SF-12 scores independently predicted significant health outcomes at 6 years and may help in targeting secondary prevention interventions effectively.

Mastery and Self-esteem are Associated With Better Physical Health in Parents of Children With Disabilities

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Background: Parents caring for children with disabilities have poorer physical health. As yet however, the role of mastery and self-esteem as determinants of physical health in these caring parents has not been really tested. **Methods:** 108 parents of children with disabilities and a control sample of 58 parents of normally developing children completed validated measures of physical health, self-esteem and mastery. **Findings:** Parent of children with disabilities had poorer physical health, lower self-esteem and mastery. Moreover, both self-esteem and mastery were significant predictors of physical health with the model predicting 25% of the variance. **Discussion:** findings from this study emphasise the protective role of self-esteem and mastery for physical health in parents of children with disabilities. When designing supports and intervention protocols for families with children with disabilities methods of increasing these factors in parents should be included.

Longitudinal Relations Between Health Behaviors, Psychosocial Factors and Obesity-related Outcomes in a Community-based Intervention

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Background: Pasos Adelante is a theory-based chronic disease preventive intervention integrating walking groups (to promote social support and activity) as well as nutrition and physical activity education delivered by community health workers. While prior work has shown significant improvements in health outcomes (e.g., BMI, blood pressure, lipids; Staten et al., 2012; depression, quality of life; Cutshaw et al, 2012) and health behaviors (Carvajal et al., 2013), it is not known which psychosocial and behavioral factors are most responsible for participants' improved outcomes. **METHODS:** Questionnaires (e.g., psychosocial factors, diet, IPAQ-physical activity), anthropometric measures and laboratory tests were collected three times over 6 months on 221 adults. **FINDINGS:** Cross-lagged SEM models showed earlier levels of activity and social support (p < .05) preceded improved BMI. **DISCUSSION:** Improved activity more so than nutrition appears to be the most critical behavioral factor linked to improved outcomes in this evidence-based intervention. Further, increased social support is an important mechanism contributing to participants' well-being at 6 months and perhaps longer.

Associations Between Lack of Professional Recognition and Health Indicators Remain Stable Despite Market Uncertainty

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Background: Building on Honneth's "Theory of recognition", we identified strong associations between lack of recognition in the work place and several health indicators. In this study we tested the hypothesis that these associations vary as a function of job uncertainty level which we suppose to modify the recognition processes. **Methods:** Longitudinal and cross-sectional data from BELSTRESS III study (N=2876) were analyzed by way of logistic regressions. 4 recognition dimensions (social esteem, rights, existential recognition from colleagues, and supervisors) were included as factors. Absenteeism, presenteeism, SPH, back pain and depression were included as outcomes. Stratifications for job insecurity and globalization were applied. **Findings:** All 4 recognition dimensions were strongly associated with all health indicators (ORs between 1.21 and 3.93) but, contrary to our hypothesis, no variation in associations' strength was observed for stratified data. **Discussion:** More research is needed for better

grasp the specificities of the link between recognition in the workplace and health when these dynamics are embedded within the novel work forms in the post-taylorist labor market.

Goal Pursuit and Illness Perception: Effects on Quality of Life of People Living With hiv

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Medical advances contribute to raise life expectancy of people living with HIV/AIDS (PLWHA) and quality of life (QoL) became a priority. However, PLWHA still face challenges related to the disease, having to adjust to different situations and adapt their goals. Tenacious Goal Pursuit (TGP) means the pursuit of goals with determination. Flexible Goal Adjustment (FGA), on the other hand, means seeking them with flexibility, disengaging if necessary. Illness perceptions (IP) are the beliefs and cognitions people have of a disease. This study aims to measure the effects of TGP, FGA and IP in the QoL of PLWHA. Data was collected from 140 French HIV positive patients. It was used the WHOQOL-HIV Bref, the Brief-IPQ and the FGA and TGP Scales. Results showed a correlation between FGA, IP and General QoL. Hierarchical multiple regression analysis indicates that the effects of FGA on the General QoL became non significant when IP is included. A Sobel test confirms that the effects of FGA in QoL is fully mediated by IP. PLWHA have to adjust in a daily basis, for that reason, FGA seems important to improve QoL. Goal oriented interventions should focus in the HIV/AIDS perception of PLWHA.

Flexible and Unconscious Pursuit of Exercise Goals: Coping Planning is Instrumental in Exercise Habit Formation

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Background: Action planning (AP) was shown to foster exercise habit formation (de Bruijn et al, 2011). However, coping planning (CP) may be more directly involved in this process given its critical focus on relapse prevention during maintenance (Prochaska et al, 2009). Methods: S1- 309 undergraduates were surveyed once on exercise habit, frequency, motivation, intention, self-regulatory tensions, AP and CP. S2- 531 runners completed those measures twice over 2 months. AP&CP were measured retrospectively at T2. S3- 208 adults in the action stage, randomized to AP only, AP&CP or control conditions, completed similar measures twice over 2 months. Findings: In studies 1&2, CP supplanted AP as a predictor of habit after controlling for all variables. In study 3, experimental effects on habit were observable only among low-habit participants of the AP&CP condition. Discussion: CP appears more typical of habitual exercisers than AP, and seems instrumental in achieving habit once the behaviour is successfully initiated. Individuals should therefore resort to CP to address relapses on the long term only after having steadily adopted a viable routine with AP to get around initial obstacles.

Online Mindfulness vs Progressive Muscle Relaxation vs a Combination of Both as a Treatment of Migraine- Empowering Clients in Their Choice of Treatment to Control Their Chronic Headache

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Background: It is unclear as to whether online mindfulness or progressive muscular relaxation (PMR) or a combination of both result in the best outcomes for people with chronic headache (Tension, Migraine & Cluster Headaches) Method: An online study which randomised people to one of three treatment groups; PMR, Mindfulness or combined PMR & Mindfulness (approximately 30 in each group). Groups were compared pre- post across 6 weeks of treatment & at one month follow-up across a number of pain, QOL & mental health measures. Findings: Both mindfulness and combined mindfulness with PMR performed significantly better than PMR alone. This effect was repeated across pain interference, medication usage, perceived illness threat and levels of pain catastrophisation. PMR alone was more successful at lowering levels of anxiety than Mindfulness or the combined treatment. Discussion: These initial results suggest that mindfulness alone might be a parsimonious intervention to help chronic headache sufferers to improve their level of pain interference, illness threat, catastrophisation and levels of medication usage. Replications of this study are now needed.

Why More Self-control Makes you Happier. Examining the Relationship Between Self-control, Regulatory Focus, and Happiness

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Background: People with high trait self-control (TSC) are not only more successful but also happier: how does regulatory focus (promotion vs. prevention) explain this relationship? Responding to this unexplored research question, the current study examines the relationship between self-control, regulatory focus, and happiness. Methods: 545 participants completed

questionnaires on TSC, regulatory focus, and happiness. Findings: Mediation analyses using bootstrapping revealed that TSC positively predicts happiness and significant mediation effects for both promotion and prevention focus were found. TSC was positively associated with promotion focus, which in turn was positively associated with happiness. Contrastingly, TSC was negatively associated with prevention focus, which in turn was negatively associated with happiness. Discussion: Greater TSC leads to happiness as regulatory focus mediates this relationship. People with higher TSC are happier possibly because they are more concerned with potential positive outcomes. Counterintuitive to the traditional conceptualization that TSC involves more vigilance in line with a prevention focus, novel findings in this study posit that more TSC leads to greater happiness through a lower prevention focus. Findings have relevant implications for topical scientific debates about the underlying mechanisms of self-control.

Exploring Psoriasis Patients' Experiences of Cardiovascular Disease Risk Discussions With Primary Care Practitioners: a Qualitative Study.

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Background Cardiovascular disease (CVD) screening occurs in primary care settings in the UK. People with psoriasis may particularly benefit from screening because unhealthy lifestyle behaviours in this group are high. This study explored psoriasis patients' experiences of discussing CVD risk with primary care practitioners. Method Semi-structured interviews explored views and experiences of 29 people with psoriasis who had taken part in an audio-recorded CVD risk assessment. 'Tape-assisted-recall' informed questioning and data were analysed using Framework Analysis principles. Findings Patients reported: 1) learning little new or personally meaningful knowledge and understanding about CVD risk; 2) strong emotional reactions to risk discussions; and 3) minimal risk discussion with practitioners during consultations. Conclusions Risk discussions with people with psoriasis during CVD screening may be limited because practitioners do not assess patients' pre-existing understanding of risk, address associated emotional reactions, or tailor discussions to patients' concerns. Facilitating practitioners to address these issues could improve effectiveness of such screenings.

'Not as Easy as Pie': Representations About Breastfeeding on the Romanian Online Discussion Forums

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Background: According to WHO (2003), infants should be exclusively breastfed for the first six months of life to achieve optimal health. Still, many mothers opt for formula-feeding and early introduction of solid foods. Understanding mother's views on the factors that facilitate or hinder breastfeeding becomes crucial for intervention planning. Methods: We gathered mothers' opinions from 24 online discussion forums (17196 messages). Thematic analysis was used to categorize messages into themes. Findings: Maternal factors that would impede breastfeeding were: misinformation regarding lactation, poor latching on to the breast, low breastfeeding self-efficacy, and (mis)interpretation of baby crying as hunger cue. Mothers voiced their anxieties regarding the insufficient milk flow in direct relationship with baby's slow weight gain or breast refusal. However, correct information regarding proper latching, avoiding mixed feeding or tight feeding schedules, were key ingredients for success. Discussion: Based on these insights, educational interventions should focus on providing technical information regarding lactation and breastfeeding as well as increasing maternal self-efficacy.

Effectiveness of an Online Computer-tailored, Pedometer-based Physical Activity Intervention: a Cluster- Randomized Controlled Trial

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Background: To test the effects of an online-tailored step advice, based on the Theory of Planned Behavior and the Transtheoretical Model, in adults. Methods: A cluster-randomized controlled trial was conducted among 274 participants recruited from eight Flemish workplaces. Intervention participants received an Internet link to request the online-tailored step advice. Self-reported (IPAQ) and pedometer-based physical activity (PA) were assessed at baseline (T0), and one (T1) and three (T2) months post baseline. Repeated measures ANCOVA's were used to examine intervention effects for both the total sample and the sample at risk. Findings: Between T0 and T1, significant intervention effects were found for step counts in the total sample

($p = .004$), and the at-risk sample ($p = .001$), and for time spent walking in the at-risk sample ($p = .02$). Between T0 and T2, intervention effects were still significant for step counts in the total sample ($p = .03$) and the at-risk sample ($p = .02$); however, self-reported PA differences were no longer significant. Discussion: The online-tailored step advice has the potential to enhance daily step counts, as well as time spent walking in adults.

Factors of Social Cognitive Theory Mediating Intervention Effects on Handwashing: a Longitudinal Study

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Diarrhoea, a leading cause of death in children under the age of five years, is best prevented by handwashing (HW). Standard education compared to theory-based approaches are rarely effective to promote HW, and their change mechanisms are often unknown. We therefore aimed to test the change mechanisms of two HW interventions based on social cognitive theory (SCT), extended by forgetting. The two interventions, a public commitment and an infrastructure promotion, were combined with education and compared to education only in a nonrandomized trial in Ethiopia. Data were collected before and after the interventions by interviewing 408 randomly selected households' primary caregivers. Mediation analyses were conducted. In comparison to the education intervention, the SCT interventions were more successful in changing handwashing, because they successfully changed SCT-factors and forgetting (total indirect effects [CI]: 0.08 [0.01, 0.14] to 0.14 [0.07, 0.21]). The study emphasizes not only the relevance of SCT in informing health interventions, but also highlights the importance of forgetting. The results confirmed the relevance of testing interventions' underlying change processes.

Bullying Behavior, Emotional Problems and Emotion Regulation Strategies in School Aged Children: a Longitudinal Approach

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Background: Bullying behaviors have a high prevalence in schools worldwide. The short and long term consequences vary from high levels of delinquency, antisocial behaviors, low school achievement to emotional problems for bullies. For perpetration victims, the negative effects vary from somatic complaints, low school achievement and high school drop-out rates to emotional problems. The mechanisms accounting for the high rates of emotional problems in children involved in bullying behaviors are still to be identified. Methods: By using a longitudinal approach, the present study aims to explore one possible mechanism involved in this relationship for school aged children: the use of dysfunctional cognitive emotion regulation strategies (N=154, age range 11-15 years old). The instruments used: Olweus Bullying Questionnaire, Cognitive Emotion Regulation Strategies, Youth Self Report. The measures were made at a 6 months' time interval. Findings: By controlling for initial emotional problems, the use of dysfunctional emotion regulation strategies (e.g. catastrophizing) partially mediated the relationship between bullying victimization (T1) and emotional problems (T3). Discussion: Several recommendations for future research, as well intervention strategies are presented.

Negative Emotion and Health: why do we Keep Stalking Bears, When we Only Find Scat?

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Background Researchers have stalked an elusive bear, a modifiable connection between negative emotion and morbidity and mortality. What is initially thought to be a bear in the woods (modifiable risk factor) turns out to be mere scat (uninformative risk marker). Discoveries are proclaimed, only to prove eventually false. Method. Narrative review of succession of variables deemed risk factors that went into decline, replaced by others. Results. Negative affect has been related to numerous morbidities and mortality. Discoveries often fail independent replication. Most candidates are statistically indistinguishable. Initial enthusiasm is due to artificial distinctions; capitalization on chance; flexibility in analysis and interpretation of data; and significance chasing. Conclusions. Each new false discovery scrambles research and clinical priorities and squanders resources. Future false alarms can be avoided with greater appreciation of the historical record. Preventive measures include recognizing false distinctions among concepts and appreciating the role of residual confounding and the inadequacy of statistical control for resolving causal issues in observational studies.

Still Young or Happy Elder? Exploring the Meaning of Positive Aging From Different Perspectives

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Background: Growing old in precarious times, defined by work and pension insecurity, makes it difficult to see aging as positive. The study explores positive meanings of old age from the perspectives of middle-aged persons and health professionals. **Methods:** Episodic interviews were conducted with middle-aged persons with secure (N=10) and insecure (N=10) pension plans and 7 expert interviews with professionals. Thematic coding was used for analyzing the data. **Findings:** Participants find it difficult to identify positive meanings for old age and tend to value staying young. Middle-aged consider wisdom a source of positive meaning in old age, whereas professionals promote social engagement and productivity. While professionals value personal responsibility for positive aging, precarious individuals believe it depends on luck. Secure individuals consider productivity and generativity attribute positive meaning to aging. **Discussion:** The positive meanings that professionals promote for old age may not be suitable for precarious individuals creating the risk for social inequalities in old age. The challenge for health psychology is to find new positive meanings for aging.

Identification of Evidence Based Behaviour Change Techniques for use in a Paediatric Weight Management Mobile app Targeting Parents

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Background: Commercial paediatric weight management apps are deficient in theory and behaviour change techniques (BCTs) and have ignored parent's role in children's weight related behaviours. **Aim:** Select appropriate BCTs for a paediatric weight management app targeting parents **Methods:** The Behaviour Change Wheel(BCW): A Guide to Designing behaviour change Interventions, guided consultations with experts, and focus groups with case workers and parents of overweight children. Focus groups were audio-recorded and transcribed to facilitate thematic coding of statements using the COM-B model. A literature review and the taxonomy of BCTs provided effective BCTs which were refined in interactive sessions with parents in regards to engagement and acceptability. **Findings:** Results indicated the need for balancing BCTs (e.g. goal setting, information on health consequences) with user engagement techniques (e.g. gamification, customisation, novelty) in the context of a digital environment. **Discussion:** This study demonstrates broader considerations health psychologists must consider in applying systematic approaches to developing effective mHealth interventions.

Associations Between Meaning in Life and Health Indicators: a Systematic Review

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Background: This systematic review tested the associations between meaning in life and health indicators. **Methods:** Using systematic review methodology we identified 49 studies testing associations between meaning and indicators of objectively and subjectively measured health (including perceived general health measures, symptoms frequency and intensity, health and risk behavior and mortality). Original trials included data from a total of 43 078 participants, including 39 939 healthy respondents and 3 139 participants with a diagnosed illness (1963 with cancer). **Results:** Following positive associations between finding or searching for meaning and health were found: 37/40 for perceived general health indices, 9/10 for risk or health behavior, 2/2 for mortality, 3/3 for symptoms. **Discussion:** Across populations, higher levels of meaning in life are related to better health measured with subjective and objective indicators.

Psychological Capital as a Mediator Between Manager Leadership Style and Sales's Adaptive Selling

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Psychological capital is one of Positive Organizational Behaviors (POB) that argued affected job performance, however the empirical evidences are still less if comparing with others POB investigated. This study was aimed to find empirical evidence from psychological capital role as a mediator between manager leadership style named transformational leadership and adaptive selling of insurance agents. Data were collected from 205 "door to door" insurance agents and accounted by using correlation and regression techniques. The result showed that psychological capital was proved as a full mediator between transformational leadership style of managers and adaptive selling of insurance agents. The finding suggest that psychological capital is more powerful in influencing adaptive selling than transformational leadership style. Consequently, personality variable such as psychological capital need to be noticed not just in selection process but also in developing skill for insurance agent better performance.

Antidepressant and Anxiolytic Medication use in Patients Treated With Coronary Artery Bypass Graft Surgery Versus Percutaneous Coronary Intervention: a Danish Nationwide Population-based Study

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Background: Coronary artery bypass graft (CABG) surgery is considered the optimal revascularization strategy for patients with complex coronary artery disease (CAD), whereas in patients with less severe CAD percutaneous coronary intervention (PCI) is recommended. As a more invasive procedure may be associated with increased psychopharmaca use, we compared antidepressant and anxiolytic use between CABG and PCI patients. **Methods:** Patients treated with CABG or PCI between 1999 and 2012 were identified from the Danish Heart Registry. Psychopharmaca use was determined by claimed prescriptions up to 12 months. **Results:** We identified 62.912 patients: 10.347 CABG and 52.565 PCI patients. After propensity-score matching, antidepressant use was significantly higher in CABG patients at 6 and 12 months, although no difference was found on anxiolytic use. Absolute risk differences (ARD's) ranged between 1.0-1.8% and risk ratios (RR's) between 1.1 - 1.2. **Conclusion:** CABG patients were more often than PCI patients prescribed antidepressants. Given the small ARD's and RR's, these differences did not seem clinically relevant, possibly reflecting comparable underlying psychological distress levels.

Risk of Bias in HIV-treatment Adherence Intervention Trials: a Systematic Review and Meta-analysis of Rcts

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Background: More needs to be understood regarding the extent to which risk of bias exists and how this may affect intervention effects reported in reviews of health behaviour interventions. This paper examines risk of bias in HIV medication adherence (MA) intervention trials. **Methods:** Databases were systematically searched for RCTs published between 1996 and 2012. Data was abstracted for study characteristics, quality of study methodology to assess risk of bias, and intervention effect estimates for adherence and viral load. A meta-analysis was conducted to assess the relationship between these variables. **Results:** 80 RCTs were obtained and coded. There was substantial risk of bias due to use of subjective behavioural measures, and inadequate and inaccurate reporting of random sequence generation, allocation concealment, and the intent-to-treat analysis. Risk of bias did not impact intervention effect estimates for HIV viral load, but did influence effect sizes for adherence behaviours. **Conclusions:** Improving the design of HIV MA trials and the comprehensiveness of trial design reports is needed to improve the quality of the evidence in MA trials.

Cognitive, Behavioural and Social Determinants of Prolonged Fatigue and Chronic Fatigue Syndrome

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Background: The objective of the study was (1) to compare patients diagnosed with Chronic Fatigue Syndrome (CFS) to a (gender and age) matched sample of people suffering from prolonged fatigue (PF) with respect to fatigue severity, somatic complaints, psychological distress, physical functioning and use of health care resources, and (2) to examine to what extent cognitive, behavioral and social factors contributed to fatigue severity and physical functioning in each group. **Methods:** Sample size was 192 for each group (mean age = 40; 88% were female). Data were collected with self-report questionnaires; the study was a case-control cross-sectional study. **Findings:** The two groups differed from each other on each of the dimensions except psychological distress. For both groups, illness perceptions were the strongest determinants of fatigue and physical functioning. Activity avoidance contributed to fatigue severity in PF, whereas all-or-nothing behaviour contributed to fatigue severity in CFS. Adequate social support was associated with less fatigue in CFS only. Activity avoidance was associated with worse physical functioning in both groups. **Discussion:** Our findings suggest that activity avoidance leads to the development of chronic fatigue and ultimately CFS, whereas all-or-nothing behaviour maintains CFS.

Psychosocial Predictors of Exclusive Breastfeeding Duration to six Months

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Background: The World Health Organization recommend that for optimal growth and development all infants worldwide should be exclusively breastfed for the first six months of life. Previous studies have identified that psychosocial factors are important for the maintenance of exclusive breastfeeding. This study aimed to examine the psychosocial factors associated with exclusive breastfeeding duration to six months postpartum. **Method:** 125 women completed questionnaires at three time points; 32 weeks gestation, two and six months postpartum. Self-efficacy, body attitude, psychological adjustment, attitude, intention, confidence, motivation and importance of exclusive breastfeeding and breastfeeding status were measured. **Findings:** At 32 weeks gestation a woman's confidence to achieve exclusive breastfeeding was a predictor of exclusive breastfeeding to six months postpartum. At two months postpartum, psychological adjustment and self-efficacy were predictive of exclusive breastfeeding duration. At six months postpartum, psychological adjustment, self-efficacy, confidence to maintain and feeling fat were predictive of exclusive breastfeeding duration. **Conclusion:** Self-efficacy, psychological adjustment, body image, motivation and confidence are important for the maintenance of exclusive breastfeeding to six months. This has clinical application for health psychology as antenatal breastfeeding education and postpartum support may be strengthened by strategies that build a woman's confidence to exclusively breastfeed.

Community Health Workers as 'cultural Producers' in Addressing Gender-based Violence in Rural South Africa

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Background: South Africa is experiencing an epidemic of gender-based violence (GBV), rendering women and girls vulnerable. In some communities health workers have positioned themselves at the forefront of addressing GBV. We frame the visual participatory work of a group of female community health workers as 'cultural production' (Bourdieu & Jackson, 1993) - shifting the subordination of women and girls and disrupting automatic transmission of cultural form across generations. We pose the question: How can community health workers create a space for social transformation in addressing GBV in a rural community? **Method:** This qualitative participatory study is positioned as critical research. Five female community health workers were conveniently selected from a clinic a rural district. We used photovoice and production of media posters to generate data. We offer a close reading of the visual data. **Findings:** Three themes: community health workers with insider cultural knowledge; community health workers as cultural producers; community health workers taking action. **Discussion:** Implications for health psychology in places where health issues are related to cultural reproduction.

Effects of an Interactive School-based Program to Prevent Adolescent Sexual Harassment. a Cluster Randomized Controlled Evaluation Study.

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Purpose of this research was to gain insight in the effectiveness of Benzies & Batchies (B&B), a school-based program aimed at prevention of sexual harassment behavior (SHB) at Dutch schools for preparatory secondary vocational education (girls and boys; 12-16 years). B&B consisted of a peer-performed theatre play followed by a group discussion and a training aimed at skills and resilience based on the prototype willingness model. Cluster randomized control trial (EG = 14 schools/431 students; CG = 11 schools/384 students); baseline (T0), post-test (T1), 6 month follow-up (T2)). Students filled out questionnaires on SHB and behavioral determinants. Multilevel analysis were conducted. Significant effect on social norm at T1 and T2 in the EG with regard to rejecting SHB ($\eta^2=.26$ en $\eta^2=.28$; $p<.05$ resp.); significant effect on self-efficacy in succeeding to reject SHB and less intention to commit SHB at T1 ($\eta^2=.23$; $p<.05$ and $\eta^2=.29$; $p<.01$ resp.). At T2 students in the EG showed a significantly higher sexual self-esteem ($\eta^2=.34$; $p<.001$). No significant effects on behavior at T2. Students and teachers appreciated the program. Further promotion and implementation of B&B is recommended.

Effectiveness and Cost-effectiveness of a Web-based Tailored Multiple Behavior Change Intervention

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Background: We tested two computer tailored lifestyle programs, one inviting people to change unhealthy behavior one at a time (sequentially), and the other inviting people to change all unhealthy behaviors (simultaneously). We compared the results with those from a comparison group receiving only lifestyle feedback. Methods: In a 2-year RCT, all respondents (N=5055) received feedback about their compliance with the guidelines for physical activity, vegetable and fruit consumption, alcohol intake and smoking. The experimental groups also received motivational feedback-based on the I-Change Model to change during via 4 steps. Mixed model, cost-effectiveness and cost-utility analyses were performed. Findings: After 1 year, the sequential condition was most effective (ES=0.28). After 2 years, the simultaneous condition was most effective (ES=0.18). Both interventions were cost-effective for changing lifestyles. Discussion: Nation-wide implementation of both interventions is recommended given their effectiveness and cost-effectiveness. A combination of both tailoring strategies may be most suitable for multiple behavior change.

Young People's Exposure to Snack and Soft Drink Advertising: Attenuating Influences of Awareness and Self-regulation

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Background: Food marketing is ubiquitous in the current food environment and young people's exposure to snack and soft drink advertising may increase consumption. We test if awareness of persuasive intent and use of self-regulation strategies attenuate the impact of advertising. Methods: Children and adolescents (N = 2,764 Mean age = 13.2; 49.1% girls) from The Netherlands, Poland, Portugal and the United Kingdom completed self-reports of snack and soft drink consumption, exposure to snack and soft drink advertising, awareness of persuasive intent of advertising, and eating-related self-regulation. Findings: Participants on average consumed two snacks and two glasses of soft drink per day. Snack and soft drink consumption was higher among those more exposed to advertising. Awareness of persuasive intent moderated the association between exposure to advertising and consumption, as did eating-related self-regulation. Discussion: Young people's exposure to snack and soft drink advertising may affect consumption, but the effect size of this association was found to be small. The impact of advertising can be attenuated by awareness of its intent and use of self-regulation strategies.

In the Heat of the Moment: the Influence of Temperature on Risk Taking

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Background: 'In the heat of the moment' and 'keeping a cool head' are common sayings that suggest a direct effect of temperature on risk behavior. We aim to show that higher temperatures, compared to lower temperatures, generally result in riskier behavior. Methods: In four studies, we tested the effect of temperature on sexual risk decisions and eating behavior, and found support for the predicted relation. We manipulated temperature by giving participants a warm or cold drink (Experiment 1), by manipulating room temperature (Experiments 2 and 4), or by using warm or cold packs (Experiment 3). Findings: Higher temperatures, compared to lower temperatures, resulted in riskier sexual decisions and higher food intake, when confronted with a temptation. Discussion: It thus seems that higher temperatures tip the decision-making scale towards temptations. People make more risky decisions 'in the heat of the moment' and 'cooling down' could literally help in the defense against temptations.

Applying the Intervention Mapping Protocol to the Design of a Serious Game Against Cyberbullying Among Young Adolescents

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Background. The Intervention Mapping Protocol (IMP) is a planning tool to design theory- and evidence-based health interventions. This approach was used to design a serious game against cyberbullying among young adolescents. Methods. Data-collection procedures included focus groups (61 adolescents, Step 1), school-based survey (1750 adolescents, Step 1), online survey (437 teachers, Step 1), pen-and-paper survey (105 parents), pen-and-paper survey (530 adolescents, Step 4), focus

groups (69 adolescents, Step 4). Collected evidence was combined with behavior change theories (Step 2, 3) to design the intervention. Results. Literature suggested high potential for a focus on bystanders. Main determinants of positive bystander behavior were moral disengagement attitudes, outcome expectations, subjective norm and self-efficacy. Behavior change methods (e.g. reinforcement) had to be translated into game principles (e.g. extra resources, accessorize). Concept testing showed positive evaluations of the narrative and characters. Conclusions. Intervention Mapping Protocol can be useful for serious game design, but its behavioral change methods need fine-tuning to fit with game mechanics.

Psychosocial and Biochemical Factors of age Changes in Depression in old age

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Symptoms of depression are among the most common problems in older persons, and may occur in relation to various risk factors, such as health conditions and psychosocial factors. The aim of this study was to determine the possible associations between psychosocial factors, biochemical factors and depression in old people, and age changes in these associations. Participants were 391 retirement homes' residents in Zagreb, Croatia, 28% men, 72% women, aged 56-96 years (average 79) at baseline, ambulatory and not diagnosed with dementia. Variables were measured, at baseline and at 2 years follow-up: sociodemographic, depression, self-perceived health, functional ability, cognitive function, social participation, individually, by trained interviewers. Biochemical variables were measured from the vein blood sample, collected at baseline. Psychosocial factors were stronger predictors of age changes in depression than biochemical factors. These findings are interesting in terms of intervention and better identification of groups particularly susceptible to depression that has been shown prospectively to predict disability, morbidity and mortality in old age.

Empathy as a Predictor and Trigger of Hand Hygiene Behavior

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Hand hygiene is vital for the prevention of nosocomial infections. We argue that empathy fosters hand hygiene behavior, since an orientation towards others' fortunes should highlight the costs/ benefits of insufficient/ adequate hand hygiene for others. We tested this prediction in three studies. In Study 1, we assessed empathy using a short version of Mehrabian & Epstein's measure of affective empathy and hand hygiene behavior with a self-report measure inspired by Kahneman and colleagues' Day Reconstruction Method. In Study 2, we experimentally manipulated empathy according to a procedure by Batson and colleagues and assessed actual hand hygiene behavior during a food preparation task, simulating work processes in a retirement home. In Study 3, an empathy-intervention was tested in a German hospital, where an empathy induction was implemented in a hospital unit and disinfectant usage frequency was assessed during a baseline and an intervention period in the intervention and a control hospital unit. Results of all three studies indicate that empathy fosters hand hygiene behavior. This effect emerged in correlational as well as experimental studies in the lab and in the field.

Emdr Disturbs Psychological Processes of Persuasion Leading to More or to Less Actual Behavior Change

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Background. The effects of persuasive health communications are influenced by activated self-regulatory processes. In the present study, the method of eye movement desensitization and reprocessing (EMDR) is studied to understand these processes. It is hypothesized that EMDR disturbs these processes that take place in the working memory. Methods: Participants from a university sample (N=124) were asked to listen to the persuasive message in a randomized laboratory experiment. In the EMDR condition, they were also instructed to follow with their eyes a dot on the computer screen. Findings: The effects of EMDR on actual fruit and vegetable consumption after two weeks depended on pretest scores on Cognitive Self-affirmation Inclination (CSAI): In people who scored high on CSAI, EMDR significantly lowered the consumption, but in people who scored low on CSAI, EMDR significantly increased the consumption. Discussion: The results suggest that EMDR disturbed defensive processes that lower persuasion in people with low CSAI, and self-affirming processes that support persuasion in people with high CSAI.

Viral Load, Adherence, and Adherence-Related Barriers Among Women Living With hiv in Constanta, Romania

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Background: The number of young women living with HIV is significant worldwide. Developing effective adherence support interventions requires an understanding of gender-specific challenges. Among these, the transition to motherhood may change adherence patterns as women adjust to new life routines. We conducted a cross-sectional adherence (ADH) survey among Romanian women with HIV with and without children. **Methods:** Self-reports of ADH behaviors and barriers were obtained from 139 women aged 18 to 40 (61 mothers). Viral load (VL) and socio-demographic data were collected from medical files. We examined differences between the two groups on VL, ADH, and ADH-related barriers. **Findings:** More mothers had detectable VL than childless women ($\chi^2(1)=7.2$; $p<.01$), although self-reported ADH levels did not differ. Perceived side effects and satisfaction with treatment were related only to mothers' adherence ($r=.59$ and $.34$; $p<.01$), while perceived treatment effectiveness was relevant only for childless women ($r=.36$; $p<.01$). ADH scores correlated significantly with VL ($r=-.25$ to $-.30$; $p<.01$). Mothers had shorter treatment duration, less education, and more lived in rural areas and independent families. **Discussion:** Mothers in this group may be at higher risk of disease progression, despite similar levels of reported ADH. More research is needed into modifiable predictors of health status in this setting.

Prototype-distancing in the Promotion of Healthy Eating: how and When can it be Reached?

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Background: To perceive the prototypical unhealthy eater more negative (prototype-distancing) represents a relevant target in the promotion of healthy eating. What, however, if adolescents perceive high similarity to the unhealthy eater? Two intervention studies were conducted to test how and when prototype-distancing can be reached. **Methods:** Study 1 (n=211) conveyed a negative unhealthy eater image via feedback of pilot study results. Study 2 (n=93) used imaginary Facebook-profiles with an instruction to contrast from the profile person. The control groups received no feedback or healthy eater profiles with an instruction to identify with the profile person. Perceived prototype similarity was tested as moderator of intervention effects. **Findings:** In adolescents perceiving high similarity to the unhealthy eater, the perception of the unhealthy eater did not become more negative after receiving negative image information only (Study 1) but if contrasting was initiated (Study 2). **Discussion:** Prototype-distancing can be reached in adolescents perceiving high similarity to the unhealthy eater prototype by presenting a negative prototype and initiating adequate comparison processes.

Bct and Theory use in Interventions Targeting Initiation and Maintenance of Weight Loss – Systematic Review

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Background: Behavioural interventions produce weight loss, but weight loss maintenance is elusive. The correspondence between behaviour change techniques (BCTs) used to initiate and maintain weight loss and the effect of theory use on weight loss maintenance is currently unknown. **Methods:** Systematic review of interventions inducing weight loss ($\geq 5\%$ body weight) in obese adults followed by randomisation to different maintenance treatments reporting weight outcomes ≥ 12 months. BCTs were compared for weight loss vs. maintenance phases, and associations between theory and weight maintenance effects were examined. **Findings:** 45 RCTs met inclusion criteria, including 9451 participants (BMI=35.2). Most studies employed the same BCTs targeting initiation and maintenance. Instruction provision, self-monitoring and problem solving were the most frequently employed BCTs. Theory based interventions were more effective compared to non-theory based ones [-2.3kg 95%CI -3.2 to -1.5 vs. -0.1 95%CI -1.2 to 0.9 , $P<.001$). **Discussion:** There is a lack of differentiation between BCTs used for initiation and maintenance of weight loss. Theory based maintenance interventions were found to be more effective.

The Experiences of People With Multiple Limb Loss Following Meningococcal Disease

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Background: Meningococcal disease is a life-threatening infection that can lead to death or significant disability, including multiple limb loss. Although no previous research has specifically investigated the experiences of those with multiple amputations, anecdotal evidence suggests that the care and support received is variable. The aim of the study was to explore these experiences and investigate the key physical, emotional and social issues. **Methods:** An exploratory phenomenological study using semi-structured telephone and face-to-face interviews. Sixteen participants were interviewed, eight had multiple

amputations and eight were parents or guardians of those who had multiple amputations. Findings: Key themes were: continuity and integration of care, specific prosthetic and rehabilitation needs for multiple limb loss, timing of psychosocial support and a lack of information. Discussion: Although multiple limb loss following meningococcal disease is rare, this study starts to explore the specific care and support needs of this specialist group and will be used as an important starting point for a future body of work in this field.

Calling in Career and Life Satisfaction Among Romanian Students

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Over the past five years there has been a growing body of literature that examines meaning in work and career. Calling, defined as a deep-seated passion and meaning for a particular line of work is essential for professionals' wellbeing, career success and adaptability. Taking into account the above mentioned, the aim of this study was to explore the relationship between the perceived calling and life satisfaction on a sample of 460 Romanian undergraduate students (326 female and 134 male). Life goals - one potential moderator of the calling-life satisfaction relation was tested. The regression analysis have revealed a strong positive impact of all three types of measured calling (Transcendent Summons; Purposeful Work; Prosocial Orientation) on life satisfaction. Moreover, the data revealed that the participants more likely to perceive their career as a calling were more satisfied in life than the others. Also, the relation of calling and life satisfaction was different based on types of life goals, with the strongest relation for self-transcendent goals. Implications for career development programs and vocational counseling are discussed.

Using Smartphone-based Applications (apps) in Occupational Health: Developing a new Concept for Practical use

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Background: Smartphone-based applications (apps) become increasingly popular when it comes to individual health. A link between these apps and occupational health can be seen as an innovative approach to raise motivation and participation in occupational health projects. The aim of our study is to investigate, how apps can be implemented in an occupational health project. Method: Two studies were conducted: First, 438 Austrian and German leaders were asked about their opinion of using apps in occupational health. Second, a pilot study was conducted in a medium-sized enterprise, where the process of including an app in an occupational health project was constantly evaluated. Findings: Among other results, study I shows that 33% of German and Austrian leaders would like to use an app in occupational health programs and see its main benefits in getting an instant feedback or advice. Study II shows the effects of the app in different phases of the project. Discussion: Our study can be seen as a first step in the direction of creating innovative occupational health projects with apps.

Interdependent Subjective Experience of the Disease in Couples Facing Breast Cancer

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Background: We aimed to identify the impact of the patient's and partner's anxiety and depression on her/his own subjective experience of the disease and on her/his partner's subjective experience, as well as the links between their experiences. Methods: 112 couples in which the woman had a non-metastatic breast cancer completed a self-administered questionnaire assessing 1) the perceived impact of the disease and treatments (Vanlemmens et al., 2013), 2) anxiety (STAI) and 3) depression (CESD). Findings: Patient's subjective experience in terms of management of children and of daily life, feeling of couple cohesion, and body image and sexual life is predicted by her own emotional distress and by her partner's experience on these dimensions. Similar results are found in partner except for his feeling of couple cohesion, predicted only by the patient's experience of cohesion. Also, the support from close relatives he perceives is predicted only by the patient's anxiety. Discussion: Partner's experience seems to be more influenced by the patient's experience than reverse. This suggests paying more attention to him –and to the couple– in support care.

Health Behaviour in Children: Associations Between Children's Self-report Data and Their Parents and Classmates Ratings

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Self-other associations between children's self-reports of health behaviours and ratings from their parents and their classmates were analyzed. Children's health protective behaviours (road safety, sun safety, dental hygiene) and eating behaviours (unhealthy eating, healthy eating, bringing with school lunch) were assessed. Methods: In Study I for 305 children (45 % girls, class levels 3-5) self-report data and their parents' ratings were assessed, in Study II for 84 pupils (45 % girls, class levels 5-6) self-report data were validated with their classmates' ratings. In Study III for 487 children (49 % girls, class levels 3-6) self-reports as well as ratings from their parents and their classmates were included. Findings: The self-other correlations between the corresponding subscales were modest to high, ranging from $r = .30$ for dental hygiene to $r = .69$ for road safety and bringing with school lunch. Even if controlled for gender and age the ratings from parents and classmates remained significant predictors for all self-reported health behaviour subscales. Self-other consistencies and the implications for the assessment of health behaviours in children will be discussed.

A Matter of Perspective: Reappraisal as a Tactic to Regulate Caloric Intake

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Background Adaptive emotion regulation strategies such as cognitive reappraisal have the capacity to 'cool down' negative feelings. The present research investigates the hypothesis that the cooling down capacity of reappraisal transcends to other 'hot' domains as well, such as the domain of eating palatable foods. Methods In two experiments anger was induced and participants reappraised their anger by viewing it from a third person perspective (reappraisal) or from their own perspective (control condition). Cognitive accessibility of eating enjoyment was assessed by a lexical decision task (Study 1) or caloric intake was assessed by a taste test (Study 2). Findings Results showed that relative to the control condition, reappraisal decreased cognitive accessibility of eating enjoyment and decreased caloric intake. Anger experience was not responsible for these findings. Discussion These findings imply that emotion regulation strategies with cooling down properties go beyond cooling down the affective domain, by dampening other 'hot' constructs as well.

The Role of Maternal Health on Children's Health in the Long-term Aftermath of Disaster

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B This paper examined the association of mothers' and children's posttraumatic stress reactions in the long-term aftermath of the 2004 Tsunami in South India. M 106 mothers gave answers for their 221 tsunami-affected children to the Traumatic Events Screening Inventory and the Parent Report of Child's Reaction to Stress. The Impact of Event Scale and the General Health Questionnaire were used to gain information about mothers' health status. The children (aged 8 to 17) were single and double orphans either living with their biological parent or in an out-of-home care organisation. The impact of mothers' health, children's prior trauma history and pre-existing characteristics on children's stress reactions were analysed with hierarchical multiple regression analysis. F The results showed that general health of the mothers ($\beta = .46$, $p < .001$) significantly predicted the amount of trauma symptoms in children, as does the context in which the children lived ($\beta = -.18$, $p < .05$). D The findings were discussed in the light of that mothers' health need to be secured in order to enable children's well-being. This study is part of the project Post-tsunami which was funded by the European Commission.

Stressful Life Events are Associated With Impaired Blood Pressure Recovery After Standing in a Sample of Community Dwelling Older Adults

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Background: The majority of the literature on stress and blood pressure (BP) is concerned with increased risk of morbidity or mortality from cardiac events. As the sympathetic nervous system is also critical to the maintenance of orthostatic BP, we hypothesise that exposure to life stressors may alter BP regulation such that older adults who have experienced more stressful life events (SLEs) are more likely to show impaired recovery of BP in response to orthostatic stress. Methods: Data were collected during the first wave of The Irish Longitudinal Study on Ageing (TILDA), which took place between 2009 and 2011. Exposure to SLEs was ascertained via self-completion questionnaire. Orthostatic BP was measured using beat-to-beat digital plethysmography. 3,765 participants aged 50 and over completed both measures and thus were included in the current analysis. Findings: Adjusting for confounders, there was a dose-response relationship between the number of SLEs reported and the odds of impaired systolic BP recovery after standing (1 event: OR= 1.22, $p < .05$; 2 events: OR = 1.32, $p < .05$; 3 or more events: 1.61, $p < .001$). Discussion: This study is unique in being the first of its size to investigate the relationship between stress and orthostatic BP behaviour using beat-to-beat measurement. Follow-up is required to determine the clinical prognostic value of the observed association.

The Relationship Between Socio-Economic Status and Eating Behaviours: Mediation Analyses of

Impulsive, Reflective, Inhibitory Control Skills and Environmental Variables.

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This study aimed to analyse the direct relationship between socio-economic status (SES) and eating behaviours, as well as the indirect relationship via impulsive, reflective, inhibitory control and environmental variables. 262 adolescents aged 12-13 years old were assessed on their intention to eat (reflective measure), temptation (impulsive measure) and the availability at their home of fruit/vegetables (FV) and sweet/savoury (SS) snacks, as well as their inhibitory control. Immediate food choices were assessed through a Behavioural Choice Task and a 24h recall was used to assess frequency of FV and SS. SES was assessed via wage and ownership of home and car. Immediate food choices (whether FV or SS or both) were directly predicted by SES and indirectly predicted by temptation and inhibitory control. The only (direct) predictor of frequency of FV consumption was SES. There was no predictor of the frequency of SS. Results seem to indicate that social inequalities can determine FV consumption. Public health interventions aiming at FV consumption need to take this into account when designing interventions. Aim should be to decrease the health inequality gap.

Resilience During Adolescence: Conceptual Structure and Intervention Opportunities

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Minimal research has measured well-being and assets that could enhance well-being, particularly during adolescence. The current study had two aims (1) conceptualise and assess an adolescent resilience and well-being model; (2) evaluate a School-Based program guided by the variables within the model. A total of 250 participants aged between 13-16 years completed a questionnaire assessing a wide range of individual and environmental predictors of adolescent resilience. For participants who completed the program, the questionnaire was administered at three stages (n=180; pre-test, post-test, 6 month follow-up). Significant pathways within the model were found for numerous assets. Quantitative and qualitative findings were obtained during the evaluation of the program. Individual factors (i.e. self-esteem and specific coping skills) increased significantly for participants completing the program. Findings from this study have identified factors that could assist in the development of adolescent resilience to stressful life events and enhance well-being. Furthermore, participant feedback has provided guidance on improving the program, which could guide future intervention developments.

Cardiac Misconceptions in FIRST-MI PATIENTS: Preliminary Results From an Intervention Study

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Background: Cardiac patients hold beliefs about their illness that can be misconceived and negatively affect adjustment. This study tested the efficacy of an intervention aimed at dispelling cardiac misconceptions in myocardial infarction (MI) patients. Methods: 86 first-MI patients were randomized to control or intervention group. The intervention consisted of 1 in-hospital session followed by 4 phone calls after discharge. Patients were assessed at baseline and 4 months later. The main outcomes were cardiac misconceptions, illness perceptions, perceived health-related quality of life, anxiety, depression and health behaviours. Findings: At the 4-month follow-up, patients in the control group had significantly higher misconceptions, more negative illness perceptions, and higher levels of depression than patients in the intervention group. Also, a significantly higher proportion of participants reported doing exercise in the intervention group than in the control group. Discussion: A cardiac misconception intervention can be effective in altering MI patients' erroneous beliefs and negative illness perceptions, with beneficial effects over depression levels and exercise behaviours.

The Influence of Reduced Psychological Detachment of Work on Work-family Conflict

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Most studies on work-family balance focus on time-related strains and resources. Employees in human service organizations are also confronted with emotional and social strains which could be still present at home with consequences for the family life. 1140 employees, working in human service organizations (education, youth care, nursing etc.) were asked for strains at work (time-related, emotional client work, social climate), organizational (overtime, shift) and social resources, psychological detachment of work and work-family conflict. Regarding the different parts of influences, a multiple hierarchical regression was used. There are high correlations between reduced psychological detachment of work and the emotional, social and time-related strains ($r=.37-.42$) and work-family conflict ($r=.53$). The full model explains 49% of the variance. Time-related strain, reduced

psychological detachment of work and shift work are the highest predictors for work-family conflict. Besides the influence of time-related strains, the psychological detachment of work has an additional important impact on work-family conflict, especially for employees from the human services organizations.

How Health Behaviors Relate to Academic Performance via Affect: an Intensive Longitudinal Study

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Background: This intensive longitudinal study examined effects of health behaviors on affect experience and academic performance, indicators of mental health and cognitive functioning. **Methods:** Over the freshman year, 282 university students answered 65 online-assessments about sleep quality, eating behavior, physical activity, affect, learning behavior, and exam grades. **Findings:** Multilevel structural equation models over the first year, showed that subjects with on average better sleep quality and regular eating behavior but not physical activity predicted better learning behavior, which in turn was associated with passing exams. Relations of all health behaviors with learning behavior were mediated by affect. In terms of day-to-day dynamics, on days with better sleep quality and eating behavior but not physical activity, participants reported better learning behavior. Daily affect mediated the relations of all health behaviors with learning behavior. **Discussion:** Results provide a first understanding of between- and within-person variations in health behaviors, affect and academic performance. They could inform health prevention or intervention programs for university students.

The Impact of Self-affirmation and Information Type on Message Acceptance, Intentions and Behaviour.

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Background: Self-affirmation, the process of reflecting on important self-attributes, such as core values, has been found to reduce resistance to personally relevant health-risk information. However, little is known about whether it interacts with different types of health information to affect outcomes. The current study examined whether the effects of self-affirmation differed according to whether health information was presented as (a) a narrative account or (b) non-narrative data. **Methods:** In an online study, females (N = 132) were randomly allocated to condition resulting in a 2 x 2 design (Affirmation, No Affirmation x Narrative, Non-Narrative). Participants then completed measures assessing indicators of message acceptance and motivation. Alcohol consumption was assessed at 7-day follow up. **Findings:** Self-affirmation (vs. no-affirmation) reduced message derogation and counter-arguing to the narrative but not the non-narrative information. Self-affirmation increased message acceptance, while narrative information increased negative affect. **Discussion:** This study has implications for understanding how the effects of self-affirmation may be influenced by information type.

Do UK Televised Alcohol Advertisements Abide by the Regulator's Rules Governing the Portrayal of Alcohol?

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Background. Advertisements for alcoholic drinks televised in the UK must abide by the BCAP Code, which aims to prevent such adverts implying, condoning or encouraging immoderate, irresponsible or anti-social drinking. The present study examines whether the general public perceive alcohol advertisements as complying with this Code. **Methods.** A quota sample of 373 adults who were representative of the UK adult population viewed one of seven alcohol advertisements shown on television over a two-week period, and completed a questionnaire assessing whether that advertisement complied with each of the BCAP Code guidelines. **Findings.** Overall, 75% of the participants rated the advertisements as breaching at least one guideline from the BCAP Code. Over 50% of participants saw breaches in guidelines regarding alcohol being presented as contributing to popularity, and implying that alcohol is capable of changing mood, physical condition, behaviour, or as nourishment. **Discussion** The UK general public perceives alcohol advertisements shown on television as breaching the BCAP guidance. The present analysis indicates the inadequacy of the current regulatory system.

Dynamics of Risk Perception

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Introduction. Changing risk perception through providing actual risk feedback is a central topic in health intervention.

Extending previous research, in the present study (1) multiple risk factors are assessed and, (2) a dynamic perspective is taken, examining trajectories in risk perception and protective behavior from pre-feedback to immediate responses after feedback and 6 month later. Methods: Dynamic change in risk perception in the context of a longitudinal public health was assessed before, immediately after and 6 month after receiving actual feedback about individual risk factors for coronary heart disease. Results: Participants (N=607) showed a relative accuracy in risk perception in relation to their actual risk feedback. Variations in post-feedback risk perception emerged due to both actual risk feedback and protective health behavior changes after receiving risk feedback. Importantly, the different risk status groups did not differ in the perceived peer-related risk, indicating an adaptive rather than defensive integration of risk information. Conclusions: Theoretical implications for and modulating factors of the processing of health risk information are discussed.

Intentional and Unintentional Non-Adherence: Motivation and Planning Predicting Medication Adherence Following Coronary Artery Bypass Graft Surgery

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Background: Medication adherence rates after coronary artery bypass graft surgery (CABG) are low. There is a lack of studies looking into intentional (deliberate or reflective) and unintentional (forgetting to take medication) non-adherence in CABG patients. Methods: In a sample of N=197 post-CABG surgery patients followed from discharge over one year, it was hypothesized that motivation, action planning and coping planning are independently predictive of medication adherence. Moreover, interaction effects were tested. Findings: Motivation (B=.30, p<.01), action planning (B=.19, p<.01), and coping planning (B=.16, p<.01) were independently related to adherence. Beyond that, action planning×motivation (B=.06, p<.05) and coping planning×motivation (B=.07, p<.01) interaction terms were significant. Discussion: As theoretically predicted, planning was more predictive in those patients who reported higher motivation towards medication adherence, reflecting the idea of planning being a factor to overcome unintentional non-adherence. Implications for intervention development were discussed.

The Moderating Role of Different Volitional Competencies on Subsequent Self-control Exertion

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Scoring high on volitional competency should protect against ego-depletion. This buffering role and the interplay between broader personality traits and state self-control have not been largely examined yet. Thus, we tested the moderating role of different volitional competencies (as assessed by VCC-4 and NEO-FFI) on ego-depletion. We hypothesized that scoring high on impulse control and on conscientiousness protects against ego-depletion. Furthermore, overburdening the self-control muscle should result in more ego-depletion. Participants (n=64) completed an emotion-suppression task and had to suppress all emotions to videos or not. Afterwards they completed the Stroop-task to measure ego-depletion. As hypothesized, we found that scoring high on conscientiousness and impulse control protects against ego-depletion and that scoring low on these variables increases ego-depletion. Overcontrol increased vulnerability towards ego-depletion. These findings show that different volitional competencies have divergent effects and that overburdening the self-control muscle can backfire. These findings have clear practical implications for self-control interventions.

Social Environment of Children's and Adolescents' Snack Intake: Individual Moderators of Actual Group-norms

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Background: In schools, perceived behavior or attitudes of classmates can facilitate but also inhibit unhealthy food intake of children and adolescents. The present study examined the association between actual attitudes of classmates and food intake. In addition, such normative effects may be facilitated by matching food preferences of the individual and class as well as a positive social self-concept indicating perceived group inclusion. Methods: 2118 Finnish, German, and Romanian children and adolescents (aged 8-19) of 127 school classes were asked to indicate their food preference, social self-concept, and snack intake. Findings: Multilevel-analyses indicated that class members share 14.7% snacking variance. Moreover, unhealthy food class preference is associated with classes' snacking ($\beta(1) = 54.67$, $p < .000$, pseudo- $R^2 = .35$). This effect was facilitated by individual unhealthy food preferences ($\beta(1) = 17.67$, $p < .000$, pseudo- $R^2 = .55$) and a positive social self-concept ($\beta(1) = 4.97$, $p = .025$, pseudo- $R^2 = .17$). Discussion: Overall, while actual class norms are important for children's and adolescents' food intake, individual differences moderate the effect of social norms.

The Impact of Patient Exercise Referral Schemes on Quality of Life.

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Background: Exercise referral schemes are increasingly used in primary care to promote mental health and wellbeing. This study explored the often overlooked psychological outcomes that patients experience from taking part. **Methods:** A pre- post design was used. Changes in potential mediators of change (motivation and self-efficacy), and quality of life (QoL) were recorded for 117 consecutive patients referred to a 12-week physical activity referral scheme in south west England. Outcomes were assessed at 3, 6, and 12 months after enrolment. **Findings:** Intrinsic motivation for exercise increased over 3 and 6 months ($p < .05$), but there was no change in self-efficacy or extrinsic motivation. Improvements in QoL were reported at all time points ($p < .005$). Improved QoL was positively predicted by improved self-efficacy at both 3 ($R^2 = 0.2$) and 6 months ($R^2 = 0.4$). Changes in motivation were not independently predictive of the observed improvements in QoL, but were significantly associated. **Discussion:** Exercise referral schemes can enhance intrinsic motivation for physical activity and QoL. The inclusion of strategies to promote self-efficacy may further enhance psychological outcomes.

Children's Knowledge About Factors Associated With the Maintenance of Normal Bodyweight

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Rising rates of childhood obesity worldwide highlight the need to address issues of diet and exercise in the early years. Little is known about children's conceptualisations of factors associated with the maintenance of normal bodyweight. This study investigated children's knowledge of food intake and exercise in relation to changes in weight. 72 children age 5-12 years ($m = 36$; $f = 34$) participated in a vignette-based semi-structured interview around topics such as food composition, food intake and exercise. The data was analysed using content analysis. The findings indicate a developmental progression, with greater understanding of biological causal mechanisms from age 9 onwards. Under nines provided mainly mechanical explanations and endorsed a hereditary component to obesity. The conceptualization of foods as 'good' or 'bad' was seen across all ages. Information-based interventions to target childhood obesity need to be tailored to the developmental level of the child. The majority of participants demonstrated awareness of health education concepts, however conceptualisations at some ages may be counterproductive in encouraging health-related behaviours.

A Systematic Review of Pragmatic Lifestyle Interventions for the Prevention of Type 2 Diabetes.

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Background: We aimed to assess a) the effectiveness of 'real-world' diabetes prevention programmes, and b) whether adherence to guideline recommendations on supporting behaviour change is associated with increased effectiveness. **Methods:** We systematically searched bibliographic databases and assessed study quality for 'real world' diabetes prevention programmes targeting change in diet and/or physical activity, with relevant outcome data for 12 months or more of follow up. We conducted a) random effects meta-analysis and b) meta-regression to associate intervention effectiveness with adherence to guideline recommendations on intervention content. **Findings:** A meta-analysis of 22 studies found a mean weight loss of 2.12kg (95% CI: 2.61 to 1.63; $I^2 = 91.4\%$), compared with 4.2 to 6.7kg for 'gold standard' clinical efficacy trials. Adherence to guidelines was significantly associated with greater weight loss, with an increase of 0.3kg per point increase on an 11-point guideline-adherence scale. **Discussion:** The effectiveness of pragmatic diabetes prevention programmes varies substantially, but is higher for programmes that adhere to guideline recommendations on supporting behaviour change.

The Variable Course of Emotional Distress Over Time in Patients on HEMODIALYSIS. the Role of Social Support Indicators

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BACKGROUND: Depression is common in hemodialysis patients but little is known about the course of distress over time. This study set up to map the course of anxiety and depression and to identify factors associated with different trajectories. **METHODS:** 159 hemodialysis patients completed the HADS and measures of social support on two occasions 12 months apart. Clinical cut-offs were used to identify patterns of change and general linear models were applied to identify correlates of these trajectories. **FINDINGS:** Mean anxiety and depression remained unchanged with over 50% above cut-offs. While most patients had

either persistent symptoms (39.6% depression; 31.8% Anxiety) or no/low symptoms (32.1% depression; 36.9% anxiety), 12.7% to 14.5% either had new-onset or recovered. Patients with persisting or new-onset symptoms of distress reported worsening in social support and quality of social interaction compared to patients with no/low symptoms ($p < .01$). **DISCUSSION:** Different patterns of symptoms reflect heterogeneity in patients' emotional adjustment. More research is needed to identify patients at risk for emotional distress and to explore social support in the context of dialysis

Predictors of Mood and Benefit Finding in Breast Cancer Patients Over 18 Months Post-diagnosis.

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Background: Diagnosis and treatment of breast cancer can pose significant adjustment challenges but some patients can also experience positive changes, although it is yet unclear whether these confer adaptive psychological consequences. This study (i) identifies predictors of both positive and negative adjustment and (ii) tracks how benefit finding relates to adjustment across an 18 month time period. **Method:** Data was collected from 167 women at 4, 12 and 18 months post diagnosis. They completed standardized questionnaires assessing stress, coping, optimism, social support, emotional adjustment (depression, anxiety, positive and negative affect) and benefit finding. **Findings:** Hierarchical regression analyses, controlling for medical variables and previous adjustment showed that while stress appraisal explained a third of variance in concurrent emotional status it was only baseline coping and optimism that predicted mood over time (5%). A random effects SEM model showed that low distress and high optimism predicted benefit finding at various time points. **Discussion:** These results support a positive relationship between perceived benefit and positive well-being.

Relations Between Obesity and Internet Dependence in Students Living in University Dormitories

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Along with the technological developments, today's life conditions make people more ponderous. Calories taken more than consumption and hypo-active living cause the increases in both body-fat and obesity. This global danger has become an important threat particularly for university students. This study was planned and conducted to reveal the possible relations between obesity and internet dependence in students living in university dormitories. Results from 290 students with an age range of 18-35 years showed that students' body-mass-indexes become higher as their internet dependence levels increased. While 82,1% of the students stated that they used internet by their mobile phones, 50,3% of the students have been using internet for more than 7 years. Internet dependence levels were found significantly higher among the students who did not employ a regular nutrition regime, skipped meals, had a family member with obesity, did not practice regular physical exercise, and did not have sufficient social support of their families. Students and their families should be well informed about potential harms of internet dependence on health, particularly on obesity, and social life.

Patients' and Visitors' Aggressive Behaviours in Four Different Hospital Departments

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Background: physical and verbal violence by patients is now widely recognized as a major occupational health hazard. Based on the Job Demand-Resources Model, our study investigates if and how certain individual resources and socio-organizational resources contribute to buffering the negative impact of verbal aggression on burnout and to boost emotional well-being. **Methods:** 442 healthcare workers working in 4 departments (ED, psychiatry, midwifery and paediatrics and outpatient clinic) were invited to complete a self-report questionnaire. **Findings:** a series of moderated stepwise regression analyses were conducted. Aggressive behaviours are important predictors of burnout and emotional well-being. Although healthcare workers in different departments differ neither in terms of perceived patient aggression nor of burnout and well-being, the study identifies differences in the patterns of resources that protect them against social stressors tied to the interaction with patients. **Discussion:** The different role played by different kinds of resources to buffer the effects of patient aggressive behaviours is also discussed.

Early-ACTID Lifestyle Intervention for Type ii Diabetes: Readiness to Change Associated With Increased Physical Activity

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Background: Behaviour change, prior to intervention but post diagnosis may affect engagement in lifestyle interventions. This study examines associations between stages of change, psychological factors and physical activity (PA) in Type II diabetes patients in a lifestyle intervention trial. Methods: Patients (N= 537) with newly-diagnosed type 2 diabetes took part in Early ACTID, a randomised controlled trial of physical activity and dietary change. Stage of change (SoC), self-efficacy, outcome expectations, social support and objective PA were measured at baseline and 6 months. Linear regression was used to determine if SoC and psychological factors predicted PA at 6 months. Findings: 58.3% patients were in the action/maintenance stage at baseline. Being at these stages at baseline and 6 months was associated with increased objectively measured PA. Only baseline stage of change predicted total PA and MVPA at 6 months (total PA: $\beta=0.47$; $P=0.000$; MVPA: $\beta=0.49$; $P=0.000$). Discussion: In predicting objective PA, the other psychological factors showed no association, suggesting readiness for change may override determinants previously specified as supporting self-reported PA change.

Psychosocial Aspects of Religiosity and Spirituality in Relation to Health

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Backgrounds: This presentation is based on the assumption that religiosity, and spirituality can with other salutoprotective factors influence physical and psychological health (well-being). Methods: The sample consisted of 278 adults (104 men and 174 women, average age 41,9 years). Mental health was assessed via WHOQoL-Bref, SWLS, PANAS; independent variables were measured via scales: SOC, PSSS, GQ, LOC and lifestyle inventory. R/S were assessed via PCBS, SIBS and DSES. Results: R/S were in some models the specific predictors of subjective quality of life (QoL). Significant linear relations were found between the construct of R/S and life satisfaction. A nonlinear relation was found between R/S and the QoL. The persons with the highest and the lowest extent of R/S had higher QoL than those with the middle extent of R/S. We found connection between the QoL and meaningfulness. We proved significant differences between other variables as to lifestyle indicators, social support, gratitude, LOC, stress etc. of the persons with higher and lower R/S. Discussion: The relation between R/S and psychosocial variables appears to be a lot more complex even if specific impact of different variables remains unclear. In a sample of Czech population we aimed to find which facets of R/S can lead to well-being improvement. R/S variables are presumed to have small but significant impact on overall well-being.

Effect of a Smartphone-delivered Intervention Using Imagery and Self-control Training on Alcohol Consumption and Binge Drinking: an Experimental Study

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Background. Excessive alcohol consumption is linked to maladaptive outcomes. This experiment examined the effectiveness of mental simulation and self-control training in reducing alcohol consumption. Method. Undergraduates (N=78) were randomised to one of 4 conditions in a 2(mental simulation: mental simulation vs. irrelevant imagery) x 2(self-control training: challenging vs. easy Stroop task) experimental design. For the mental simulation manipulation, participants received either a mental simulation task requiring visualisation of steps required to reduce alcohol intake or an irrelevant imagery task. For the self-control training manipulation, participants completed either incongruent (challenging) or incongruent (easy) Stroop-colour naming tasks twice daily on their smartphone. Findings. Self-control training predicted alcohol consumption (partial eta squared=.022) but not mental simulation. No interaction effect for the manipulations on alcohol consumption was found. Discussion. Results support an effect of self-control training on alcohol consumption, but not the hypothesis that training is more effective for individuals whose motivation is enhanced through mental simulation.

Comparing the big Five Personality and Early Maladaptive Schemas in Patients With Celiac Disease and Healthy Controls

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This research performed with goal of comparison of five main factors of personality and basic incompatible plan at celiac patients and normal people. Research design was comparison-casual type and 108 patients (65 women and 43 men) and the same number of normal person from 4 universities of Nursing, Psychology, Literature and Accounting of Islamic Azad university of Karaj have been selected as a sample size. Both groups answered the brief five factors questionnaire about personality, Yang's incompatible plan, and General health questionnaire. Results showed that from five main factors of personality, score of the psycho-lesion of the patient affected by the celiac was more than normal people. Also, patient's scores at the basic incompatible plan (emotional baffling, lack of trust, fault, shame, social recluse, strangeness, attachment, inefficiency, vulnerability toward loss or sickness, not self-maturing, engaged, failure, fitness, modesty, self-denial, insufficient self-discipline, servitude,

self-sacrifice, aggressive criteria, extreme criticize and emotional inhibition) in comparison with normal people were higher. Regarding the effect of the celiac sickness from basic incompatible plan for recovering the patients can use the psychological and educational courses and therapy plan at the recovering cognitive and emotional pattern of this patient.

Post Traumatic Stress Disorder After Delivery : French-Tunisian Cross-cultural Study

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Background: Motherhood may be associated with psychopathological manifestations. Recent studies have found a link between a traumatic experience of childbirth and Posttraumatic Stress Disorder (PTSD) (Olde et al, 2006; Denis et al, 2009). According to international literature, 2% of women are at risk to develop postpartum PTSD. The aim of this study is (1) to evaluate the prevalence of PTSD in a French/Tunisian populations and(2) to determine the role of coping strategies. Methods: French and Tunisian participants (n =164) were recruited during the last trimester of pregnancy (T0) and at 2 months postpartum (T1). They had completed measures of perinatal PTSD (PPQ) and coping (brief COPE). Findings: 34.4% of French women and 47.5% of Tunisian women have symptoms of PTSD at 2 months postpartum. Concerning the impact of coping strategies, women using more denial, blame and less positive reinterpretation and expression of feelings presented greater risk of developing PTSD following childbirth. Discussion: In the context of postpartum PTSD, the role of psychological adaptation must be explored further in order to better understand its development and possibilities of prevention.

Experiences of Child Vaccine Providers With the National Immunization Programme and Their Dialogue With Parents

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Background: Child Vaccine Providers (CVP) work at Child Welfare Centers (CWC), administer vaccines and communicate with parents about the National Immunization Programme (NIP). We performed this quantitative study to get more insight in CVPs attitude, their need for information and education, and their experience with educating (critical) parents who visit the CWC. Methods: We conducted a cross-sectional on-line self-report questionnaire. In total, 1427 CVPs received, and 432 CVPs completed the questionnaire (response rate = 30.3%). Findings: Half of the CVPs (52.2%) indicated that they sometimes avoid discussion with parents. CVPs give 1-2 minutes education during a consult about the NIP to parents, but prefer 2-5 minutes, while 11.8% of the CVPs do not give education at all. Discussion: CVPs indicated not having enough time to fulfill the information need of parents, we think that CWCs should schedule an extra consult, or information meeting when parents have many questions. CVPs have a need for education in how to communicate with parents, therefore Public Health Institutes should develop training for CVPs about how to communicate with parents.

Training of Health Behavior Skills: Clinical and Psychological Effects of a Tooth-brushing Training

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Background: Albeit oral hygiene is a widespread health behavior prevalence of diseases due to insufficient oral hygiene is high. Deficits in oral hygiene skills might be responsible. Skills have been rarely included in health behavior modelling. This interventional study focusses on skills and how they are associated with psychological variables. Methods: 70 participants were randomized to a standardized training of one of two tooth brushing techniques (Fones, Bass) or of basics of tooth brushing alone (control group). Skills (plaque after thorough hygiene) and gingivitis were assessed 6, 12 and 28 weeks after the training. Self-efficacy, decisional balance and adherence were assessed and brushing behavior was video recorded after 28 weeks. Findings: Fones group differed significantly from the control group after 6 (p=0.030) and 12 weeks (p=0.006) with respect to skills. The control group showed less gingivitis. Groups did not differ with respect to self-reported adherence. Multiple associations were observed with psychological parameters and observed brushing behavior. Discussion: Data indicate complex relationships between behavior complexity, behavioral skills and maintenance.

The Impact of Self-Affirmation on Health-Behavior Change: a Meta-Analysis

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Self-affirmation (eg induced by reflecting upon important values) may reduce defensive resistance to information and increase readiness for change. However, these effects have yet to be subjected to quantitative review. We report a meta-analysis of the impact of self-affirmation on outcomes at 3 key points in the process of health-behavior change: message acceptance, intentions to change, and subsequent behavior. Methods. The literature search identified 144 tests of the effects of self-affirmation on outcomes. Effect sizes were extracted and meta-analyzed. Findings. Random effects models indicated small but reliable +ve effects of self-affirmation on each outcome: acceptance, $d=.17$ (CI=.03 to .31), intentions, $d=.14$ (CI=.05 to .23), behavior, $d=.32$ (CI=.19 to .44). Findings held across a range of health problems and behaviors. Discussion. Deploying self-affirmation inductions alongside persuasive health information has +ve effects, with effect sizes comparable to ones obtained in meta-analyses of other health-behavior change interventions. The findings are relevant to those working to understand why people resist beneficial information and how such resistance can be reduced.

Social Influences on Vaccination Decision Making: Exploring Research Possibilities

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Background: Although policy of large-scale vaccination brought undeniable positive results, recent media attention on negative side-effects posed difficult decision-making dilemma to many parents. It leads to question which resources parents employ when making vaccination decisions. Method: In literature review, 15 most relevant quantitative and qualitative studies found via Ebsco and Science Direct were analyzed. Findings: Vaccination decision-making could be complex, posing cognitive and emotional strain and need to defend one's choice. Both vaccinating and non-vaccinating groups were found to lack relevant knowledge on the subject, describing the situation as "more question than answers". Discussion: The topic of trust and disappointment seems to surface repeatedly. Health-care system is seen as neglecting individual specifics, and not capable of providing adequate answers to questions of vaccination safety. There appears a pressing need to seek more comprehensible and trustworthy ways of communicating benefits and risks of vaccination, and rebuilding trust. Data collection project in Slovakia would be designed based on this literature review. (VEGA Grant 2/0154/13)

Resilience Assessment: Importance of Identifying the Person-situation Interaction

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It has been noted that people can show resilience when facing a kind of adversity but not with others, and also show it in different degrees. Still, there is no measure of adult resilience in different contexts. Previous research with teenagers indicates the adequacy of a contextual model – thus, we aim to validate a subjective contextual resilience test for adults. In our correlational study, we developed a 20 item scale with five problem areas: work, close persons relationships, own health, close person health and economy. It was completed along with CDRISC10 by 416 adults. We conducted a confirmatory factor analysis of a "5 specific x 1 general" factor model using AMOS, and reliability and correlation analyses. Results show that the 5x1 factor structure is well defined ($X^2/df=2.06$; $GFI=.93$; $CFI=.95$; $RMSEA=.05$). The general scale (GS) has an excellent reliability ($\alpha=.90$) as well as the subscales (ranging from $\alpha=.71$ to $.83$). The GS-CDRISC10 correlation is good ($r=.45$). Important implications for research and intervention are derived, such as the vital need of assessing resilience in different contexts and researching the resilience-promoting processes most adequate for each one.

Qualitative Analysis of Illness and Treatment Perceptions in Juvenile Asthma: a Parent-adolescent Dyad Approach

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Background: Although the CSM-related literature is advanced, there is a lack of research concerning illness and treatment perceptions of children and adolescents, and still less concerning dyadic approaches considering perceptions of both chronically ill patients and their parents. Methods: We conducted focus groups with $N=30$ adolescents with asthma and telephone interviews with $N=15$ mothers. The interviews were transcribed and analyzed in a dyad-focused qualitative content analysis procedure using the computer program Atlas.ti. Findings: Adolescents' and parents' statements were categorized using 74 codes assigned to 10 dimensions of illness and treatment perceptions. The results demonstrated large inter-individual variability in the perceptions among adolescents and parents and pointed to both issues of high congruence in parent-adolescent dyads and issues entailing distinctive discrepancies in perceptions. Discussion: For their high inter-individual variability, paying more attention to individual and dyadic illness and treatment perceptions in adolescent care could be worthwhile, not least because of their particular importance for patients' adherence and illness management.

Prevalence of Cognitive Impairment and Mood Disorder six Months Post Ischaemic Stroke.

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Background: Psychological problems are common post-stroke, including emotional distress, behavioural change and cognitive impairment. Stroke rehabilitation typically focuses on restoration of physical and language function. **Methods:** The ASPIRE-S (Action on Secondary Prevention Interventions and Rehabilitation in Stroke) study assessed secondary prevention, rehabilitation and stroke outcomes in a cohort of patients admitted with acute ischaemic stroke over one year from October 2011. Assessments were conducted at six months post stroke, including assessments of psychological distress and cognition. **Results:** 302 patients (58% male) participated. Mean age was 69 years (range 22-95). Over half (52%) of patients reported being emotionally distressed by the stroke. Over half (57%) also scored below the cut-off for cognitive impairment. Of those needing support from psychological services, a majority (63%) did not receive any. **Conclusion:** Significant levels of emotional challenges and cognitive impairment post-stroke were evident from the ASPIRE-S cohort. Provision of psychological services post-stroke is identified as a significant unmet rehabilitative need.

How to Support Employees With low Campaign for own Interests When Solving Conflicts? Interactional Justice as Buffer

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Numerous studies have attempted to explain the destructive results of interpersonal conflicts in the context of work for health-related variables. If poorly managed, conflicts can have negative effects on employees' well-being, such as burnout and psychosomatic complaints, particularly in the case of relationship conflicts (De Dreu & Weingart, 2003a). According to Dual Concern Model, an individual's style in handling conflicts can be categorized along two basic dimensions: the first pertains to the concern for self, while the second the concern of others. Using 402 public employees in Malaysia we explored the relationship of conflict styles with stress and job satisfaction. Results indicated obliging, a conflict style that have low concern for self while high for others influence stress. Employees that are unquestioningly oblige to others' requests adversely impact their stress by creating a sense of frustration. Interestingly, dominators, who have the opposite concern of self and others than the obligers, also experience high level of stress. This is because that those who focus on their own concerns will act in a way that ensures that conflicts are resolved by presenting their interests and making sure that their needs are addressed. Contrarily, integrating that is associated with effective decision making, is positively related to job satisfaction. Furthermore, based on Social Exchange Theory interactional justice might be able to buffer the negative effects of conflict management styles. As expected, interactional justice moderates the relationship between avoiding and job satisfaction. As avoiders fail to satisfy their conflict goals by evading the conflict issues, supervisors' assistance in exhibiting high interactional justice, can buffer their job satisfaction for those who hesitate to campaign for themselves. Ultimately, these employees will perform productively and make greater contribution to the organization.

Do we Know how to Design Effective Health Coaching Interventions: the State of the Literature

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Background: Health coaching (HC) has been widely used as a tool to promote behavior change to improve health outcomes, yet the effectiveness of HC interventions is unclear. We aimed to systematically review HC interventions regarding: effectiveness of HC for specific outcomes; optimal intervention approaches; identification of specific techniques associated with effectiveness. **Method:** We searched health/medical/psychological databases for randomized controlled trials that assessed the efficacy of HC interventions. For each study we assessed aims, participants, approach, behavior change techniques (BCTs) and findings. **Findings:** Fifteen of 16 eligible studies reported a positive HC effect on at least one outcome. The number of intervention sessions provided ranged from 2-48; in three studies, one or more intervention details were unclear. Studies used 3-15 BCTs and these varied widely. It was hence difficult to synthesize the studies to adequately address our aims. **Discussion:** HC is a promising strategy for health improvement. Future research should ensure clarity in reporting intervention details, consistency in reporting BCTs, and efforts to achieve high treatment fidelity.

Self-rated Health and Functional Ability in Community-dwelling Older Adults: a Longitudinal Study

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Background: The aim of this study was to investigate the association between self-rated health (SRH) and risk of functional decline among community-dwelling older Japanese. **Methods:** A 3-year prospective study was conducted among 653 residents aged 65 years and older without disability in carrying out basic activities of daily living (BADL) at baseline. SRH was assessed using a 100-mm visual analogue scale (worst=0 to best=100). Information on functional ability, sociodemographic factors, depression, quality of life and medical conditions, was obtained using a self-administered questionnaire. Logistic regression was used to examine the association between baseline SRH and functional ability 3 years later. **Findings:** A total of 108 (16.5%) participants reported a decline in BADL at the 3-year follow up. Low SRH was significantly associated with a higher risk of functional decline, even after controlling for potential confounding factors (OR: 2.2, 95% CI: 1.2-3.9). **Discussion:** The results suggest that SRH is a strong predictor of subsequent loss or maintenance of functional ability in community-dwelling older adults.

A Critical Review of Social-Psychological Models of Modifiable Determinants of Travel Mode Choices

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Background Driving is a sedentary behaviour and car emissions a respiratory health issue. Consequently, promoting non-car travel mode choices has potential to enhance population health. Social cognition models, involving attitudes have been important to psychological research in personal travel. This review appraises transportation research and questions the adequacy of conceptualisations of "attitude". **Method** This study systematically and critically reviews current models, synthesising both, qualitative and quantitative research. A two-stage systematic search structured by the PICO framework was undertaken and accessed EBSCO, Web-of-Science and ScienceDirect. **Finding** A critical perspective on attitude constructs and their measurement integrated goal and control theory into understanding travel mode choice. We question the assumption that travel mode attitudes are stable across contexts and propose that they are shaped by goal priorities. **Discussion** Development of a more context-sensitive conceptualisation of travel-mode of modifiable determinants of transport-choice cognitions has implications for the design of interventions to reduce car use and the promotion of healthier travel.

Evaluation of the Effectiveness and Implementation of the Sexual Health Program Long Live Love iv

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Background. To evaluate the (short and long-term) effects and program use of the revised Long Live Love program (LLL), a comprehensive sex education program for secondary schools. **Method.** Two experimental versions of LLL (with and without teacher e-coaching) were tested against regular sexual health education. Evaluation focused on behavioral determinants related to condom use, contraceptive use, relational and sexual desires and boundaries, and attitudes towards homosexuality. A cluster-RCT was used with a 1-month and 8-month follow-up. A total of 53 schools (4623 students) participated. Multilevel analyses with multiple imputation were used. **Findings:** Compared to the control group, the combined LLL groups reported exposure to a larger variety of sexual health themes, and use of active modes of delivery: Short-term changes were found for sexual health knowledge, STD vulnerability, and various social-cognitive determinants of condom use and contraceptive use. The effect on intended condom use was maintained at 8-months. **Discussion.** LLL does change determinants of sexual health. The teacher e-coach seems to improve program experience and participation of students.

Utilizing the Question-behaviour Effect to Promote Bowel Cancer Screening: a Randomized Controlled Trial

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Question-behaviour effect (QBE) refers to the finding that answering questions about behaviour can increase behaviour itself. We investigated the QBE and motivation as methods to increase bowel cancer screening. Participants (N= 10693) were randomized into four conditions and received a Theory of Planned Behaviour questionnaire only or combined with the offer of a £5 incentive for returning the questionnaire. Two control groups received either a demographic questionnaire or no contact. Behaviour was objectively measured by whether a bowel screening test kit was returned within 19 weeks. Total attendance was highest (61.5%)

in the no contact control condition which was marginally significantly higher than the QBE condition (58.9%). Significantly more questionnaire returners in the QBE condition (97.3%) attended than the demographic control (94.5%). The incentive did not affect motivation and all questionnaire returners had high levels of motivation. These findings suggest the QBE cannot be applied as a population-wide intervention to increase bowel cancer screening, but for some individuals, simply completing a questionnaire can increase their likelihood of carrying out screening.

Mental Health and Interpersonal Well-being: Positive Sharing as a Mediator Between Depression and Couple Satisfaction

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Mental health problems tend to have impact on the social reality of the affected individual. Depressive symptoms are associated with worsened couple satisfaction. The aim of this study is to explore the role positive sharing within the couple. Possibly, the decrease of this positive couple process in the context of depression is mediating the link with couple satisfaction. In an online study, 211 couples filled in questionnaires regarding the sharing or disclosure of positive experiences with the partner, depressive symptoms, and couple satisfaction. Structural equation based Actor Partner Interdependence Models reveal the expected intrapersonal associations between depression and couple satisfaction which is partially mediated by positive sharing. The weak associations between the partner's depressive symptoms and own couple satisfaction are mediated by decreased positive sharing. Positive sharing in the couple might be an important way of interpersonal emotion regulation which suffers in depressive states and in turn affects relationship quality. This implicates that fostering positive couple processes may prevent possible adverse social correlates of mental health problems.

Savoring as a Daily Life Process Mediates the Associations Between Health Promotion and Depressive and Physical Symptoms in People Newly Diagnosed With Cancer

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Background Limited is known about the daily life processes in the association between health promotion and outcomes in cancer patients. This study aimed to examine the nature of associations among cancer-specific health engagement control strategies, savoring, and psychological and physical symptoms in Chinese people with colorectal cancer (CRC). Methods and Findings A total of 157 newly diagnosed CRC patients were recruited and administered (1) back-translated items on control strategies (active processes counteracting physical health problems) (Wrosch et al., 2003), (2) back-translated Savoring Belief Inventory (enjoyment of pleasant experiences in the moment), and (3) the Chinese version of Hospital Anxiety and Depression Scale and Memorial Symptom Assessment Scale (psychological and physical symptoms). Structural equation modeling revealed that savoring mediated the association between control strategies and both depressive and physical symptoms. Discussion To maximize holistic health in cancer patients, symptom management and health behavior change intervention should be integrated with well-being intervention that targets daily life psychological functioning.

Virtually Impossible? Promoting Healthy Screen Time Habits Among Australian Children and Adolescents.

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Background: Screens, in particular mobile devices, are the centrepiece of young people's lives. Is the recommendation that parents limit children's screen time to < 2 hours per day a realistic objective? Primary Objective: To determine Australian 8-16 year olds screen use, particularly in the context of the < 2 hours recommendation. Research Questions: To what extent are Australian children/adolescents exceeding the 2 hour recommendation? Method: On line survey of screen use on "a typical weekday" with 2,553 8-16 year olds from 26 schools. A new Youth Orientation to Screen Use Scale (YOSUS) was developed. Results: Two factors (Salience [S] & Mood Management [MM]) (CFI=.98, NFI=.98, RMSEA=.048) emerged. Hierarchical linear models revealed increasing gender disparity with main effects of Gaming, Social Networking, Web Use, and TV; different significant predictors for males/females evident. Screen use (0-2 hours, 2.1-4 hours, 4.1-6 hours, over 6.1 hours) revealed main effects for S & MM. Discussion: Young people exceed 2 hours by varying degrees on different activities (with differing associated effects). Findings are important for promoting healthy screen time habits.

Real-life Experience of Breaking bad News and Posttraumatic Growth by Patients With Multiple Sclerosis : a Qualitative Approach

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Background: Breaking bad news produces negative emotional, cognitive and behavioral reactions on patients, has consequences on their quality of life, but a traumatic event could caused positive outcomes in the patient's life. This study is focused on multiple sclerosis patient's real-life experience of breaking bad news and on the posttraumatic growth dimension. Methods: participants: 15 patients; data collection: semi-directive interviews (based on exploratory interviews and on the Posttraumatic Growth Inventory); data analysis: IPA and clinical analysis (qualitative approach). Findings: themes developed: real-life experience when breaking bad news; evaluation of the doctor-patient communication; consequences of the announcement on their quality of life; change in their priorities and new identity; strategies to cope with multiple sclerosis; psychic resistances in non-adherence with treatment... Discussion: Psychic traumatism when breaking bad news, feeling of powerlessness due to the evolving and progressively crippling character of MS and relative effectiveness of treatment explain the difficulty for patients to cope with MS and the fragility of their relation to their doctor.

'It Makes a Difference, Coming Here': a Qualitative Exploration of Barriers and Facilitators to Clinic Attendance Among Young Adults With Type 1 Diabetes

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Background: Poor outpatient clinic attendance is common among young adults with Type 1 diabetes mellitus (DM). The aim of this qualitative study is to develop a theory, using Grounded Theory, of clinic attendance among young adults with Type 1 DM. Methods: Semi-structured interviews have been carried out with 18 young people with type 1 DM and 7 members of staff. Findings: Many young adults are motivated to attend the diabetes clinic in order to gain reassurance through contact with familiar, supportive staff, and testing and screening. Barriers to attendance include fear of deterioration of diabetes, work demands, and a lack of value associated with attending. Barriers prevent the development of Alliance, the core category in this theory. A collaborative relationship or Alliance between young adults and staff is developed through experience of attendance and major events (structured education programme or crisis of diabetes) and facilitates further attendance. Discussion: This substantive theory provides new insight into experiences of diabetes care which will inform the development of behavioural interventions to improve clinic attendance as well as improvements to services.

A Systematic Review of School-based Physical Activity and Sedentary Behaviour Interventions Among Older Adolescents

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Background: Earlier reviews on school-based physical activity (PA) and sedentary behaviour (SB) interventions among adolescents have not characterised intervention content in sufficient detail to draw conclusions about the effective ingredients. This systematic review evaluates 1) the effectiveness of school-based interventions for PA and SB, and 2) whether content (i.e., behaviour change techniques, BCTs) influences intervention effectiveness. Methods: Five databases were searched. Two researchers independently screened publications to check eligibility, assessed risk of bias, and coded intervention content using BCT Taxonomy v1. Results: Ten studies were included. Six out of 10 studies reported significant increases in PA and two out of 4 reported reductions in SB. Effects were generally small and short-term. Interventions effective in increasing PA included BCTs related to self-regulation, e.g, goal setting and self-monitoring. Discussion: School-based interventions can increase PA in the short term, and use of self-regulatory BCTs seems promising. Researchers need to improve the quality of intervention descriptions to be able to identify which BCTs were actually implemented.

Testing the Feasibility of a Behavioural-educational Pilot Intervention to Prevent Paediatric

Asthma uk Emergency Admissions

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Background: A behavioural-educational pilot intervention was designed to prevent paediatric asthma emergency admissions to promote behaviour change towards effective self-management. The self-regulatory model, self-efficacy theory and intervention mapping were used. **Methods:** 15 participants (aged 2-16) with asthma were recruited from out-patient clinics (Birmingham Children's Hospital). Survey, self-report and feedback data was collected (7 children and 15 participants' parents) at baseline, 3months and 6months follow-ups. **Findings:** There were significant differences in ACT scores for parents ((2,n=15)=12.26, p=.002) and children, ((2,n=7)=10.33, p=.006), and in parent PACQLQ scores ((2,n=15)=12.25, p=.002)). However there were non-significant differences in children's miniPAQLQ scores ((2, n=7)=3.71, p=.156), Parent Asthma Self-Efficacy scores ((2,n=15)=5.22, p=.074)) and Child Asthma Self-Efficacy scores ((2,n=7)=2.55, p=.280)). **Discussion:** This theory-based intervention successfully tackled self-management behaviours. Feasibility, fidelity and quality of the pilot were good. Participants appreciated the extra contact; however a better tool for self-reporting is needed

The Impact of Alcohol Specific Rules and Communication on Alcohol use Among Dutch Late Adolescents

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Background: Aim of the study was to determine whether parental alcohol specific rules and communication have a beneficial effect on alcohol use in 16 to 18 year old Dutch adolescents, who were at the time of measurement legally allowed to buy soft alcoholic beverages. We furthermore assessed whether effects of rules and communication vary in drinking situations with and without parents. **Methods:** 499 Dutch parents and their 16 to 18 year old child responded to a questionnaire assessing alcohol consumption and binge drinking of adolescents, alcohol consumption of parents, alcohol specific rules and communication. Structural equation modeling was used to test the relationships between these variables. **Findings:** Stricter rules were associated with less adolescent alcohol use. Communication was positively related to alcohol use indicating that more communication was associated with more alcohol use. These effects were equally strong in situations with and without parents. **Discussion:** Contrary to parents' perception, their influence on adolescent alcohol use persists, even in situations where they are not present. Parents should be encouraged to continue setting rules about alcohol use.

Reporting Behaviour Change Interventions: the Tidier Interdisciplinary Checklist of the Minimum Recommended Information

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Background: Reports of interventions, including behavioural interventions, frequently omit essential information, thus preventing intervention uptake. One analysis reported only 29% of non-pharmacological interventions were adequate. We aimed to develop a guide for reporting minimum data across all interventions (drug, surgery, rehabilitation, psychotherapy, behaviour change). **Methods:** EQUATOR stages for reporting guideline development were followed: 1. item generation 2. two-round international

Delphi survey with 74 inter-disciplinary experts; 3. consensus meeting of 13 experts; 4. follow-up iterations and piloting. Results: The resulting checklist identified 12 items: brief name, why (rationale), what materials, what procedure, who provided, how, where, when and how much, tailoring, modifications, how well planned (fidelity assessment), how well delivered (fidelity outcomes). Each item has a brief explanation and inter-disciplinary examples. Conclusions: The TIDieR (Template for Intervention Description and Replication) checklist and guide can be applied to all interventions, as well as control interventions, used by authors to guide intervention report writing and journal editors and reviewers to ensure adequate published intervention descriptions.

Illness Beliefs and Emotion Predict the Perceived Necessity of Cardiac Rehabilitation Over Time

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Background: Cardiac rehabilitation (CR) is highly effective in promoting physical and psychological recovery following acute cardiac syndrome (ACS). Despite this in the UK, only 42% of eligible patients take part. This study examines determinants of “perceived necessity” of Phase 3 CR in a cohort of ACS patients followed from discharge until the start of CR. Methods: Of 488 eligible ACS patients (March 2012 to July 2013), 214 consented. Consecutive patients completed a computerised weekly diary using shortened standardised questionnaires targeting illness and treatment-related beliefs, mood and “perceived necessity” of CR. Findings: 184 participants provided 5 weeks of diary entries. “Perceived necessity” was independently predicted by illness perceptions (“treatment control” (B=0.07, p<.002); “emotional representation” (B= -0.13, p<.001)), treatment perceptions (“concerns regarding exercise” (z=-0.12, p<.001)) and positive affect (z=0.31, p<.001). Discussion: Perceptions of high controllability, negative emotional consequences of ACS, low concern regarding exercise were strong predictors of “perceived necessity”. Targeting these processes could increase attendance at CR.

Children’s and Adult’s Visual Attention to Healthy and Unhealthy Food: Comparing Self-Regulatory Capacity

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Background: Visual attention to unhealthy food triggers the urge to eat and thereby creates self-control conflicts in people trying to eat healthily. Avoiding visual attention to unhealthy food can thus be considered a self-regulatory strategy. Self-regulatory capacity has been shown to develop throughout childhood and adolescence suggesting that adults self regulate better than children. Methods: Using a novel eye-tracking paradigm children's and adults' initial fixation (bottom-up) and retained dwell time (top-down), were measured upon exposure to healthy and unhealthy food pictures. Findings: Results revealed increased initial attention to unhealthy food in children and adults. For retained attention however, adults self-regulated their visual attention away from the unhealthy towards the healthy food, while children did not self-regulate visual attention away from unhealthy food despite their self-reported attempts to eat healthily. Discussion: These findings emphasize the necessity of improving children's self-regulatory skills to support healthy eating in an obesogenic environment and promote a novel technique of examining self-regulatory capacity.

Context Matters – how Communicative and Cognitive Processes Impact Results in Surveys on Student Health

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Creating health promoting conditions for students is regarded an important duty of universities. Questionnaire surveys are the standard means for collecting data on students’ health. Yet, the cognitive and communicative processes impacting the answers in self-reports as described in the influential paper “How the questions shape the answers” by Norbert Schwarz [1999, American Psychologist, 54(2), 93-105] are not always considered sufficiently. The present paper describes the results of a replication of this work conducted within a research methods course (N = 16 students). The course aimed at sensitizing the students for context effects and promoting their research self-efficacy. Study subjects (N = 72) were randomly assigned to two experimental conditions, namely two versions of a questionnaire on student health. Results were significantly impacted by response alternatives (high vs. low frequency), question form (open vs. closed-ended) and question order. It was demonstrated that context effects shape the answers we receive in student health surveys. Besides, the students involved in conducting the present study reported a substantial perceived increase in research self-efficacy.

Patients’ Satisfaction. is it Only a Matter of Effective Communication Skills?

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There are evidences in the literature supporting the relation between clinical communication and patients' satisfaction. The aim of the present longitudinal study was to explore whether nurses' self-regulation skills contributes to patients' satisfaction. 338 nurses (mean age 38.8, SD = 8.8) from Public Hospitals participated in the study. 89 from the 338 nurses participated in a six month intervention programme for the purpose to develop self-regulation skills. The participants filled the following self-reported questionnaires : A goal elicitation procedure (Little, 1983); SRSB(Maes, De Gucht, Heiser, Karoly, & Ruehlman, 2005); Long-Form Patient Satisfaction Questionnaire (PSQ-III) (Marshall & Hays,1987) Structural Equation Analyses showed that nurses' self-regulation has significant positive relation with patients' satisfaction and negative significant relation with patients' dissatisfaction. The present results underline the important contribution of nurse's self-regulation to patient's satisfaction.

Different Types of Perceived Social Support and its Role on Sexual Risk Behaviour Among Young Adults From Hungary, Lithuania and Slovakia

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Previous studies have found that specific sources of perceived social support may play different roles in health risk behaviour and sexual risk behaviour as well. The aim of this study is to explore the associations between three types of perceived social support from family, friends and others and sexual risk behaviour among young adults in Hungary, Lithuania and Slovakia. An online questionnaire concerning health behaviour, perceived social support and sexual behaviour was distributed to first year university students from Slovakia (N=807, 75% females, mean age 20.8), Lithuania (N=928, 70% females, mean age 20,0), and Hungary (N=819, 66% females, mean age 21,4). Binary logistic regression was performed in SPSS 16. Young adults from all countries reported the same pattern of associations between social support and sexual risk behaviour. Higher levels of support from family and others was associated with lower rates of sexual risk behaviour. Students with a higher level of support from friends were more likely to report multiple partners, sex under the influence of alcohol and inconsistent condom use. Young adults are sensitive regarding the source of social support as their behaviour differs depending on the source. The identification of students with their peers and friends in addition to perceived social norms may explain this.

Resilience to Disaster: Predicting Resilience in a Disaster Prone Community

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The degree an individual is prepared for a potential threatening event impacts on their ability to be resilient during and after the event. As such, predicting the factors that influence the level of preparation can provide useful recommendations in increasing the level of resilience. The current study sought to extend the applicability of the Extended Parallel Process Model to predicting preparation in a disaster prone community. A total of 279 participants from a cyclone prone community in Northern Australia completed the questionnaire about their experience with extreme weather events, preparation, concern, perceived threat, self-efficacy, social capital and resilience. It was found that self-efficacy predicted preparation ($p=.01$) and this was mediated by social connectedness ($p=.00$). Also, the perceived severity of a future weather event was found to predict concern ($p=.00$) and this was mediated by trust ($p=.00$). Findings from this study suggest that the adapted EPPM is an acceptable model for making predictions about preparation within a disaster prone community. The results suggest that increasing self-efficacy and social connectedness will increase preparation.

Maladaptive Health Beliefs, Illness-related Coping Behaviour and the Role of the Patient-Physician Communication

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Background: The aim of this study was to examine whether the relation of general maladaptive health beliefs (as a set of biases in understanding general health issues) to patients' coping behaviours is mediated by illness representations (as a set of beliefs about an illness). A further aim was to examine whether these relations are moderated by the amount of illness-related information provided by physicians. Methods: Patients with cardiovascular diseases (N=119) participated in the study. Coping behaviours were assessed 2 months later than general maladaptive beliefs, illness representations and information provided by physicians. Findings: Personal control and illness coherence mediated the relation of maladaptive beliefs to coping behaviour.

The amount of information provided by physicians moderated the relation of maladaptive beliefs to illness representations and coping behaviour (it was not significant at the higher levels of the moderator). Discussion: General maladaptive health beliefs seem to conduce to a more negative perception of illness, which in turn impacts health behaviour. However, this effect is conditional on the quality of the patient–physician communication.

Knowledge, Attitudes and Communication Preferences of Different Segments of the Greek Public With Regards to Cervical Cancer and the hpv Vaccine.

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Background: The introduction of the HPV vaccine constitutes a shift in health policy and health promotion practice. The aim of this study is to investigate knowledge, attitudes and communication preferences of the Greek public in relation to cervical cancer and the HPV vaccine. **Methods:** 9 focus groups (6-8 participants each) were conducted with teenage girls, parents of vaccine eligible girls and young women. Pre-focus group questionnaires consisted of: socio-demographics, knowledge (adapted from Gerend & Sheperd, 2011), BMQ - General & Specific to the HPV vaccine (adapted from Horne et al, 1999). The discussion guide was based on issues raised by (Kang & Kim, 2011; Flynn & Ogden, 2004) i.e. risk perception, illness severity. Thematic analysis was used for analysis of qualitative data. SPSS will be used for correlation and comparative analysis. **Findings:** Preliminary quantitative findings indicate that participants had a moderate level of knowledge and strong concerns beliefs about medicines and the HPV vaccine. Emerging themes are: lack of faith in the healthcare industry, over- medicalization of life, poor health information communication, ambivalence of health professionals, negative emotions springing from the vaccine dilemma. **Discussion:** Findings will contribute to our understanding of health behavior decision making and provide recommendations for health policy adjustments.

Differences in Psychosocial Outcomes and Diet After Prostate Cancer Diagnosis

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Background: Prostate cancer patients can benefit from changes in their diet because they are at risk of developing other conditions. This study investigated the relationship between psychosocial factors, participants' demographics and changes in prostate cancer patients' diet. **Methods:** A cross sectional study using an online and paper survey in the UK. Prostate cancer patients (N = 95) were recruited through self-help groups and charities. The questionnaire consisted of information on dietary change, sociodemographic factors, the EORTC QLQ C-30 and PR25, Cancer Locus of Control and General Self Efficacy Scales. **Findings:** Lower cognitive functioning (CF), lower external locus of control (doctors), more severe symptoms of dyspnea and higher education were found to predict dietary changes after diagnosis but only lower cognitive functioning after therapy started. **Discussion:** Our study proposed an association between HRQOL, perceived behavioural control, self-efficacy and personal characteristics on the variability of dietary changed after diagnosis but not after therapy has started. Cognitive functioning can determine the changes both after diagnosis and after therapy.

Effectiveness of Mindfulness Based Cognitive Therapy in Changing the Cognitive Emotion Regulation Strategies Among Veterans' Wives With Chronic Ptsd due to IRAN-IRAQ war

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Background: Various studies on the wives of the veterans with PTSD show that these wives, after some time of joint life with these veterans, experience a lot of psychological problems. The object of the present study has been evaluating the effectiveness of mindfulness based cognitive therapy in changing the cognitive emotion regulation strategies among veterans' wives with chronic PTSD. **Methods:** In this study, semi-experimental design pretest-post test was done with the control group. The statistical sample included 40 of veterans' wives with chronic PTSD who had the criteria for entering into this study and was selected by an objective-based sampling method. These participants were randomly put in 2 groups of 20 individuals including the experimental group and the control group. The experimental group was trained in 8 sessions of 2 hours and 30 minutes. The measurement tool was CERQ scale. The results were analyzed using T-Test method. **Findings:** The results showed that the eight training sessions were effective in changing the experimental group's cognitive emotion regulation strategies (P<0.01). **Discussion:** The obtained results suggest that the therapeutic sessions based on mindfulness strategies were effective in changing the cognitive emotion regulation strategies among veteran's wives with chronic PTSD. In other words, these strategies increased the use of positive strategies (positive refocus and programming, positive evaluation, acceptance) and decreased the use of negative strategies (self-blame, blaming others, rumination, catastrophizing).

The Predictive Validity of Implicit Measures in Health Behaviours and Well-being

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Background. Traditionally, research into health behaviours and well-being has adopted a self-report, explicit approach. More recently, implicit, impulsive processes have been measured. Recent research into health behaviours, relationships, and body dysmorphia and well-being in general will be presented. **Methods.** Several studies (n = 76 - 200) were conducted investigating the predictive validity of implicitly measured motivation and explicit measures across a number of health behaviours and well-being (e.g., eating, exercising, gym attendance, body dysmorphia). **Findings.** Analyses support the significant role of implicit motivation across a range of health behaviours and well-being in general. For several categories, implicit measures of motivation were a stronger predictor of behaviour than explicit measures of motivation, personality, and attachment. **Discussion.** There is growing support for the predictive validity of implicit measures of motivation and attitudes in research. However, there is a growing trend in the literature and current findings suggesting that implicit measures predict spontaneous, unplanned behaviours better.

Addressing Smoking Determinants to Reduce Alcohol Consumption: the Effects of a Transfer-oriented Curriculum

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Responding to the call for health interventions that address multiple health behaviors, we developed a transfer-oriented health curriculum for secondary schools. This curriculum explicitly addressed smoking, but it included principles from transfer-oriented learning theory, meaning that it aimed to transfer the skills and knowledge learned in the domain of smoking to other – unaddressed – health behavioral domains. An experimental study among 1107 thirteen and fourteen year old students indicated that the curriculum favorably impacted behavior in the unaddressed domain of alcohol consumption, but the mechanism through which those effects were achieved were unknown. Using regression analyses, the present article shows that the transfer-oriented curriculum strengthened the relationship between smoking determinants and alcohol consumption, allowing alcohol consumption to co-vary with positive changes in the addressed smoking determinants. By strengthening relationships between health behaviors, transfer-oriented health interventions can impact multiple health behaviors, and by doing so they have the potential to fulfill the need for more efficiency in health promotion practices.

Threatened to the Limit? the Effects of Traffic Safety Billboards on (risky) Driving Behavior.

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Background: Although fear appeals can cause defensive reactions, traffic campaigns frequently use threat with the goal to promote safe driving. This study investigates possible defensive reactions (i.e. more risky driving) of threat information on billboards. Adding coping information with advices for safe driving might reduce defensive reactions and increase safe driving. **Methods:** 71 Participants completed a 25 km test-drive in a driving simulator showing four billboards (photo and text) related to safe driving. The levels of coping (yes or no) and threat (yes or no) on the billboards were varied as between-subjects factors. Eleven measures of risky driving were used including velocity and speeding. **Findings:** Univariate analyses showed main effects of threat on velocity (p = .007) and speeding (p = .019). Billboards with threat led to higher velocity and more speeding than billboards without threat. No effects of coping were found. **Discussion:** While threat information led to more risky driving, combining fear and coping showed no increase in safe driving. Cautiousness is advised when using fear appeals on billboards and more effective methods have to be developed.

Understanding Health Promotion Signposting for People With Psoriasis: the Application of Nudge Theory

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Background: Psoriasis is associated with cardiovascular disease risk thereby making lifestyle behaviour change (LBC) key to its management. Environmental cues can nudge people into healthier lifestyle choices. If and how signposting and health information displays within health care centres is using this knowledge is unknown. We systematically examined LBC signposting in health centre waiting areas for general and specific health messages for patients with psoriasis. **Methods:** We analysed the

quantity and quality of messages in health leaflets, posters and signposting to LBC. Findings: Across 24 health centres 262 sources of LBC information were recorded (median per site = 10, range= 0-40). These were mainly: generic posters/displays of LBC support (n = 113); and generic materials in waiting areas (n = 98). Information quality was poor and badly displayed, with no high quality psoriasis-specific patient materials. Discussion: Evidence about using environmental cues to prompt LBC does not currently inform the design and display of LBC information in standard health centre settings. Future research should test the impact of good quality information on psoriasis and other health outcomes.

Effectiveness of Telephone Genetic Counseling for Hereditary Breast and Ovarian Cancer: a Randomized Noninferiority Trial

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Background: Because of increasing demand and access issues, there is an urgent need to evaluate alternative genetic service delivery models. **Methods:** In a randomized clinical trial we tested the equivalency and noninferiority of telephone counseling to remote in-person counseling for hereditary breast and ovarian cancer. Women (n=901), 25-74 years of age, with a personal or family history of breast and/or ovarian cancer completed BRCA1/2 counseling and follow-up assessments 1 week after pre-test and post-test counseling and at 6 months. **Findings:** Uptake of BRCA1/2 testing was lower following telephone (21.8%) than in-person counseling (31.8%; cluster bootstrap estimate of 95% confidence interval (CI)=3.9%-16.3%; intent-to-treat: 9.2%, CI=-0.1%-24.6%). Telephone counseling was noninferior to in-person counseling in terms of decisional conflict (linear model estimate of between group difference [D] = 0.42; noninferiority one-sided 97.5% CI=1.86), decision regret (D = 2.03; one-sided 97.5% CI=4.66) and patient-centered communication measures. **Discussion:** Telephone counseling can effectively increase the clinical reach of and access to genetic counseling services.

Influence of Approach-avoidance Commitment to Romantic Relationships on Mental Health and Subjective Happiness

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Commitment is the most important predictor of the maintenance of romantic relationships. Recently, Frank & Brandstatter (2002) and Strachman & Gable (2006) proposed that commitment can be divided into approach and avoidance commitment. The present study examines the influence of approach-avoidance commitment on mental health and subjective happiness. Sixty-nine romantic pairs completed a questionnaire about approach-avoidance commitment, positive and negative affect, subjective happiness and GHQ. The actor-partner interdependence model showed that for both men and women, own approach commitment was positively associated with positive affect; own avoidance commitment was positively associated with own negative affect. Additionally, a man's approach commitment is negatively associated with a woman's negative affect. Finally, whereas men's negative affect is positively associated with GHQ score, women's positive affect is positively associated with subjective happiness. These results suggest that the process by which approach-avoidance commitment influences mental health and happiness differs between men and women.

Emotion Regulation (ER) During Experimental Pain Stimulation in Migraine Patients and Controls

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Chronic pain such as migraine is associated with emotional impairments and the use of maladaptive ER. We studied if migraineurs compared to pain-free controls can reduce negative emotions by employing the adaptive ER strategies reappraisal or distraction during experimental pain stimulation. To do so, 66 women (33 migraineurs, 33 controls) were randomized to one of three conditions (reappraisal, distraction, control) and exposed to 20 electric pain stimulation trials. After each trial participants rated their anticipatory anxiety and pain perception. Additionally, physiological parameters (skin conductance, heart rate) were recorded throughout the experiment. Compared to the control condition, reappraisal and distraction led to strong reductions in anticipatory anxiety and pain perception that were equivalent in migraineurs and controls. Physiological parameters are analyzed at present. When following instructions how to adaptively regulate emotions while anticipating and receiving pain, migraineurs are as capable as controls to reduce anxiety and pain perception. Thus, migraineurs could benefit

from promoting reappraisal and distraction to regulate emotions and pain.

Eating What the Cool Kids Eat: Associations Between Popularity, Snack Preferences and Snack Choices

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Background: Associating popularity with certain food items is a technique used in advertising. This raises the question (1) whether children associate unhealthy foods with a peer's popularity status and, (2) whether this is related to their own preferences and consumption behavior. **Methods:** Snack preferences and consumption of 2.837 children and adolescents from Finland, Germany and Romania were assessed. In a forced-choice vignettes format, they indicated the preferred snack choices (e.g., muffin vs. apple) for a popular and an unpopular peer. **Findings:** Path models showed a significant association between the perceived snack preference ascribed to popular and unpopular peers and their own snack preference, indicating a symbolic preference effect: the more popularity was associated with unhealthy snacking the more children preferred unhealthy snacks themselves ($\beta > |.136|$, $p < .001$) which in turn was associated with greater snack consumption ($\beta = .441$, $p < .001$). **Discussion:** The results suggest an implicit mode for triggering food preferences through social incentives: cool kids can make food more socially rewarding. Practical implications for interventions will be discussed.

Psychological Eating Behaviors as Predictors of 15-year Weight Changes After Surgical Treatment for Severe Obesity

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Background: There is a need for better understanding on the factors predicting long-term weight outcomes after bariatric surgery. This study examined whether psychological eating behaviors (cognitive restraint, disinhibition, hunger) were prospectively related to short- and long-term weight changes after surgical treatment for severe obesity. **Methods:** Participants were bariatric surgery patients ($n=2010$) from the Swedish Obese Subjects study, which is an ongoing, matched (non-randomized), prospective intervention trial. Physical measurements (weight, height) and questionnaires (Three-Factor Eating Questionnaire) were completed prior to surgery and 0.5, 1, 2, 3, 4, 6, 8, 10 and 15 years after the treatment. **Findings:** Pre-treatment eating behaviors were unrelated to subsequent weight changes, while lower 6-month and 1-year levels of disinhibition and hunger were associated with greater 2-, 10- and 15-y weight loss ($B=0.19-0.36$ in men, $B=0.09-0.28$ in women, all $p<0.05$). **Discussion:** Problems in the regulation of eating shortly after bariatric surgery predicted poorer long-term weight outcomes, making post-operative overeating tendencies an important indicator of targeted interventions.

Can Social Support Work Virtually? the Impact of an Interactive On-line Tool on Health Outcomes Among ra Patients

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Background: Although there is much evidenced of the social support effects on health, there is limited information about to what extent social support can be provided online and the conditions under which such support can have positive outcomes for chronic pain patients. The aim of this study is to examine the impact of an online social support tool on patients' health outcomes and to identify the determinants that impact the usage and the efficiency of such a tool. **Methods:** we used a mixed approach and at the first stage we conducted an experimental quantitative study with 160 ---- (RA) patients interacting on a web site that we developed previously using an online questionnaire. At the second stage we conducted 20 in-depth interviews with RA patients evaluating what determined the usage and the impact of the site. **Findings:** Online support improved more concrete outcomes related to the daily management of the disease, but was less successful at deeper self-perceptions such as empowerment and acceptance. These results are explained by some determinants like the characteristics of the web source; the internal and external experience with the disease; illness dimensions and personality type. **Discussion:** defining the factors that determine patients' usage of online support lead to recommendations for designing future tools in order to maximize the effectiveness in delivering online support.

Applying Temporal Self-regulation Theory to the Prediction of the Breakfast Consumption Behaviour of Australian Young Adults

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Background A large proportion of young adults between the ages of 18 to 25 have been found to skip breakfast on a regular basis – the predictors of consumption within this population are not yet well understood. The aim of this study is to evaluate the extent to which Temporal Self-Regulation Theory (TST) can be meaningfully applied to breakfast consumption behaviour. **Methods** Australian young adults (18-25 years) were administered a web-based survey containing measures of habit and intention and two computerised measures of self-regulation. Breakfast consumption was measured at 1 week. **Findings** TST constructs predicted 66.2% of variance in breakfast consumption. Although intention was significantly correlated with behaviour, only habit was a significant predictor of breakfast consumption in the final model. **Discussion** This is the first study to evaluate TST in the context of breakfast consumption behaviour. The findings suggest a central role of habit in determining young adults' breakfast consumption behaviours. Future research in this domain should explore the potential for interventions that target the habitual consumption breakfast in order to improve dietary behaviour.

Impact of Coping on Quality of Life in Cancer Patients

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Objectives: Studies of coping and quality of life (QOL) mostly consist of one assessment of patients in different phases. The goal was to assess the level and effects of specific copings on specific QOL domains in cancer patients in the month around diagnosis and 10-12 months later. **Methods:** The participants were 52 cancer patients with different diagnoses. They were administered the Multidimensional Inventory of Coping and the QOL Questionnaire two weeks after diagnosis and two weeks after treatment termination. **Findings:** Coping strategies and quality of life levels differed in the two phases of the study: Denial and fighting spirit in coping and work, negative emotions, and physical needs in QOL were higher in the first phase; and in the second phase stoic acceptance and changing life style in coping and social functioning and meaningfulness in QOL. The coping strategy with the strongest impact on QOL in the first phase was positive emotions and in the second phase focusing on oneself. **Conclusions:** Coping strategies and affected domains of QOL change in the course of the illness and the treatments as well as their interactions.

Communication With the Physician in Cancer Patient-caregiver Dyads: Impact on Distress and Illness Perceptions

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Background: The aim of the study was to explore how satisfaction of the communication with the physician impacts anxiety, depression, illness concern and comprehension in a dyadic setting. **Methods:** We compared 73 dyads of patients' and caregivers' on three scales assessing the satisfaction with communication (MCCS ; IV), illness concern and comprehension (BIPQ ; DV) and psychological distress (HADS ; DV). Data were analyzed using the Actor Partner Interdependence Model (APIM). **Findings:** Greater satisfaction with communication for patients was associated with greater patients' coherence and illness concern and with more anxiety for caregivers. This last link was mediated by caregivers illness concern. Caregivers' communication was not associated with caregivers' outcomes. **Conclusion:** This study showed the importance of patients' satisfaction about communication with the physician on both patients' and caregivers' distress and illness perceptions.

A Person-centered Approach to Depression Symptoms Trajectories in Myocardial Infarction Survivors: a 6-year Follow-up Study

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Background: Intra-individual change trajectories of depression symptoms and their covariates including coping process variables in myocardial infarction (MI) survivors, were examined in 6-year follow-up period. **Methods:** Two hundred cardiac patients (age 53.73±7.26 years) were assessed four times: a few days after first MI, one month, six months, and six years later. Demographic and medical characteristics, cognitive appraisal, coping, emotions, depression symptoms, as well as resources and critical life events (both only in the 4th stage) were measured. **Findings:** Three latent trajectories based on growth mixture modeling (GMM) were identified for depression symptoms: chronic (N=49), rising (N=121), and low (N=30). Belonging to the chronic group were associated with higher emotion-focused coping, negative affect and critical life events number, also lower problem-focused

coping, hope, resources number and worse somatic health. Discussion: The findings shed light on the intra-individual change trajectories of depression symptoms after MI and related coping process variables: protective function of resources and instrumental coping, opposite of negative states and palliative coping.

Procrastination as a Health Behavior Problem: the Relationship Between Procrastination and Getting Insufficient Sleep

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Background: Procrastination is a prevalent and problematic phenomenon that has mostly been studied in the domain of academic behavior. The current study highlights another domain in which procrastination may lead to harmful outcomes, introducing bedtime procrastination as an important factor related to getting insufficient sleep and consequently affecting individual well-being. Methods: A community sample (N = 177) filled out an online questionnaire assessing self-regulation, bedtime procrastination and sleep outcomes (hours of sleep, experienced insufficient sleep, daytime fatigue). Findings: As predicted, bedtime procrastination was negatively associated with self-regulation. Moreover, bedtime procrastination was related to getting insufficient sleep above and beyond demographics and self-regulation. Discussion: Introducing a novel domain in which procrastinators experience problems, bedtime procrastination appears to be a prevalent and relevant issue that is associated with getting insufficient sleep. The current study suggests that procrastination may be an important but as of yet neglected factor in the health behavior domain.

Needs and Preferences of Dutch Chronic Pain Patients: the Lack of Continuity and Guided Care.

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Background: Chronic pain is common in many patients, sometimes without a clear cause. However, pain is not a medical specialty in the Netherlands. It is therefore of interest to see what care these patients receive and how they perceive the care received. Methods: Mixed methods using focus group discussions and IPA method for analyses in developing a structured Consumer Quality Index questionnaire (CQI). Findings: 23 chronic pain patients took part in four focus groups, 886 completed the survey (RR=40%; 73% women). Patients reported lack of continuity in care and poor coordination between healthcare providers. Though most reported fairly good doctor-patient communication, about 25% reported limited shared decision-making and 35% limited information sharing about treatment possibilities. Many made use of complementary medical care, due to restricted health care insurance coverage of standard care. Discussion: Chronic pain patients would benefit of health-care providers being more proactive and some central healthcare-professional coordinating the chronic pain care, e.g. a case manager. Complementary care was found useful, though standard care was believed to be most beneficial.

N-of-1 Study of Weight Loss Maintenance in People who Lost Over 5% of Body Weight.

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Background: This study aimed to advance understanding of explanatory variables associated with weight loss maintenance (WLM). Methods: We used a series of n-of-1 studies and McKnight bootstrapping approach to explore WLM in 12 people who in the previous year lost over 5% of their body weight. For two months we used ecologic momentary assessment to gather daily data on motivation, self-regulation, resources, habits and environmental and social influences (predictive variables) and weight, physical activity and ability to follow a WLM plan (outcome variables). Results: For all 12 participants, daily fluctuations of each of the 3 outcomes were significantly predicted by explanatory variables. Patterns of variables contributing to the prediction, amount of variability accounted for and autoregression differed between participants. Discussion: Divergent maintenance-related variables showed differential impact on ability to maintain weight, engage in physical activity and to follow a WLM plan for different individuals. The n-of-1 design offers useful tool for developing and testing theory of behaviour change maintenance.

Optimism, Social Support, Mood and Daily Coping With Pain in Women With Rheumatoid Arthritis

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Background: The aim of the study was to examine whether optimism and social support moderate within-day associations between pain intensity, pain coping and negative and positive emotions. Methods: 53 women completed an initial questionnaire

assessing LOT-R and a 7-day daily diary assessing pain (10- point visual analogue-scale), negative and positive emotions (PANAS) and pain coping strategies (Daily Coping Inventory adapted for chronic pain coping). Findings: Multilevel analyses examining within- and between person variability showed a greater increases in positive emotion on less painful days and increases in relaxation on more painful days; whereas pessimistic patients showed a greater decline in seeking for social and professional support in more painful days. Furthermore, results revealed that effect of social support was non-significant. Discussion: Findings support the positive role of optimism defined as coping resource in psychological functioning in rheumatoid arthritis.

Patterns of Quality of Life and Related Factors in Patients With Advanced Lung Cancer

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Background Limited information has reported about types of changes in quality of life (QOL) in advanced lung cancer patients (pts). The aims of this study were to (1) explore the types of QOL trajectories, and (2) identify factors related to each QOL pattern in advanced lung cancer pts during the first 6 months of being diagnosed as lung cancer. Methods A prospective longitudinal study was conducted in a medical center in Taiwan. Patients were assessed 4 times: pre-treatment (tx) and 1, 3, 6 months from first tx (T1-4, respectively). QOL pattern was measured by the overall QOL item from the EORTC QLQ-C30. Physical and psychological distress and self-efficacy were analyzed as potential factors for each QOL pattern. The Latent Class Growth Analysis (LCGA) was applied to analyze the patterns of QOL changes. Finding A total of 170 pts were recruited and three QOL patterns were identified. The first type of QOL (41.8% of pts) was "changing but moderate level of QOL". The second type of QOL (19.6% of pts) was "moderate to lower levels of QOL". The third type of QOL (39.6% of pts) was "steadily moderate level of QOL". Generally, physical function, pain, poor appetite, uncertainty, and self efficacy (the most robust one) were related to patients' QOL. Discussion The timely and tailoring interventions, including symptom and psychological supports, should be developed to enhance cancer patients' QOL.

Interventions of Positive Psychology as Tool for Fostering Well-being and Psychological Health

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Fostering positive emotions and sense of life are central aims of Positive Psychology (PP). These variables are also important for psychological health (PH). It is suggestive therefore to combine both approaches and to use methods of PP to promote PH. In the paper the conception and evaluation of a PP-seminar to foster PH is presented. The seminar consists of seven elements: Psycho-education, happiness-diaries, cognitive restructuring, individual strengths and resources, mindfulness, enjoyment-training, and work-life-balance. 42 subjects participated in the training and were compared with a randomized control group (n=54) in following outcomes: positive emotions, well-being, depression, anxiety, self-esteem, personal and social resources. Effects of the training show medium effect sizes in average. Highest effects were found in raising positive emotions, self-esteem, and perceived personal resources, and in reducing depression and anxiety. Most outcomes are stable over a four to six-months period. Results are promising and show that PP interventions are able to promote well-being and happiness and to reduce distress in people without apparent mental problems.

Social Embeddedness and Well-being: Moderating Role of MI, age and Gender. the Hunt Study, Norway

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Background: Social embeddedness is connected with well-being but little is known if experiencing MI, age and gender moderate this relation. Methods: MI-survivors (n=780) and MI-free participants (n=44820) in HUNT Study were followed-up after 10 years. Social embeddedness at HUNT2 (1995-1997) was used as a main predictor. Three positive (self-rated health, positive affect, general life satisfaction) and 3 negative (everyday life impairment, anxiety, depression) well-being indicators at HUNT2 and HUNT3 (2006-2008) were outcomes. Findings: Hierarchical regression revealed that higher social embeddedness predicted higher positive and lower negative well-being indicators both in cross-sectional and prospective analyses. Age moderated some of the relations: a negative relation between social embeddedness and current everyday life impairment and a positive relation between social embeddedness and future positive affect were stronger in older age, while a positive relation between social embeddedness and current self-rated health was stronger in younger age. Discussion: Social embeddedness should be an issue of interventions aimed at well-being improvement both in older and younger adults.

The Intention to get Vaccinated Against Influenza and Actual Vaccination Behavior of Healthcare Personnel

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Background: To prevent the transmission of influenza to patients, influenza vaccination of healthcare personnel (HCP) is recommended but vaccination rates are low. The aim of this study was to identify social cognitive variables that explain the motivation to obtain vaccination and to test whether intention is a good predictor of actual vaccination behavior. **Methods:** Dutch HCP (N=1370) were invited to participate in a cross-sectional survey (baseline). To link intention to behavior, participants who completed the first questionnaire (N=556) were sent a second questionnaire after vaccinations were offered (follow-up). **Findings:** Multinomial regression analyses showed that HCP with a negative attitude, high autonomy, preference of inaction over vaccination, low moral norms, and high self-protection motives are more likely to report no intention to get vaccinated vs being unsure. A positive attitude and believing that vaccination is effective increase the probability of reporting high intention vs being unsure. 80% of the variance in intention was explained. Intention in turn explained 58% of the variance in behavior. **Discussion:** Social cognitive variables were identified that explain the intention to get vaccinated against influenza of HCP, which proved to be a good predictor of behavior. Future interventions should focus on these variables to increase vaccination coverage rates.

The Interplay Between Work Engagement, Individual Level Social Capital and Personal Traits of Hospital Physicians

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Work engagement has been proven to be a viable indicator of physical and mental well-being at work. Research findings have shown a link between work engagement and both individual and organizational resources. The aim of the present study is to test the hypothesized relationships between personal traits (Big-5), the quality of the social work environment (social capital) and work engagement among hospital (n = 35) physicians (n = 387) in North-Rhine Westphalia, Germany. Structural equation modeling (SEM), combining confirmatory factor analysis (CFA) and path analysis, was employed to conduct the statistical analyses. The results of the SEM indicated that social capital was positively associated with work engagement. The personal trait variable neuroticism was negatively related to work engagement. The relationship between agreeableness and work engagement was fully mediated by social capital. Findings suggest that social capital plays a key role in promoting work engagement of physicians.

Mediation of Parental Education Level on Fruit and Vegetable Intake Among Schoolchildren in European Countries

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Background The present study examined which factors mediate the association between parental educational level (PEL) and children's fruit and (FV) intake in ten European countries. **Methods** In total, 8159 11-year-old children (response rate 72%) and their parents, in ten European countries, participated in the PRO GREENS project in 2009. Children completed a validated food frequency questionnaire about their daily FV intake and a validated questionnaire about availability of FV at home, parental facilitation of FV intake, liking for FV, self-efficacy to eat FV and knowledge of the FV intake recommendations. PEL was reported by parents. Associations were examined with mediation analyses with Mplus. **Findings** Higher PEL was associated with more frequent daily fruit intake among children in five of the ten countries. This association was mediated mainly by knowledge. Positive association between PEL and children's daily vegetable intake, found in seven countries, was mediated mainly by availability and knowledge. **Discussion** Future intervention studies, which aim to decrease PEL differences in FV intake, should target the country-specific determinants of FV intake.

What Factors Contribute the Most to Patient-reported Physician Empathy (PRPE) in Advanced Cancer Patients?

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Background: This study aims at exploring the factors that contribute the most to PRPE in advanced cancer patients. Investigated factors were: physician-reported empathy, patients' unmet supportive care needs, concordance between patients and physicians on patients' unmet needs, and patients' satisfaction with care on various dimensions. **Methods:** 201 metastatic cancer patients and 28 oncologists participated in the study filling out validated questionnaires. Durations of consultations were also recorded. Multilevel analyses were carried out. **Findings:** Patients' psychological unmet needs, physician-reported empathy and concordance were not related to PRPE. Conversely, patients' unmet needs for more support and information by medical staff strongly lessened PRPE, while the patients' satisfaction with interpersonal skills and the duration of consultations strongly improved PRPE. **Discussion:** According to these results, it would not be necessary for oncologists to develop an accurate perception of their patients' situation or to focus too much on their psychological concerns, as long as they pay attention to provide them with clear information and explicit expression of their support.

Comparing a Motivational With a Self-regulatory Intervention to Adopt an Oral Self-care Regimen

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Background: Periodontal diseases and dental caries are the most prevalent dental diseases affecting people worldwide. According to the health action process approach (HAPA), participants should first be informed about the risks and benefits to be encouraged to form a behavioral intention to adopt better oral self-care. Then should be guided to generate plans and control their behavior. However, research has not addressed the validity of this putative sequence. Thus, this study evaluates the effectiveness of two subsequent dental flossing interventions (Motivational vs. Self-regulatory), placed in different order to test the superiority of a sequence. **Methods:** Young adults (N=205, aged 18–26 years) were allocated to two treatment groups (Sequence 1 vs. Sequence 2) at three assessment points, 34 days apart in Spring 2013. Sequence 1 received a motivational intervention followed by a self-regulatory intervention. Sequence 2 group received the same treatments, but in the opposite order. ANOVAs and ANCOVAs were conducted with dental flossing, self-efficacy, planning, and action control as dependent variables and sequence conditions as within subject factor. **Results:** Both treatment sequences yielded gains in terms of all variables. However, the motivational treatment was found to have a negligible effect, i.e., the overall gains were attained even without it. At Time 2, those who had received the self-regulatory treatment first, were superior to their counterparts who had received the motivational treatment first. At T 3, differences vanished as everyone had then received both treatments. **Conclusions:** This research has explored in a unique way the sequencing of different health behavior interventions. Findings highlight the advantage of a self-regulatory intervention over a motivational dental flossing intervention. **Keywords:** self-regulation, intervention, oral self-care, self-efficacy, planning, action control, young adults.

Future-time Manipulation Influenced the Prioritization of Health and Social Goals

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Background: People with a limited future-time perception (FTP) are likely to engage more in emotionally meaningful goals but less in healthy behaviors. In view of the potential conflict between health and social goals, this study tested whether FTP affected goal prioritization and intentions to be physically and socially active. **Methods:** Participants (n=262) elicited 3 health and 3 social goals, ranked the goals on importance, and reported exercise and social engagement intentions. They were randomly assigned to receive open-ended, limited, or unchanged FTP manipulations. Afterward, participants ranked the goals and reported the intentions again. **Findings:** Both open-ended and limited FTP conditions led to a shift toward social over health goals as compared with unchanged condition. People in the limited FTP condition intended to exercise less than those in the control condition. **Discussion:** Both open-ended and limited FTP manipulations might make time constraints salient and shifted people's attention toward social goals. No such pattern was observed in exercise intention, suggesting the existence of temporal mechanisms other than the socioemotional selectivity theory.

Unhealthy or Unsociable? the Influence of Message Framing on Alcohol-related Implicit Attitudes.

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Background: Research suggests that gain- or loss-framed messages may be an effective way to manipulate attitudes toward health behaviour. However, the majority of this research has focused on the influence of message framing on explicit attitudes. The current study aimed to examine whether alcohol-related implicit attitudes could be altered by exposing participants to

different message frames. Methods: Participants (N=196) completed an alcohol-related Implicit Association Test (IAT) before being exposed to either gain- or loss-framed social or health-based messages aimed at making implicit attitudes toward alcohol more negative. Participants then completed another IAT after reading the message. Findings: Messages targeting the social aspects of drinking produced a significant negative shift in implicit attitudes from pre- to post-test, while health-based messages had no influence. Gain- or loss-framed messages showed no significant differences in influencing implicit attitudes. Discussion: Results suggest that attempts to make alcohol-related implicit attitudes more negative should focus on highlighting the negative social outcomes that result from consuming alcohol.

Evidence Based Function Diagnosis of the Autonomous Nervous System - a new Approach to Healthiness

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Non-communicable diseases caused 65.5 % deaths worldwide in 2010. These are the results of lifestyle and established chronic disease management. So new preventive concepts have to be found. Lifestyle interventions based on the findings of function diagnosis of the autonomous nervous system promise to enable health-conscious behaviour to any population group. In healthy people, the heart continuously reacts to stimuli with finely tuned "variations" of the heart beat. This so-called heart rate variability (HRV) is a measure of an organism's general adaptability and therefore a measure of disease and health as well. Transforming the data of a 24 hour measurement into a color prism, it visualizes numerical values in a "fire-like" spectrographic illustration – an intriguing, self-explanatory, easy-to-understand, engaging and emotional way of bio-psycho-socio-emotional feedback. Intuitively and rationally noticeable results of one's personal physiological "fingerprint" establish understanding between therapist and client. As a screening-and evaluation-tool for disease and predisease states HRV is a reliable tool to proof and democratize the evidence of disease and health management.

Increasing Parents' Well-being Using the Greek Adaptation of the "Parenting the Strong-Willed Child" Group Curriculum

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This clinical trial evaluates the effectiveness of the 6-week program "Parenting the Strong Willed Child-Group Curriculum" (PSWC-GC) to improve the wellbeing of 58 Greek Cypriot parents of children with various disruptive behaviors (2-8 years old). Parenting stress is the constellation of aversive stress reactions that arise from the demands of the parent role. Parents were recruited from the community following bioethics approval and assigned to the PSWC-GC condition. The Greek adaptation (Aerostata) maintained all key elements of the original curriculum in 5 parenting skills. T1=Baseline and T2=post-intervention at 7 weeks. Cronbach's alphas were high. A paired sampled t-test showed a significant decrease at T2 in Parental Distress of the Greek PSI-Short Form. Child behavior problems decreased significantly at T2, as measured by the Greek ECBI. Higher PSI-SF scores negatively correlated with ECBI. Parents reported high satisfaction with the program at T2 and a global improvement in functioning. Effective parent training programs, such as the Greek adaptation of the PSWC-GC, seem to have significant benefits for the well-being of the parents and the behavior of the child.

Alexithymia Impairs the Cognitive Control of Both Negative and Neutral Material in Adults: how Does it Impact on Intervention Care?

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Background: Individuals with alexithymia tend to exhibit a deficit in emotional processing and poorer emotional regulation which can then lead to poorer mental health and somatic disorders. We investigated the moderating impact of alexithymia on the ability of adults to control the recall of negative and neutral material, using the directed forgetting paradigm. Methods: Participants studied negative (Experiment 1, N = 60) and neutral (Experiment 2, N = 60) words. They were instructed to forget the first half and remember the second half of an entire list of words. Findings: Alexithymia impaired the recall of wanted negative material and impairs the ability to prevent the recall of unwanted negative material and the ability to exhibit cognitive control over memory for neutral material. The "externally oriented thinking" factor of alexithymia may play a pivotal role in this inability. Discussion: These results suggest that the deficits associated with alexithymia represent a global decline in cognitive control. They will help guide the future treatment of primary and comorbid alexithymia, giving special consideration to its effects on both emotional and cognitive processing.

Antenatal Attachment, Adult Attachment and Gender: a Study of French Couples

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During pregnancy expectant parents develop an attachment relation with their unborn child (Condon, 1993). The aim of our study was to compare the influence of Adult Attachment dimensions and Gender on Antenatal Attachment. 76 participants completed questionnaires on their 3rd trimester of pregnancy: ECR (Experiences in Close Relationships-Adult Attachment: Brennan et al., 1998) and MAAS/PAAS (Maternal/Paternal Antenatal Attachment: Condon, 1993). In our study, expectant parents presented good levels of parental-foetal attachment ($M=57.07$; $SD=8.27$; $min=30$; $max=70$). Linear regression showed that gender had an important effect on antenatal attachment ($\beta=.58$, $p=.001$). Avoidance of intimacy dimension-ECR was also relevant for antenatal attachment ($\beta=-.35$, $p=.001$). This result was significant for both expectant fathers ($\beta=-.42$, $p=.012$) and mothers ($\beta=-.47$, $p=.004$). Anxiety of abandonment dimension-ECR had no effect on Antenatal Attachment. Our results showed adult attachment had an important impact in the way expectant parents related to their unborn child. Understanding factors underlying Antenatal Attachment would allow preventing perinatal negative outcomes and promoting family health.

Determinants of Stress, Fatigue, Somatic Complaints and Sleep Problems in Emergency Physicians

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Background: This study investigated to what extent demographics, traumatic occupational events, occurrence of physical occupational hazards, violence and situations that can cause burnout as well as social support of by colleagues and supervisor contributed to post traumatic stress, psychological distress, subjective fatigue, somatic complaints and sleep problems in emergency physicians (EP). Methods: 346 questionnaires, measuring the above concepts by means of mainly validated instruments, were distributed to EP at two emergency medicine conferences. This resulted in 150 usable questionnaires. Hierarchical regression analyses were conducted to explore the contribution of the independent variables on the dependent variables. Findings: High clinical levels were found for all outcome variables. For post-traumatic stress and psychological distress occurrence of burnout situations was the most important predictor. For subjective fatigue occurrence of violence, burnout situations and lack of social support by colleagues were significant predictors. For somatic complaints gender, occurrence of burnout situations, lack of social support by the supervisor and lack of social support by colleagues explained most variance. Sleep problems were mainly predicted by traumatic events. Discussion: There is a lack of research on occupational stress in physicians. These data suggest that EP do not only experience a lot of occupational stress, but that some determinants are more important than others and can be important intervention targets.

Nonlinear Model for Predicting Subjective Well-being and its Change After Psychological Intervention

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Background. The aims of the present study were: a) to construct nonlinear integrated subjective well-being (SWB) model based on bottom-up approach and experimental data on several personality variables: inner directedness, time competence, sociotropy, perfectionism, locus of control, body dissatisfaction, neuroticism, and alexithymia; b) to use SWB model for evaluating the effectiveness of rhythmic movement therapy (RMT) in the increasing of SWB level. Methods. A total of 273 subjects (54 males and 219 females, mean age was 37.3 ± 10.5 years) were selected at random in nonclinical population and assessed with the appropriate surveys and questionnaires. The obtained data were used to construct the SWB model, evaluation of its parameters and validation. The RMT program was proposed to the 105 subjects (24 males, 81 females, mean age 37.6 ± 11.7 years) with very low, low and medium SWB level. Control group was included. Findings. Results revealed that: a) the SWB model not only predicts the level of SWB satisfactorily but also allows obtaining the partial response functions of psychological predictors of SWB directly as a result of estimation of model's parameters; b) the efficacy of RMT intervention for increasing SWB level was confirmed; c) SWB model predicts the changes in SWB after RMT intervention satisfactorily and can help to identify the reliable predictors of success.

The Downstream Consequences of Hedonic Priming

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Background: Hedonic priming can lead to increased food intake. We propose that when unconsciously triggered indulgence violates a person's dieting standards, it may lead to negative affect and a tendency to confabulate (to make up a plausible, but erroneous reason for the indulgent behaviour). Methods: A study with a 2 (Dieting Standard: high vs. low) x 2 (Condition: Neutral vs. Hedonic Prime) between subjects design was conducted. Dieting standards and negative affect were assessed in questionnaires. Condition was experimentally manipulated in a lexical decision task. After the lexical decision task, a taste test was administered. An excuse for indulgence was then subtly provided. Then, negative affect and the tendency to use the excuse was assessed. Findings: Results were indicative of moderated mediation: dieters, but not non-dieters, who indulged as a result of the prime, experienced increased negative affect which caused them to misattribute their behaviour using the provided excuse. Discussion: These findings suggest that hedonic priming has relevant down-stream psychological consequences that extend beyond the primed behaviour itself and that may affect future behaviour.

An Updated Systematic Review and Meta-analysis of Physical Activity Based Interventions for Chronic Fatigue

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Background: This meta-analysis examined (1) the effects of behavioral and psychological interventions containing a graded physical activity component in chronic fatigue management, and (2) potential moderator effects of trial characteristics. Methods: Studies were identified through electronic database searches. Studies reporting on randomized controlled trials (RCT's) were eligible if they: a) targeted adults with chronic fatigue, and b) presented data on any of the following: fatigue, physical functioning, physical activity, and psychological distress; assessed at baseline, post treatment and/or follow-up. Methodological quality and content of studies were extracted. Meta-analysis software was used to calculate effect sizes of intervention effects and to conduct moderator analyses. Findings: Sixteen RCT's were included. Significant effect sizes were found for all outcomes. Subgroup analyses revealed that interventions providing minimal direct contact with patients had additional effects upon fatigue and depression. Discussion: Treatments with an activity component have beneficial effects upon chronic fatigue management. Identifying key factors of success can improve future interventions' design and effectiveness.

The Effectiveness of Parents as Distraction Coaches During Venipuncture: a Randomised Controlled Trial

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Objective. To assess if training parents as distraction coaches would increase the amount of distraction used by parents and reduce child pain and anxiety during venipuncture procedures. Method. 44 participants were assigned to either distraction training condition (using a training booklet sent prior to the procedure and an electronic tablet to distract their child during the procedure) or a control group. Results. Parents used significantly more distraction in the experimental group compared with the controls. Although no significant differences for child distress or pain were observed between groups, significantly higher levels of coping behaviours were found in the experimental group. Significant correlations between higher rates of parental use of distraction and lower reports of child pain and distress. Significant correlations were found between parent distress-promoting behaviours and child distress. Conclusions. Distraction training was successful in training parents to use higher rates of distraction although expected reductions in pain and distress were not found for the experimental group. The intervention significantly increased child coping behaviour.

Influence of Parental Reactions to Illness Behaviour in Childhood on Adolescent Health-related Decision-making

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Background: It is unclear to what extent health-related decision-making in adolescence is influenced across a range of measures and illnesses by earlier parental reactions to illness behaviour in the child. Methods: 247 Participants, M = 16.8 years (SD = 0.5). Illness decision measures included visits to GPs, reported levels of illness disruption and vulnerability, and treatment-seeking

scenarios for rash, urinary problems, and anxiety. Parental Reactions to Childhood Illness Behaviour (PRCIB) were assessed as in Crane and Martin (P&ID, 2002). Findings: Higher levels of PRCIB led to increased levels of GP visits, illness disruption and vulnerability. Examining levels of treatment-seeking, regression analysis showed PRCIB to be significant even after HADS depression and anxiety, sex and age had been extracted; compared to NHS guidelines, mean responses under-reacted to rash and urinary problems and over-reacted to anxiety. Discussion: Adolescents differed systematically in health-related decision-making as a function of childhood experience, with normative levels both exceeded and fallen short of in different areas, suggesting the need for targeted health education.

Promoting Informed Decision-making on Renal Replacement Therapy: a Multicenter Randomized Controlled Trial

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We investigated the effectiveness of an intervention to promote informed decision-making on primary renal replacement therapy (RRT) among patients with ESRD and members of their social network (attendees). In a multicentre randomised controlled trial 40 patients received home-based group education and 40 patients received standard education. 310 attendees participated. TPB concepts were measured in a pre-post design: knowledge, communication, attitude, self-efficacy, anticipated negative affect, and subjective and moral norm. In the intervention group significant increases were observed in knowledge ($d=1.1$; $p<.001$), communication ($d=0.2$; $p=.13$), attitude toward haemodialysis ($d=0.5$; $p=.01$), and subjective and moral norm ($d=0.5$; $p=.02$) while no changes were observed in the control group. In the intervention group no change was found in anticipated affect ($d=-0.1$; $p=.65$) while the controls showed a significant decrease ($d=0.6$; $p=.003$). There were also significant increases among attendees in knowledge ($p<.001$) and communication ($p<.001$). Early, out-reaching, group education supports informed decision-making regarding primary treatment for ESRD and may facilitate PKT.

Ecological Model of Australian Indigenous Men's Health

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Background: Indigenous Australian men's life expectancy is substantially shorter than that of non-Indigenous Australian men. This study is designed to examine the health behaviors, as well as the enablers and barriers to these health behaviors. Method: One hundred and fifty Indigenous Australian men from three different locations (rural, regional, urban) were interviewed about their health behaviors, particularly in relation to eating and physical activity. Findings: The analyses from the perspective of the Ecological Model of Human Development, revealed several themes of importance to men in terms of their current health and/or their ability to improve their health: 1) Community, 2) Discrimination/racism, 3) Partner and family, 4) Broader relationships, 5) Lack of appropriate healthcare facilities 6) Role of the Indigenous man, 7) Employment. Discussion: These findings are discussed within the context of a participatory action research framework, and highlight the importance of broad community-based (rather than individualistic) approaches to promoting health behavior in Indigenous men.

Behavioural Effects of Ego-depletion During an Interval Exercise Session

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Background: The purpose of this study was to determine whether self-monitoring interval exercise, compared to other-monitored intervals, produced ego-depletion effects assessed in terms of subjective vitality and post-exercise choice of healthy snacks (e.g., fruit), 100 calorie snack treats, or full size snack treats (e.g., chips, chocolate). Methods: Eighty-one university students were randomized to a self-monitored or other-monitored interval cycling exercise bout. Subjective vitality was assessed before and after the 25 minute exercise bout in half the sample. On completion of the exercise, a snack selection was offered to all participants, whose choices were surreptitiously recorded. Findings: A significant time x group interaction for subjective vitality ($\eta^2=.165$, $p<.05$) was observed. There were no significant effects of exercise monitoring group, or activity level on snack selection. Overall, participants were least likely to choose the 100kcal treats. Discussion: Self-monitoring interval cycling exercise did produce ego-depletion effects evidenced by subjective vitality, but not snack choice. Possible explanations including affective effects of exercise are suggested.

Momentary Confabulations as Interactional Achievements

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Background: Momentary confabulations are false recollections produced in response to questioning, often arising in clinicians' interviews with patients. Here we examine the interactional elements of such interviews. **Methods:** Using discourse analysis, we analysed talk from clinical interviews with confabulating patients. Analysis focused on how both parties oriented to patients' descriptions of remembered events and on the design and consequential relevance of interactional turns. **Findings:** Patients' descriptions show interaction of memory deficits with preserved interactional skills. Interviewers agree with rather than challenge problematic descriptions resulting in further confabulation. Thus, patients' false recollections arise in part out of the interviews themselves rather than neuropsychological impairment. **Discussion:** These features mark the clinical interviews out as different from other interactions. Ironically, interviews based on use of confabulation questionnaires can provide settings that are especially conducive to generation of momentary confabulations. Clinical and health researchers require to be alert to the interactional aspects of such encounters.

Act FAST' When Stroke Occurs. are Stroke Patients Listening to This Advice?

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Increased population knowledge of stroke warning signs has been reported in Ireland following widespread advertisement of the stroke awareness message 'Act FAST'. This study aimed to examine the change in incidence of pre-hospital delay in an acute ischaemic stroke population and to examine if the Act FAST message influenced individual behaviour when stroke occurred. The incidence rate of pre-hospital delay was examined by assessing delayed stroke presentations in 2010/2011 and 2012/2013 to two Dublin hospitals. A cross-sectional prospective design was employed to examine behaviour during stroke onset. The primary outcome was pre-hospital delay, as defined by Onset-to-Door time (OTD) greater than 3.5 hours. The incidence rate of pre-hospital delay significantly reduced from 2010/2011 to 2012/2013. Adjusted Cox regression modelling indicated shorter OTD time if the patients decision-making during symptom onset was affected by prior exposure to the FAST campaign (OR=1.8, 95% CI 1.01-3.24). Pre-hospital delay evidenced a significant reduction since the introduction of FAST. There was evidence that demonstrated population knowledge increases successfully affected behavioural response.

Social Support for Skin Cancer Patients: a Question of Attributions of the Support Provider

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Background: The aim of this study was to examine attributions that may influence the willingness to provide social support to a patient diagnosed with skin cancer. **Methods:** In an experimental design, N=485 participants received written fictional scenarios in which the onset controllability of the cancer (non-self- vs. self-inflicted), the controllability of the course of the cancer (treatable vs. terminal), and the patient's coping behavior (norm-conforming vs. norm-violating) were systematically varied. Emotional reactions towards the patient (empathy, blame, anger) and the willingness to provide social support were measured. **Findings:** Results of an ANOVA showed that more support would be provided when onset controllability was attributed as non-self-inflicted ($F(1,477)=11.24, p = .001, \eta^2 = .023$). Mediation analysis showed significant indirect effects from onset controllability, course controllability and coping behavior on support through empathy. **Discussion:** Attributions explain variance in the willingness to provide social support. Findings suggest that patients who may benefit most from support have a reduced chance to receiving it. Practical implications will be discussed.

Children's Stress Influences Their Diet, Physical Activity and Adiposity: a Two-year Study

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Background: Psychosocial stress and adiposity are public health threats that have been associated with each other. Longitudinal studies are needed to reveal the directionality and underlying behavioral or hormonal factors. **Methods:** In 312 Belgian children (5-12y), the longitudinal stress-lifestyle-adiposity relation was tested. Stress data, lifestyle and adiposity (BMI, fat%, waist) were measured in 2010, 2011, 2012. Salivary cortisol was sampled in 2010. **Findings:** Children with a high stress score reported more sweet food consumption, psychological eating behaviour and physical activity. Stress increased adiposity in children with high sweet food consumption or high cortisol awakening response. Stress decreased adiposity in children with high physical activity. In the other direction, adiposity also increased stress. High cortisol was associated with an unhealthy diet, supporting the cortisol-induced comfort food preference. **Conclusions:** Children's stress deteriorates their diet which stimulates adiposity. Stress can also enhance physical activity which inhibits adiposity. This creates a perspective for multi-factorial obesity prevention,

targeting stress and lifestyle in parallel.

Oral Contraceptive Pill Use: Associations With Socio-demographics, Beliefs About the ocp and Barriers to Access

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Background: The oral contraceptive pill (OCP) is the most popular form of hormonal contraceptive and its use continues to increase internationally. In this analysis we aim to identify key determinants of OCP use in an existing population dataset. **Method:** In this cross-sectional survey 1,562 women were interviewed and asked about their views and experiences of contraceptive use. Logistic regression analyses were used to identify associations between predictor variables and OCP use. **Findings:** Thirty-five percent had used the OCP in the previous year. Younger, unmarried women, with free medical care were more likely to be OCP users. Sixty-eight percent agreed that taking a break from long term use of the OCP is a good idea. Thirty-seven percent agreed with the statement that the OCP had dangerous side effects and this belief was the strongest predictor variable of non-use of the OCP (Adjusted odds ratio: 0.52, 95% CI: 0.41, 0.66). Age dependent associations between beliefs and OCP use were observed in interaction analysis. **Discussion:** Concerns about the safety of the OCP are prevalent and may be important and modifiable determinants of contraceptive related behaviour.

The Exploration of Prototype Perceptions Across a Range of Sun-related Behaviours

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Background. Recent research supports the role of prototype perceptions in predicting a range of health behaviours. The current study adopts the prototype willingness (PW) model as a framework for examining a range of sun-related behaviours including sunbathing, sun protection, and incidental sun exposure. **Method.** Community participants (N=218) from North Queensland, Australia completed an online survey measuring the PW model variables and their sun-related behaviour. **Findings.** Results indicated that those who sunbathed rated all three prototypes (protector, incidental, deliberate) to be of similar favourability; in addition, the incidental prototype was perceived to be most similar to themselves. Those who abstained from sunbathing perceived the protector and incidental exposer prototypes to be significantly more favourable than the deliberate tanner. Prototype perceptions also predicted sunbathing and incidental sun exposure. **Discussion.** This research suggests that prototype perceptions can predict sun-related behaviours. The PW model could inform future interventions to reduce incidental sun exposure in high-risk regions.

Assessing Needs in Cancer Patients: Unmet Needs and Feasibility of Assessment

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Background: Healthcare should address the needs of individual patients. This feasibility study develops and implements a needs assessment within routine clinical oncology practice. **Methods:** Our previous work resulted in the CancerCAN-22, a multi-domain needs assessment tool. 43 outpatients were recruited (IG) to complete the CancerCAN-22 and the HADS and PHQ-9 (mood). On-referrals and service/advice provision were compared with a matched control group (CG). **Findings:** 66 unmet needs were reported by the IG. Females, older participants (66-80 yrs), and those with gynaecological or liver cancer reported the most unmet needs. Time since diagnosis (0-3m; 4-12m; 13+m) did not affect total unmet needs however those diagnosed within 4-12 months experienced significantly higher HADS-distress and HADS-anxiety compared to the 13+m group. Whilst total on-referrals did not vary between IG and CG, the IG were more often referred to community or complementary services. **Discussion:** Findings reveal individual variability in unmet needs and the feasibility of completing an individual needs assessment in a clinical setting and making on-referrals as appropriate to identified unmet needs.

High-fat Snacking in Greek High-school Students: a Prospective Application of the Theory of Planned Behaviour

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Background: Given the very limited data, this study aimed to determine the applicability of the Theory of Planned Behaviour (TPB: Ajzen, 1991) in the study of high-fat snacking in Greek high-school students, whilst taking into consideration gender and culture-relevant factors. **Methods:** Predictor variables were measured at Time 1 (N=147), and actual high-fat snacking a week

later (N=129). Additionally, three focus groups (N=28) were conducted to elucidate culture-relevant factors influencing high-fat snacking. Findings: The TPB variables predicted 19.6% of intended high-fat snacking, with attitudes being the strongest predictor ($r = .40$, $p < .001$). Moreover, the model predicted 35% of subsequent high-fat snacking. Gender did not influence intended or subsequent high-fat snacking. Of the culture-relevant influences, the involvement of grandmothers and the 24-hour easy access to snacks at kiosks were particularly salient. Discussion: The TPB can be used to study high-fat snacking among Greek students, whilst accounting for culture-relevant influences.

Immigrants' Adherence to Child Health Surveillance Services in Portugal: a Grounded-theory

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Given that immigrant children are a vulnerable group regarding health (Javier et al., 2009), it is important to promote their adherence to Child Health Surveillance Services (CHSS). Evidence suggests lower rates of adherence to CHSS among immigrant children (vs. non-immigrants, Javier et al., 2009), but little is known about the determinants of this behavior. Therefore, this study aimed to develop a Grounded Theory (GT) on the determinants of adherence to CHSS, of Cape Verdean and Brazilian immigrants in Portugal. 5 Focus Groups (n=19 immigrants) and 15 in-depth interviews were conducted; with Cape Verdean, Brazilian and Portuguese child caregivers, from different socioeconomic conditions. Data was analyzed using a grounded-theory methodology (Strauss & Corbin, 1990). Adherence to CHSS is a nuclear and multidimensional concept with several determinants at different levels of analysis. Some of the main determinants are: the degree of similarity between consults/health-care providers of origin and host countries; caregivers' and health-care providers' practices and socioeconomic conditions. These findings may contribute to improve immigrant's adherence to CHSS.

Serostatus Disclosure and Identity Management Among HIV-positive gay men in Ireland

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Background: HIV serostatus disclosure is most often construed as a transmission reduction strategy by health professionals. We explored the lived experience of disclosure to sex partners among HIV-positive gay men. Methods: 15 in-depth interviews were conducted with HIV-positive gay men, and were analysed using grounded theory. Findings: The following themes were elaborated: (1) Protective non-disclosure: Discourses portrayed seropositivity as a moral failure rather than the result of viral exposure, and non-disclosure protected a discreditable identity. (2) Rejective non-disclosure: Interviewees refused association with other HIV-positive gay men, characterised as damaged and dysfunctional, and rejected disclosure as allowing oneself to be defined by an illness. (3) Moral non-disclosure: Personal infection was presented as a temporary moral lapse, which when contrasted with a renewed morality and responsibility, made non-disclosure to partners ethical. Discussion: The findings highlight the role of disclosure in identity management, in contrast with usual conceptions of disclosure, and the need for a more nuanced approach in the design of transmission reduction interventions.

Fatigue Related Psychological Factors in Patients With Cardiovascular Diseases

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Background. The positive effects of exercise training in cardiovascular diseases are well known and used widely in cardiac rehabilitation. Evidences indicate that exercise improves physical activity and overall cardiorespiratory fitness. However, less is known about the relations of exercise training to psychological factors, like vital exhaustion and chronic fatigue as highly predictive risk-factors of myocardial infarction and sudden cardiac death. The pathophysiological mechanisms are not yet well understood but fatigue might be partly related to disrupted cardiorespiratory values. Methods. Patients with ischemic cardiovascular diseases entered the study (n=227; mean age=63.30±9.89). All patients underwent both standard ergometric and psychological test procedures. In addition, 72 of these patients (mean age= 64.88±5.59) entered an exercise-based cardiac rehabilitation program and were followed for three months. Results and Conclusions. Our results indicate the positive effects of rehabilitation on both cardiovascular and psychological fitness. In addition, we found strong associations between the ergometric and psychological factors. More specifically, the fatigue related psychological parameters were found to show significant associations with maximum systolic blood pressure during exercise, metabolic equivalent and maximum heart rate.

Exploring Risk and Protective Mechanisms Associated With hiv Infection Among Adolescents in South Africa

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Background: The main objective of this study was to explore South African adolescents' perceived risk and protective mechanisms for HIV infection in their communities. **Methods:** The study used a qualitative design with Focus Group Discussions (FGDs) for data collection. FGDs were conducted among 12 to 17 year old participants receiving mental health services at either one of two clinics in Cape Town. Thematic content analysis was used to generate the core themes that emerged. **Findings:** Themes associated with risky behaviours for HIV infection were: Alcohol and illicit drug use; Non-condom use; Prostitution and risky sexual activity with multiple partners; and Non-disclosure of HIV status. Themes associated with protective mechanisms were: HIV knowledge and appropriate risk-reducing behaviour; and Proactive parental attitudes and behaviour. **Discussion:** The findings highlight the importance of ascertaining the perceptions of adolescents regarding how knowledge, attitudes and practices of the members of their social network influence young individuals' vulnerability to HIV infection. The findings also help to shape future targeted adolescent programs for HIV prevention.

Uptake of an sms Cessation Intervention for Pregnant Smokers (MiQuit) in Early Antenatal Care

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Background: Aim: to estimate the initiation rate among pregnant smokers of a tailored SMS text message smoking cessation intervention (MiQuit) when promoted in antenatal care without health professional endorsement. **Methods:** Pregnant women (N=1,750) accessing a UK maternity hospital received a single-sheet A5 leaflet describing MiQuit in their maternity notes folder over a 6-month period. Similar materials were left on clinic desks and noticeboards. Activation requests for the SMS system and system interaction were recorded over a 9-month period. Historical hospital smoking rates were used to estimate the number of pregnant smokers exposed to the materials. **Findings:** 25 activation requests were received, estimated to represent 3.7% (95% CI 2.3-5.2%) of all pregnant smokers accessing care over the 9-month period. Only 11 (44%) sent the sign up request SMS message in the correct format. Among those activating support, there was relatively high interaction with the system. **Discussion:** A low intensity and low cost promotion of a low cost intervention resulted in an engagement rate which would confer a significant public health benefit if effectiveness was demonstrated

A Qualitative Study of Supporting Lifestyle Behaviour Change in Psoriasis Patients – are Practitioners READY?

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Background: Psoriasis is associated with unhealthy behaviours known to trigger onset/flares of the condition and to increase the risk for cardiovascular disease. Whether health-care practitioners managing people with psoriasis are confident to incorporate lifestyle behaviour change (LBC) techniques into routine consultations is unknown. **Methods:** In-depth, qualitative interviews were carried out with 23 practitioners managing psoriasis patients in the UK stratified by discipline. Interviews explored practitioners' knowledge, skills and attitudes in relation to LBC, including perceived barriers. Data were analysed using Framework Analysis to identify key issues. **Findings:** Practitioners viewed LBC as important in managing psoriasis but believed such work was outside their role, citing organisational constraints and prioritisation of other goals as barriers. Limited knowledge and skills about lifestyle factors in psoriasis underpinned these beliefs, resulting in LBC being addressed only rarely in consultations. **Discussion:** Low levels of knowledge, skills and confidence among professionals about addressing lifestyle issues in psoriasis patients and a lack of structured support for LBC were identified. Findings will inform the development of training for staff and support materials to improve lifestyle in people with psoriasis.

Affective and Cognitive Components of Risk Perception Work Differently in the Case of Cellular Phone

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Background: Recent findings in risk perception highlight the importance of the affective component in predicting intentions and behaviors (Dillard, Ubel, Ferrer, & Fagerlin, 2012; Janssen et al., 2011). The present study replicated the design and measures in

sun-screening and extended it to use of cellular phones. Methods: 116 participants filled an online cross-sectional survey, tapping knowledge, affective and cognitive risk perception, worry, behavioral intentions and actual behaviors with respect to using sun-screen and using cellular phones. Demographic variables were also recorded. Results: Finding on sun-screen use were replicated, but were different in the case of using a cellular phone: thought knowledge about the negative effects of radiation was unrelated to reported behavior, the cognitive component of risk perception was significantly associated ($r=.18$, $p<.05$) with behavior while the affective component and worry were unrelated. Moreover, cognitive risk perception was the only predictor of behavior in a multivariate analysis. Conclusions: The results are discussed in terms of dual-process models and the possibility of the singularity and centrality of cell phones.

Promoting Physical Activity in People With Type 2 Diabetes: Findings of an N-of-1 Study

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Background: To test within an n-of-1 design whether brief interventions (1) increase physical activity (PA) and (2) reduce sedentary activity (SA) in people with Type 2 Diabetes; and to examine whether effects are mediated by psychological process measures taken on a daily basis. Methods: Six participants wore an accelerometer device for 6 months that deliver different instructions on alternate days (either to improve PA, reduce SA or no instruction) while measuring physical activity levels. Participants recorded levels of confidence, self-efficacy, stress, pain, happiness and motivation on a daily basis. Results of the n-of-1 study were analysed by bootstrapped time series analyses. Findings: Participants varied in response to the PA and SA interventions with some being more responsive to PA whereas others were more responsive to SA. Self-efficacy and happiness were routinely predictive of physical activity levels. Discussion: The n-of-1 design highlighted how participants respond differentially to interventions targeting PA as opposed to SA and that level of response to an intervention was mediated by psychological processes.

Mother's Emotional Reactions and her Child's Health

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It is known that mother's emotional reaction maturity is the main factor of the child's psychological health. After birth, most children in Russia are given one or another diagnosis. By the end of the child's first 2 years of life these earlier diagnoses are dismissed by specialists. The purpose of the research was to analyze, which parameters of mother's emotional reaction influence on the child's diagnoses dismissing. Overall 100 mother-child pairs with the child in the first 2 years of life were participants. To analyze the heart rate variability of mothers in emotional situation, we recorded heart rate variability. Two consecutive recordings of 300 R-R intervals (a fixed number, making it possible to successfully evaluate the high and low frequency waves of the heart rate) were made. The first record was made in the rest situation and during the second records mothers were asked about their children health. We have analyzed some additional characteristics: the number of children in families, mother's level of education and her age. Regression analysis showed that the more mother's level of education and her age is the more probability of her child's diagnose dismissing. The less her heart rhythm rigidity during both the rest and emotional situation is the better her child's health. The research was supported by the grant RGNF N14-16-48005 and 14-06-00195

Physical Activity: the Role of Autonomous Motivation and Self-regulation Techniques

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Background: Autonomous motivation and self-regulatory techniques, e.g. self-monitoring, action planning and coping planning, are known to predict physical activity (PA). We studied whether the use of self-regulatory techniques affects the motivation-behaviour relationship. Methods: Finnish adolescents (N =411, aged 16-19) took an electronic survey including validated measures of self-determined motivation, self-regulatory techniques, and PA, and a one-month follow-up. A subsample used an accelerometer to objectively measure PA (n=69). Findings: Intrinsic motivation was positively related ($r=.47$, $p<.001$) and extrinsic motivation unrelated ($r=-.03$, $p=.612$) to self-regulation technique use. Autonomous PA motivation ($r=.29$, $p<.001$) and the use of self-regulation techniques ($r=.39$, $p<.001$) prospectively predicted PA. Self-regulation techniques mediated the effects of motivation on PA but did not influence the strength or direction of the relationship between any type of motivation and PA. Discussion: Teaching self-regulation techniques use and supporting autonomous PA motivation may be equally important and have additive effects in interventions aiming to increase adolescents' PA.

Anticipated Regret and Organ Donor Registration

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Background: This study tested whether asking people to rate their anticipated feeling regret (AR) for not registering as a posthumous organ donor increases subsequent verified organ donor registration. **Method:** 14,509 members of the UK general public were randomly allocated to 1 of 4 arms. Participants in the no-questionnaire control (NQC) arm were asked if they were registered as an organ donor. Participants in the questionnaire control (QC) arm answered the same questions plus questions regarding their affective attitudes towards donation and their intention to register as an organ donor. Those in the TPB arm received the same items as the QC arm, plus items measuring their attitudes towards organ donation, subjective norm and perceived control. Those in the AR arm received the same items as the TPB arm, plus two items measuring AR for not registering as an organ donor. 6 months later, the UK transplant register was searched. **Findings:** People in the NQC condition were more likely to register as an organ donor (6.39%) than participants in the QC (5.27%), TPB (5.40%), and AR (4.51%) arms. **Discussion:** A brief AR intervention did not lead to an increase on organ donor registration.

The Role of Positive Social Interactions in Improving Wellbeing: a Randomised Controlled Pilot Trial.

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Background: Positive psychology activities (PPAs) have empirically shown to increase wellbeing. However, the role of positive social relationships is yet to be examined in this research. This study aimed to test whether kindness and gratitude PPAs enhance existing social relationships. **Methods:** Using a mixed repeated measures design, 212 participants were randomised to one of four intervention conditions (or control) and completed measures of social support and wellbeing at three time points (baseline, post intervention and one month). The experimental conditions involved positive interactions with others whereas the control did not. **Findings:** As evidenced by a significant interaction, those who completed kindness or gratitude PPAs to people in their social network had greater increases in relationship satisfaction than the control group post intervention. Further, only those in the experimental conditions felt their existing relationships had improved at trial cessation. **Discussion:** PPAs significantly enhanced social relationships. Given its integral relationship to health and wellbeing, health researchers are advised to value the role of social relationships in the PPA framework.

Effects of Conscientiousness on Sleep and Sleep Quality: a Daily Diary Investigation

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Background Conscientiousness predicts longevity and better health outcomes. Health behaviours have been found to account, in part, for these positive relationships. However, little or no research has explored the effects of conscientiousness on sleep and sleep quality. This study, using a daily diary design, investigated the effects of conscientiousness on sleep outcome measures. **Method** Two hundred and forty-five participants completed a baseline measure of conscientiousness followed by a 7 day daily diary, providing daily reports of stressors experienced as well as hours slept, sleep quality and efficiency and mood. **Findings** As predicted, hierarchical linear modelling found cross-level interactions indicating that higher levels of conscientiousness were associated with better daily sleep quality measures, though, not number of hours slept. At baseline, conscientiousness and its facets were also associated with better sleep efficiency and overall sleep quality. **Discussion** These findings indicate that conscientiousness, and its facets, may influence health status directly by influencing sleep quality and efficiency.

The Associations Between Mental Disorders and Subsequent Cancer

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Background: The associations between mental disorders and cancer is unclear. It is also unknown whether associations vary according to life course stage or gender. **Methods:** The World Health Organization Composite International Diagnostic Interview retrospectively assessed lifetime prevalence of 16 DSM-IV mental disorders in face-to-face household population surveys in 19 countries (n=52,095). Cancer was indicated by self-report of diagnosis. Survival analyses estimated associations between first onset of mental disorders and subsequent cancer. **Results:** Following adjustment for mental disorder comorbidity, panic disorder, specific phobia and alcohol abuse were associated with cancer (OR 1.3-1.5). The risk of cancer rose with the number of disorders. Depression was more strongly associated with cancers diagnosed early in life (OR 1.7) and not late onset (OR 1.2) and cancer among women (OR 1.5). PTSD also has an association with early cancers. **Discussion:** This study reveals the magnitude and patterns of the associations between mental disorders and cancer. The findings suggest a link between the two types of

conditions and support arguments for early identification and treatment of mental disorders.

Identifying the Content of Care Delivered to Control Groups

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Background: Much attention has been directed at behavior change techniques (BCTs) in interventions. Little attention, however, is being paid to the BCTs in control groups receiving usual care, yet studies suggest usual care content can vary between study sites and impact outcomes. This study explored a method of assessing the active content of usual care provided to control groups. **Methods:** HIV-nurses (n=21) completed an open-ended questionnaire about nine domains in adherence counseling. The content was coded by two coders based on a medication adherence BCT taxonomy. We examined intercoder reliability (kappa), internal consistency of a standard care quality (SCQ) scale, and variability in SCQ scores. **Findings:** Responses could be reliably coded with the taxonomy. The mean kappa was .79. 19 of the 22 BCTs coded produced a kappa >.6. The SCQ scores displayed substantial variability (range=7-19 BCTs), and showed good internal consistency ($\alpha=.74$). **Discussion:** The BCT taxonomy could be reliably applied to responses to open questions on adherence counseling. Moreover, adherence counseling can be compiled in one quality score. The tool may be useful for exploring control group content.

A Field Experiment of Diet Priming for Changing Unhealthy Eating Habits

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Background: Unhealthy eating habits are difficult to change by intention to diet. Habitual behavior sometimes operates automatically, inconsistent with conscious intention. The study examined the effect of diet priming that changes habits and reduces unhealthy eating behavior unconsciously. **Method:** 139 female undergraduates participated in the field experiment. For about half of participants, the goal of dieting was primed by giving a picture of a slender female (priming condition). For the others, an animal picture that was unrelated with diet was used (control condition). The study measured diet intention, habits, and subsequent snacking behavior two weeks after the manipulation. **Findings:** The results showed that the consumption of snacks was reduced in the priming condition more than in the control condition. Intention to diet had no effect on the subsequent behavior. Moreover, diet priming moderated the effect of habits on behavior. **Discussion:** Diet intention cannot always control unhealthy eating habits. However, the introduction of diet priming can reduce habits and can change behavior. These findings are discussed in the context of intervention for unhealthy habits.

Quality of Life of Working and Non-working Informal Caregivers in the Lifelines Cohort Study

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Background: We aim to study whether working and non-working caregivers differ in their quality of life (QoL), and what the underlying factors of these differences are. **Methods:** The study population consists of informal caregivers in the Lifelines Cohort Study (aiming to include 165.000 participants in total), who participate in an additional informal care questionnaire. Within 7 months of recruitment, 582 caregivers completed the questionnaire. We aim to include 1000 caregivers. The following constructs were measured: QoL (EQ-5D VAS), caregiver burden (Caregiver Reaction Assessment), work, informal care situation, and support. (Preliminary) findings: 403 caregivers (70%) are employed (77% female, mean age 50 yrs), and 179 (30%) are unemployed (73% female, mean age 60 yrs). The mean QoL of working caregivers (78.3) is significantly higher than of non working caregivers (73.6) (mean difference 4.7; 95%CI .78-8.56). Multivariate regression analyses will examine possible underlying factors of this difference. **Discussion:** Working and non-working informal caregivers differ in their QoL, and should be targeted differently in interventions when aiming to improve their QoL.

With a Little Help From my Friends - why the Beatles Where Right or how Self-regulation and Social Support Make Intentions Reality

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Background: Although many people know that an active lifestyle contributes to health they fail to translate their intention into action. This has been explained by deficits in health literacy such as enabling social support, planning and self-regulation in the face of barriers. The present study examines the role of received social support, planning and self-regulation in facilitating physical activity. **Methods:** In a prospective online study (N = 1660), intention was assessed at baseline, planning and social support at 4-week follow-up, self-regulation and physical activity at 6-month follow-up. A path analysis was conducted including intention, received support, planning and self-regulation to predict physical activity. **Findings:** Received support,

planning and self-regulation mediated the link from intention to physical activity, the total indirect effect was significant ($b = 5.38$, CI 95% [2.76; 9.29]). Discussion: In the present sample received social support, planning and self-regulation bridged the intention-behavior gap. To support behavior change and maintenance health literacy should be enhanced in vulnerable individuals (cf. www.irohla.eu)

Perceived Well-being and Physical Activity Indoors, in Built Outdoor Settings, and in Nature

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Background: Experimental studies have systematically shown that the benefits associated with physical activity (PA) are stronger after exercise in natural, compared with built, environments. This research explores whether these results apply beyond experimental settings. Methods: Nationally representative Finnish survey data ($n=2072$) on outdoor recreation was analysed using structural regression modeling. Weekly frequencies of PA indoors, built outdoor settings, and in nature were regressed on perceived general health and emotional well-being (RAND-36). Covariates included general situation in life and socioeconomic factors. Findings: Frequent PA in nature, but not in built environments, was related to improved emotional well-being ($\beta=0.069$, $p=0.003$). General health was positively connected to PA in natural ($\beta=0.046$, $p=0.028$) and built ($\beta=0.046$, $p=0.032$) outdoor environments. Discussion: The results suggest that PA in natural environments is related to enhanced well-being more specifically than PA in built settings. Green areas could provide a cost-effective, preventative tool for stress- and self-regulation, and thus, promote individual well-being and public health.

Temporal Frame and the Consumption of High Calorie Snacks: Moderating Effects of Impulsivity.

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Background: Previous research has shown a positive correlation between impulsivity and high-calorie snack consumption. The current study examined whether highlighting immediate (vs. long-term) consequences of high-calorie snack consumption reduced impulsive participants' snacking behaviour. Methods: Participants ($N=109$) completed a questionnaire including measures of impulsivity and snack consumption, completed either an impulsivity priming task or neutral task, and read a health message highlighting either the short-term or long-term health consequences of consuming high-calorie snacks. One week later, participants were asked to record their snack consumption over the previous seven days. Findings: Participants with higher individual levels of impulsivity, and participants experimentally primed with impulsivity, consumed fewer high-calorie snacks when the immediate (vs. long-term) consequences of snacking were highlighted. Discussion: Findings suggest that health promotion messages advocating the avoidance of high-calorie snacks may be more effective for impulsive individuals if immediate health consequences are highlighted.

Biofeedback and Progressive Muscle Relaxations' Potential for Reducing Students' Academic Stress

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Background: Moderate level of stress is a normal phenomenon for students. Students who reported higher levels of stress were linked with poor health behaviors, increased depression, anxiety, reduced learning achievements. Thus, physical, psychological, behavioral, and academic difficulties were the cost of stress for students. When academic stress is perceived negatively, it may decrease academic performance and health. The study aimed at assessing the potential of relaxation training in reducing academic stress. Methods: Subjects of the study were 29 undergraduate university students aged between 19 and 27. The participants were randomly assigned to 3 different groups. Two groups received 4 progressive muscle relaxation (9, 32.3%) and skin-conductance relaxation (23, 41.9%) training sessions once a week between two measurements of their perceived stress (Perceived Stress Scale, (Cohn, 1983) and academic stress (Student Academic Stress Scale, (Busari, 2011). Results: The results of the study showed that perceived stress and academic stress decreased after skin-conductance relaxation training, while no such changes were observed in the progressive relaxation and control groups.

The Alpha and the Omega of Scale Reliability and Validity: why and how to Abandon Cronbach's Alpha

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Health Psychologists using questionnaires rely heavily on Cronbach's alpha as indicator of scale reliability and internal

consistency. Cronbach's alpha is often viewed as some kind of quality label: high values certify scale quality, low values prompt removal of one or several items. Unfortunately, this approach suffers two fundamental problems. First, Cronbach's alpha is both unrelated to a scale's internal consistency and a fatally flawed estimate of its reliability. Second, the approach itself assumes that scale items are repeated measurements, an assumption that is often violated and rarely desirable. The problems with Cronbach's alpha are easily solved by computing readily available alternatives, such as the Greatest Lower Bound or Omega. Solving the second problem, however, is less straightforward. This requires foregoing the appealing comfort of a quantitative, seemingly objective indicator of scale quality altogether, instead acknowledging the relationship between reliability and validity and the distinction between scales and indices. In this contribution, I will explore these issues, and provide recommendations for scale inspection that takes these dynamics into account.

Occupational Stress Among Health Professionals: the Role of Psychosocial job Dimensions and the Recovery Processes.

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Background. In accordance with the Effort - Recovery model (Meijman & Mulder, 1998), recovery is a process of psychological unwinding that is the opposite of the activation of psychophysiological systems during effort expenditure, particularly under stressful conditions. In the present study we examined the mediator role of three recovery dimensions (spillover, recovery self efficacy and sleep disorders) in the relationships between psychosocial job dimensions and psychological distress/well being variables. **Methods.** Three hundred and forty nine workers (69% females, mean age = 44.8 years; SD = 9.6) employed in helping professions (37% teachers; 28% civil servants, 18% health care workers, 16% social workers) filled out the Leiden Quality of Work Life Questionnaire (van der Doef & Maes, 1997); the recovery self efficacy scale (Kodja, 2003); the sleep disorders questionnaire (Violani, et al., 2000); and the Maslach Burnout Inventory-Human Service Survey (Maslach & Jackson, 1997). **Findings.** The recovery self efficacy showed only direct associations. Moreover, spillover and insomnia impact partially mediated the association between job demands and emotional exhaustion. Finally, spillover partially mediated the association between job control and emotional exhaustion. The indexes of the final model were: ChiSquare = 35.3; GDL = 28; CFI = .99; RMSEA = .03; (.00 - .05). **Discussion.** The processes of recovery were not univocal. Future research would benefit from the use of longitudinal designs and focus on changes of working conditions.

Development of a Programme to Improve Empowerment and Health Behaviour in Adults Visiting Their General Practitioner

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Background: The prevalence of chronic diseases has increased during the past decades, suggesting that primary prevention about health behaviour may be important. The general practitioner (GP) can positively affect patients' behavioural choices. But often GP's report a lack of time which makes it difficult to provide preventive counselling. The objective in this study is to develop a programme delivered by GP's that empowers adults (18 to 65 years old) to make changes in physical activity and dietary behaviours. **Methods:** The Intervention Mapping Protocol (IMP) was used for the systematic development of this programme. By the elaboration of the six steps of the IMP, theoretical and empirical methods were used and programme objectives (PO's), theoretical methods and practical applications were stated. **Findings:** The systematic development resulted in a tablet based eHealth programme existing of three parts, based on the self-regulation theory: goal selection (1), active goal pursuit (2) and goal attainment (3). The PO for patients is to develop their own action plan that states which behaviour they will perform, when, where and how they will deal with difficult situations. Methods used are self-regulation, computer-tailoring, planning coping responses, goal setting, implementation intentions and selfmonitoring of behaviour. For GP's the most important PO is to motivate their patients to use the programme. **Discussion:** The IMP resulted in the development of a flexible eHealth programme, used for developing action plans by patients to achieve health goals. This programme will be delivered in general practice by the use of tablets. It is expected that this programme solves the problem of time burden because it provides tailored information and empowers patients to change their behaviour themselves. To ensure the feasibility, focus group research have to be conducted in general practice. Also a pilot test to evaluate the acceptability, feasibility and efficacy of this programme will be performed.

Statistical Versus Narrative Risk Information: Implications for Future Communication About hpv Vaccination

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Background: In an experimental online study we compared the effects of different types of risk information on mothers' perceived

vulnerability towards HPV and cervical cancer of their daughter . Methods: 375 mothers of girls-to-be invited to the HPV vaccination round of 2014 were derived from the National Immunization Register and were randomly assigned to one of four conditions in a 2 (statistical information: yes or no) x 2 (narrative information: yes or no) factorial between-subjects design. Narrative information was expected to increase perceived susceptibility to both HPV and cervical cancer, while statistical information was only expected to increase perceived susceptibility towards HPV due to difference in prevalence rates between HPV (high) and cervical cancer (low). Findings: Mothers who received statistical information felt their daughter was more susceptible towards HPV than mothers who received no statistical information. No effects of narrative information were found. Discussion: Among mothers, statistical information seems most effective in increasing perceived vulnerability of their daughters towards HPV and may thus motivate decision making towards HPV vaccination.

Cross-Cultural Differences in Cognitive Emotion Regulation Strategies: a Comparison Between six European Countries

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Background: Use of cognitive emotion regulation strategies (CERS) in response to stressful life events varies by country, though research has been limited to Americans and Asians. We aimed to compare six European countries to investigate cross-cultural differences in the use of CERS and test if the relationship between specific strategies and psychopathology varies across countries. Methods: Participants were recruited from the Netherlands, Hungary, Spain, Italy, Portugal and Germany (N=1553) and completed cross-cultural measures of cognitive emotion regulation using the Cognitive Emotion Regulation Questionnaire (CERQ), depression and anxiety. Results: We found significant differences on all the subscales of the CERQ: northern European countries made less use of strategies related to maladjustment than southern European countries. The direction of the relationships between specific strategies and symptoms of psychopathology was consistent across countries. Discussion: Although there were culture-related differences in the use of CERS, the consistent relationship between strategies and psychopathology supports the idea of a transdiagnostic approach to treating psychopathology.

Identity, Representations and Beliefs: the Experience of People Living With hiv and hiv Controllers on the Frontier of Good Health and Illness

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Background: Immuno-virological data have highlighted the particular situation of people living with HIV (PLHIV) who are called "HIV controllers". Infected for more than 10 years and having never received antiretroviral treatment, the level of the virus in their blood remains undetectable despite the presence of antibodies indicating HIV infection. Methods: We implemented a study aimed at understanding the life experience of these PLHIV. The present analysis focuses on qualitative data. Thematic analyses were performed. Findings : 14 PLHIV HIV Controllers were interviewed for the qualitative study. These PLHIV brought up persistent representations about HIV before their identification as HIV Controllers. With regard to their status, moral and mental strength were frequently mentioned, this psychological aspect helping them make sense of the immuno-virological data in order to justify their situation. Lifestyle, healthy living and religious beliefs/spirituality were less frequently mentioned to justify their situation. Discussion: These data, unprecedented in PLHIV HIV Controllers, highlight the complex nature of this sub-group's experience with HIV.

Behaviour Change Techniques Used in Diabetes Quality Improvement Interventions: Secondary Analysis of a Systematic Review

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Background: A 2012 Lancet review identified 142 trials of interventions for quality improvement (QI) for people with diabetes, and classified interventions using broad QI categories, making analysis and replication difficult. We examined which behaviour change techniques (BCT) could be identified within these QI interventions. **Methods:** Three psychologists independently coded a random sample of 23 trials for healthcare professional (HCP) and/or patient behaviour, using the v1 BCT taxonomy. Rules were developed to supplement use of the framework for this literature. **Findings:** Only 26/93 BCTs were identified targeting HCP and 22/93 targeting patient behaviours: median=6 BCTs per trial for HCPs and 3 for patients. Interventions mainly used prompts/cues, goal setting, feedback and monitoring, social support, instruction on how to perform the behaviour, credible source, and/or add objects to the environment. **Discussion:** BCTs provide detailed description of QI interventions' active ingredients, which may enable identification of effective components and help replication efforts. Many BCTs are rarely incorporated in QI interventions and may present a useful focus for future research.

Do Psychological Interventions Reduce Anxiety and Depression in Patients Undergoing Invasive Cardiac Procedures? a Meta-analysis of Randomised Controlled Trials..

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Background: This meta-analysis assessed the efficacy of psychological interventions to reduce distress in patients undergoing cardiac procedures and explored the impact of intervention features. **Methods:** Random effects models assessed changes in depression and anxiety at post-test (earliest after baseline) and follow-up (after three months), with moderator analyses for type of usual care, cardiac procedure undertaken, intervention duration, risk of bias, and facilitator type. **Findings:** Twenty studies met the inclusion criteria (2181 participants), 16 reported depression and 12 reported anxiety. Relative to controls, interventions reduced depression and anxiety at post-treatment (SMD = -0.66, 95% CI: -1.14 to -0.19, and SMD = -0.40, 95% CI: -0.71 to -0.09, respectively), and anxiety at follow-up (SMD = -0.29, 95% CI: -0.47 to -0.10). Type of usual care, type of cardiac procedure, and intervention duration significantly moderated depression outcomes, whereas facilitator characteristics significantly moderated anxiety outcomes. **Discussion:** Psychological interventions can reduce distress in cardiac patients. Future research could investigate how intervention features impact outcomes.

Online Social Support and the Risk of Compulsive Internet Use: a Cross-national Exploratory Study

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Background: Although the health benefits of traditional social support have been largely documented (e.g. Uchino, 2006), less is known about its virtual form. Some of the benefits include increased social capital, potential for egalitarianism and the cathartic function of writing (e.g. White and Dorman, 2006). Notwithstanding, there is a risk of over-extending our virtual time at the expense of traditional interactions (Burrows et al., 2000). Moreover, spending long hours online is associated with higher risk of Compulsive Internet Use (CIU), a maladaptive use that results in damaged family relationships (Meerkerk et al, 2010). In this study, we explore the extent to which using online channels to interact with the main source of social support contributes to the development of CIU. Furthermore, to address the lack of reference to macro-variables in the study of social support and health, we collected data in three countries with different freedom in their internet access. **Methods:** We used a cross-sectional, survey-based design (NUK=277, NUSA=268, NUAE=270). The survey was made of validated scales (i.e. CIU, Meerkerk et al, 2010), Social Support (Rena et al, 1999) and new items that we developed to assess main source and main channel of social support. **Findings:** Those that mostly used online channels to interact with their main source of social support were at a higher risk of CIU. UK and UAE used online channels in higher proportion than face to face, whereas the USA used all channels (face to face and online) in a similar way. UAE reported higher levels of CIU than UK and USA, even though they also were the country that spent the lowest time online. **Discussion:** Our study highlights the dangers of relying on online channels for social support. The study also supports previous studies regarding the health benefits of using a variety of social support sources (Cohen et al, 1997) and expands these to incorporate the channel of interaction (virtual vs non virtual).

Parent's Sense of Coherence Associated With and Predicting Energy-balance Related Behaviors Among 10-11-year old Children?

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Background: Associations between parent's Sense of Coherence (SOC) and schoolchildren's energy-balance related eating habits

have been found. This study examines if parent's SOC is associated with other energy-balance related behaviors; screen time, sleep duration, and physical activity, and whether parent's SOC predicts the change in behaviors. Methods: Finnish schoolchildren (n=1268, RR 79%), aged 10-11, reported their screen time, sleep duration, and physical activity (PA) in autumn 2006. Simultaneously, one parent filled-in a questionnaire comprising SOC-13. In spring 2008, a follow-up was conducted among schoolchildren. Parent-child dyads were 747 in 2006 and 475 in 2008. Linear regression was used in the analyses. Findings: A stronger parent's SOC in 2006 was associated with schoolchildren's less screen time, and longer sleep duration. A stronger parent's SOC did not predict the change in energy-related behaviors in 2008. Discussion: The associations found were energy-related behaviors conducted at home, sleep duration and screen time, but not for out of home activities as PA. A stronger parent's SOC might not be a preventing factor for children's behavior.

INTELLIGENCE-RELATED Health Status in Subjects With Intact and Damaged Brain

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Health state reflects the degree of well-being of an individual on the physiological, psychic and social levels. By considering a disease as adaptation disturbance and the nervous system as a major regulator of the functional equilibrium of all organism systems it is logical to conclude on indirect connection between intelligence and health. To study plasticity of functional neuronal networks determining human adaptability we analysed the relationship between IQ and SF-36 scales in patients with brain tumours vs. control subjects. Significant positive correlations between scores in solving figural tasks and 'Physical function' and 'Vitality' scales in control group were found. Patients with brain tumour were characterized by positive relation between general IQ and 'Role of interactions due to emotional problem' scale as well as between efficiency of solving verbal tasks and 'Role of interactions due to physical problem'. The variable relationships between intellectual abilities and SF-36 scores can be ascribed to flexible strategies of information selection and potential adaptability in individuals with brain damage due to compensatory reconstructions in neuronal systems.

How to Measure Informed Choice? Results From the German Mammography Screening Programme

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Background: Informed choice in mammography screening has long been an ethical requirement with poor implementation. The objective of this study was (1) to develop a questionnaire to assess informed choice in the German mammography screening programme (MSP) and (2) to determine whether women invited to the MSP for the first time make informed choices. Methods: This study was designed as a cross-sectional study with 3-month follow-up on self-reported behaviour. 2084 women from Westfalen-Lippe aged 50 answered the questionnaire in 2013/2014. The primary outcome was informed choice. Secondary outcomes were the components of informed choice (intention, knowledge, attitude) and components of the reasoned action approach. Findings: 23.7% made an informed, 58.0% a partly uninformed and 18.3% a completely uninformed choice. Accordingly, knowledge was low (M=2.8 SD=1.4, possible scores 0 to 8). Attitude was favourable (M=1.1, SD=0.7, possible scores -2 to 2) reflected in 71.1% having a positive intention. Discussion: This study showed that the majority of women in our study did not make an informed choice. Developing tools to improve informed choice in the MSP is therefore imperative.

Sponsorships for Adult Refugees: the Effects of Social Support on Well-being

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Background: Based on Berry's acculturation theory and on concepts of social support, we tested the assumption that sponsorships by laypeople would moderate acculturative stress by reducing psychological and physical strain and by enhancing psychological and socio-cultural adaptation in refugees. Methods: N = 63 Chechnyan and Afghan refugees (N = 27 female, mean age of 33.08 years, s = 10.3) were randomized to a sponsorship group, which was granted support for six months and a control group with no support. Questionnaires assessing well-being by life satisfaction, self-esteem, interpersonal contact and assistance and by the absence of marked clinical symptoms were administered at pre, post, and follow-up occasions. Findings: Sponsorships had distinct palliative effects on traumatized participants only. As compared to the control group, their well-being improved significantly and persistently as indicated by the absence of severe clinical symptoms. There were no significant instrumental effects (e.g. improvement of living conditions). Discussion: The results advocate sponsorships as a means of improving well-being in refugees suffering from acculturative and post-traumatic stress.

TPB-Based Interventions can Prevent the Decline in Balanced Diet in French Schoolchildren Over

Time

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Background : This study examined the effects of TPB-based interventions using the taxonomy of behaviour change techniques (BCTs) in improving balanced diet in French children aged 12-14 yrs. **Methods :** Allocation to intervention group (intervention vs. control) was randomised at the school-level, the intervention group received 2 hour-long interventions containing BCTs to improve attitudes and perceived behavioural control. Self-reported diet was assessed pre- and post-interventions. The resulting data were coded by a nutritionist and transformed into a novel measure representing the extent to which the participant achieved a balanced diet. **Findings :** Multi-level modelling indicated that there was a significant interaction effect between intervention group and balanced diet over time, $b = 1.54$, $t(1836) = 2.13$, $p = .03$. Separate models for each intervention group revealed that balanced diet decreased over time in the control group, $b = -1.20$, $t(1200) = -2.34$, $p = .02$, but did not in the intervention group, $b = .04$, $t(636) = 0.86$, $p = 0.39$, suggesting a buffering effect of the interventions. **Discussion :** Theory-based interventions can prevent the worsening of diet over time.

Planning Increases Physical Exercise Among low Active Young Adults in a Self-regulatory Intervention

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Background: The study examined whether a self-regulatory intervention increases exercise levels via action planning. Planning strategies might be especially important in people with low levels of exercise in order to initiate with a new behaviour. **Methods:** a randomized controlled trial was conducted to compare an intervention on exercise with an active control condition in young adults ($N = 486$, mean age = 18.74, $SD = 2.83$). Exercise levels were measured at pre-test and post-test and action planning at post-test. To evaluate intervention effects and change mechanisms involved, repeated measures ANOVA and mediation analysis were conducted. **Findings:** Intervention had an effect on exercise ($p < .05$). When the overall sample was divided into participants with high and low levels of activity at T1, the effect remains only for the less active subsample ($p < .05$). Planning mediated the effect of the intervention on exercise. **Discussion:** Planning is a useful self-regulatory strategy for low active persons, who benefit from it when adopting a new behaviour. Initial levels of activity should be taken into account when designing self-regulatory interventions on exercise.

War Experiences and Health Among People in Bosnia-Herzegovina and Kosovo

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The aim of this population based study was to examine the relationship between war experiences and health, measured by poor general health and longstanding health problems. **Methods:** The data source is the South-East European Social Survey Project (SEESSP) based on a representative survey in Bosnia-Herzegovina ($n=3313$) and in Kosovo ($n=1000$). The data collection with face-to-face interviews was fielded in the winter of 2003/2004, that means 8-9 years after the end of the war (1995) in Bosnia-Herzegovina, compared to 4-5 years after the war ended (1999) in Kosovo. The finding showed that individuals with more severe war experiences, reported poorer general health in both countries, while for longstanding health problems this was the case only for Kosovo. Individuals in Kosovo who fought in the war had highest probability of poor health, while longstanding health problems were reported in both countries. The expected relationship between the time since the war, and general health and longstanding health problems showed up in Kosovo, where those who fought in the war seemed to have higher probability of poor health than those who fought in the war in Bosnia-Herzegovina.

Constructions of Masculinity and Health Behaviour Among Hong Kong men

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Background: Men suffer more severe chronic health conditions and have higher mortality for leading causes of death. Research suggests that men who endorse more traditional constructions of masculinity are less likely to engage in health protective behaviour. However, less attention has been paid to non-Western societies. **Methods:** The present study used a quantitative approach to examine the influence of age on health behaviours and masculinity, among Chinese men in Hong Kong. A total of 200 Chinese males are used in the present study, for the purpose of examining age-related differences, participants were split into two groups: younger (?25yrs) and older (?50yrs) age groups. **Findings:** Older men were significantly less likely to engage in

preventive care and healthy dietary behaviour compared to their younger counterparts. Diet and social support were significant in their prediction of engagement in preventive care. Playboy behaviour, heterosexual presentation, and the primacy of work were all predictive of power over women. Discussion: Findings are discussed in relation to the influence of culture. The implications of the findings for future research are discussed.

Change in Confidence for Overcoming Exercise Barriers in men and Women Over 6 Months

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Background: The idea of coping with barriers to enhance exercise adherence has been well addressed, yet little is known about differences between men's and women's confidence for overcoming specific barriers, and how this might change with exercise experience among initiates. Methods: A sample of 63 previously sedentary adults (nmen=23; nwomen=40) completed assessments of confidence for overcoming 9 exercise barriers at baseline and after 3 months of exercise. Exercise frequency was objectively assessed. Findings: RMANOVA revealed significant main effects of time ($\eta^2p=.049$, $p<.1$), and barrier ($\eta^2p=.663$, $p<.001$), and a multivariate sex x time x barrier interaction ($\eta^2p=.313$, $p<.006$) such that women's confidence decreased more than men on 8 of 9 barriers over 3 months. Discussion: Women seem to lose confidence for motivational barriers (e.g., I don't feel like it) faster than men. Barrier specific intervention strategies could be developed for men and women separately.

Resilience Predicts Anxiety, Depression, and Post-traumatic Stress in Parents of Critically ill Children After Discharge.

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Research on parental psychological outcomes related to a child's critical illness has focused on the assessment of distress and psychopathology, but resilience has been overlooked. So, this research studies: 1) the evolution of resilience after child's discharge from a Pediatric Intensive Care Unit (PICU), and 2) whether resilience predicts anxiety, depression and post-traumatic stress. We used a prospective longitudinal cohort design. A total of 130 parents were assessed within 48 h after the discharge of their child from PICU, and 3 and 6 months later. We measured resilience (CDRISC10), stress (PSS), stress related to PICU (PSS: PICU), emotions (DES), posttraumatic stress (DTS), anxiety and depression (HADS). Repeated Measures ANOVA, and confirmatory factor analyses were carried out. Resilience remains stable in the lower resilience group, but decreases between the discharge and the 3 months assessment in the higher resilience group. Parents with lower initial resilience show poorer outcomes than high resilience parents. The level of positive emotions, negative emotions and stress experienced during admission mediates the relationship between resilience and poor outcome ($X^2/df = 1.72$; GFI= 0,84; CFI= 0,90; RMSEA=0,075). Mental health in parents after a child's PICU admission can be predicted by resilience, so this measure can be used to detect high risk parents for intervention.

Disengaged and Involuntary Responses to Coping Mediating Relations of Bicultural Stress to Late Adolescents' Well-being

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Bicultural stress arises from intercultural conflicts in norms, language, values, or fair treatment. Grounded in theories of risk and resilience, the present study tests a mediational model of bicultural stress, coping strategies, and mental well-being. METHODS: 268 college students aged 18-23 participated (62% were European American; 38% Mexican American) in an IRB-approved online survey at a large US university. The Bicultural Stress Scale (Romero & Roberts, 2003) measured proximate everyday life stressors that occur within a bicultural environment; other measures included the Responses to Stress Questionnaire, the Rosenberg Self-Esteem scale, and the CES-D. FINDINGS: Models tested (MPlus) evidenced equivalent parameters across groups. Indirect effects (estimates from bootstrapping) showed involuntary engagement and voluntary disengagement significantly ($p<.05$) mediated relations between stress and well-being. DISCUSSION: Ignoring cultural stressors may have negative effects on majority and ethnic minority students' well-being. Mindfulness strategies and others directed at reducing involuntary responses (e.g., rumination) may be applicable to promoting their college adjustments.

Trajectories of Anxiety as a Proxy for Psychological Adjustment in Breast Cancer

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Background: Psychological distress is reported to be highly prevalent in women with early breast cancer. Consistent with the conceptualization of anxiety as a future oriented mood-state reflecting uncertainty and anticipation of negative outcomes, we approach a gradual decrease in anxiety as a proxy of overall psychological adjustment to breast cancer. The aim of the present study is to identify patterns of trajectories of anxiety to assess the course of adjustment from acute to extended survival in breast cancer. Methods: Data on Hospital Anxiety and Depression Scale acquired from a longitudinal prospective cohort study of women with breast cancer (n =750) were subjected to Mixture Growth Modeling. Results: 94% of the group divided into 3 classes displayed varying initial levels, but significant decrease in anxiety within a year, followed by a non-significant slope from a year to 2 years. A 4th class (6%), however, displayed the highest intercept and non-significant slopes throughout the time frame of the study. Discussion: The results suggest that the main adjustment occurs within the first year following the surgery for most of the women. However, a small subgroup displays abiding levels of anxiety indicating a lack of psychological adjustment 2 years after the surgery. The need for intervention for this group may be extended beyond the first year following the initial treatment.

Correlates of Work-family-conflict and Family-work-conflict Among Women in Two-earner-families

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Background: Over the last decades the interface between work and family life and its influence on health has received increasing attention. Work-family-conflict (WFC) and Family-work-conflict (FWC) have been identified as two crucial constructs, with women seeming to perceive more conflict. Past research has identified some external variables (e.g., work stressors) that impact WFC and FWC, but less is known about person-related variables and resources. Methods: 284 women in two-earner families filled in questionnaires assessing WFC, FWC, work and family characteristics, personality (big five, self-esteem) and resources (individual/family coping, social support). Findings: Personality variables accounted for a significant rise in explained variance on both WFC ($r^2_{corr}=.24$) and FWC ($r^2_{corr}=.21$); emotional stability showed the highest significant correlations (beta = $-.44/-0.24$). Resources explained further 5%/4% of variance. Social support mediates the relation between extraversion and WFC, while adaptive family coping mediates the relation between emotional stability and WFC. Discussion: Personality and coping should be considered as important variables with regard to WFC and FWC.

People With Intellectual Disabilities About Sexuality: Important Implications for the Development of sex Education

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Existing sex education programs have failed in involving people with intellectual disabilities (ID) in the development of these programs, which decreases the likelihood that the sex education program will be effective. This study was conducted to assess the perspectives of people with ID on several sexuality-related topics. Semi-structured interviews were held with 20 people with an ID. The reported frequency of sex education the participants receive is low. Their knowledge regarding sex education is mainly limited to topics such as safe sex, contraception and STI's and tends to be superficial. Additionally, knowledge on safe sex does not always translate to safe sex behavior. Finally, relationships are important for most participants; mainly because they don't want to be alone. There is a need for high quality sex education. Sex education should be lengthier and taught more frequently, focusing on a variety of sexuality-related topics. Furthermore, sex education should include the improvement of sexuality-related skills as well. To increase the likelihood of a program to be effective it is advisable that a theory- and evidence-based framework is used for its development.

Title: Behavioural Determinants of Dental Health Behaviour: a Meta-Analytical Review

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Background: The aim was to quantify the relationship between behavioural determinants and dental health behaviour among 9-18 year old children. Methods: Searches were conducted in PsycINFO, PubMed, CINAHL and EMBASE. In total 25 studies were included, which addressed 16 variables. A weighted average effect size correlation (WAES r) was calculated per determinant and dental health behaviour. According to Cohen (1988) effect sizes can be considered as small ($r = 0.10$), medium ($r = 0.30$) and

large ($r = 0.50$). Findings: All WAES r 's were significant and revealed a positive relation between determinant and dental health behaviour. Large effects were found for coping planning and self-efficacy. Medium-to-large effects were found for the determinants: intention, affective attitude, and action planning. The WAES r was small-to-medium effects were found for: social norms, cognitive attitude, knowledge, parental oral health behaviour and parental cognitions. Discussion: Although the number of studies focusing on volitional factors are limited, the overall findings highlight the importance of volitional factors, rather than knowledge or motivational factors in explaining dental health behaviour.

Body Image, Mental Health and Quality of Life

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Background: Body image is defined as one's body-related self-perceptions and self-attitudes, including thoughts, beliefs, feelings, and behaviours. Experiences and conditions of embodiment may have far-reaching effects on physical and emotional well-being. In patients with severe somatic diseases body image disturbances have been confirmed and are associated with lower quality of life. However, the association between body image, mental health, and quality of life is still unclear. Methods: The present study investigated the association between body image and quality of life in 267 patients with a wide range of mental health problems. Body image was measured by the Dresden Body Image Questionnaire (DBIQ), a 35 items self-report instrument measuring five dimensions of body image: vitality, body-acceptance, self-aggrandizement, physical contact, and sexual fulfillment. Quality of life was measured with the Manchester Short Assessment of Quality of Life (MANSA). Findings: Body image was significantly lower for all subscales in the clinical sample compared with healthy controls. Correlations between DBIQ-35 and MANSA were strong for mean total score and moderate for body acceptance, vitality and sexual fulfillment. Discussion: Enhancing body image may be beneficial for people with mental health problems.

Implementation Fidelity of Diabetes Self-management Education Programs: a Systematic Review

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Background: As diabetes requires extensive self-care, self-management education is widely recommended to enhance the effectiveness and reduce the costs of treatment. While a variety of diabetes self-management (DSM) programs are available, the conditions for their effective implementation are not well documented. This paper reviews the literature on implementation fidelity (IF) as a factor influencing the effectiveness of diabetes education. Methods: Medical, psychological and educational research databases were searched to identify published studies on diabetes education describing the implementation process. Studies detailing the intervention adherence/fidelity/integrity were included to assess the way key elements of IF were addressed. Findings: From an initial 418 abstracts, 20 published papers were retained for an in-depth analysis focusing on the components of IF. Intervention content was mainly assessed through observation, whereas intervention dose was more often assessed through self-report measures. Only one study addressed the relationship between IF and intervention effectiveness. Discussion: Despite the importance of IF to achieve program outcomes, IF of DSM programs remains largely under-investigated. The results of this review suggest that reports on DSM education should systematically describe how the program was implemented.

Video-based Tobacco Prevention in Schools: a Randomised Controlled Pilot Study

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In Europe, the smoking prevalence of 15- and 16-year-olds is high (30 days prevalence: 28%). School-based tobacco use prevention programs might be fostered by the use of videotapes in which the students give a statement about their attitude toward smoking. 12 to 16-year-old students in 35 classes were randomly assigned into an intervention (in which statements of students were videotaped) and a control group. Students were asked about their smoking, their intention to smoke, their commitment not to smoke, their knowledge about smoking, and about side effects, such as negative peer pressure and stigmatisation of smokers. 619 students participated and 467 returned the questionnaire (75%). 211 (46%) of the students have ever tried smoking and 90 students declared themselves as current smokers. Almost two out of three students intend to reduce or quit smoking. However, this did not differ between the intervention and the control group. Videotaping students' commitment not to smoke may reinforce the non-smoking students in their behaviour. Smoking students, however, do not change their smoking due to the videotaping in the class and the possible side effects should be considered.

Stress and Well-being in Primary School Children

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Background: A parent-teacher consultation was introduced to empower parents to decide what kind of secondary school their children should go to. Effects of the shift from an obligatory secondary school recommendation to a parent-teacher consultation on children's stress levels and well-being were examined. **Method:** Within 7 schools a first group of primary school children with an obligatory school recommendation (Group I, grade 4, assessed in 2011, n=120; age: M=9.7 ys.) as well as a second group with a parent-teacher consultation (Group II, grade 4, assessed in 2012, n=164; age: M=9.5 ys.) were examined. Stress and well-being were assessed using a self-report. Children's well-being was assessed by parents' reports as well. **Findings:** Stress varied as a function of a school by group interaction; $F(6,223)=2.86$, $p<.05$, showing a positive effect of paradigm shift only for children attending certain schools. In addition, only girls showed a benefit in self- and parent-reported well-being from the annulment of the obligatory school recommendation; $F(1,220)=4.83$, $p<.05$. **Discussion:** Findings are discussed with regard to gender-specific social consequences of the new arrangement.

Using a Proactive Dissemination Strategy to Optimize Reach of an Internet-delivered Lifestyle Intervention

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Background: In order to optimize reach of Internet-delivered lifestyle interventions it is important to invest in proactive dissemination strategies. The present study used a proactive dissemination strategy by embedding an Internet-delivered lifestyle intervention in an existing online health monitoring system. **Methods:** Dutch adults were invited to participate in the Adult Health Monitor (N = 96,388). A prospective design was used to determine levels of reach. Furthermore, adequacy of reach was assessed by composing detailed profiles of intervention users. **Findings:** A total of 16.940 people participated, of which more than half indicated their interest (n=54%) and 5.168 actually participated in the Internet-delivered lifestyle intervention. Males, older respondents and higher educated respondents were significantly more likely to participate in the intervention. Furthermore, results indicated that especially participants with a relatively healthier lifestyle and a healthy BMI were likely to participate. **Discussion:** Even though high levels of reach were ensured, reach among at-risk individuals remained modest. It is essential to further optimize reach among these subgroups.

Improvement of Well-being After Stop Smoking Through Inpatient Cessation Therapy

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Background: Many smokers are dissatisfied with their tobacco consumption. 61% of current tobacco users who live in the EU have undertaken at least one attempt to quit smoking. Various assumptions and perhaps reasons exist why smoking cessation attempts aren't followed through with more vigor, enthusiasm and success. The high anticipation of psychological distress expected throughout a cessation process, the fear of an unbearably strong desire to smoke, as well as the increased stress and weight gain are identified barrier. **Methods:** This is a longitudinal study based on case reports of 270 participants (55.6 % men) who completed an in-patient smoking cessation program in Austria. Treatment effects such as health complaints, sense of well-being, and changes in sleep pattern were analyzed. **Findings:** At 12 months post-therapy follow up, 42.6% of participants were identified (via CO values) as non-smokers. Along with the expected health benefits of quitting smoking, non-smokers reported significant changes to their quality of life such a better sense of well-being and sleep habits, increased level of physical activity, and lower drug prescriptions. **Discussion:** The many successes that can be gained through smoking cessation - particularly in terms of increased quality of life - should be motivation for current smokers struggling with this addiction.

Ego-Depletion and Compliance in Physiotherapy

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Background: Despite of high motivation, compliance with home exercise is low in patients receiving physiotherapy. Predictions based on the strength model of self- control (Baumeister et al., 2007) were tested by investigating whether high self-control demands at work lead to difficulties to begin with home exercise and to low actual exercise behavior (ego-depletion). It was also tested whether relaxation can counteract the effects of ego-depletion. **Methods:** 40 patients who should do home exercise every after work day took part in a RCT with 2 groups over a period of 5 working days. One group conducted a standardized relaxation (15 minutes) before starting the exercises; the other group conducted the exercises straight after work. Self-control

demands at work, the perceived difficulty and actual exercise behavior were assessed by a daily survey. Findings: ANOVAs revealed no significant group effect. Self-control demands at work were positively associated with perceived difficulty ($r = .50$; $p < .01$) and negatively associated with actual exercise behavior ($r = -.25$; $p = .17$). Perceived difficulty was also negatively associated with actual exercise behavior ($r = -.55$; $p < .001$). Discussion: Results suggest that high self-control demands at work lead to a state of ego-depletion which consequently reduces compliance with home exercise. The missing group effect can be due to methodological issues.

Development of an Exercise Programme Alongside Medical Treatment for Cancer Patients: Implementation and Acceptance

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Background: Due to the positive effect on the treatment of cancer patients, physical activity schemes should be implemented alongside hospital care. The level of demand for "treatment-associated sports schemes" has been examined in an implementation and acceptance study. Following questions were investigated: 1. How should offers and communication be designed? 2. Which barriers do the patients face? 3. What are patients' opinions and how high is the readiness to participate? Method: A questionnaire was used to collect data, specifying personal details, medical history, physical activity, attitude towards an exercise programme, readiness to participate, social support and structural conditions of an exercise programme. The survey was conducted at an oncology clinic, 120 patients took part in answering the questionnaire. Findings: Above all, patients desire an exercise programme with participants of a similar age. Women would prefer to be in exclusively female groups. Longer journeys (> 2 km), rather than physical fitness, prevent patients from participating, but a positive attitude increases the willingness to travel a further distance. Discussion: The implementation of concomitant therapy for physical activity is generally welcomed. To overcome barriers, a strengthening of the personal resources and the improvement of structural conditions ought to be considered.

10-Minute Interventions on Diet, Exercise, Hand Hygiene, and Dental Flossing in 4 Countries

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Background: The purpose was to examine whether very brief paper-pencil interventions can have an effect in various domains of health behaviour change. Theoretical basis was the health action process approach (HAPA) that makes a distinction between motivational and volitional phases. Methods: A series of leaflet-based interventions were conducted in Poland, India, Iran, and Costa Rica with more than 1,000 participants. Repeated measures analyses of variance were applied to test time by treatment effects, observing treatment and control groups over several weeks. Findings: Modest intervention effects were found for diet, exercise, hand hygiene, and dental flossing. Moreover, mediation and moderation analyses identified the role of social-cognitive variables (intentions, planning, self-efficacy, action control). Discussion: A case has been made in favor of very parsimonious interventions that provide either a starting point for the adoption of health behaviors, or a cue to action that helps to maintain on-going behaviors.

Beyond the Opposition of Methods: Benefits of a Mixed Methods Design in Health Psychology

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In exacerbating epistemological oppositions between « post-positivist » and « constructivist » paradigms, the « Paradigm war » has entailed a focus on one of the two methods, rather than thinking about the phenomenon under investigation. This presentation aims to raise the value of combining these two methods. Through our research, we illustrate the mismatch between patients and gynaecologists facing the integration of sexuality during consultation. We conducted semi-structured interviews (N=21), 3 focus groups and a questionnaire based on the qualitative findings (N=421) in a sequential design. Qualitative methods allow the discovery of new outcomes. Indeed, our analysis highlights important gaps between gynaecologists' and patients' perceptions regarding for example the definition of sexuality. Gynaecologists reduce it to medical aspects, whilst patients would expect to discuss their sexuality at the embodied, relational and psychological levels. The questionnaire adds an additional value in confirming qualitative findings and provide further information. In our use of mixed methods, we emphasize the need for reflexive adjustments by the researcher at each stage of the research.

Physical Activities and Their Influence on Personality of Seniors Over 75 Years.

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Background: The study deals with the influence of physical activity on personality of seniors. **Methods:** From 2007 to 2013 we conducted an individual examination of seniors over the age of 75 using the NEO FFI method. The study group consisted of 117 seniors, who were not diagnosed with dementia. The group was divided: 1. Members of the Czech Sokol Community. 2. People who regularly perform physical activity. 3. People who do not regularly perform physical activity. **Findings and Discussion:** Male participants of „Sokol“ (Czech sport club) had lower levels of neuroticism and openness and higher level of friendliness and knowledge. The degree of extroversion was comparable. In this group, we found a tendency for a high level of active management and live their lives according to their own ideas, which were confirmed. Regarding Sokol women, we found lower levels of extroversion, openness, and slightly higher neuroticism, agreeableness and conscientiousness. The measured values were similar group of women who regularly participate in any organized activities and do not exercise regularly. We believe that despite their age, women from these groups are actively involved in their lives.

Living as Married and Religiosity Reduce the Effect of Disabling Chronic Conditions on Quality of Life

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This paper aims to examine the role of personal and contextual resources in buffering the effect of chronic disease and disability on quality of life (QoL) in older people. We used data from the Irish Longitudinal Study of Ageing (TILDA), a population sample of adults aged 50+ (n=4454). QoL was measured with the two dimensions of the CASP-R12 – control/autonomy and self-realisation/pleasure. Regression was used to test the effect of newly diagnosed chronic conditions and increased disability on change in QoL over two years, with interaction terms to examine moderating effects of socioeconomic status, social support, personality and religiosity. Two effects were statistically significant. Living as married, regardless of marital quality, reduced the negative effect of disabling chronic disease on control/autonomy. Religiosity reduced the effect of a disabling diagnosis on self-realisation/pleasure. Both contextual and personal resources matter for maintaining QoL in poor health. Living as married may provide key instrumental support, allowing older people to maintain independence, while religiosity may make physical health less important for living a fulfilling and enjoyable life.

The Operation and Control of Implicit Influences on Health Decisions and Actions

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Background: Health behavior theories predominantly focus on conscious, reflective precursors of health behaviors and eschew the possibility of implicit influence. Four studies examined whether behavior priming influences decisions and actions related to diet, exercise, alcohol consumption, and condom use. A fifth study explored whether self-control training moderates the impact of priming on eating behavior. **Method:** Participants were university staff and students (Ns = 50, 151, 31, 24, and 173 in Studies 1-5, respectively) who were randomly assigned to conditions. Decisions were measured using questionnaires and behavior was measured objectively. **Findings:** Priming stereotypes, exemplars, or goals had reliable effects on exercise and condom use decisions, mental readiness to drink alcohol, and food intake. Self-control training did not moderate the impact of priming on food intake. **Discussion:** This research obtained evidence of priming effects on health cognitions and behaviors, but found that self-control training not attenuate priming effects. Implications for dual-process theories of health behavior and for interventions to promote behavior change will be discussed.

Health Lifestyle Clustering in Older Australians and the Association With Physical, Psychological and Sociodemographic Factors

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Background. Increasing life expectancies, burgeoning healthcare costs, and an emphasis on the management of multiple health-risk behaviours points to a need to identify health-related lifestyles in older adults. The aim of this study was to delineate health lifestyles of older adults, and to examine the association of these lifestyles with biological and psychological states, and socioeconomic indices. **Methods.** Cluster Analysis was applied to data derived from the 45 and Up cohort study of Australians over 45 years. Participants (N=96,276) completed measures of exercise, smoking, alcohol consumption, diet, cancer screening, and physical functioning, quality of life and psychological distress. **Findings.** Six lifestyle clusters emerged characterised by smoking, screening and physical activity levels. Individuals within health-risk dominant clusters were more

likely to be male, living alone, low income earners, living in a deprived neighbourhood, psychologically distressed and experiencing low quality of life. Discussion. Health lifestyle cluster membership can be used to identify older adults at greatest risk for physical and psychological health morbidity.

The Effects of Watching the Monitor Screen During Cardiac Catheterization on Patients' Outcomes

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Background: The emotional, cognitive and behavioral effects on patients caused by watching the monitor screen during cardiac catheterization were investigated, including potential mediators (illness perceptions) and moderators (individual differences in monitoring coping style). Methods: An experiment was conducted, comparing patients instructed to watch the monitor screen during the procedure with those that were not. Questionnaires measuring illness perceptions, monitoring coping style, emotional, cognitive and behavioral variables associated with cardiac health were collected one day and one month after the procedure. Results: watching the angiography screen during the procedure increased cardiac patients' personal and treatment control perceptions, which in turn increased their functional self-efficacy and outcome expectancies regarding lifestyle changes, improved their self-assessed health, and decreased negative affect. Behavior-related benefits of watching the screen were moderated by monitoring coping style, which was correlated positively with the benefits of watching the screen. Conclusions: these findings illustrate the significance of illness perceptions, perceived control and monitoring coping style in achieving desirable outcomes, and open new opportunities for psychological interventions using medical imaging technologies.

Psychosocial Predictors of Stress in Polish Immigrants

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Migration may be seen as a critical life event. Moving to foreign country requires an individual to face a completely new life situation. Our previous research brought up the following questions: 1) are there any differences in perceived stress among immigrants regarding country of destination; 2) what are psychosocial predictors of stress in immigrants. Research group: 239 Polish immigrants to England, Scotland and Ireland. Participants were asked to fill out several questionnaires: COPE, BMS, SE, DI. Analyses have shown that load of stress among immigrants is different in every country in this research ($F=29,768^{**}$; $\eta^2=0,20$). Moreover, stress predictors are different in every country of immigrants' destination. For immigrants psychosocial factors explain: in case of England 28% of stress variability ($R^2=0,28$; $F=9,101^{**}$), Ireland 20% of stress ($R^2=0,20$; $F=11,262^{**}$), Scotland 34% of stress ($R^2=0,34$; $F=11,892^{**}$). Our results demonstrated that countries differ essentially in demands of immigration. Most likely distinctive features of immigrants destination countries are source of high stress. We anticipated that reasons for obtained results lay in cultural differences immigrants are exposed to.

Benefits of Self-Help Groups in Turkish Migrant Women

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Effectiveness of self-help groups was investigated in a study on female Turkish migrants with recurrent depressive disorder. Self-help groups were guided by group leaders of Turkish decent, providing a platform for exchange and social support. Analysis of qualitative data on effects of participation in groups was done, though no alleviation of symptoms was found. 43 female Turkish migrants participated in groups over a period of 4 months. Qualitative data contained interviews with participants, group protocols and supervision protocols of group leaders. Analysis of data was done with the qualitative content analysis (Mayring). Findings revealed that women reported feelings of being neglected and violated by their husbands, pointing towards a functional value of the illness. During participation in self-help groups women also reported emancipating from their husbands and gaining strength. Self-help groups were seen as social resource and support for change in their lives. Interventions to improve well-being and social functioning in female Turkish migrants should consider the functional value of depressive symptoms and focus on social support systems as well as social networks.

The Role of Work-Family Conflict in Portuguese Nurses' Stress Responses, Marital Adjustment and Job Attitudes

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Background: This study investigated the impact of work-family conflict in Portuguese nurses' stress responses, the quality of their marital adjustment and their attitudes toward work. **Methods:** The sample consists of 310 female hospital nurses (Age: $M = 33.83$; $SD = 8.70$). Measures were the Portuguese versions of the General Health Questionnaire (GHQ-12) and the Brief Personal Survey-Revised, to measure stress responses; the Organizational Climate Questionnaire, to measure job attitudes; the Work-Family Conflict Scales, to evaluate work-to-family conflict (WFC) and family-to-work conflict (FWC); and the Revised Dyadic Adjustment Scale, to assess marital adjustment. **Findings:** WFC was higher than FWC, being a significant predictor of all outcomes. Higher WFC was associated with more stress responses ($\Delta R^2 = [\text{psychological distress: } .132; \text{pressure overload: } .140]$), reduced marital adjustment ($\Delta R^2 = [\text{consensus: } .022; \text{satisfaction: } .033]$), and increased negative attitudes toward work ($\Delta R^2 = [\text{global assessment of organizational climate: } .120]$). FWC predicted guilt feelings ($\Delta R^2 = .037$) and lowered dyadic consensus ($\Delta R^2 = .018$) but did not predict job attitudes. **Discussion:** Findings show that WFC and FWC affect both the work and marital domains. The interface of family and work demands must be considered in occupational health promotion programs, targeting female nurses.

A Systematic Review of Intervention Studies Using Health Action Process Approach (HAPA) Model Components to Prevent and Manage Chronic Diseases

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BACKGROUND The HAPA model and HAPA-like approaches (incorporating self-efficacy plus multiple motivational and volitional components) are increasingly applied in intervention studies. This review: 1) describes how HAPA-based approaches have been used to design or evaluate interventions to change behaviours for preventing/managing chronic disease; 2) examines the effectiveness of HAPA-based interventions. **METHODS** Relevant studies were identified, selected and synthesised as per our protocol: www.crd.york.ac.uk/PROSPERO/display_record.asp?ID=CRD42013003596 **FINDINGS** 402 of 669 potentially relevant papers initially identified were selected for full text review, with 54 studies included. Over half were published in the last 2 years and half were European. Apart from self-efficacy, intention/goal-setting was the most used, and risk perception the least used component. Most studies were trials and targeted exercise, diet and/or weight loss. Detailed data extraction is ongoing. **DISCUSSION** This review assesses the use and effectiveness of HAPA-based approaches in interventions, suggesting there is scope for their application to a wide range of preventative and disease management behaviours.

Predictors and Costs of Intention-behaviour Gaps in a Multi-behaviour Paradigm

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Background: Intention behaviour relationships are often studied in between-subject designs looking at an individual behaviour. It has been suggested that failure to implement intentions reflect poor self-regulatory capacity and has psychological costs. **Methods:** $N=126$ participants completed measures of 51 different intentions, demographics, behaviour, crystallized intelligence, executive function and quality of life. Participants were followed up one week later with a 49 self-reported and two objective behaviour measures. **Results:** The number of intentions participants reported was not related to the percentage of intentions implemented. Crystallized intelligence and executive function measures showed higher associations with the number of intentions formed and implemented than with those failed. Participants with more intentions reported higher well being. Failed intentions were not related to lower well being. **Discussion:** People may form more intentions than they can translate because they are more prone to be happy about their achievement than disappointed about intentions which are not translated.

Preoperative Anxiety Dynamics

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Background: Patients anticipating surgery experience significant anxiety. The prevalence of anxiety prior to surgical procedures has been reported to range from 11% to 80% among adult patient populations. The objective of the study is to explore preoperative anxiety dynamics in patients. **Methods:** Two samples of patients ($N_1=60$, $M_1=57.5$, $SD_1=16.8$; $N_2=50$, $M_2=44.3$,

SD2=13.7) were assessed by nurses using the rating scale Anxiety Level-12 and at the same time self-report state anxiety measures HADS-A (Hospital Anxiety and Depression Scale) and STAI (State Trait Anxiety Inventory) were administered. Time remaining to surgery ranged from 10 minutes to 48 hours. Findings: Results showed significantly higher anxiety closer to surgery. Several other variables show influence on the relationship: age, premedication, sex, anaesthesia. Discussion: In accordance with previous findings the results show that preoperative anxiety changes with time remaining to surgery and the relationship is influenced by various factors, e.g. age, sex, previous surgery, type of anaesthesia. Future research could uncover the influence of personality factors on preoperative anxiety dynamics.

How Children Cope With a Brain Injured Parent? an Interpretative Phenomenological Analysis

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Background: A severely ill person has to cope with medical procedures, declines in socio-economic status, and the direct threat to his/her life. If this person is a parent, the consequences of these stressor factors may result in a lasting distortion of the children's social and emotional development. The purpose of this study of families where a parent has an acute brain injury was to present an in-depth, idiographic study of the coping strategies used by children. Methods: Thirty-two counseling sessions (8 children) were analyzed and the resultant transcripts subjected to interpretative phenomenological analysis. Findings: Several themes emerged in the analysis and are discussed here: "closeness strategies", "avoidance strategies", "gender and age specific differences". Discussion: The results points to the importance of developing counselling possibilities focused on facilitating factual as well as emotional communication within the family, empowering the parenting function of the healthy parent, and helping children in sharing their worries and thoughts.

A Prospective Study of Goal-related Coping in Early-stage Breast Cancer Patients

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Background: The demands associated with the diagnosis and treatment of serious illness can substantially interfere with personal goal pursuit. Adaptive goal-related coping is necessary to maintain psychological well-being in response to goal interference. This prospective study sought to gain insight into the nature of goal-related coping in the context of early-stage breast cancer. Methods: Personal goal interference and goal-related coping were examined in a sample of female breast cancer patients (n=33) at two, four and six months post-surgery using a novel mixed-method goal-specific assessment and multi-phase thematic analysis. Findings: Participants widely varied in their experiences of goal interference and subsequent coping responses across different goals and over time. Four clusters of participants were identified on the basis of patterns of adaptive (vs. maladaptive) goal-related coping over time. Discussion: Findings suggest that early-stage breast cancer patients widely vary in their experience of goal-related coping across time and provide support for a situation-specific approach to investigating goal-related coping in early-stage breast cancer patients. Further empirical studies are needed to examine the utility of this approach in larger samples of breast cancer patients. Such research may inform person-centred psychosocial support in this population.

Does Migration Affect Adolescents' Eating Behaviour? a Comparison of Turks in Germany and Turkey

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Unhealthy eating behaviour is a health issue among adolescent Turkish migrants in Germany and among adolescents in Turkey. To develop effective interventions, it is important to identify relevant social-cognitive determinants of eating behaviour for both groups and to find out how the migration experience affects these social-cognitive factors. The present study combined research on migration with the prototype-willingness model (PWM) for the explanation of eating behaviour. PWM-variables were assessed via questionnaire and compared cross-sectionally across adolescent Turkish migrants (n = 102) and adolescent Turks (n = 270) using multiple-group SEM. Latent mean differences and associations of variables were analysed. Levels of PWM-variables were more favourable in Turkish migrants than in Turks. Turkish migrants' eating behaviour was predicated via the reasoned action pathway, whereas Turks' eating behaviour was predicted via both the social-reaction pathway and the reasoned action pathway. Migration seems to affect both levels of PWM-variables and which PWM-variables are relevant for the prediction of eating behaviour. Implications for theory and interventions are discussed.

A Thematic Comparison of Eight Frameworks of Quality Criteria in Qualitative Health Research

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Background: Despite the increasing incidences of the publication of assessment frameworks intending to establish the "standards" of the quality of qualitative research, the research conducted using such empirical methods are still facing difficulties in being published or recognised by funding agencies. Methods: We conducted a thematic content analysis of eight frameworks from psychology/psychiatry and general medicine. The frameworks and their criteria are then compared against each other. Findings: The results illustrated the difficulties in reaching consensus on the definition of quality criteria. This showed the differences between the frameworks from the point of views of the underlying epistemology and the criteria suggested. Discussion: The aforementioned differences reflect the diversity of paradigms implicitly referred to by the authors of the frameworks, although rarely explicitly mentioned in text. We conclude that the increase in qualitative research and publications has failed to overcome the difficulties in establishing shared criteria and the great heterogeneity of concepts raises methodological and epistemological problems.

Suggestion Trumps Restriction: Social Norms Promote Healthier Eating Only When Communicated as a Suggestion

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Background: Social norms influence eating behavior. Research has shown that communicating social norms does not always promote healthy eating, but may sometimes backfire. We investigated if a suggested norm is more successful in curbing unhealthy behavior than a restrictive norm. Methods: Participants (n = 79) completed a creativity task while M&M's were within reach, consumption of which was forbidden (restrictive norm), discouraged (suggested norm) or allowed (control). Reactance was then assessed, after which a taste test was administered where all participants could eat M&M's. Findings: Consumption during the creativity task did not differ between the experimental conditions, but reactance after the creativity task was higher in restricted participants. In the free-eating taste test phase, restricted participants consumed more than suggested participants. Indications of mediation via reactance were found. Discussion: There are more and less effective ways of delivering social norms. A restrictive as compared to suggested norm induced psychological reactance and higher unhealthy consumption. It is important to pay attention to the way in which norms are communicated.

Young ADULT'S Preferred THEORY-BASED Behavioural and Technological Features in a Mobile Physical Activity Application

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Background: Apps to increase physical activity (PA) are popular, but hardly include theory-based features. This study will examine how behavior change techniques (BCTs) and technological features can be used to target important determinants as social support and self-efficacy (SE). Additionally, the preferences and the intentions to use such features will be assessed. Method: Young adults (n~100) will complete an online questionnaire assessing constructs of PA, social influences, SE, their preferences, acceptance and usage of BCTs (e.g. monitoring, goal setting) using validated questionnaires. Associations of PA, social determinants and SE with the preferences will be estimated by regression analyses. Results: Results (available in May/June 2014) will describe the behavioral and technological preferences of young adults, e.g. proportions of participants that prefer SE promoting features in an app. Regression coefficients will describe the strength of PA, social determinants and SE with the specific preferences. Conclusion: Results will directly be used in the development of a new theory-based mobile intervention, aiming to empower young adults to be more physically active.

Obesity in 3D: a Qualitative Comparison of General Practitioners, Dietitians and Nurses' Views About Obesity

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Background: Healthcare providers don't seem to be taking the issue of obesity as seriously as they should. Quantitative studies are criticized for insufficient comprehension of this phenomenon. This qualitative study aimed to understand the beliefs, attitudes, practices and treatment role about obesity of Portuguese general practitioners, nurses and dietitians in primary care setting. Method: Semi-structured interviews were conducted and data was analyzed according to Thematic analysis procedures. Findings: The main themes indicate that all groups hold negative beliefs and attitudes towards obese. General practitioners lack successes, feel frustrated, have low expectations of efficacy and are negative about their role in the treatment. Nutritionists and

nurses demonstrate an active role and perceived themselves as being able to positively modify obese motivation. However, the change process is described as a constant struggle with the patients. There seems to exist communication problems between the three groups. Discussion: Knowledge about treatment options and communications skills should be improved and a bigger emphasis should be put on a multidisciplinary approach to obesity.

Focus on Resistance: the Psychology of Strength Exercises in Overweight People

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Background Obesity has become a growing problem, where not only metabolic health, but also psychological wellbeing is decreased. A long-term effective program should focus on both one's biological and psychological strengths. For overweight people, strength exercises might be the answer. From a biological perspective, there is a consensus that strength training results in long term positive effects on metabolic and cardiovascular health. What are the psychological consequences of these biological insights? **Methods** A systematic review using Pubmed and Psychinfo. **Findings and discussion** Resistance exercises might trigger the intrinsic motivation and self-efficacy that is lacking in aerobic exercise programs. Overweight people notice that 1) resistance exercises are relatively easier than aerobic exercises; 2) their performance will be better than the performance of their normal weight counterparts, and 3) their performance will improve more compared to both aerobic exercises and compared to the normal weight. We assume that to make overweight and obese people healthier, stronger, more confident (and feeling better in general), this is the answer.

'On Your Feet to Earn Your Seat!' Development of a Sedentary-reduction Intervention for Older Adults

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Background This study describes the development of a habit-formation intervention of low-level physical activities for sedentary older adults, to achieve long-term activity gains and reduce sedentary behaviour. **Method** An intervention leaflet was developed in four stages: 1) a multidisciplinary expert panel generated physical activity tips; 2) a focus group of ten adults aged 60-75 discussed the tips; 3) a panel of 21 adults aged 63-85 rated tips and a motivational text for readability, difficulty, motivation and performance likelihood (1=least, 4=most positive); 4) acceptability is currently (Dec 13-Apr 14) being tested among 30 sedentary adults aged 60+. **Findings** Stage 1 generated 18 tips covering walking, stretching, strength, balance and limiting sitting. Removing tips viewed unfavourably (Stage 2) reduced the tips to ten, which were judged (stage 3) to be readable (mean=3.38), easy (2.95), motivating (2.82), and likely to be performed (2.95). Photos were added to the leaflet for clarity. So far, stage 4 data suggest older adults are motivated and able to incorporate the tips into everyday routines. **Discussion** Effects on behaviour and health are to be tested in a pilot RCT.

Predictors of Change in Donors' Mental Health Three Months After Living Kidney Donation

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Background In order to optimize screening and support of living kidney donors, we examined which factors predict changes in donors' mental health after living kidney donation. **Methods** Living kidney donors (N=137) completed validated questionnaires and participated in interviews a median of 2 months before and 3 months after donation. Using multilevel linear models we examined whether psychological complaints and wellbeing were predicted by sociodemographic characteristics, medical outcomes for donor and recipient, and psychological factors based on stress models of Lazarus (1999) and Ursin & Eriksen (2004). **Findings** There was no main effect of time on psychological complaints while wellbeing increased over time ($p < .01$). Donors' home situation, greater stress, appraising donation as an uncontrollable or negative event, expectations of negative personal consequences, coping, social support, and more negative life events predicted negative changes in donors' mental health. Medical outcomes were not related to changes in donors' mental health. **Discussion** We recommend negative appraisals of donation and individual resources as targets for improved donor screening and support.

Investigating Slum Dwellers Decisions to Invest in a Sanitation Service in Kampala (Uganda)

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The lack of adequate sanitation is a major threat for health and well-being of people, particularly for those living in urban slums

in developing countries. Affordable solutions to the problem are available and new technologies in development but, still, will be relatively expensive. We investigated how slum dwellers in Kampala (Uganda) decide to rent a new sanitation service, in order to improve the design and promotion of the service. 1050 participants were randomly selected for personal interviews that covered a wide range of qualitative and quantitative questions. A logistic regression explains the decision to rent the service with psychological evaluations on 4 dimensions: (1) affective (liking the toilet), (2) instrumental (advantages for health), (3) normative (compliance with cultural norms, being proud or ashamed, and expected opposition or support), and (4) expected difficulties when using the toilet. All dimensions significantly ($p < 0.01$) affect the decision with the exception of affective liking ($p = 0.846$). To conclude, the promotion of the toilet should address advantages, difficulties, and normative aspects with arguments favouring systematic information processing.

The Effects of Chronic Depression and Inflammation on Incident Type 2 Diabetes Mellitus in men

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Background: Inflammation is a possible aetiological mechanism through which depression increases incident diabetes risk however there are few longitudinal studies. **Methods:** A cohort of 1,110 men aged 35 years or older underwent venous withdrawal for cardiometabolic risk factors, IL-6, CRP, and e-selectin at baseline and 5 year follow-up. Depression symptoms were assessed by CES-D or BDI-I, respondents were categorized into chronic or remitting depression. Logistic regression determined whether diabetes mellitus was associated with depression chronicity, inflammation, ? inflammation, and their interaction terms. **Findings:** There were 158 cases of incident diabetes (14.2%). The chronic depression and ? IL-6 interaction term was associated with greater diabetes risk (OR 2.36; 95% CI 1.28 – 4.36, $p = .006$). Chronic depression and ? e-selectin interaction term also significantly increased diabetes risk (OR 1.08; 95% CI 1.00 – 1.16, $p = .05$). **Conclusions:** These data provide support for inflammation as a biological mechanisms through which chronic depression increases diabetes risk.

Effects of a HAPA-based Exercise Counseling on the Activity Level of Insufficiently Active Cancer Patients

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The study examined if a Health Action Process Approach (HAPA) based exercise counseling increases physical activity of cancer patients who are motivated but insufficiently active and leads to a progress in HAPA stages. 72 cancer patients (54 % female; $M = 56$ years) participated in the MOTIVACTION study consisting of a 4 week intervention (1 hour personal counseling and weekly phone calls) with pre- (T1) and post-test (T2). Participants were randomized either to exercise counseling or stress management training (control). The exercise counseling included volitional behavior change techniques and a meeting with a role model. Physical exercise was assessed with the SQUASH. Patients of the exercise counseling group increased their weekly exercise from 52 minutes (T1) to 150 minutes (T2). They spend significantly more minutes on exercise at T2 than patients of the control group ($M = 150.4$ vs. $M = 65.0$, $p < .05$). Looking at HAPA stages, 47% could proceed in stages between T1 and T2 in the exercise group, whereas only 24% in the control group. The MOTIVACTION exercise intervention turned out to be helpful to increase the exercise of insufficiently active cancer patients.

Health Beliefs Colorectal Cancer Screening Change With a Screening Navigation Program for Deprived Persons

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Background: To decrease social inequalities in colorectal cancer screening participation, Screening Navigation Programs (SNPs) focusing on a global view of individual barriers (transportation, cultural difficulties, knowledge) have shown to be effective. However, psychological mechanisms of SNP efficacy are not well known. We hypothesized that SNP should change health beliefs about screening and reduce social inequalities on them. **Methods:** From a French SNP protocol, the study included two independent variables: SNP Intervention (Screening Navigation vs. Usual Screening) x Socioeconomic Status of the living place (Townsend Index). We measured health beliefs following the Protection Motivation Theory by a mailed questionnaire, in 261 non-compliant persons regarding screening and targeted to participate to screening. **Findings:** We found significant interactions between SNP Intervention and Socioeconomic Status on several health beliefs. More specifically, our results show that social inequalities on perceived efficacy of the screening and on perceived facility were reduced by the SNP. **Discussion:** Health beliefs

are a way to understand SNP efficacy to reduce social inequalities.

Patient Experiences of Free Internet-based Weight Loss Interventions

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Background. Research on eHealth applications is growing fast, but little is known about people's experiences with internet-based weight loss interventions. The current study explored experiences with these interventions to provide a better understanding of the facilitators and barriers to adherence. **Method.** Semi-structured recorded interviews were conducted with 20 primary care patients who were offered lifestyle advice and access to three free internet-based weight loss programmes. The interviews focused on experiences with the interventions during a 4-week period. Transcripts were analysed by two separate coders using Thematic Analysis. **Findings.** The accessibility and novelty of using the internet for weight loss was the initial motivation of engagement. Barriers to adherence included time, effort and excessive reminders. Ongoing engagement was facilitated by face to face contact and perceived success of changes. **Discussion.** This study identified facilitators and barriers to adherence that can inform the development of new eHealth behaviour change interventions and highlights the potential for use of eHealth alongside weight management advice within primary care settings.

Testing the Question Behaviour Effect Hypothesis Versus the Non-reponse Bias Hypothesis

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Introduction We study whether previous findings in studies on blood donation behaviour that were labelled question behaviour effect (QBE) could actually reflect a non-response bias (NRB) instead. Higher response rates have also been associated with finding QBE. **Methods** Blood donors (N=1,395) were randomly allocated to one of six experimental questionnaire conditions or to a control group. The questionnaire conditions either included intention items to trigger a QBE, general health items, both items, and handwritten post-its to increase response rate or not. The outcome variable was the % of donors that donated after receiving a standard invitation. **Results** The questionnaire conditions did not influence the odds of donation compared to the control group (OR's ranged from 0.70 to 1.01). Non-responders showed significantly lower odds of donating than controls (ORresponders: 1.05, 95%CI: .77-1.45; ORnon-responders: .63, 95%CI: .45-.88). **Discussion** Regardless of the content or response rate, receiving or filling in questionnaires does not seem to increase blood donation. However, non-responders donate less than responders. These findings support the NRB hypothesis over the QBE hypothesis.

Age-related Differences in Self-management Support Needs of Chronically ill People Explained by Their Life Context

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Background Current self-management support (SMS) programmes pay little attention to patients' age and related life context. The aim of this study is to examine age-related differences in SMS needs by applying the stress-coping theory. We explore the role of three concepts that relate to patients' age and that may impact on their SMS needs: burden of illness, social roles and resources. **Methods** Logistic regression analyses were conducted using data on SMS needs, burden of illness (e.g. type of illness, physical functioning), social roles and resources (educational level, health literacy) of 1,782 patients with chronic disease(s) who participated in a nationwide Dutch panel-study. **Findings** Age is positively related to the need for SMS regarding medical management, coping with the consequences of having a chronic illness and communicating with healthcare providers. SMS needs regarding making lifestyle changes are not related to age. Age-related differences in SMS needs can be explained by patients' social roles and especially by their burden of illness. **Discussion** This study shows that there is an urge for tailored interventions, which take the life context of patients into account.

"Am I Really Ready to go Home?": a Qualitative Study of Patients' Experience of Fast Track Surgery

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Background: Fast track surgery or Enhanced Recovery Programs (ERP) have been shown to improve patient outcomes, speed patient recovery post-operatively and increase cost-effectiveness for patients undergoing cancer surgery. ERPs are based on improving patient education, explaining the expected milestones in the recovery period and discharge planning. The effectiveness of ERP has been assessed by clinical outcome measures. The patient experience is often neglected. **Methods:** The current qualitative study was designed alongside a Randomised Control Trial for patients enrolled in an ERP for liver cancer. The aim of the qualitative study was to conduct a process evaluation. 30 patients were interviewed pre-operatively and 6 weeks post surgery. Transcripts were analysed using Thematic Content Analysis (Braun & Clarke, 2006) **Findings:** The patient experience of preparing and recovering from surgery for ERP was different for “Avoiders” (patients who distance themselves from negative feelings) and “Sensitizers” (patients who acknowledge negative emotions). Leventhal’s Self-Regulatory Model was used as a theoretical framework to explain the patient experience and ways in which patient education and psychological support may accentuate the effect of ERP. **Discussion:** The potential for using a psychometric tool for assessing “readiness for fast track surgery” are discussed.

The Happiness Indicator

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The happiness indicator is a combination of a self-help website and a long-term follow-up study. Participants get an e-mail every month with a link to a webpage on which they rate how happy they feel right now and during the last month. They get instant feedback on difference with the happiness of comparable people and change in their happiness over time. Participants can also complete the Happiness Diary on which they record their activities of the previous day and rate how happy they have felt during each of these. They get instant feedback on how their time use and experience differs from comparable people. The happiness indicator is developed in the Netherlands as a joint project of health insurance company VGZ and Erasmus University Rotterdam. To date the site has attracted some 75000 participants of which about half on a regular basis. An English language Beta version is available at www.happinessindicator.com Uses for health promotion and follow-up research are discussed. Participation from colleagues in other countries is welcomed.

Does Psychological Flexibility Longitudinally Predict Psychological Well-Being in Patients With Cancer?

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Introduction: A growing body of literature shows that psychological flexibility (PF) is associated with higher psychological well-being (PWB). Studies on this issue conducted in patients with cancer are however few and limited by the cross-sectional nature of the methodological designs. The objective of this study was to explore whether PF longitudinally predicts PWB in patients with cancer. **Method:** A total of 87 females with cancer (Mean age = 50 years, SD=9.6, range = 23-68) participated in the study. Patients completed the Acceptance and Action Questionnaire II (AAQ-II) and the Psychological Well-Being Scale (PWB) at Time 1 (T1) and at Time 2 (T2), that is 16 months later. **Findings:** Results from hierarchical regression analyses – controlling for socio-demographic, clinical, and dependent variables at T1 – showed that PF at T1 significantly and positively predicted both Positive Relations and Personal Growth scores of the PWB as well as the PWB total score at T2. **Conclusion:** Findings in this study support PF as a temporal antecedent of two important PWB dimensions. Psychological interventions designed to increase PF may be effective to improve PWB in patients with cancer.

Action Planning as a Strategy to Increase Smoking Cessation Care: Explorative Study Among General Practitioners

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Background To explore if action planning improves the uptake of guidelines for smoking cessation care by general practitioners (GPs). **Methods** During a training GPs (n=25) formulated action plans on asking about smoking and advising to quit and coping plans for encountering smokers who are (un)motivated to quit. GPs’ plans were rated on the degree of specificity and GP-reported goal attainment. Patients reported smoking cessation activities of GPs after consultation during a three-week period prior (n=1002) and following (n=630) the training. **Findings** We found an effect of high GP plan specificity (OR 1.52, 95% CI 1.29-1.92) and high GP goal attainment (OR 2.83, 95% CI 2.18-3.68) on the number of patients being asked about smoking compared to baseline. Patients were most likely to be asked about smoking when GPs formulated a highly specific plan and reported a high goal attainment (OR 3.35, 95% CI 2.50-4.47). No effects were found on other smoking cessation activities.

Discussion Incorporating action planning in a training for GPs may improve the frequency at which smokers are identified, especially when GPs describe their plan highly specific.

Adaptive Planning: Using Implementation Intentions as a Metacognitive Strategy to Change Unhealthy Snacking Habits

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Background: Implementation intentions effectively change unhealthy snacking habits by creating an association between a detailed situation and alternative. Yet such plans are rather inflexible. We tested whether if-then plans can be taught as a metacognitive strategy (MCS) teaching people to use and adapt this strategy independently. **Methods:** After keeping a 7-day snack diary, participants (N=73; community sample) received a planning strategy (implementation intentions, MCS, control). MCS instructions involved three steps: planning, monitoring, evaluating, and participants learned to adapt plans accordingly. Caloric intake was assessed with a diary after one and two months. **Findings:** Results showed main effects of condition and time ($p's < .05$) and a marginally significant interaction ($p = .07$). The MCS was found most effective in reducing unhealthy snacking. **Discussion:** Providing the instructions just once, implementation intentions can be taught as a MCS. People learn to adapt plans to changing situations resulting in behaviour change maintenance. Boundaries regarding the use of if-then plans are addressed and an effective and applicable strategy for interventions is demonstrated.

How Fruitful are Social Comparative Norms?

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Background: This study tested the effect of social comparative norms on fruit intake intentions in students. We expected negative comparative information to increase intention and positive comparative information to increase or decrease intention (boosting or boomerang effect). **Methods:** Participants were 172 Dutch students (22% males, Mage: 21.9) who reported intention, attitude, self-efficacy and self-identity towards fruit intake. Fruit intake was reported during 3 days. Hereafter, they received a message that they either consumed more fruit than the average student (pos experimental group, n=46), consumed less fruit (neg experimental group, n=46), or received no message (pos and neg control groups, both n=40). Intention was then again assessed. **Findings:** Intention decreased among the neg experimental group ($t = 2.38$, $p = .02$), while it stayed stable among the neg control group ($t = -.15$, $p = .88$). In the pos groups, the controls showed a decrease in intention ($t = 2.45$, $p = .02$) while the experimental group stayed stable ($t = -.15$, $p = .88$). **Discussion:** Contrary to expectations, a negative comparative norm message demotivated participants to consume fruit, while a positive norm message seemed to boost intention. Hence, positive comparative norms seem most fruitful.

Lessons From the Qolibri Overall Scale (QOLIBRI-OS) for its use Worldwide

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Background: The Quality of Life after Brain Injury (QOLIBRI) scale is a recently developed instrument that provides a profile of health-related quality of life (HRQoL) in domains typically affected by traumatic brain injury (TBI). However, for some purposes (e.g. when time is costly or the concentration of respondents limited) it is desirable to have a brief summary measure. This study examined a six-item QOLIBRI Overall Scale (QOLIBRI-OS), and considered whether it could provide an index of HRQoL after TBI. **Methods:** The properties of the QOLIBRI-OS were studied in a sample of 792 participants after TBI recruited from centres in nine countries covering six languages. An examination of construct validity was undertaken on a sub-sample of 153 participants recruited in Germany who had been assessed on two relevant brief quality of life measures: the Satisfaction With Life Scale and the Quality of Life Visual Analogue Scale. **Results:** The reliability of the QOLIBRI-OS was good (Cronbach's $\alpha = 0.86$, test-retest reliability = 0.81), and similar in participants with higher and lower cognitive performance. Factor analyses indicated that the scale is unidimensional. Rasch analysis also showed a satisfactory fit with this model. The QOLIBRI-OS correlates highly with the total score from the full QOLIBRI scale ($r = 0.87$). Moderate to strong relationships were found between the QOLIBRI-OS and the GOSE, SF-36, and Hospital Anxiety and Depression scale ($r = 0.54$ to -0.76). The QOLIBRI-OS showed good construct validity in the TBI group. **Conclusion:** The QOLIBRI-OS assesses a similar construct to the QOLIBRI total score and can be used internationally as a brief index and screening instrument of HRQoL for TBI. **Key words:** Traumatic brain injury, outcome, health-

related quality of life, short index.

Digital Interventions Targeting Alcohol and Tobacco use in Adolescents and Young Adults: a Systematic Review.

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Background:Digital interventions are increasingly used for changing alcohol and tobacco use in young people. This review aims to assess the efficacy of digital interventions targeting alcohol and tobacco use in young people, to update existing evidence and to expand the range of digital components reviewed. **Methods:**Electronic databases were searched for randomised and quasi-randomised trials targeting individuals aged 15-24, which reported either alcohol or tobacco outcomes, and which involved a direct interface between the participants and the digital intervention components. **Findings:**2259 unique articles were found. 94 studies from abstract and reference searching were retained for full text screening. Data extraction includes the effect of digital interventions on alcohol and tobacco consumption outcomes and the duration and use of digital interfaces in the delivery of the intervention. **Discussion:**Digital interventions in young people might provide a promising intervention channel for alcohol and tobacco use behaviours. The results will inform a pilot trial for a digital intervention tackling alcohol and tobacco use in adolescents and young adults in Estonia.

The Development of a Psychometric Measure of Post Traumatic Growth Following a Physical Illness

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Background:The distinct impact of physical trauma is currently not considered in any measures of post traumatic growth (PTG). The main aims of this study were to develop a measure of PTG following physical trauma; assess dimensionality and psychometric properties using exploratory and confirmatory factor analysis. **Methods:**Men at least 1yr post prostate cancer treatment were recruited via clinics, online and local support groups (n = 452). The physical PTG questionnaire items were distributed to participants. Participants were randomly split into two independent samples: Data Set A (n = 226) and Data Set B (n = 226) for EFA and CFA respectively. **Findings:**Two factors emerged following EFA of Data Set A:Health Autonomy and Health Awareness. CFA was conducted on a 2nd sample (Data Set B). These factors were deemed a good fit: $\chi^2(164) = 284.13$, $p < .0005$; $Q = 1.73$; $RMSEA = .057$ (90% CI: .05-.07); $CFI = .95$ and $AIC = 376.13$. This supports our initial qualitative findings on the unique role of physical trauma in PTG. **Discussion:**This novel measure of physical PTG addresses major limitations in current PTG measures and facilitates a more comprehensive understanding of adjustment and survivorship.

A Randomized Controlled Trial to Promote Volunteering in Older Adults

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Background: Volunteering is presumed to confer health benefits, but interventions to encourage older adults to volunteer are sparse. **Methods:** An RCT with n = 280 community-dwelling older adults was conducted to test a theory-based social-cognitive intervention for volunteering (VIG) against a passive control group (PCG) and an active control group for physical activity (ACG). Self-reports of weekly volunteering were assessed at baseline (T1), two (T2) and six weeks (T3) after the intervention. Controls were age, gender, education, partner status and number of illnesses. **Findings:** The latent change model fitted well, $\chi^2(2) = 4.41$, $p = .11$, $RMSEA = 0.07$, $CFI = 0.99$, $SRMR = 0.02$. All groups developed similarly from T1 to T2. Volunteering change from T2 to T3 was associated with assignment to the ACG versus VIG ($\beta = -.23$, $p = .02$) and PCG versus VIG ($\beta = -.26$, $p = .01$), indicating a steeper increase of volunteering from T2 to T3 in the VIG as compared to both other groups. **Discussion:** A single face-to-face group session can increase volunteering among older community-dwelling adults. The effects, however, need time to unfold, as changes in volunteering were apparent at T3 but not T2.

The Relationship Between Psychological Need Satisfaction and Behavioural Regulation in Exercise Over 6 Months

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Background: Self-determination theory (SDT) posits satisfaction of psychological needs is key to development of self-determined regulation (Deci & Ryan, 2002). These relationships were prospectively examined in exercise initiates. Methods: 97 adults (Mean age 43.43, SD=10.71) participated in 6 months of exercise. The psychological need satisfaction in exercise scale (PNSE), and behaviour regulation in exercise questionnaire (BREQ) were completed at 0, 3, and 6 months. Findings: Positive significant correlations (r) were observed between PNSE and self-determined regulations (r s from .247 to .548) but not controlled regulations (r s from -.140 to .045), except a positive r between relatedness and introjection at 3 months (r .305). Repeated measures MANOVAs revealed interactions of PNSE subscales over time, $\eta^2 = .37$, with increased autonomy and competence and decreased relatedness; and BREQ subscales over time, $\eta^2 = .63$, which mostly increased except external. Discussion: Results provide novel evidence of declining relatedness in an individual exercise program, and support for the role of needs satisfaction in the development of self-determined regulations.

Service Dominant Logic, Self Determination Theory and Wellbeing

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This paper combines two bodies of literature - Service Dominant Logic (S?D Logic) and Self-Determination Theory (SDT). It is argued that each has much to offer the other in respect to health care provision and management. Service Dominant Logic (S?D Logic) is described as the 'logic of interactivity' and involves participating agents co-creating value through an exchange of operant resources such as skills, knowledge and competencies. In effect, S-D Logic exemplifies the ecological process of symbiosis where two (or more) participating agents benefit from a mutual sharing of operant resources. In brief, S-D Logic builds on the idea that exchange is about agents doing things for and with each other. The coexistence that occurs in S?D Logic highlights the interactional role of agents in a process of mutual value co-creation (i.e., health care provision and wellbeing). Self-determination theory (SDT) proposes that behaviour and subsequent wellbeing are shaped among others by the satisfaction of three basic human psychological needs: autonomy, competence and relatedness. The need for autonomy reflects a social need for volitional decision-making, perhaps in respect to health-related behaviours such as those concerned with self-care maintenance programs. The need for competence reflects a desire for mastery in the physical and social worlds. The need for relatedness reflects among others a desire to care for others and to feel cared for. When these needs are supported, empirical evidence suggests that behaviour is more likely to be sustained longer than under controlled conditions; an important goal in respect to many healthcare programs. This paper argues that successful service-oriented health-care providers can support their patient/client partners by facilitating opportunities that advance the fulfillment of the other's specific health care needs in respect to autonomy, competence and relatedness. Furthermore, this paper introduces several SDL principles, including that of co-creation, as important in this respect. In doing so, this conceptual paper lays a foundation for the development of research that builds on these arguably related bodies of literature.

Teamwork in Health Care: Relationships With Work Stress and Patient Safety

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Background: Inter-professional teamwork is essential to provide safe patient care, which is a central indicator of hospitals' organizational performance. Reduction of care providers' work stress is another important organizational focus. However, little is known about the complex interrelations between these constructs. This study examined if the effect of teamwork on patient safety was mediated by clinician burnout. Method: Participants were 1453 nurses and physicians working on intensive care units. Data on different teamwork aspects, burnout, and patient safety was collected via an online questionnaire. Multiple mediation analysis was used to test whether burnout mediated the relationship between teamwork and patient safety. Findings: All teamwork aspects correlated positively with burnout and negatively with patient safety. In addition, the association between teamwork and patient safety was mediated by emotional exhaustion. The effects varied depending on individual and organizational factors. Discussion: Teamwork is associated both with clinician burnout and patient safety. Team-based interventions could contribute to improving both clinician and patient outcomes.

Intrinsic Rewards, Fruit/vegetable Consumption, and Habit Strength: a Three-wave Study Testing the Associative-Cybernetic Model

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Habit formation is thought to lead to long-term maintenance of fruit and vegetable consumption (FVC). Habits develop through context-dependent repetition, but additional variables such as intrinsic reward of behaviour may influence habit strength.

Drawing upon the Associative-Cybernetic Model, this study tested pathways by which intrinsic reward may influence FVC habit strength. In a three-wave study of FVC in the general population (N = 127 adults), intrinsic reward, intention, and self-efficacy were assessed at baseline, FVC and intrinsic reward 2 weeks later, and habit strength another 2 weeks later. Direct, indirect, and moderation effects of intrinsic reward on habit were tested simultaneously in a moderated mediation model. Intrinsic reward had positive indirect effects on habit through its influence on FVC frequency. Further, the relationship between FVC and habit was stronger where consumption was considered more intrinsically rewarding. Findings highlight the potential relevance of intrinsic reward to habit. Intrinsic rewards from behaviour may not only facilitate habit via behaviour frequency, but also reinforce the behavioural repetition and habit strength relationship.

What Does it Matter? Investigating the Importance of Subjective age for Health Behavior Stages

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Background: Subjective age seems to have an impact on forming intentions as well as on physical activity itself. However, it is unclear if subjective age has a greater impact on the intention or the action phase of health behaviors. This will be addressed in the current study by analyzing data from an online-survey. Methods: Cross-sectional data (N = 615) were analyzed using multinomial regression to investigate the influence of subjective physical age on three phases of the Health Action Process Approach with a stage algorithm as the dependent categorical variable. Findings: The model led to a significant decrease of unexplained variance ($\eta^2 = 213.31$, $p < .001$). When intenders are the reference group, significant differences for subjective physical age arise for the actors group ($b = -0.4$, Wald $\chi^2(1) = 6.05$, $p = .01$, OR = .963), but not for non-intenders. Discussion: The findings suggest that individuals who feel physically older are more likely to be intenders, whereas individuals who feel younger are more likely to be actors. These results contribute to a better understanding of the differential effects of subjective age on health behavior stages of physical activity.

TPB Predicts Objectively Measured Walking Behaviour, but not Behaviour Change, in a General Practice Sample

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Background: Previous research has demonstrated TPB variables as consistent predictors of physical activity intentions and behaviour. Yet studies have shown that TPB variables do not predict objectively measured behaviour, but these studies had sample and method limitations. This study aimed to assess which TPB variables predicted objective walking behaviour, and behaviour change, in a general practice sample. Methods: N=315 general practice patients were recruited as part of a randomised controlled trial. Patients completed a TPB questionnaire, and wore a NL-1000 pedometer. Multiple hierarchical regression analyses were conducted. Findings: TPB variables explained 42%-51% of the variance in intentions. Intention and PBC predicted walking behaviour at 6 weeks and 6 months, with 5.8%-5.9% unique variance explained. When past behaviour was controlled for TPB variables failed to predict change in walking behaviour. Discussion: TPB variables are predictive of intentions and objective walking behaviour, but not behaviour change, in the current sample. Past behaviour was the most important predictor of future behaviour, suggesting walking is a habitual behaviour.

A Good Start? Structural Approaches to Improving Perinatal Maternal Health

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The perinatal period is a critical phase for the biopsychosocial health of mothers and infants. A study investigates the psychosocial factors influencing childbirth methods and women's mental states. The representative survey was carried out 4 days postpartum among 1,829 women in 7 hospitals administered by the City of Vienna by means of a questionnaire provided in 8 languages, as well as a follow-up analysis among 99 women 4 to 6 months later. Psychosocial risk factors, delivery methods, information levels, subjective motives for the particular childbirth method and emotional and social situations were recorded. Fear of childbirth correlates with an increased C-section rate. There were significant differences in the emotional state depending on childbirth method. 24% of women electing to undergo a Caesarean said they would recommend their chosen childbirth method. 1.5% of the women had a C-section without medical indication. A C-section is a relevant perinatal stress factor. Childbirth classes and effective multidisciplinary cooperation are key protective factors. A block of measures have been drawn up aimed at counteracting and preventing later psychosocial crisis situations.

A Counterbalanced Comparison Study Between a Time-contingent Smartphone Application and an Event-contingent Estimated Snack Diary

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Background: Between-meal snacking is a key risk factor for overweight. The aim of this study is to validate momentary energy intake as measured by the Snackimpuls app, a smartphone application based on the Experience Sampling Method. **Methods:** In a counterbalanced design participants (n=46; age 20-50) reported snack intake during four days with Snackimpuls and during four days with an estimated snack diary. To investigate whether Snackimpuls and the snack diary were comparable on momentary energy intake (Kcal) a multilevel regression analysis was conducted. A mixed Anova Latin square analysis was used to assess differential transfer. **Findings:** Results showed no significant differences between the app and the snack diary ($\eta^2 = 11.84$, $SE = 8.03$, $p > 0.05$). A mixed design Anova Latin square analysis showed no differential transfer ($F(1,44) = 3.29$, $p = .077$). **Discussion:** This study demonstrates satisfactory validity of the Snackimpuls app to assess momentary energy intake. The Snackimpuls app is a suitable instrument to assess dynamic psychological processes related to between-meal snacking behavior.

Can the Theory of Planned Behaviour and Planning Predict Increased Walking Among Stroke Survivors?

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Background: To adapt an existing intervention, based on the Theory of Planned Behaviour (TPB) extended to include planning, to increase walking for stroke survivors, we tested the TPB's ability to predict intentions for, and actual, walking more in this group. We also tested if planning predicts/moderates the effect of intentions on walking **Method:** Longitudinal survey. At t1, 70 South London Stroke Register participants, able to walk outdoors, completed measures of walking, intentions, attitudes, subjective norms (SN), PBC and spontaneous planning for walking more. c7 days later, weekly time walked was assessed **Results:** SN ($\eta^2=0.41$, $p<0.001$) and PBC ($\eta^2=0.38$, $p=0.01$) significantly predicted intentions, while attitudes' effect ($\eta^2=0.20$, $p=0.08$) was only marginally significant, $R^2 = 0.50$. Neither intentions (OR=1.09, $p=0.20$), PBC (OR=0.99, $p=0.99$), planning (OR=0.93, $p=0.33$) nor the plans x intentions interaction (OR=1.02, $p=0.11$) significantly predicted walking more at t2 **Discussion:** PBC and SN are key predictors of intentions to walk more among stroke survivors and could be targeted by interventions. Interventions will also need strategies to turn this positive motivation into action

Health and Well-being of Patients After Bone Marrow Transplantation (BMT) – Psychological Predictors

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Background: The theoretical base of researches is Helena Wrona-Polanska's Functional Model of Health (FMH Wrona-Polanska 2003), in which health is a function of creative coping with stress. Psychological predictors of health and well-being were: level of stress and personal resources. 141 patients after BMT - 80 males and 61 females – at the Hematology Clinic of Jagiellonian University of Collegium Medicum, were studied clinically. **Methods:** Examined methods were the questionnaires: Spielberger's STAI, Endler's, Parker's CISS and CHIP, Antonovsky's SOC-29, Rosenberg's self-esteem scales, 10-point rating scales of sense of health and sense of calm. Objective health was examined by physician on the 10-point rating scale. **Findings:** Health and well-being depended on styles and effective coping strategies with stress, personal resources and temporal factor since transplantation. **Discussion:** The basis of health promotion of persons after BMT is development effective coping with stress and increase personal resources.

Intrinsic Versus Identified Motivations and the Frequency of Preparing Vegetables Among Main Household Food Preparers

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Background: Existing fruit and vegetable promotion campaigns are often based on the assumption that acceptance of the value

and importance of healthy eating (i.e., known as identified regulation) will lead to behavior change. However, intrinsic regulation (i.e., engaging in the target behavior out of a sense of enjoyment), another autonomous motivational dimension proposed in the Self-Determination Theory, has not received much attention in the domain of healthy eating. We examined the possibility that intrinsic versus identified regulation may be more or less strongly associated with consumption of vegetables. Methods: A two-wave online survey of main household food preparers was conducted (N=610). Findings: intrinsic regulation was more strongly associated with the frequency of preparing and serving both classes of vegetables than identified regulation. Furthermore, the association between intrinsic regulation and cruciferous vegetables was mediated by self-efficacy of preparing vegetables in challenging situations. Discussion: Our findings suggest that new marketing campaigns for vegetables are needed that focus on enhanced sensory attributes of vegetable-rich meals.

A Systematic Review of Stair Climbing Interventions

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Background: Significant health benefits can be obtained by incorporating moderate physical activity into daily life. Since stair climbing is an easily attainable activity, researchers have conducted stair climbing interventions in a range of settings. This systematic review was conducted to investigate the effectiveness of a range of stair climbing interventions. Methods: A search strategy using electronic databases was undertaken to identify relevant articles that involved stair climbing interventions. The search strategy returned 5697 articles that yielded 43 eligible studies in 38 articles. Studies were coded independently by two investigators. Findings: Papers included studies at workplaces (11), public transportation stations (11), shopping malls (8), and academic buildings (6). Two papers included multiple intervention settings. Interventions using point-of-decision prompts were more effective than environmental change or education. Most of studies demonstrated an increase in stair use, although only two studies compared individual change of stair climbing. Discussion: Follow-up measures of stair use are needed to evaluate long-term intervention effects. There is a need for evaluation at the individual level and improved external validity is required.

Risky Driving Motives and Attitudes Towards Traffic Safety Among Young Male Traffic Offenders

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Even though young traffic offenders contribute to high number of traffic violations and accidents in most countries including Lithuania, they may not be homogenous in their motivational features. This study was aimed to find out if two groups of young male traffic offenders (drunk drivers and overspeeders) differ in their motives for risky driving and attitudes towards traffic safety; and how these two psychological characteristics can predict their risky driving indicators. A cross-sectional survey using self-report questionnaire (with Motives for dangerous driving scale, Attitudes towards traffic safety, and DBQ) was carried out in 2013. The total sample included 268 young male traffic offenders (151 – drunk drivers, 117 – overspeeders; mean age 23.4). The results showed that drunk drivers and overspeeders do not differ in their risky driving indicators or attitudes towards traffic safety, but overspeeders had stronger motive for driving fast/risk taking and stronger motive of disrespect for traffic laws. Regression analysis also revealed that motive for driving fast/risk taking is the strongest predictor of self rated risky driving indicators in both groups of traffic offenders.

Acceptance of Social Changes and Perceived Health in Lithuania

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Background: Lithuania is a small European country marked with history of significant social changes during last two decades, including restoration of independence in 1990, and joining EU. We assume that social cognitions related with social changes can be significantly related with health. Our main goal of this study was to examine relationship between acceptance of social changes and perceived health in a Lithuanian general population sample. Research was funded by a grant (No. SIN-01/2012) from the Research Council of Lithuania. Methods: 626 participants, mean age about 39 on average (from 18 to 89 years) participated in our study. Self-report measures of perceived health and acceptance of social changes were used. Acceptance of social changes was measured using Social Changes Inventory (SOCHI) developed by the authors of this study. Findings: Results supported our prediction, that acceptance of social changes is significantly related with health. More positive attitude towards social changes was significantly related with better perceived health. Discussion: Present study contributes to better understanding of social cognitive factors of health in the context of society changes.

Abstracts for poster presentations

Effect of Obesity Levels on Lifestyles and qol of Middle and old Aged Women

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Background Obesity is a risk factor for lifestyle diseases. Effect of obesity levels on lifestyles and QOL were investigated. Methods Participants were middle and old aged women (N=900) in Body Mass Index (BMI) Standard class, Class?, and above Class? (n=300 in each class). An Internet survey was conducted. One-way analysis of variance was used to examine differences in lifestyles, among others, between BMI classes. Results Participants' mean age was 51.8 (SD=10.23), mean BMI values were: Standard=21.2 (SD=1.74), Class I =26.7 (SD=1.23), and Class?=33.8 (SD=5.66). Significant between-group differences were shown in lifestyles, stress responses, and QOL: lifestyles: $F(2,897) = 8.788$, stress responses: $F(2,897) = 4.799$, and QOL: $F(2,897) = 11.297$, $p < .001$. Furthermore, multiple comparison (5% level) using the Tukey's method for lifestyles, QOL and stress responses indicated that the Standard BMI class was optimal (standard > Class? > Class?). Discussion Lifestyles, stress responses, and QOL were different among three BMI classes. To prevent and improve problems caused by overweight, intervention measures for changing behaviors of overweight people are needed based on their obesity level.

The Relationship of School Anxiety and High iq Abilities in Children

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Children with high abilities could have emotional and behavioral instability. This can cause problems while adapting at transitional conditions or disadaptation in middle school. The aim of the research is to find out relationships between school anxiety features and high abilities. Abilities were measured by Raven's Progressive Matrices, and school anxiety was assessed by R. Philips's school anxiety test. Participants were divided into two groups: children with high abilities- G1 and children with average abilities - G2. T-test was used for statistics. 34 students (age- 11-13) from middle school were enrolled. G1 had high school anxiety level (75% and higher by R. Philips's test), especially at the scale of "Experiences of social stress", "Fear of self expression" and "The fear of situation of knowledge testing". G2 had an average and lower levels of school anxiety (low that 50% by R. Philips's test). G1 had higher level of school anxiety, than G2. ($p < 0.05$). Study shows the relationship between high abilities and school anxiety. The main contribution for school organization is the plan for individual education for high developed children and educational program for teachers.

A Sense of Responsibility for Health in Adolescents – the Presentation of a new Research Tool.

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Background: In the recent years a construct of Health Sense of Responsibility (HSR) has been identified and empirically verified, which helped to provide a new perspective on analyzed issues. It is defined as individualized and multidimensional subjective-personal construct, which plays an important role in regulating choices, decisions and human activities in the aspect of health behaviours. HRS constitutes a concept of an individualized character and bears a cognitive-emotional aspect. The development of an individual as well as their level of maturity appears to play a significant part in developing one's sense of responsibility for health. These two factors constitute individual character structures, which are displayed in behaviour, choices and decisions of an individual. The concept of responsibility for health within the scope of health psychology and promotion of health behaviours represents an important innovative and innovatory approach, being complementary to the research approach explaining complex mechanisms of undertaking health behaviours in different age groups. The aim of undertaken research was to elaborate an accurate and reliable tool enabling the measurement of the HRS in adolescents. For the purpose of achieving the main objective the following detailed objectives were formulated: 1) Elaborating items, which will relate to HSR in adolescents and establish an initial version of Health Sense of Responsibility Scale (SPO-Z). 2) Evaluation of the psychometric properties of the elaborated SPO-Z scale. 3) Evaluation of relationships between the level of social approval against results obtained in SPO-Z scale. Methods: The research was conducted among 103 respondents aged 16-19 years. The research adopted two research tools: 1) author's Health Sense of Responsibility Scale initially consisting of 19 items, which were subject to standardization among adolescents. 2) KAS Questionnaire elaborated by Wilczyńska and Drwal, aimed at evaluating social approval level. Cronbach's alpha coefficient for this questionnaire is 0.82-0.79 depending on a researched group. The evaluation of the psychometric features of elaborated questionnaire encompassed the analysis of SPO-Z accuracy and reliability. Test accuracy provides information on how precise the measurement of an examined characteristic was in a presented questionnaire. Due to the strategy of construing this diagnostic test, the evaluation of accuracy was performed by measuring the intensification of hypothetical characteristic in an examined individual (so called theoretical accuracy). The evaluation of accuracy was performed by employing factor analysis method, which enables identifying the factors responsible for covariance of tests' results correlated with each other. The research also encompassed measuring the KMO coefficient and Bartlett's test. KMO coefficient indicates whether the chosen sample of items is adequate. KMO coefficient value should be higher than 0.5. This determines the validity of employing the Principal Component Analysis. Bartlett's test of sphericity verifies zero hypothesis, which assumes that „Correlation matrix of variables is an identity matrix, with 1 on the diagonal and 0 on the off-diagonal“. The reliability was evaluated by the means of analysis of test items characteristics. This method compares variances of questions. Variances were calculated for each question and relativised to total variance, following Kuder-Richardson formula. In the research the level of item-difficulty index was also defined; it indicates the proportion of persons giving the answers in accordance with previously generated answer key. The answers

considered diagnostic were “often” and “very often”. Discriminative power of each test item was also calculated. Discriminative power constitutes a coefficient informing us on how a given test item differentiates given population with respect to a characteristic, measured throughout the whole test. Spearman correlation coefficient was employed to evaluate discriminative power. The evaluation of the relationship between the level of social support and the level of sense of responsibility for health was also conducted. An adequate Spearman correlation coefficient was employed to evaluate the power of relationship between social approval level and the answers given to particular items of the elaborated questionnaire. Statistical analyses were performed employing SPSS 18 statistical software. Findings: Obtained results were subject to the analysis of anti-image correlation matrix in order to eliminate variables which will lower the psychometric values of elaborated questionnaire. Two items had value below 0.5 in anti-image matrix and were excluded from further analyses. In the given study the value of elaborated test was $\chi^2 = 416.210$ while significance level was close to zero ($p = 0.0001$). Due to this fact, the zero hypothesis, which assumes that „ Correlation matrix of variables is an identity matrix, with 1 on the diagonal and 0 on the off-diagonal”, was rejected. Consequently, it has been considered that in the case of analyzed data the factor analysis can be conducted. KMO coefficient value was 0.721 and was considered satisfactory. The number of factors in the scale was specified based on eigenvalue criterion (Kaiser criterion), scree test criterion, as well as variance explained criteria. The analysis taking into account the total explained variance and with the employment of SPSS statistical software identified only these factors, which have eigenvalue above 1. Consequently, the conducted statistical analysis suggested including two main factors into the analysis. In order to thoroughly evaluate the number of distinguished variables, the scree diagram was used, on the basis of which two main factors were incorporated into further analyses. For the purpose of defining the factors’ structure Varimax rotation was employed; the rotated component matrix was also evaluated. While performing the evaluation of factor loadings, 4 out of 16 analyzed items have been observed, which belong to two or more factors. They have been excluded from further analyses. A model matrix that consisted of 2 factors has been identified. SPO-Z in its final version consists of 12 statements and enables the measurement of the total Health Sense of Responsibility level (OZ). Within the scale two subscales were distinguished: 1) the first of them relates to responsible (mature) involvement (OZ) – 7 items. This factor explained 27.357% of variances 2) the second of them relates to adequate responsible behaviours (A) – 5 items. This factor explained 15.720% of variances Both subscales of the sense of responsibility for health explained 43.078% of cumulated variance. Cronbach's alpha coefficient for the first of subscales (OZ) was 0.73 and for the second one (A) – 0.70. For the whole questionnaire the discussed coefficient has a 0.74 value. Discriminative power index for the whole test is 0.632. In the case of A factor the discriminative power index placed itself within the range of 0.617 – 0.742. In the case of OZ factor discriminative power index was between 0.529 – 0.682. Total scale difficulty is 0.37. For subscale A the test items difficulty is between 0.80 and 0.92. For subscale OZ the test items difficulty is between 0.25 and 0.46. None of the items included in the questionnaire displays the relationship with the level of social approval. Discussion: The innovatory character of the elaborated Health Sense of Responsibility Scale results from a more profound and detailed literature research as well as already undertaken empirical work of the authors. This scale represents, beyond doubt, a new research method. An important advantage of the proposed SPO-Z scale is its multidisciplinary character which joins together, and at the same time is complementary to, the achievements of health psychology, developmental psychology as well as prevention and promotion of health behaviours. Therefore, this scale is aimed at adolescents.

Health Related Physical Functioning and Usage of Addictive Substances in Adults

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Background: Health related quality of life (HRQoL) maybe differently related to usage of alcohol, tobacco and other addictive substances (ATA). The aim of this study is to disclose the relationship between the physical functioning of HRQoL and usage of ATA. Methods: The data of participants in Kaunas regional health project 913 males and 1317 females investigated by WHO HRQoL-100 scales of physical functioning, self-rated health (SRH) and items for evaluation ATA were analyzed using χ^2 and Spearman correlational tests by SPSS.16 software. Cronbach's alpha coefficients 0.8-0.9. Findings: Better physical functioning is related with better general health and younger. Better physical functioning in males and females was related to higher involvement in ATA ($p < 0.001$) (including more positive attitude towards usage of ATA), better SRH and less willingness to consult psychologists ($p < 0.001$). Discussion: The findings about the level of physical functioning are of value for health psychologists planning health promotive and preventive activities for chronic diseases and untimely deaths.

Relationship Between Family Environment With Resilience and High Risk Behaviors in Adolescents

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Background: This study examines the relationship between family environment (FE), including relationship, personal growth, and system maintenance dimensions with resilience and high risk behaviors (HRB) in adolescents, in Tehran, Iran. Method: In this correlation study, 83 adolescents (age mean = 16.3) were recruited through a cluster sampling method in Tehran. Family Environment (Moos & Moos, 1994), CD-RIS (Persian version, Joukaar, 2007), and Youth Risk Behavior Surveillance System (1999) were respectively utilized to evaluate FE, resilience, and HRB. The data were collected after getting the required permissions. Findings: Pearson correlation and regression analysis revealed a significant relationship between the variables. A significant relationship was also observed between FE dimensions and resilience and HRBs. Discussion: Accordingly, we can conclude that FE has relationship with resilience, HRBs and can predict health relationships and a positive condition in the family.

Time Variation in Psychological Stress Responses Among Athletes

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Background: Athletes' psycho/physiological stress problems have become the critical issues in the world. The purpose of this study was to examine time variation in psychological stress responses. **Methods:** The participants in this study were 372 athletes. They were given a questionnaire on Athletes Stress Response Scale (Amemiya, 2013). To examine time variation in psychological stress responses, a cross-lagged effects model and synchronous effects model were examined between times 1 and 2 to monitor stress response progression. **Findings:** The results of the cross-lagged effects model and synchronous effects model had good fit indices and showed that athletes' stress responses in Time1 significantly affected stress responses in Time2. Moreover, stress responses in Time 2 significantly interacted with the stress responses cycle in Time 2. **Discussion:** The results of this study showed athletes' stress responses progress and change through time variation. These findings suggested that athletes who have psychological problems need professional psychological support not only improve their performance but also improve their mental health as soon as possible.

Investigating the Effectiveness of Training Behavior Modification Methods to Mothers of Children With Adhd on Decreasing Parenting Stress and Enhancing Their Children's Behavioral Performance

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Background: The purpose of the current study was to investigate the effect of training behavior modification methods to mothers of children with Attention Deficit Disorder (ADHD) on enhancing the behavioral performance and decreasing parenting stress. **Method:** The research method was quasi-experimental with pre-test and post-test design and control group. To do so, 30 mothers of children with ADHD were selected using at-hand sampling and divided into control and experimental groups. Both groups filled out Parenting Stress Index and children behavioral performance questionnaire. In the next step, the experimental group was instructed behavior modification methods in 9 ninety-minute sessions while the mothers in control group went on their normal procedures. At the end of the instructional session, both groups filled out the mentioned questionnaires as the post-test. Covariance analysis was used for analyzing data. **Findings:** The results of the analysis of covariance showed that instructing behavior modification methods improved behavioral performance in children ($P < 0.05$) and also decreased parenting stress ($P < 0.05$) among mothers in experimental group, in comparison with the control group. **Conclusion:** Findings generally showed that instructing behavior modification methods to mothers, reduces behavioral problems of children and prevents stress in child-parent relationship.

The Effectiveness of the Mitchell Method Relaxation Technique for Fibromyalgia Symptoms: a Randomised Controlled Trial

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Background: The aim of the study was to evaluate the effectiveness of the Mitchell Method Relaxation Technique (MMRT) for reducing symptoms of fibromyalgia. **Method:** A three arm randomised controlled trial was used to compare effectiveness of a self-applied MMRT ($n = 67$) to an unspecified attention ($n = 66$) and a usual care ($n = 56$). Health outcomes were fatigue, pain, sleep, daily functioning, quality of life, depression, anxiety, coping and perceived stress. Assessment was done at baseline, post intervention and one month after intervention. **Findings:** MANCOVA, followed up with discriminant function analysis identified improvement on outcomes in the MMRT group ($p < .005$) with small effects for sleep problems ($d = 0.29$, $p < .05$), sleep inadequacy ($d = 0.20$, $p < .05$), and significant medium effects on fatigue ($d = 0.47$, $p < .05$). The one-month follow-up fatigue score was not different to the post-intervention score ($p = .246$) indicating short-term sustainability of the treatment effect. Pre-post change in pain levels did not vary across three groups, ($p = .59$). **Discussion:** MMRT is an effective treatment for pain, sleep problems, and fatigue. The MMRT is proposed as an adjuvant treatment for fibromyalgia.

Work Culture Among Healthcare Personnel in a Palliative Medicine Unit

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Objective Understanding and assessing health care personnel's work culture in palliative care is important, due to the conflict between "high tech" and "high touch". The aim of this study was to explore the work culture at a palliative medicine unit (PMU). Method Healthcare personnel (N = 26) at a PMU in Norway filled in a questionnaire. The Systematizing Person-Group Relations (SPGR) method was used for gathering data and for the analyses. The method seeks to explore which aspects dominate the particular work culture. Results The healthcare personnel working at the PMU had significantly higher scores than the "Norwegian Norm (NN)" in vectors in the "Withdrawal" dimension and significant lower scores in vectors in the "Synergy," "Control," and "Dependence" dimensions. Discussion Healthcare personnel at the PMU have a significantly different perception of their work culture than NN in several dimensions. The low score in the "Synergy" and "Control" dimensions indicate lack of engagement and constructive goal orientation, and not being in a position to change their behavior. The conflict between "high tech" and "high touch" at a PMU seems to be an obstacle when implementing changes.

The Influence of the Duration of Social-psychological Training on the Sense of Community

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Background: People having strong sense of community are in general happier, mentally healthier, they trouble and worry less and perceive themselves as more competent to influence their lives (Cochrun, 1994). The aim of the research was to measure influence of the SPT on the psychological sense of community with respect to duration of the training. Methods: Social-psychological training (SPT) was pursued with tutors (N1=67, duration of SPT 40 hours) and with social workers (N2=69, duration of SPT 80 hours). The measurement of the psychological sense of community was carried out before and after SPT using the Perceived Sense of Community Scale (Bishop, Chertok, Jason, 1997). Findings: We've identified a significant increase of the sense of community after taking part in SPT in both groups. Having compared the groups with respect to the duration of the SPT, the sense of community of the group taking part in 80 hour SPT grew more significantly. Discussion: As SPT has increased the sense of community, it is considered to be a suitable tool for the care of quality mental life of workers occupying helping professions.

Complexity and Clarity of the Multidimensional Personality SELF-CONCEPT as a Predictor of Psychological WELL-BEING

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Background. The significance of self-concept is controversially interpreted in personality research both as predictive of other psychological outcomes (Marsh, 2008) and as having only a "seductive pleasure" (Baumeister et al., 2005). The objective of this research was to demonstrate the causal effect of the multidimensional self-concept on psychological well-being of the individuals, their future orientations and personality traits. Method. A sample of 180 university undergraduates was clustered (K-means algorithm) on the variables of the complexity and clarity of their domain-specific self-concept (Campbell et al., 1996). The findings revealed significant inter-cluster differences on the psychological well-being measures (Ryff, 1989), with t-varying from 3.04 to 6.52; on the future -orientation measures (Malmberg, 1998) in professional self-actualization, further education, family life (t=3.74, 2.56 and 1.97 respectively) and on the Big-five trait measures: openness to experience (t=2.86), agreeableness (t=3.09), conscientiousness (t=3.52). Discussion. The results suggest that the multidimensional self-concept is an important personality facet, thoroughly predicting the individual's well-being.

Parental Influences on Health Risk Behaviour of College Students.

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Background: Research shows that parental influence on adolescents' alcohol use remains important after entering college. This study explores whether this is true also for other health risk behaviours (HRB) of college students. Methods: As a part of international SLICE study data were collected among 243 college students (mean age 20.8, 79% females). Students completed questionnaires on Perception of Parents, family support, type of living during a school year (with parents, other) and HRB (amount of alcohol used, frequency of smoking and marijuana use). Stepwise linear regression was used in three models. Findings: Interestingly, living without parents (students dormitories, shared rented flat) was associated only with higher frequency of smoking ($\beta=0.17$; $p?.05$), not alcohol or marijuana use. Both low positive ($\beta=-0.23$; $p?.05$) and high negative ($\beta=0.25$; $p?.05$) perception of mother were connected to greater amount of alcohol use. All the other associations between perception of parents, family support and type of living with students' HRB were insignificant. Discussion: Parental influences

explored within the study affected students' HRB only to a small extent.

The Relationship Between the Spiritual Intelligence and Subjective Well-being in University Students

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Aim: The purpose of current research is the study of the role of spiritual intelligence as the predictors of subjective well-being in University students. **Method:** the research method was correlation. The statistical population of research were students in Mazanadarn university and the sample consisted 220 students which randomly were selected. They were asked to respond to self-report measure of the spiritual intelligence (king ,2008) and subjective well-being (Keyes and coworkers, 2003). Data were analyzed using Pearson correlation coefficient and multiple regression analysis. **Results:** Results showed that personal meaning production predict 22 percent of the variance related to subjective well-being , 17 percent of the variance related to psychological well-being and 18 percent of the variance related to social well-being. Transcendental awareness 7 percent of the variance related to emotional well-being. **Conclusion:** Based on results, spiritual intelligence can be well predictive for subjective well-being. So it was suggested that spiritual intelligence and subjective well-being training and workshop are required to improve spiritual intelligence and subjective well-being by university. **Keywords:** subjective well-being, spiritual intelligence, University students

The Association Between Trait Emotional INTELLIGENCE, STRESS, Anxiety and Depression

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Background: Trait Emotional Intelligence – considered different from ability emotional intelligence – was being conceptualized as a constellation of emotional self perceptions and behavioural dispositions. The study of the relationship between trait emotional intelligence (TEI) and stress and two consequences of stress, anxiety and depression, has revealed contradicting results. **Method Objective:** the analysis of the relationship between TEI and perceived stress, anxiety and depression in the students' environment. **Subjects:** N = 115 students. Age - M = 19,41 S.D. = 0,45 **Measures:** Trait emotional intelligence questionnaire – TEIque-SF - measures a global score of TEI and its factors; Perceived stress scale – PSS - explores the subjective feeling of stress; Anxiety and depression scale – HAD - measures scores for anxiety and depression. **Results and discussion:** The correlational analysis shows significant negative relationship between TEI and perceived stress (r between -.36 and -.60) as well as between TEI and anxiety and depression. Emotionality and sociability components of the TEI structure seem to have the highest influence in resistance to stress. The results suggests that individuals with highly developed TEI withstand stress better than those with lower scores. We consider that TEI is a useful construct to capture interindividual differences in the case of stress, anxiety and depression.

Stress Appraisal and Cognitive Emotion Regulation Strategies of Employees

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Companies expect their employees would develop coping skills to manage stress. Earlier research asserts we cope with stress at different levels. Strategies can be classified as more or less adaptive. We investigated the relationship between cognitive emotion regulation and stress appraisal in the workplace. Our goal was determining the workplace dynamics driven by this relationship. We used a non-experimental design and data came from 260 respondents (M age= 34.1, gender reported by 178 males and 69 females). Cognitive Emotion Regulation Questionnaire (N. Garnefski et al., 2001) displayed the frequency of cognitive strategy use and we assessed stress appraisal by Perceived Stress Scale (Cohen et al., 1983). Refocus on planning was the most used strategy, while catastrophizing was the least preferred. Only 6% frequently used less adaptive strategies. When they evaluated the last month of their experiences, one third of employees perceived high level of stress. There was small, yet significant correlation (r=0.17, p=0.01) between less adaptive strategy use and stress appraisal. Our study implies that HR professionals should use more measures to lead better intervention processes.

What is the Factor Related to Mental Health in Music Major College Students?

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Former studies have pointed out that usually mental health is not so good in musicians. To promote their mental health, cognitive strategies (e.g., an optimistic view) might be played an important role. The purpose of this study was to investigate the states of mental health and the cognitive tendencies for music major college students. Subjects were 186 music major college students (MS group), and 139 college students (CS group) who majored the other studies (e.g., economics, etc.) (mean age; 20.6 ± 2.6 years). Center for epidemic studies depression scale (CES-D; Shima et al., 1985) and Optimism and Pessimism Scale (Toyama, 2013) were measured by questionnaire method. Independent t-tests showed that in the MS group, the mean of CES-D scores was significantly higher and the mean of optimism scores was significantly lower than those of the CS group. Multiple-regression analysis indicated that the pessimism scores were positively associated with the CES-D scores in both two groups. These results suggested that music major college students experienced more stressful events than the other college students. Therefore, an optimistic view might be needed for them.

A Protocol for Psychiatric Consultations in Inpatients Affected by Serious Oncological Diseases

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Introduction: International guidelines suggest special attention to the management of the personal needs and psychological problems of patients with serious oncological diseases, for example the psychological “distress”, the onset of a new psychiatric illness or the worsening of a pre-existing one. Our protocol provides the specific procedure in the management of psychiatric consultation for in-patients and Day-Hospital patients in oncology, hematology, breast surgery and otorhinolaryngology wards in our Hospital. **Methods:** With the aim to improve the traditional “liason” activity and to create a structured and shared contribution from the different services involved, different employers (medical doctors, residents, psychologists, nurses) coming from different wards of AOU UD attended, an internal structured training, through which emerged the importance of dealing with the problems related to the assistance of the oncological patients. The training has led to the organization of a ‘psychoncology microteam’ and a specific protocol has also been activated, in order to give concrete answers to the needs of the patients. **Results:** Procedure includes the compilation, by the requesting wards, of the NICE Distress misure Scale and the assessment of the characteristics of the patient as described in the document DIS A and DIS-B of the scale. The consultant, after visiting the patient, also fills in a “Needs Survey Scale” and, if it is needed, can make other assessments like the “Mini-MAC Test”. **Interventions suggested includes:** reports with psychopharmacological prescription, psychotherapy, referring to social and religious services. In addition to the use of these measures, other instruments and other initiatives can be chosen in order to make an integrated intervention that meets, highlights and underlines the specific needs of the patient and also the demands of the requesting wards. Particularly, for most complex situations, the patient can refer to our psychoncological microteam, which will meet regularly and will be composed by some doctors, psychologists and nurses from the wards involved in the protocol. **Conclusions:** The aim of our work has been to define an integrated procedure in order to improve the quality of the liason activity and ameliorate our respond to the patients’ needs. We also look forward to the possibility to discuss and exchange impressions and suggestions with colleagues from others countries who are concerned with this kind of problems.

The Influence of Eudaimonic Intervention on the Cognitive Appraisal of Illness in Dialysis Patients

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Background: The great progress that has been made in application of dialysis lets the patients with end-stage renal disease live in satisfactory somatic state for many years. It was investigated whether eudaimonic intervention can influence on cognitive appraisal of illness and treatment. **Methods:** The study was a randomized controlled trial using a convenience sample of 88 (44 women, 44 men, age $M = 49$; $SD = 14,07$) fully informed and consenting patients with the end-stage renal disease who were assigned to experimental (eudaimonic intervention) or control (usual care) groups. Participants in the experimental group participated in psychological intervention once a week during 5 weeks. The instrument was the Cognitive Appraisal Inventory. **Findings:** After the application of a eudaimonic intervention, the experimental group had a weaker intensity of cognitive appraisal of the situation as a harm/loss $F(2,60)=3.01$; $p < .05$ and a stronger intensity of cognitive appraisal of the situation as a challenge $F(1,24)=5.65$; $p < .05$ **Discussion:** The results make it possible to identify the opportunity of changing patients' psychological state in a positive way.

Job Satisfaction and Positivity in a Multicultural Environment of Multinational Corporations

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Background: Although job satisfaction is widely analyzed, it has received limited attention in the literature on cultural diversity. The aim of this paper was to analyze how a multicultural environment of multinational corporations (MNCs) impacts on job

satisfaction of employees, who interact with representatives of different cultures. Methods: The narrative review of theoretical and empirical studies was used. Results: The theoretical conceptualization of job satisfaction showed that job satisfaction includes both cognitive and affective components. The narrative review revealed that the effect of cultural diversity on job satisfaction was inconsistent. A positive organizational scholarship (POS) lens, including subjective well-being and positivity, was applied. Cultural diversity in a working environment was positively related to the cognitive component of job satisfaction, however, it was negatively associated with the affective component. Discussion: Having implemented the POS lens, it has been indicated that job satisfaction and positivity appear to be associated with a multicultural setting of MNCs in different ways. The recommendations for future research are presented.

“Psychosocial Resources in German Student Teachers – a Starting Point for the Prevention of Teacher Burnout?”

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Background: Teachers are among the occupational groups most severely affected by psychological strain. Therefore the prevention of stress should start as early as during teacher training. Referring to the Transactional Model of Stress and Coping (Lazarus, 1966) the current study explores the degree of psychosocial resources of German student teachers and their level of psychological strain to identify starting points for early prevention. Methods: The cross-sectional study was conducted using an anonymous online survey. It comprised of well-established questionnaires assessing on the one hand psychosocial resources (social skills, self-efficacy, uncertainty tolerance and mindfulness) and on the other hand psychological strain (Irritation Scale by Mohr, 2007). N = 805 student teachers completed the survey. Findings & Discussion: Student teachers already perceive a higher-than-average degree of psychological strain (Irritation) that correlates significantly with the level of reported psychosocial resources. Uncertainty tolerance and self-efficacy of the participants are significantly below the norm. Multivariate analyses are planned to obtain a more differentiated basis for prevention.

Quality of Life After a Severe Traumatic Injury – a Longitudinal Study Using the SF-36.

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Background: Even though 85% of those who have been severely injured in an accident in Germany survive, complex and serious long-term consequences are still a major problem and the victims' quality of life is affected permanently. Therefore the aim of the current study is to identify factors that correlate significantly with the quality of life after a severe traumatic injury and to investigate whether the support by a reintegration service has a positive effect. Methods: The sample consists of severely injured accident victims who were supported by a reintegration service. The data collection comprises three data points: T1 (N = 108), T2 (N = 67) and T3 (N = 47). At every data point the German version of the SF-36 questionnaire (Bullinger & Kirchberger, 1998) was used to assess the participants' quality of life. Findings & Discussion: The results indicate that an individual medical-vocational support by a reintegration service has the potential to significantly and stably improve the physical but not the psychological aspects of quality of life, even if the accident dates back several years. The treatment of psychological consequences after severe accidents needs more attention.

Which Decision-making Styles are Connected With Risk Behaviour?

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Background: While the relationship between decision-making styles and other cognitive characteristics has often been investigated, little attention has been given to the connection with health. The main aim of the present research is to examine the association of decision-making styles with risk behaviour in terms of alcohol use, smoking and drug use. Methods: University students from Slovakia (N = 218) filled in the General decision-making styles questionnaire (Scott & Bruce, 1995) identifying five decision-making styles as part of the SLICE study. AUDIT (Babor et al., 2001) was used to assess alcohol use. Smoking was assessed by five items and drug use by ten. Findings: Dependent and spontaneous decision-making styles were positively associated with some aspects of alcohol use and smoking. The relationship of drug use with decision-making styles was not found to be significant. Discussion: Certain decision-making styles are associated with risk behaviour which highlights the importance of the way decisions are made in relation to keeping healthy.

Personality Features of Surgeons

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Our assumption was that to the number of the professionally important traits that characterize the individual-psychological characteristics of a surgeon are attributed the thinking style and typological characteristics of the person associated with the temperament. The role of the thinking is determined by the specifics of the professional activity involving the need to solve a variety of professional tasks, development of skills and strategies of practical thinking. In order to study the features of surgeons' personality types accentuations we have carried out a study in the City Hospital ? 1, Rostov-on-Don (Russia), which included 60 surgeons. For the diagnosis of the intelligent characteristics was used the author's technique "Thinking style", to study individual-typological characteristics - Eysenck Personality Inventory. Analysis of the study results showed the differences in the individual-psychological characteristics. There are differences in the surgeons' thinking style and in the dominance of the extraversion and emotional instability.

Development of a Mobile Phone Hypertension Specific Self-management System: Content Validity and Reliability

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Background Self-management support tools, facilitating patients' understanding of relationships between wellbeing, blood pressure and lifestyle may help to improve adherence to hypertension treatment. We report on the development of a multi-module mobile phone self-management system and on evaluations of the self-report module regarding content validity and reliability. **Methods** Domains and items were derived from focus group interviews with patients and providers. Items and response formats were designed to fit all mobile phones. Content validity was iteratively assessed in 21 cognitive interviews in four rounds. Reliability was examined by test-retest. **Findings** The focus groups resulted in six domains covered by 16 items. The cognitive interviews showed good item comprehension, relevance and coverage. Reliability was satisfactory. **Discussion** The self-report module appears relevant to the self-management of hypertension. The system, also including modules for reminders/encouragements, blood pressure measurements and feedback of self-reports in relation to blood pressure, will be evaluated in clinical practice as a tool to support patients in self-managing their hypertension.

Does the Satisfaction of Basic Psychological Needs Protect Against Unhealthy Internet Use?

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Background: This study used the Self-determination theory to explore whether basic psychological needs satisfaction (BPN) has a protective role against unhealthy internet use. **Methods:** The sample of 237 (75% women) first year university students completed questionnaires on generalized problematic internet use (GPIU), perceived stress (PS) and BPN (autonomy, competence, relatedness) on two occasions over a one year period. Linear regression models were built to explore the relationship between PS, BPN and GPIU as well as to test the potential moderating role of BPN. **Findings:** The BPN relatedness at T2 was negatively associated with GPIU ($\beta = -0.156$; $p < 0.05$). Further, PS at the baseline and its increase during the year served as significant predictors of GPIU at T2 ($\beta = 0.310$ $p < 0.001$; $\beta = 0.153$ $p < 0.05$). However, evidence for the moderating effect of BSN was not detected. **Discussion:** In line with the assumptions, PS and low satisfaction with relationships was found to be directly related to GPIU although further research is needed to identify moderating protective factors.

Investigating the Impact of Acupuncture on Clients' Psychological Distress: a Double Blind, Randomised Control Trial.

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Background: Psychological distress is of increasing human and financial cost in a variety of healthcare settings. This study aimed to investigate the efficacy of traditional Chinese acupuncture in the treatment of somatised and general psychological distress in a diverse sample. **Methods:** The study was a double blind, randomised, placebo controlled trial, utilising a sham acupuncture device. Forty two participants were allocated into either genuine or placebo acupuncture groups. Measures included the eight subscales of the Bradford Somatic Inventory (BSI) and the General Health Questionnaire (GHQ-12). Measurements were taken before and after a five weekly treatments. **Findings:** Current findings are part of a larger randomised trial of the effects of acupuncture on psychological distress. Significant post-treatment differences were observed between genuine and placebo treatment on all primary outcomes ($p < .001$). **Discussion:** Findings suggested that traditional Chinese acupuncture had a significant positive effect on somatised and general psychological distress beyond placebo and may have implications for the treatment of

psychologically distressed clients in various health care settings.

The Invisibility of Epilepsy: Challenges Posed for Family Communication About and Disclosure of Childhood Epilepsy

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Background Epilepsy is unique as it is only visible when symptoms manifest. During periods of seizure freedom, there may be no evidence that the person has epilepsy. This poster aims to relay the impact that the invisibility of epilepsy may have on family communication and disclosure strategies adopted by families living with epilepsy. **Methods** Data in this presentation emerged from the qualitative phases of two mixed method studies exploring disclosure practices and family communication surrounding epilepsy. Sixty interviews were conducted with children with epilepsy and their parents. Data were thematically analysed. **Findings** Analysis of the data revealed that the invisible nature of epilepsy: a) poses significant challenges for parent-child communication about the condition; and b) can result in families adopting concealment disclosure strategies. **Discussion** Silence around epilepsy contributes to epilepsy related-stigma. Acknowledging the impact that the invisibility of epilepsy can have on family communication and disclosure practices can promote more openness about epilepsy within a family context and in the public domain; thereby enhancing the wellbeing of individuals with epilepsy.

Job Task Characteristics and Motivation Stimulating Physicians' Work Engagement

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Background: the aim of the study was to investigate the stimulating or deteriorating influence of core task characteristics and intrinsic motivation on employees' engagement. **Methods:** participants were 95 physicians. Work engagement was assessed by UWES; motivational aspects were measured by Hackman & Oldham's JDS and Ritchie & Martins' Motivational profile. To answer the research questions we used regression analysis as our analytical model to explore the relationship between task characteristics and motivational factors (independent variables) on engagement (dependent variables). **Findings:** work engagement among practicing doctors and teachers of medical secondary school has different motivational determination. Growth Satisfaction, Skill Variety and Growth Need Strength have statistically reliable influence on work engagement among practicing doctors ($R^2=0,67$). Skill Variety, Knowledge of Results of the Work Activities and Recognition have statistically reliable influence on work engagement among teachers of medical secondary school ($R^2=0,51$). **Discussion.** The significance of focus on motivational aspects for occupational health prevention will be discussed.

Gender Differences in Associations Between Alcohol Use, Normative Beliefs and Religious Belief: Slice Study.

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Background: Religion can affect health by providing health promoting norms of behavior. The aim of this study was to examine how much of the variance in alcohol use can be explained by normative beliefs about alcohol consumption and the importance of religious belief among men and women. **Methods:** The research sample: 802 Slovak university students (females: 75.7%) who participated in the international study SliCE. The Alcohol Use Disorders Identification Test, scale measuring alcohol related normative beliefs and single item measure of the importance of religious belief were used. Data were analyzed with the Mann-Whitney U-test and linear regression. **Findings:** Gender differences were found in alcohol use ($U=25830$, $p<0.01$). Normative beliefs (0.309 , $p<0.01$) and the importance of religious belief (T1) (-0.131 , $p<0.05$) among women and normative beliefs (0.259 , $p<0.05$) among men contributed to the variance of alcohol use. **Conclusion:** The findings contribute to the knowledge about gender differences in alcohol use. The implementation of a social influence strategy with emphasis on the correction of normative beliefs is an important part of prevention in men and women

Factors Influencing Exercise and Relaxation Behaviour in Cardiac Rehabilitation Patients

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Background: The aim of this study was to examine factors of exercise and relaxation behaviour in cardiac patients six months after their rehabilitation with the Theory of Planned Behaviour (Ajzen, 1991) and Temporal Self-Regulation Theory (Hall and Fong, 2007). **Methods:** Design: longitudinal; 6 months follow-up. **Participants:** cardiac rehabilitation inpatients with acute ischemic heart disease aged 65 or below. N=302, 278 (75%) males, mean age 55.61 (SD=7.31). **Measures:** CDS, SVS, self-report questionnaire about the variables of the theories. **Linear regression models and path analyses were used.** **Findings:** 212 participants (71%) did exercise and 45 (15%) did relaxation 6 months after the rehabilitation. Positive temporal evaluation was expected after one month of regular exercise or relaxation. **Predictors of exercise behaviour** were intention, descriptive (but not injunctive) subjective norm, self-efficacy, past behaviour, temporal proximity of positive consequences, and state vitality. **Predictors of relaxation** were intention and past behaviour. **Discussion:** Relaxation is less accepted than exercise by cardiac patients. Different factors contribute to these behaviours.

Determinants of Cardiac Nurses' Intentions Towards Initiating Smoking Cessation Care to Their Patients

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Background: Although nurses are in an ideal position to offer smoking cessation interventions during hospitalization, they perceive challenges in providing this care. The Ask-Advise-Refer (AAR) strategy may be a feasible approach since the actual counseling delivered at the outpatient setting. This study identified determinants of cardiac nurses' intentions towards providing the AAR strategy. **Methods:** A cross-sectional survey was conducted among randomly selected nurses in all Dutch cardiac wards, of whom 165 (35%) responded. Regression analyses were used to determine correlates of the intention towards providing the AAR strategy. Current provision of smoking cessation care was also assessed. **Findings:** The current delivery of smoking cessation care was low, though the majority of the cardiac nurses had a strong intention to work with the AAR strategy. Familiarity with smoking cessation guidelines, positive attitudes, high self-efficacy expectancies, social modeling, and social support by cardiologists were significantly associated with increased intentions to apply the AAR strategy. These factors explained 65% of the intentions. **Discussion:** The AAR strategy may improve smoking cessation care for cardiac patients. Nurses should be familiarized and be encouraged towards working with this strategy, and be able to practice its delivery to enhance their attitudes and self-efficacy.

Endometriosis: Identifying Meaningful Subgroups of Females at Risk of a Poorer Adjustment

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Background: The objective of this study was to explore whether scores on the Activity Engagement (AE) and Pain Willingness subscales of the Chronic Pain Acceptance Questionnaire (CPAQ) may be useful to identify clinical significant subgroups of females with endometriosis. **Methods:** A total of 296 females with endometriosis completed the CPAQ, measures of positive and negative affectivity, anxiety and depression. Exploratory cluster and ANCOVA's analyses were conducted. **Findings:** Analyses yielded three clusters on the basis of the CPAQ scores: females with high or low scores in both CPAQ dimensions, and participants with high AE but low PW scores (discordant scores). The cluster with low scores showed a poorer adjustment than the other two clusters, and the Discordant group showed a poorer adjustment than the group with high scores. **Discussion:** Findings support the validity of the CPAQ scores to identify females with endometriosis at risk of poorer adjustment to illness. Further, results support that PW is sufficient but not necessary to AE.

Gender-differences in Relationships Between Perceptions of Heart Disease and Health Behaviours.

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Background: The health belief model (HBM) guided an examination of relationships between leisure-time physical activity (LTPA) and fruit and vegetable consumption and the HBM constructs of susceptibility, seriousness, fear, risk reduction, control, family history and media exposure related to heart disease (HD). **Methods:** Data were collected using an internet survey of adults (813 men, 1635 women). LTPA and fruit and vegetable consumption were regressed onto the HBM constructs and demographic variables. Separate models were conducted for each behavior and for men and women. **Findings:** Susceptibility, media exposure, education and income predicted LTPA in men. Susceptibility, risk reduction, family history, media, and income predicted LTPA in women. Fruit and vegetable consumption in men was predicted by susceptibility, risk reduction, control over HD, media, age, education and income. In women, significant predictors were susceptibility, risk reduction, family history, media, having HD, age, education, and income. **Discussion:** The differences and similarities between the models have gender-based implications for

targeted communications regarding health behaviours.

Perceptions of Memory Problems Among Patients and Their Next of kin at a Memory Center

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Background: In the context of clinical assessment of memory complaints (MCs), the process of disclosing a diagnosis is of major importance since it is known to influence disease acceptance of patients and their next of kin. Based on the Common Sense Model (CSM, Leventhal et al. 1997), this study aims to prospectively examine memory problem perceptions of patients with memory complaints and their next of kin during the diagnostic process, namely before and after diagnosis disclosure. **Methods:** We plan to recruit 125 patients with MCs who are seen for the first time at the Research and Resources Memory Center in Nancy, France. This study includes 4 visits during which patients and their next of kin are evaluated for memory problem perceptions (French adaptation of the Illness Perception Questionnaire-Memory IPQ-M, Hurt et al. 2010), anxiety, depression, quality of life and coping strategies. **Findings:** Results from the pilot study show that the CSM is applicable in MCs and early stage dementia and reveal a typical profile for first-visit patients at a memory center. **Discussion:** We anticipate that the use of IPQ-M will help gain insight into how patients and their next of kin cope with memory problems.

The Natural Context of Wellbeing. Beneficial Effects of Nature and Daylight in Daily Life.

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Nature and daylight can enhance health in many ways, for instance by reducing stress and improving mood, self-regulation, and health. Since exposure to daylight and nature often co-occur, both phenomena were investigated simultaneously. To investigate benefits of both phenomena in daily life an experience sampling methodology was employed. Previous experience sampling studies have found vitalizing effects of nature and mood enhancing effects of daylight. Two experience sampling studies were conducted. Participants filled in a questionnaire 8 times per day for 6 consecutive days. Pseudo-objective checklists and subjective assessments of naturalness and daylight characteristics were used to assess naturalness and amount of daylight. Dependent variables were indicators of mental and physical health. Hierarchical linear models indicated a significant positive correlation ($p < .05$) between amount of daylight or nature and several aspects of health (e.g., mood, self-regulation). Results stress the importance of nature and daylight for micro-restorative experiences in daily life and can be used to design individualized health-promoting interventions using experience sampling technology.

Social Skills and Psychological Suffering

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The nature of the associations between interpersonal relationships and mental health is not clear yet. The aim of this study was to explore the correlations between social skills and neuroticism. The subjects that participated in this survey study were 1.031 college students of both genders (mean age=24,5; standard deviation=6,9) who self-evaluated their social behaviour and neuroticism. Results show significative and negative correlations between social skills and neuroticism ($r_s=-0,078$ to $r_s=-0,416$). Social skills of Conversation and social fluency appear as the stronger correlation with neuroticism ($r_s=-0,354$, $p<0,001$), and Depression was the subscale of neuroticism that more closely had correlated with the social repertoire ($r_s=-0,416$, $p<0,001$). It was concluded that the deficit of social skills tends to be accompanied by psychological suffering. The theoretical and practical implications for psychological work in mental health were discussed.

Behaviour Change Initiation in Adults at Risk of Diabetes

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Background Lifestyle modifications can prevent diabetes in people at high risk. This study investigated factors underlying behaviour change in adults with pre-diabetes taking part in an intervention based on the Health Action Process Approach (HAPA). **Methods** Semi-structured interviews with 21 participants (13 m, 8 f; 47-80 years; mean BMI=31kg/m²) probed lifestyle changes made; motivations/barriers; understanding of the HAPA-based model. Interviews were audio recorded, transcribed verbatim and analysed in NVivo using Framework Analysis. **Findings** Many participants were surprised by the pre-diabetes diagnosis but indicated this increased their motivation to change, suggesting the HAPA risk perception component was important. Social influences and enjoyment of food were common barriers to dietary change; barriers to physical activity

included age/illness/injury and low motivation. Discussion Qualitative research on use of the HAPA is rare, as is literature on the determinants of behaviour change in adults at diagnosed risk of chronic disease. These findings tend to support the motivational phase of the HAPA but imply the addition of social support as a motivating factor.

Patient-relevant Needs and Treatment Goals in Nail Psoriasis

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BACKGROUND: Medical decisions should be based on patient needs. Objectives were to (a) develop treatment goal items for a questionnaire on needs and benefit in nail psoriasis treatment, (b) determine goal importance and (c) determine the association between goal importance and quality of life (QoL). **METHODS:** The study comprised 4 steps: qualitative patient survey on needs and burdens due to nail psoriasis (n=120); development of pilot items in expert group; empirical item testing (n=55); assessment in 6 countries (n=203). The percentage of patients rating goals as important was compared between different subgroups. Overall goal importance was correlated with disease-specific QoL. **FINDINGS:** The final NAPP-PBI contained 24 treatment goals. Outcomes of particular importance related to manual dexterity and social interaction. Importance of many goals increased with disease severity, but not with age or disease duration. Goal importance and quality of life were associated ($r=.61$, $p<.001$), but patients with high QoL differed widely in goal importance, whereas most patients with low QoL stated high goal importance. **DISCUSSION:** Goal importance is not determined by subjective impairment only.

The Patient-physician Relationship: Experiences of Atrial Fibrillation and Anticoagulation Therapy

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Background: Oral anticoagulation (OAC) reduces stroke risk in patients with atrial fibrillation (AF) however it is often underutilized and sometimes refused by patients. Two inter-linking studies aimed to explore patients' and physicians' experiences of AF and OAC. **Methods:** Study 1: Three AF patient sub-groups were interviewed (n=11); accepted, refused, or discontinued OAC. Study 2: Four physician sub-groups (n=16) were interviewed: consultant cardiologists, general physicians, general practitioners and cardiology registrars. Data was analysed using IPA. **Results:** Three main themes comprised patients' experiences: the initial consultation, life after the consultation, and patients' reflections. Two main themes emerged from physicians' experiences: communicating information and challenges with OAC prescription for AF. **Discussion:** This programme of work has illustrated the benefit of taking an in depth phenomenological approach to understanding the lived experience of the physician- patient consultation. This work has strengthened the evidence base and demonstrated that there is a need to target patients' and physicians' ability to communicate with each other in a comprehensible way.

Testing the Relative Autonomy Index as a Moderator of the Relationship Between Intention, Action Planning and Physical Activity Behaviour Among People With Type 2 Diabetes

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Background: Action planning has been postulated to bridge the intention-behaviour gap; however, some studies have shown that the mediating role of action planning between intention and PA behaviour may be contingent to specific conditions. We hypothesized that the indirect effect of intention (the independent variable) on PA behaviour (the dependent variable), through planning (a mediator), will be moderated by the relative autonomy index (RAI). **Methods:** A total of 122 people with type 2 diabetes (T2D), selected randomly, completed the baseline questionnaire measuring the theoretical constructs. The Godin Leisure-Time Questionnaire was used to measure the PA behaviour one month later. Moderated mediation analysis was conducted. **Findings:** Controlling for the effect of baseline PA, action planning mediated the effect of intention on PA at the mean and low (-1 SD) levels of RAI, but not when the RAI was high (+1 SD). **Discussion:** The findings suggest that people with T2D, characterized with a high intention and using an action planning strategy, are more likely to practice PA; however, this action planning strategy seems useless for those with high autonomous regulation.

Body Image Perception and Stages of Exercise Change Behavior: do men and Women Differ?

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Previous research found that exercise had positive impact on body image perception. However, few studies examine the relationship between body image dissatisfaction and readiness to engage in regular physical activities across gender. The main goal of this study was to examine the role of gender in the relationship between body image dissatisfaction and stages of behavioral change for exercise in adults. The sample consisted of 272 employed adults (48.5% females) in Serbia, with a mean age of 39.46 years. The participants completed the measures of body image dissatisfaction (Body Shape Questionnaire) and readiness to exercise (Exercise: Stages of Change-short form). Analysis showed that females reported, on average, greater body image dissatisfaction than males. The results also indicated that perception of body image was significantly associated with the stages of exercise change behavior, with females in the stage of contemplation having greater odds for body image dissatisfaction when compared with females in the stage of maintenance. On the other hand, males reported similar levels of body image dissatisfaction across all stages of exercise change behavior.

Treating pbs With EMDR: a Pilot Study

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Background: The aim of this research was to challenge the use of EMDR - Eye Movement Desensitization and Reprocessing - therapy in the treatment of the phantom breast syndrome. Methods: Thirteen patients agreed to participate in this study and were treated by EMDR therapy, focusing on two target types: traumatic events related to disease experience and phantom breast sensation. Quantitative evaluations were conducted before the first session, just after the last session and as a follow-up three and six months after. Intensity of the pain and intensity of the sensation were measured, as well as Post-Traumatic Stress Disorder, anxiety and depression. Findings: Results show significant effectiveness of EMDR therapy on all quantitative measures, but also show that EMDR approach can be an encouraging, non-invasive and relatively short strategy. Discussion: While these results need to be completed by other studies covering a larger population and the use of a control group, they are still encouraging because they suggest that a psychological treatment based on EMDR techniques and adapted to the specificity of phantom breast syndrome could be effective in bringing relief to patients.

Normative Beliefs, Self-determination and Alcohol use Among Slovak University Students: Slice Study

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Background: The aim of the study is to investigate the contributions of normative beliefs (NB) and self-determination (awareness of self and perceived choice) (SD) on Slovak university students' alcohol use (AU). Methods: The data were collected online from 814 university students (75.22% females; M=19.61; SD=1.42), who filled in the AUDIT-C, items of NB and self-determination scale. T-tests and linear regression were used for data analysis. Findings: Gender differences were found in AU. Males had a higher level of AU. Further analyses were conducted separately by gender. Linear models were statistically significant and explained 14.1% and 14.3% of the variance in males' and females' AU respectively. A higher level of AU was associated with (1) a higher level of NB for males and females and (2) lower awareness for males. Discussion: The findings showed gender differences in the contribution of variables to AU. The results are relevant for improving intervention effectiveness by focusing on (1) the development of awareness of self (it is a precursor of additional competences which closely relate to AU) and (2) correcting normative beliefs regarding the prevalence of AU.

Association Between Risky Behaviors and Time Perspective in University Students

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Many young people are involved in risky behaviors which are related to immediate or long term negative health consequences and can have adverse effect on the overall development and well-being of youth (Boyer, 2006; Gruber, 2000). In order to prevent risky behavior we have to know the factors that increase the likelihood of this behavior. One psychological variable that might explain and predict risky behavior is time perspective (Adams, Nettle, 2009; Crocket, Weinman, 2009; Zimbardo, Boyd, 1999). The aim of our study - to investigate association between various forms of risky behaviors and time perspective in University students. 664 university students from 8 Universities in Lithuania participated in the survey. Students' mean age was 20,4 years (SD = 2,2). 76% female, 24% - male. We used specially designed questionnaire and Time Perspective Inventory (Zimbardo, 1988). The results revealed, that drug use, 6 drinks per one time, smoking, driving under the influence of alcohol, not using seat belts, writing SMS while driving, risky sports, sex without condom were related to hedonic present time perspective. Our research

demonstrates, that time perspective is an important factor in understanding risky behavior and can be explored in the prevention and intervention context.

Co-occurrence of Food Sensitivities and Psychological Disorders in Australian Children.

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This paper presents findings from a larger study of the psychosocial implications of living with a chronic food sensitivity. Participants were targeted through membership of food related illness support groups, and parent reports were gathered for 1316 Australian children aged 0-18 (M= 7.3 years). Almost half (46%, n=594) were reported to have a food sensitivity (food allergy or food intolerance), with 80% (n=450) having received a professional medical diagnosis. A significantly higher proportion of those children also had a diagnosed psychological condition compared to the children without food sensitivities, and at rates much higher than Australian prevalence data. This indicates that a child with a food sensitivity is more likely to also have significant psychological needs. Children with a medically diagnosed food sensitivity were 4 times more likely to have Asperger Syndrome, 4 times more likely to have Dyslexia, 3 times more likely to have Depression or Anxiety, and 4 times more likely to have ADHD. Acknowledgement of the potential complexity of these conditions will promote more effective management of the psychosocial health of these children and their families.

The Heart Rate Variability of Primary School Children on the Recollection of Punishment and Reward

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The goal of this research was to determine the effect of the system of reward and punishment used in the family on the child through the study of their heart rate variability. 119 children from two schools in Saint-Petersburg took part in this experiment. The children's heart rates were monitored while they were sitting and answering questions about punishment and reward in their families. After comparing the results, we discovered the following pattern: the children's experiences associated with the system of punishment, had almost no reflection in their cardio, on the contrary the experiences of reward significantly affected their cardio. Thus we came to the conclusion that the reward system used in the family has a significant impact on the characteristics of cardio children under punishment. In all cases, the evidence suggests that the maximum variation of cardio while rewarding was marked in cases when a child reports tactile encouragement, and the minimum - in case where a child failed to answer. At the same time in punishing the opposite is true: if the child is encouraged to be tactile, there will be more pronounced effect on the sympathetic pacemaker in the punishment. Therefore, the closer a child is with a parent, the more painfully he will experience the punishment. But if the child receives no encouragement, we can see stronger sympathetic influence in connection with encouragement and parasympathetic influence with punishment. Consequently, the reward system is reflected with the cardio activity when a child recalls reward and punishment situation.

Discomfort in the TEACHERS` Professional WELL/BEING

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The contribution presents the main sources of potential stress in the teaching profession and discusses the elimination of these factors in favour of improving the experience of subjective well-being of teachers. Research data are derived from structured interviews with teachers and from the answers on the questionnaire focused on situations that could be described as stressful and dealt by a teacher on a daily basis. Respondents were 27 teachers. The answers in the interviews and questionnaires were processed by qualitative analysis. Research has found that a major source of stress is in our group referred to psychological stress, which is mainly due to troublesome pupils, unappreciated work of teachers and parents' attitude towards school. In coping with stressful situations, the most frequently used are positive strategies for finding social support.

The Secret to a Good Night's Sleep: the Role of Psychological Need Satisfaction Examined.

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Background: While several studies have identified psychological predictors of sleep, most of the available body of work is lacking a strong theoretical basis. The present study explored the association between the satisfaction of the basic psychological needs for autonomy, competence and relatedness, as defined within the Self-Determination Theory, and subjective measures of sleep in

a non-clinical population. Secondly, we explored whether need satisfaction would account for the relation between mindfulness and financial strain and sleep outcomes. Methods: Adult participants (N = 215, 61% female; Mean age = 31) completed a questionnaire assessing psychological need satisfaction, mindfulness, financial strain and sleep outcomes. Findings: The results indicated that psychological need satisfaction related to better sleep quality and more adaptive daytime functioning but was only minimally associated with sleep quantity. Finally, mindfulness and financial strain related, respectively, positively and negatively to sleep quality through need satisfaction, suggesting that need satisfaction represents a critical explanatory mechanism. Discussion: These results suggest that the satisfaction of one's psychological needs is implicated in the adequate regulation and satisfaction of the physiological need for sleep.

Forgive or not the Abuser? Forgiveness Among Women Victims of Domestic Violence

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Background: Domestic violence is frequently studied, yet, questions concerning its causes and consequences still remain to be elucidated. Previous findings suggest that the degree to which women are willing to forgive their abuser plays a significant role in their intention to remain in a relationship. This study employed the Functional Theory of Cognition to address this matter. Methods: 100 female victims expressed their willingness to forgive an abuser while judging 48 scenarios. Six between-subject factors were studied: couple commitment, aggression context, type of abuse, the abused woman's response, recurrence of the abuse and presence of apologies. Results: factorial ANOVAS evidenced a significant effect of four factors: type of abuse, the abused woman's reaction, recurrence of the abuse and presence of apologies. A cluster analysis evidenced three groups of participants: those that never forgive, those that always forgive and those that forgive while considering the same factors as the total sample. Discussion: Findings contribute to the understanding of domestic violence victims' decision making processes which can be crucial for their health and well-being.

Information Needs and Psychological Factors Among Patients With Coronaropathy

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Background: Studies on chronic diseases have underlined the need for personalized healthcare, taking into account patients' characteristics and needs to support proactive health management. Our study aimed to explore the priorities and the correlates of information needs among patients with coronaropathy. Method: 357 patients with acute myocardial infarction or acute coronary syndrome completed an assessment questionnaire. Descriptive analyses were conducted to identify information needs; path analysis were conducted to explore the relationship between needs and psychological factors. Findings: The key information need was for a full understanding of the disease. Positive coping strategies were positively associated with need for information on pharmacological treatment and pathology while negative association were found with information on distress management; non adaptive coping strategies were positively related to distress management information. Anxiety was positively associated with information on distress management and risks and complications. Discussion: The comprehension of patients' information needs and correlates could strongly improve the quality of disease management.

The Impact of Social Support on Quality of Life and Emotional Distress of HIV-positive People

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The HIV infection impacts the quality of life of affected people, who can sometimes present negatives feelings. Some psychosocial aspects can influence it. In this research, we had attempted to see the impact of social support on their quality of life and their emotional distress, with a comparative study between HIV positive persons and HIV negative. A questionnaire (composed by the WHOQOL-HIV Bref/WHOQOL Bref, the HADS and the SQQ6) was completed by a sample of 119 persons (67 HIV-positive persons and 52 HIV-negative). The results show that social support had mainly an influence on the social relationship quality of life of our participants, but not on the emotional distress. It also point out a difference regarding physical, psychological, independent and social relationship quality of life and the presence of anxiety and depression disadvantaging HIV-positive persons when compared to healthy people. These results suggest the development of interventions with relatives could improve the quality of life of people living with HIV and as well as researches on the impact of social support.

Mind set and Effort in Restoration of Life Roles in Post-traumatic Conditions

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Higher levels of negative cognition and emotions, and indications of poor effort will have poorer outcomes in contrast to those who are able to mobilize their "resources" at the beginning of treatment. Over 100 individuals who suffered motor vehicle traumas or industrial accidents were examined at the onset and the end of psychological treatment. Salmon Rehabilitation Checklist was used to identify priority of the social roles along with Resourcefulness for Recovery Inventory-Revised. As an outcome measure the Rehabilitation Survey of problems and Coping was used to assess self-reported changes in the level of disability and improvement in coping. Effort measures included Test of Memory Malingering, Computerized Assessment of Response Bias and Psycho-assessment. Binary logistic regression revealed that better coping and lower social disability were strongly associated with an initial focus on personal resourcefulness and indications of adequate effort. In conclusion, it is essential in order to maximize psycho-social outcomes in recovery from trauma that both resourcefulness and effort be initially assessed and addressed in treatment.

Life-satisfaction and Resilience of University Students

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Our research aim was the exploration of relation between life-satisfaction and resilience. We worked with specific definition of life-satisfaction by Fahrenberg et al. (2001) and the Concept of resilience which is the subject of interest of various authors (e.g. Conner, 1993; Grotberg, 1996; Goldstein, Brooks, 2005). Our research methods were Resilience Scale (Wagnild, Young, 1993) and Life Satisfaction Questionnaire (Fahrenberg, Myrtek, Schumacher, Brähler, 2001) which consists of ten sub-scales: health, job and occupation, financial situation, free time, marriage and partnership, relation to own children, satisfaction with oneself, sexuality, friends and acquaintances, living. The research sample consisted of 200 university students with average age of 22.2 years, male-female ratio of 34:166. In the first analysis stage we created two groups characteristic by different resilience levels – one having high level of resilience and the other one having a low level of resilience. We subsequently analysed the life-satisfaction in these two groups. We discovered that students with high level of resilience possess significantly higher life-satisfaction ($p < 0.05$), satisfaction with hobbies ($p < 0.01$), with school ($p < 0.01$) and with health ($p < 0.05$). We haven't discovered significant differences in other life-satisfaction variables. The results show that courage and hope in difficult life situations (which are the bases of resilience) are the sources aiding to life-satisfaction in subjectively important areas.

Teachers' Autonomy Support and Students' Motivation and Intention of Preventing H1N1 Influenza

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Background: This study, using a quasi-experimental design, examined the effect of teachers' autonomy support on students' motivation and intention of wearing facemasks during an H1N1 pandemic situation. **Methods:** Participants (705 university students from China) were randomly divided into two groups before receiving hypothetical scenarios about an H1N1 pandemic. In the scenario, the teachers asked them to wear facemasks in the classroom, by an autonomy supportive manner (e.g., care, support, and the rationale) for group 1 and by a controlling style (e.g., punishment) for group 2. All participants responded to the items of autonomy support from the teacher, motivation and intention of wearing facemasks in the classroom according to the given scenario. **Findings:** The autonomy-supportive group reported higher perceived autonomy support and self-determined motivation of facemask wearing in the classroom than the controlling group. Self-determined motivation was a positive predictor of behavioural intention. **Discussion:** For the prevention of infectious diseases, health messages presented in an autonomy supportive style might be more effective than using controlling or punitive methods.

The Optimal Cut-off Point of the Children's Eating Attitudes Test (ChEAT-26) Among a Prepubertal Population in Taiwan: a Primary-school-based Study

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Background: It is proposed that for each population a culturally appropriate cut-off point should be defined when using scales or questionnaires in quantitative cross-cultural research. The purpose of this study was to identify the best cut-off point of the Children's Eating Attitudes Test (ChEAT) in a Taiwanese prepubertal population. **Methods:** A two-stage design for the recruitment of the participants was used. During the first stage, fifth- and sixth-graders from three elementary schools in Taiwan were

purposely selected, and a total of 1,195 valid questionnaires were obtained using the ChEAT. During the second stage, 280 students were chosen using a stratified random sampling method; among them, 205 students received a diagnostic interview for any eating disorder. The differences between the clinical diagnoses and the ChEAT scores of all study samples were compared to determine the best cut-off point. Results. Using the psychiatrist's clinical diagnosis as the golden standard, it was found that when the cut-off point was set at 21.5, the ChEAT yielded the highest discriminant value with the area under the curve (AUC-ROC) of 0.723, showing good sensitivity and specificity. Conclusions. The optimal cut-off point for the ChEAT among prepubertal students in Taiwan was 21.5. Limitations of this present study and suggestions for future research were also addressed.

Exploring Healthcare Professionals' Personal Models About Psoriasis: 'we Understand but we Forget it'

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Background Psoriasis is a long-term condition associated with significant psychological and physical disability. Illness beliefs or 'personal models' underpin patients' mood, self-management, and healthcare seeking behaviours but little is known about health professionals' understanding of psoriasis and how this informs clinical decision making. We examined health professionals' personal models about psoriasis. **Method** In-depth interviews were conducted with 23 practitioners managing people with psoriasis. Analysis was informed by the Common Sense Model, and principles of Framework Analysis. **Findings** Practitioners often held incongruent personal models about psoriasis; while commonly aware of the condition's complexity and long-term nature, they described more linear and narrowly focused approaches to management and acute skin-focused management strategies. **Conclusions** Practitioners' understanding of psoriasis conflicts with their reported management of the condition. Addressing practitioners' personal models of psoriasis may address the current mismatch between understanding and practice.

The „Rauchfrei App“ – a Support for Smoking Cessation on the Smart Phone

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¹Social insurance companies, the federal states, the ministry of health, NÖGKK, "Rauchfrei Telefon"

Without professional help only every 10th smoker, who wants to stop smoking, reaches long term – sucession in beeing smoke free. Beside therapeutical treatment programms, variuos self help materials and SMS support services, applications for smart phones are a new and promising way to offer support in stop smoking. Especially target groups, who do not want to attend face to face programms might be adressed by cost free applications. The „Rauchfrei App“, 2014 developed by psychologists of the „Rauchfrei Telefon“ and „Co;des“ offers well grounded support to get smoke free. The programm is developed on evidence based therapy programs. Experiences and evaluations of existing applications for tobacco cessations were taken into consideration. The application emphasises the preparation, the implementation and the maintenance of tobacco abstinence as well as the relapse prevention. It considers the personal motivation to stop smoking as well as high risk situations and offers personalised tips and messages in the process of changing the smoking behaviour into the non smoking behaviour. The „Rauchfrei App“ works in close cooperation with the „Rauchfrei Telefon“ and the homepage www.rauchfrei.at, but can be used independently from the phone counselling.

Promoting the Avoidance of High-calorie Snacks: the Role of Temporal Message Framing and Eating Self-efficacy

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Background: Messages framing outcomes of healthy behaviours as occurring 'every day' vs. 'every year' can influence the temporal proximity and perceived likelihood of these outcomes. However, it is not known how pre-existing beliefs such as confidence in one's ability to perform health-related behaviour interacts with such messages. **Objectives:** The purpose of this research was to investigate whether eating self-efficacy moderates the effect of temporal framing (day-frame vs. year-frame) on snacking behaviour. **Methods:** Participants (N = 95) completed the short-form of the Weight Efficacy Lifestyle Questionnaire (WEL-SF) and read either a day-framed or year-framed message about the health benefits associated with avoiding snacking. Consumption of snacks was reported 7-days later. **Results:** For those with low levels of eating self-efficacy (WEL-SF score < 4.3 on a 7-point response scale), the year-framed message was associated with lower levels of snacking than the day-framed message. **Conclusions:** The current research identifies a key role for eating self-efficacy in shaping recipients' responses to temporally framed messages about the health benefits associated with the avoidance of snacking.

Health-risk Behaviors Among Students of University of Zadar

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Background: The aim of the study was to determine the prevalence of risk-health behaviors among students of University of Zadar in order to identify potential student risk groups for educational health programs. **Methods:** Survey comprised a sample of 500 students of University of Zadar aged 18-35. A questionnaire was designed to examine five areas of risk-health behaviors: eating habits, physical activity, cigarette smoking, drinking alcohol and risk sexual behaviors. **Findings:** 48% of female and 23% of male students do not participate in any physical activity and in the same time 35% of females and 21% of males spend 4 and more hours a day in front of the computer. 60% of students are smoking cigarettes and 80% of them have drunk alcohol at least once in the last 30 days. 75% percent of females have entered into sexual relationships, but 41% of them have never visited gynecologist. **Discussion:** The findings of the present study suggest the need for health promotion programs with special emphasis on importance of regular physical activity and taking care of reproductive health.

Caring a Patient in a Vegetative State: Increasing Well-being by Using Different Coping Strategies

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Background: Family caregivers of patients in a vegetative state (VS) can experience high levels of distress and difficulty in facing grief. Our aim was to explore how the health status of VS caregivers changed in relation to the different coping strategies they used. **Methods:** The Anxiety and Depression Short Scale, the Prolonged Grief 12, Family Strain Questionnaire, and the Coping Orientations to Problem Experiences were used with 61 caregivers of VS patients hospitalized in specialized units in Italy. A hierarchical cluster analysis was carried out to group the data. **Findings:** Two groups of caregivers were found. The first group was characterized by lower levels of anxiety, depression, family strain, and prolonged grief. The main coping strategies used by this group were Social Support, Positive Attitude, and Problem Oriented. The second group showed higher levels of anxiety, depression, family strain, and prolonged grief, and used the Avoidance strategy more than the first group. **Discussion:** The health status of family caregivers of VS patients changes according to the different coping strategies adopted. Helping these caregivers to adopt more effective coping strategies may increase their well-being.

Intergenerational Relations Between Older Parents and Their Adult Children: Effects on Subjective Well-being

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In the near future, many western nations will be confronted with specific challenges regarding ageing populations and their physical and psychological well-being. Ageing parents might experience a greater need for intergenerational support and solidarity, especially in the context of migration. The acculturation process may, however, entail an increased intergenerational gap possibly leading to conflicts and ambivalences between parents and adult children. This might in turn diminish their well-being. Here, a cross-cultural comparison is envisaged between Luxemburgish and Portuguese triads of adult children and their older parents living in Luxembourg (N = 120). Participants will report on their mutual relationship quality and subjective well-being by using a standardized questionnaire. Similarities and differences in mutual expectations of family members as well as the effects of an intergenerational gap in ideas about intergenerational solidarity on relationship quality and on subjective well-being (SWB) will be examined. Results will be discussed regarding the relevance of intergenerational family relations for subjective well-being in the light of migration and ageing.

Systematic Review and Meta-analysis of Randomised Controlled Trials of Psychosocial Interventions for Cancer-Related Fatigue in Adult Post-treatment Cancer Survivors.

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There is evidence to suggest that psychosocial interventions may be effective in reducing fatigue during active treatment in cancer patients. It is still unclear how effective such interventions may be post-treatment. The Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, EMBASE, CINAHL PsycINFO, Web of Science and CancerLit were searched. RCTs were included which evaluated psychosocial interventions for fatigue in adults post cancer-treatment. One author screened titles. Two

authors independently screened the remaining abstracts for their eligibility for inclusion. The search returned 6,380 papers. Following an assessment of the abstracts approximately 24 papers remained. Two authors independently extracted data from studies using a standard data extraction form and assessed the risk of bias of the selected studies. Education and CBT were the most commonly used psychosocial interventions for this group. This review is the first to evaluate the effectiveness of psychosocial interventions for cancer-related fatigue following cancer treatment. Findings will inform the literature, as well as policy makers & stake-holders, to ameliorate fatigue in this group.

The Relationship Between Illness Representation, Coping and Metabolic Control in Adolescents With Type 1 Diabetes

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Background: To explore the role of coping in the Leventhal self regulatory model by testing whether coping styles mediate the relationship between illness representation and metabolic control (HbA1c). Specifically, we aim to establish which of the five dimensions of illness representation are most highly associated with coping strategies used by adolescents with type 1 diabetes in order to explain metabolic control. **Methods:** Seventy adolescents between 13 and 16 years of age were asked to complete the Diabetes Illness Representations Questionnaire (DIRQ) and the Kidcope. Measures of metabolic control (hemoglobin A1c) were taken from medical records. **Findings:** Perceived impact, identity, and cognitive restructuring were significant independent predictors for coping styles. Active coping predicted lower A1C levels. Multiple regression analyses indicated that coping did not mediate the association between illness representations and HbA1c. **Discussion:** Understanding the relationship between illness representation and coping styles should enhance efforts to improve diabetes outcomes in terms of metabolic control.

Can Interest and Enjoyment Help to Increase use of Internet-delivered Interventions?

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Background: Internet-delivered interventions have proved efficacious in changing people's behaviours, but the actual use of these interventions by the target group is often very low. The aim of this paper is to investigate whether arousing interest and enjoyment results in increased intervention use in an online context. **Methods:** Invitations to visit a website about Hepatitis A, B, and C virus infections (Studies 1 and 3) and the website itself (Studies 2 and 3) were manipulated to arouse interest and enjoyment. Subsequently, intention to visit the website (Study 1), clicking on the link to visit the website (Studies 2 and 3), and pages visited on the website (Study 3) were assessed. **Findings:** Arousing interest in an invitation resulted in a higher intention to visit the website (Study 1) and a higher likelihood of clicking on the link to visit the website in comparison with arousing enjoyment (Study 2). The percentage of pages visited increased when interest was aroused on the website (Study 3). **Discussion:** Arousing interest is a promising strategy to increase use of Internet-delivered interventions and potentially increase the public health impact of these interventions.

Model-based Approach to Validate a Measure for Assessing a Quality of Care in Chronic Illness Patients (FACIT-TS-PS)

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Abstract The Functional Assessment of Chronic Illness Therapy - Treatment Satisfaction Background: patient Satisfaction (FACIT-TS-PS) is a measure for assessing the quality of care and satisfaction in chronically ill patients. **Methods:** validity of the multi-dimensional structure and reliability of the FACIT-TS-PS were investigated in a sample of 431 chronically ill patients, using Confirmative Factor Analysis (CFA) and CUB models. **Results:** integrated use of CUB models and CFA resulted in an satisfactory structure, leading to confirmation of the original, reliable, six-factor structure, even with a reduction in items from 25 to 15. **Discussion:** the FACIT-TS-PS appears to be a practical instrument that is reliable and has good construct validity.

Mental Distress and Chronic Pain

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Background and aims: We present preliminary findings from a quality assurance project at an outpatient pain clinic at the University Hospital of North Norway, identifying key factors associated with mental distress. **Methods:** Patients admitted 2010 - 2012 (n= 300) completed measures of pain (Numerical Rating Scale NRS), number of pain locations, sleep disturbance, mental distress (Hopkins Symptom Checklist HSCL-25), catastrophizing (Coping Strategies Questionnaire CSQ) and demographics.

Results: Mean age was 45 (15-87), 59 % female, 70 % not working. Mean pain intensity 8.49 (SD = 5.89), 68% > 5 locations of pain, and 37% >10 years of pain. Mean HSCL was 1.99 (SD = 0.59), 62% > cut-off (1.75). 34% reported severe sleep problems. 47% reported that personal economy was inflicted by their health. The mean of the CSQ items was 3.8 (SD 1.4). In a stepwise regression analysis, mental distress was predicted by catastrophizing, sleep disturbance, personal economy inflicted by health, and number of pain locations ($F(291) = 42.3, p=.000$). The model explained 37% of the variance. Conclusion: Mental distress is frequent among patients with chronic pain, and associated with a range of psychosocial factors. The effect of pain intensity was mediated by the other factors in the regression model. The results support a multidisciplinary treatment of chronic pain, including an awareness of psychosocial issues.

Health Self-perception and Psychosocial Adjustment Indicators

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Previous findings highlight that health self-perception depends directly on the subjective evaluation that individuals give to their experience of illness, as well as of their living experiences (Tap & Vasconcelos, 2004). In this field, psychosocial adjustment indicators as social integration, self-esteem and stress may assume special relevance on individual's health and illness self-evaluation. The purpose of this work is to examine the relationship between health self-perception and age, gender and psychological adjustment indicators. This is a quantitative study conducted in 448 patients, from 18 to 85 years old, recruited from fourteen Portuguese health-care centers. For data gathering it was applied a questionnaire to access background variables, health self-perception (measured by a scale from 1 to 20), and psychosocial adjustment indicators (e.g. social integration, self-esteem and stress). Findings suggest that the score of health self-perception decreases with age and tends to be lower in women. Results also show that health self-perception is positively associated with social integration and self-esteem, and negatively associated stress. Globally, this study indicates that adjustment feelings play a role in the way that patients experience and cope with their own state of health.

Toward a Socio-cultural Health Psychology: Taking Human Activity Into Consideration

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Several authors in critical health psychology have underlined the need to develop models of psychological life within qualitative research that are not limited to mere descriptions of health or illness. This communication presents methodological basis in order to overcome such descriptive level by proposing a socio-cultural approach. First, we analyse the dominant tendency in psychology consisting on defining the constructivist paradigm and qualitative research as impressionist, vague and subjective, that is, "non scientific". We claim that qualitative research may be objective, clear and precise while succeeding to consider psychological processes within their socio-cultural context. We make "indirect methods" a major focus, as able to capture psychological processes at stake in health and illness by interpreting their "traces". Moreover, we illustrate a variety of methods used in psychology to study the structuring role of culture in this process. We conclude by discussing the possibility to build complex psychological concepts regardless immediate experience.

Sexual Behavior of men who Have sex With Men: Comparison of Three Data Sources

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Background: MSM are a high-risk group, and therefore target of much research investigating risk factors related to having STI/HIV. Our primary objective was to compare findings of three data sources regarding differences in demographics, risk factors, STI/HIV and their relations. Methods: Dutch data available in 2010 from EMIS, an international internet survey, Schorer Monitor, a Dutch internet survey, as well as data from 3800 STI-clinic visits were combined into one dataset. Findings: Risk factors were similar in the databases, with besides some actual differences, some differences caused by question phrasing. We analyzed three outcomes, having STI or HIV, and having never tested for HIV. Risk factors include drug use (e.g., combinations of drugs increased the risk), age, residence, and number of partners. Notably, ethnicity had no effect. Data from STI-clinics differed, possibly as it involves diagnosed instead of self-reported STI/HIV. Discussion: This research sheds light on the comparability of different initiatives investigating MSM, consequences of phrasing questions differently, and ultimately differences in conclusions drawn based on these initiatives.

How to Reduce the Psychological Impact of the Announcement of Allogeneic Bone Marrow Transplant in Hematologic Malignancy ?

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Background: Breaking bad news to patients with hematologic malignancy produce a traumatic outcome on the patient's quality of life. This study focused on the announcement of allogeneic bone marrow transplant (ABMT) and on the real-life experience of patients and haematologists about this event in order to reduce the psychic impact of this medical care. Methods: participants: 5 patients and 4 haematologists; data collection: semi-directive interviews; data analysis: Grounded Theory and clinical analysis (qualitative approach). Find.: themes developed: 1. Patients: Patients' real-life experience when receiving the diagnosis, hearing the possibility of a transplant and the risk of recurrences; Perception of its relationship with the doctor, communication elements and content of the announcements; Beliefs, psychic resistances, coping strategies and anguishes about ABMT /2. Haematologists: announcement of hematologic malignancies diagnosis and recurrences; presentation of the ABMT;... Discuss.: Haematologists must explore patients' beliefs and anguishes about the transplant and patients' use of defence mechanisms and coping strategies, to reduce their anxiety before and after the surgery.

Meta-analytic Review of Serious Games for Healthy Lifestyle Adoption: Comparison of Single Level and Multilevel Programs

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Background. Multilevel programs (containing individual and environmental influences) are often documented as most effective in health promotion. This study examines whether serious games which are part of a multilevel program are more effective than games focusing only on the individual. Methods. A meta-analysis was conducted of serious games for health promotion published before Aug 2013. Random effects model analyses were performed (Hedges' g). Results. Sixty-seven studies were included, of which a minority (29%) were multilevel games. Both single level ($g=.391$) and multilevel games ($g=.215$) were effective, but surprisingly, single level games were more effective than multilevel games. However, when examining behavioral determinants separately, only for attitudes ($Q(1)=10.553$, $p<.01$ -note: small sample) single level games were significantly more effective than multilevel programs. No long-term differences were significant. Conclusions. Both single level and multilevel serious games are effective for health promotion. When targeting attitudes, single level games may be preferred. However, few multilevel serious games to date exist and more research on multilevel games is needed.

Depression in Patients With Peripheral Arterial Disease and Relationships With Social Support and Coping

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Background: The objective of the study was to assess the presence of depressive symptoms at patients with peripheral arterial disease (PAD) and to identify potential psychosocial factors (such as social support and coping mechanisms) that may help these patients to deal with the disease. Methods: The design of the study was transversal and included 37 patients with PAD with critical ischemia (32 men, 5 women, mean age= 62,41). They were administered Center for Epidemiologic Studies Depression Scale, Duke-UNC Functional Social Support Questionnaire and COPE inventory. Findings: Depressive symptoms were found at 21,6 % of the patients. There were low scores of perceived social support at 32,4% of the patients. Depression correlated ($p<.001$) positively with mental disengagement ($r=.791$), denial ($r=.672$), behavioral disengagement ($r=.760$), restraint ($r=.0753$) and negatively with social support ($r= -.879$) and positive reinterpretation ($r=-.844$), active coping ($r=-.776$), use of emotional support ($r=-.624$). Discussion: Recognition and evaluation for depression in patients with PAD followed by identifying psychosocial interventions may be useful in improving outcomes of these patients.

Understanding Weight Loss in Obese Adults

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Background: Obesity is a global problem, however, behaviour change to counter this problem is not well understood. This study sought to explore this in a group of NHS patients who were obese or who had been obese but who had lost a substantial amount of weight within the last 3 years (even if they had regained). Method: After receiving NHS ethical approval this study recruited 11 participants, data was collected by means of semi-structure interviews and a 7-day daily diary. Thematic analysis was used to

analyse the data. Findings: Of the 11 participants, 3 had not been successful at losing weight and 8 had been successful (5 regained). Themes developed from the analysis included 'what was helpful' (the doctor's approach, e.g. a 'shock tactic'), weight loss techniques (e.g. motivation and knowledge), the successful state of mind (e.g. perception of body size), and the support (positive and negative) received from friends and family. Discussion: The results have implications for health professionals in identifying factors important for this group for interventions. The results suggest that tackling knowledge and social norms and using 'shock tactics' may be effective.

Body Satisfaction in Muslim Adolescents With Western and NON-WESTERN Dress Preferences

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The aim of this study was to investigate body satisfaction and readiness to accept Western standards of beauty (thin-ideal) among Muslim female adolescents with different religious beliefs, manifested in different dress preferences (Western or non-Western). The sample consisted of 150 high school students. All students were Muslim, but half of them accept Western dress preferences, and other half follow traditional way of dressing wearing non-Western clothing and a head veil (hijab). The instruments were: Contour Drawing Rating Scale for measuring body satisfaction and SATAQ-3 for measuring sociocultural attitudes towards body appearance. We also collect data on Body Mass Index and existence of diet regime. Muslim adolescents wearing non-Western clothing and a head veil were significantly less likely to express drive for thinness or pressure to attain a thin-ideal standard of beauty than adolescents wearing Western dress style ($t = -5,761$; $p < 0,001$). They are also more satisfied with their body shape, than adolescents accepting Western dress standards. ($t = 3,029$; $p < 0,005$). The results suggest the significance of Western cultural pressures in existence of body dissatisfaction and drive for thinness in adolescents. It is well known that such pressures could be the important risk factor for developing of eating disorders. Key words: Muslim religion, body image, dress preferences

Influence of Emotional Factors on the Report of Somatic Symptoms in Patients on Haemodialysis

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Background: The study aimed to compare somatic symptoms between patients undergoing hemodialysis and a healthy control group and to investigate the relationship of psychological variables (i.e. anxiety, depression, social support, self-efficacy, coping strategies) with the severity of these complaints. Method: Forty-six patients and 30 matched healthy controls participated. Data analysis was based on multiple regression models. Findings: Patients reported markedly elevated somatic symptoms, especially immunological, cardiovascular, gastrointestinal and allergic complaints. Anxiety turned out to be the main predictor of most symptom categories, explaining up to 24.9% of variance in symptom severity. Depression, worry and passive coping strategies (helplessness, fatalisms) were furthermore associated with higher symptom levels. Active coping strategies, self-efficacy and social support were associated with lower symptom severity. Discussion: The results suggest that emotional factors explain some of the symptoms without clear etiology in the renal patient and may help developing psychological interventions aiming to reduce somatic symptoms in patients undergoing chronic dialysis.

A Qualitative Approach to Psychological Determinant of the "patient Delay" for Head and Neck Cancers

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Background: Reducing the time between the onset of the first symptoms of cancer and the first consultation with a doctor (patient delay) is essential to improve the vital prognosis and quality of life of patients. Understanding which factors mostly determine the patient delay seems to be essential for optimization of preventive messages in public health. The main objective of this qualitative study is to assess whether, in head and neck cancer, patient delay is linked to socio-cognitive and emotional factors, in addition to previously known factors. Methods: 15 semi-directive interviews of head and neck patient's cancers were conducted to identify subjective perceptions concerning the symptoms and the medical appointment, and subjective perceptions of health, the disease and treatments. Findings: Several themes were obtained such as: symptoms interpretation; health habits; relatives support; and coping strategies. For instance, we found quite pro-active approach to health ("I do not wait to consult") and more passive visions ("we'll see later"). Discussion: The identification of these different factors could be useful to offer some interventions and prevention campaigns strategies.

Using Surveys of Patients Experiences and Satisfaction With Cystic Fibrosis Care for Quality

Improvement

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Background: Quality management programmes were implemented at the CF centre Innsbruck more than ten years ago, including regular ISO 9001:2000 certificates. To account for the patients' opinion on our services, we prospectively evaluated the experience and satisfaction of parents, CF adults, and adolescents and used the results for quality improvement. **Methods:** In 2009, we participated in a pilot study to develop a CF specific patient's experience and satisfaction questionnaire. Two years later, a nationwide survey was performed in Germany using the same instrument. Our centre also took part in that survey. **Findings:** In 2009 and 2011, 63 and 76 (78%) participants from IBK (both parents and adult patients) responded to the surveys. Ideal problem scores of 0%, indicating no problems for the respective topic, were reported in 2009 for 15% and 19% of all items by adults and parents, respectively. The thirteen adolescents reported more problems. After quality improvement measures had been implemented, the percentage of ideal scores increased to 32% and 48% (adults and parents) in 2011, also for adolescents better follow-up results were achieved. **Conclusion:** The CF specific questionnaire identified strengths and weaknesses of patient care " through the patients' eyes." After improving procedures, lower problem scores in the 2011 IBK survey indicated the success of certain measures.

Alcohol Awareness Survey of Parents who Have Elementary-Aged Child

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Background Prior research has suggested that parental involvement is needed for alcohol prevention program. In this research, we focus on how much knowledge dose parents has about alcohol and clarify what kinds of knowledge should be incorporated into alcohol prevention program. **Methods** 348 parents who have child aged 6 or younger completed questionnaire about knowledge related to alcohol, genetic constitution, experience to offer alcohol for their child, and ideas about the contents of alcohol prevention program. **Findings** The highest item that participants answered correctly was knowledge about acute alcohol intoxication is consequence of drinking alcohol excessively in short time, and the lowest one was about drinking alcohol causes pancreatitis and diabetes. 1.1 % of participants answered that they have ever offered alcohol to their child, and the main ideas they expects for alcohol prevention program for children was to teach bad influence of alcohol on children body. **Discussion** This result indicated that many parents has insufficiency knowledge about the effects of alcohol on human health and alcohol prevention program should be include this type of knowledge for the parents.

Factors Influencing the Quality of Life of Patients With Multiple Sclerosis (MS)

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Background: To investigate the influence of a number of psychosocial and biological variables related to the quality of life in MS patients. **Methods:** The sample consisted of 49 MS patients (30.6 % men, mean age 39.5, SD 9.6), who were being treated in two hospitals in Girona (Spain) and agreed to take part in an 18 month long prospective cohort study. The number of relapses and pseudo-relapses, the degree of disability, the level of anxiety and depression, perceived stress, social support and controllability were measured at baseline and every 6 months. Demographic variables, the number of new brain lesions and quality of life were measured at the beginning and at the end of the study. **Findings:** Gender, the level of anxiety and depression and the number of pseudo-relapses were the variables most able to predict a reduction in the perceived quality of life after 18 months ($R^2 = 0.80$ and $p < 0.05$). Being female, having had more pseudo-relapses and higher levels of anxiety and depression predicted a lower perceived quality of life. **Discussion:** These results identify the role a psychologist may play in improving patients' perceived quality of life of, since three of the four significant factors were psychological. The results also highlight the specific needs of female MS patients.

Psychosocial Resources and Situational Aspects Related With Emergency Patients' Emotional Distress and Self-rated Health

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Background: We studied to what degree psychosocial resources, demographic variables and situational aspects are related with patients' emotional distress and self-rated health at emergency department (ED). **Methods:** This is an observational cohort study including 101 medical ED patients ($M = 68.7$ years, males 67.07%) from a Swiss tertiary care hospital. Emotional distress was assessed using a short form of the Positive and Negative Affect Schedule (PANAS). Self-rated health was measured with a visual analogue scale. Further variables assessed with standardized questionnaires were personality (BFI-10), resilience (RS-11) and self-efficacy (ASKU). **Findings:** Results from regression analysis showed that emotional distress was significantly correlated with patients' knowledge of diagnosis ($r_s = .21, p < .05$) and neuroticism ($r_s = .27, p < .05$). In turn, conscientiousness ($r_s = .29, p = .01$), resilience ($r_s = .29, p < .05$), age ($r_s = -.22, p < .05$) and gender ($r_s = .31, p < .01$) were related with self-rated health. **Discussion:** Results are discussed referring to a resource-oriented model of distress-management, and in view of designing prevention and intervention strategies.

Childhood Family Experiences and Close Relationships and Loneliness in Adolescence: how They Relate?

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Background: According to attachment theory, romantic and sexual involvement and commitment to a steady partner mark the transition to adulthood aimed at procreation and transfer of well-being to next generation. The paper explores how quality of relationships with parents - in terms of attachment to parents, stressful childhood experiences and family ties - influences satisfaction in romantic dyads and social loneliness in adolescence - measured in terms of relationships with friends. **Methods:** From the online Outcome of Adolescence Survey, completed by Romanian students on the XIth grade in 2012-13, only respondents with a romantic partner and who lived with parents until their 15 were selected. Two logistic regression models were applied to 1259 students, controlling for gender, age-group and economic status of family. **Findings:** According to first logistic regression, relationships with parents in childhood appeared unrelated with satisfaction in romantic dyad in adolescence. However, males reported significantly less satisfaction in partnership than females. Instead, the second regression model proved that low attachment to parents and material deprivation almost halved the chance to avoid loneliness. In addition, high level of stress in family significantly increased the chance of relying on the social network of friends. Younger adolescents were more likely to rely on friends. Family ties during childhood seemed unrelated with the quality of romantic relationship or with the level of social loneliness in adolescence. **Discussion:** This study is valuable as our trial to capture a clearer picture of the contribution of family experiences in childhood on the quality of romantic dyads and of friendship networks among nowadays adolescents is a novelty in the Romanian literature on adolescents.

Perception of Health Evolution Within Occupational Activities for Nurses

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In occupational health psychology, perception of health is studied mainly through single time data collection. However, perception of health is a psychological developmental experience linked to the unpredictable professional context that may be revealed by longitudinal methods. Semi-structured interviews conducted with 7 female nurses from 28 to 50 years old in a 2-steps design explore the evolution of health perception connected to occupational health. Using phenomenological psychology data analysis (Giorgi), results from thematic content analysis of the second interviews evidence that participants debrief their health perception evolution between T1 and T2 as a positive experience influencing their life in a healthy way. Self-awareness of endangering situations and development of systematic safer work behaviours, disclosure of unknown resources, collective team supporting strategies or decision/possibility of professional change are themes connected positively with a perception of better health and motivation. In terms of prevention of occupational disease and clinical interventions, these results advocate in favour of longitudinal approaches in occupational health psychology.

Delayed Recovery of Systolic Blood Pressure After Orthostasis Predicts Cognitive Decline in a Large Sample of Community-dwelling Older Adults.

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Background: With aging, impairments in cardiovascular and autonomic nervous system function render older adults more vulnerable to orthostatic hypotension, increasing the risk of cerebral hypoperfusion which may potentially accelerate cognitive decline. The current study investigated the relationship between orthostatic blood pressure (BP) and cognitive decline in a large

sample of older adults. Methods: Data were collected during the first and second waves of The Irish Longitudinal Study on Ageing (TILDA), which took place in 2009-2011 and 2012-2013 respectively. 4,134 adults aged 50 and older were included in the current analysis. Orthostatic BP was measured by beat-to-beat digital plethysmography. Cognitive function was assessed using the Mini Mental State Exam (MMSE) at baseline and follow-up. A multivariate regression model was fitted, adjusting for demographics, depression, health behaviours, exercise, BMI, cholesterol, and medications. Findings: Delayed systolic BP recovery from orthostasis at baseline was associated with a decrease in MMSE score at follow-up (coeff: 0.53, $p < .01$). Discussion: The failure to return BP to baseline rapidly after standing may impair cerebral blood flow and adversely affect cognition. Further longitudinal study will determine whether these individuals have a greater risk of transitioning to mild cognitive impairment/dementia.

Factors Associated With Emotional Eating and BMI: a sem Modelling Approach

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Background: There is evidence to suggest that childhood environmental factors play an important role in the development of eating pathology and emotional eating. Few studies have addressed protective factors against emotional eating. The current study aimed to elucidate some of the processes involved. Method: 573 participants completed measures including BMI, emotional eating, remembered parenting style, attachment, attitudes towards emotional expression in childhood, and ability to observe oneself in the moment. Findings: An SEM revealed age, gender, and the ability to observe oneself in the moment as having significant direct effects on BMI and emotional eating. Attachment and remembered parenting style had indirect effects which were mediated by attitudes towards emotional expression in childhood. Discussion: Childhood environmental factors, particularly attitudes towards emotional expression, have a role in the development of emotional eating in adults. The preventative role of mindfulness-based skills, particularly those focusing on observing oneself in the moment need to be further investigated.

Preliminary Study of Psychological Factors on a Sample of Allergic Subjects

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Background: Literature and clinical practice evidence that some patients who complain about allergic symptoms do not result positive from diagnostic tests. The study aims to investigate the possible psychological variables involved. Methods: The project involved 208 subjects of the Allergology Department of San Raffaele Hospital in Milan (Italy), who filled out three questionnaires, WHOQOL (World Health Organization Quality of Life), SCL -90- R (Symptom Checklist -90 -Revised), TAS- 20 (20 -Item Toronto Alexithymia Scale). Findings: The true allergic patients represent the 78% of the sample and non-allergic 22%, while manifesting the symptoms. The non-allergic patients have more compromised scores in the scales of quality of life ($F(1)=4.91$; $p < 0.05$) (WHOQOL). They have higher values in hostility ($F(1)=16.33$; $p < 0.001$), somatization ($F(1)=4.64$; $p < 0.005$), obsessive-compulsive ($F(1)=6.05$; $p < 0.05$), interpersonal sensitivity ($F(1)=8.76$; $p < 0.005$) and depression ($F(1)=5.42$; $p < 0.05$) (SCL -90- R). Discussion: specific psychological features may influence the symptomatology reported by patients with negative allergologic test results

Validation of the Italian Version of the Parental Attitude Scale

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Background: This study focused on the validation of the Italian version of the Parental Attitude Scale (PAD). This is a 46-item questionnaire that was developed to measure parental attitudes on the basis of three dimensions: Pleasure-Displeasure, Arousal-Non arousal, Dominance-Submissiveness. Methods: 495 parents (241 males; mean age= 40.6±5.7 years) participated in the study. Dimensionality was explored using Principal Component Analysis. Findings: The three-factor solution accounted for 19.98% of the variance, and yielded poor indices for about one-third of the items. Moreover, it was largely inconsistent with the original proposed structure and difficult to interpret, suggesting the removal of 17 items. A four-factor solution for the resulting 29-item version was identified (Parenting Pleasure, Parenting Load, Parental Permissiveness, Educational Rules), explaining 30.63% of the variance. Discussion: The 29-item version of the PAD seems a more psychometrically sound measure than the original 46-item version. However, more studies are needed to achieve a comprehensive investigation of its psychometric characteristics in Italian contexts.

A Review of Instruments for Measure the Burden of Caregivers : Importance to Create and Validate a French Scale to Evaluate the Burden of asd Children Parent's.

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Background : The aim of this study was to overview scale used to evaluate the burden experienced by caregivers and their clinimetric properties from 2002 to 2012. **Methods :** A review of the literature was conducted to examine burden scales with regard to setting, caregiver population, sample size, reliability, validity, feasibility and subscales. **Findings :** The literature search resulted in 95 studies measures of caregiver outcomes, including 39 different measures of caregiver burden. While, most of the instruments measure various aspects of burden (negative personal impact, activity limitation, social strain, emotional burden, physical burden, economic aspects, etc.). Also, little is known about the reliability, validity and subscales of these measures. While five studies evaluate the burden of caregiver in the field of children, there is only one English study aiming to explore caregiving among ASD children parent's. **Discussion :** While there is a lot of scales evaluating burden of caregivers, to our knowledge, there is no French scale adapted for ASD children. It seems of primary importance to create and validate a french scale in order to better targeting burden experienced by ASD children parent's.

Development and Evaluation of an Intervention Targeting Eater Prototypes to Improve Eating Behaviour Among Adolescents

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Background: Prototype perception is an important determinant of behaviour. Intervention studies show that prototype information successfully influence behaviour or related constructs. This was found for drinking and unprotected sex. Further, evidence suggests this method to be promising in improving eating behaviour as well. The aim was thus to develop and evaluate a theory- and evidence-based intervention targeting eater prototypes. **Methods:** An RCT-study was conducted with 108 adolescents. The intervention consisted of specific information on healthy and unhealthy eater prototypes and the initiation of directed social comparison processes. Prototype information was given via Facebook profiles. Social comparison was initiated by asking participants to identify with or contrast from the healthy and unhealthy eater respectively. **Results:** The intervention was well received and could be carried out as planned. Further, it effectively changed prototype perception and eating behaviour directly and four weeks later. **Discussion:** The developed intervention proved to be feasible and effective in improving adolescents eating behaviour. It can be provided alone or integrated in larger programmes.

Mindfulness-based Metaregulative Intervention: a new way to Increase Well-being and Reduce Depression and Anxiety

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Mindfulness is defined as intentional and non-judgmental observation of all experiences in the present moment. Metacognition is similar to mindfulness. Thoughts, emotions and behavior are observed from a meta-perspective. Thus, the metacognitive subject is separated from the observed object (e.g., one's thoughts). Thoughts and emotions are attenuated by detached observation. Although the influence of dysfunctional cognitions and emotions are reduced through mindfulness-based interventions, from a metaregulative perspective it should be possible to affect one's thoughts, emotions and behavior. Thus, mindfulness-based metaregulative intervention goes one step further: thoughts, emotions and behavior should not only be observed from a meta-perspective, but also directly influenced, regulated and controlled. In addition to mindfulness-based and metacognitive techniques, people will learn to influence and modify positive cognitions and emotions. It is assumed that the mindfulness-based metaregulative intervention has positive effects on well-being and reduces depression and anxiety. The discussion is based on psychoanalytic assumptions and cognitive behavioral therapeutic approaches.

The Relationship Between Body Image and Quality of Life Among Women who Apply for Cosmetic Surgery

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Background: Women with no physical defect request cosmetic surgery to increase self-confidence and quality of life(QoL). The aim of study is to identify relationship between body image(BI) and QoL as impacted by surgery. **Methods:** BI was assessed by Multidimensional Body-Self Relations Questionnaire (MBSRQ), QoL by SF-36 scale. 80 women were divided into: Control Group (CG)-was satisfied with BI, Experimental Group1 (EG1)-was operated, ExperimentalGroup2 (EG2)-planning surgery. Pierson correlation coefficient was used for statistics. **Findings:** QoL is highest in CG, EG1 higher than EG2. The most significant differences in QoL indicate in 3 groups: EG1/EG2/CG: Emotional well-being (EWB) 52.6/41.65/73.3, Social functioning (SF) – 60/45.2/81. Significant results for MBSRQ: Appearance orientation(AO) is above norm in EG1, EG2.Body areas satisfaction(BAS)

is higher in EG1 than in EG2 but lower than average coefficient. Significant correlations are between: EG1-SF and AO($r=-0.6$), EG2-BAS and EWB($r=0.8$), ($p<0.5$) Discussion: BI and self-esteem issues persist after cosmetic surgery. The poor QoL correlates with negative BI and impacts negatively on emotions, social activity and well being.

Personality Factors, Autonomy, Religion and Risk Behaviours of First Year Slovak University Students.

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Background: This study aimed to explore the associations between personality factors, autonomy, religion and risk behaviours (RBs) among students. Methods: Six separate binary logistic regression models were built to explore associations of problematic internet use (PIU), binge drinking and smoking for boys and girls (807 students, 75% females, 19.6 mean age) with personality variables (Plasticity, Stability), autonomy (awareness of self), religion (importance & attendance). Findings: The individual models revealed that PIU was associated with Plasticity and autonomy for both genders and with Stability for boys. Binge drinking was associated with Plasticity for both genders, with importance of religion for boys and attendance for girls. Smoking was associated with Plasticity for both genders, with autonomy for boys and Stability and religious attendance for girls. Discussion: A higher level of Plasticity seems to be generally associated with RBs while Stability, autonomy and religion, although differently for each gender, is protective. This distinction may be an important aspect of prevention programs.

A Qualitative Exploration of Beliefs About Walking Exercise Therapy for Intermittent Claudication

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Background: Intermittent claudication (IC) is a debilitating leg pain caused by peripheral arterial disease. It is improved with walking exercise, but activity levels are low. An understanding of people's experience of their condition and of walking exercise may inform management strategies. Methods: Data from semi-structured interviews were explored using Framework analysis. Findings: A semi-purposive sample of 16 people (4 female) with IC was included. Three themes (subthemes) emerged: 1) Purposeful exercise is challenging (desire for clearer instructions, barriers/facilitators to walking, beliefs do not translate to behaviour); 2) Walking is an overlooked self-management opportunity (uncertainty about IC cause and treatment, walking is secondary to medical/surgical options); 3) Perceived consequences of IC are not addressed by walking (IC is benign and leg pain can be overcome, IC is serious and medical management is required). Discussion: People report uncertainty about IC and walking. Clear instructions and information on benefits of walking for general health and for IC are required. A better understanding of IC could help translate positive walking beliefs to behaviour.

The Psychological and Physiological Cost of Supporting People During Stress

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Background: Providing social support has been found to improve psychological well-being. However, little is known about the physiological consequences of providing support or whether it varies with relationship intimacy or types of social support. We investigated whether relationship intimacy (friend vs stranger) would interact with support type (active vs passive) to influence cardiovascular responses of support providers. Methods: Participants were randomly allocated to one of four conditions (stranger/active support, stranger/passive support, friend/active support and friend/passive support), and then completed a standard stress testing protocol (baseline, task) and had their blood pressure and heart rate monitored while they watched someone to a stress task. Findings: Thus far, there are no interactions between relationship intimacy or support type for psychological or cardiovascular responses. However, those providing passive, and not active, support had the greatest reductions in diastolic blood pressure while watching someone do a stress task Discussion: This suggests that it is passive support that will bring the most health benefits to the social support provider.

Associations Between Self-efficacy and Health Outcomes Among Cardiac Patients: a Systematic Review

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Background: The aim was to provide a systematic examination of the associations between self-efficacy and health outcomes

among people with cardiovascular diseases. Methods: Five databases were searched to retrieve published literature over the period of June 1988 and October 2013. Using methodology of systematic review 209 studies were identified and 28 met the inclusion criteria. Original trials included 5710 participants. Findings: Self-efficacy was positively associated with subjective and objective health outcomes, such as physical activity, diet, BMI, blood pressure, total cholesterol ratio, quality of life, self-care management behaviours, social functioning, positive emotions, and indicators of psychological well-being. Twelve out of thirteen self-efficacy enhancing interventions significantly affected health outcomes. Discussion: Higher levels of self-efficacy are related with better health status of patients with cardiovascular diseases.

Cognitive Behavioral Stress Management and Rumination With Students.

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Objective : Students in last year of psychology could have lot of stress, anxiety, rumination and reduced quality of life. Many research studies showed that CBSM (cognitive behavioral stress management) reduce stress, rumination and also enhance quality of life. This research developps CBSM technique for students. Method : A 2-days group cognitive-behavioral stress management intervention has been tested among 25 students, following them for 4 months after recruitment. This group has been compared to a control group (25 students also). Quality of life has been evaluated by questionnaire and we have also assessed change in stress (PSS) since trial enrollment, anxiety (HADS) and rumination (Mini-CERTS). Results : CBSM intervention learns to patients what is stress, coping, cognitive distortions and rational thought replacement, social support and assertiveness. Results show that intervention group has less stress, anxiety and rumination than control group. Conclusion : This intervention reduce stress, anxiety and rumination for students. We would like to developp this technique in France to other population.

The Relationship of Depression and Health-related Quality of Life in Patients With Epilepsy

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Background: Depression is prevalent in patients with epilepsy, which is associated with low health-related quality of life (HRQOL). Our aim was to study the relationship between depression and HRQOL in epilepsy. Methods: We enrolled 140 epilepsy patients. Depression was assessed by Hamilton depression scale (HAMD), and HRQOL by SF-36 scale. We divided patients into 2 groups: G1- mild/no depression (HAMD 0-16, n=89, mean age-32), and G2 - patients with moderate/severe depression (HAMD>16, n=51, mean age - 39.4). T-test was used for statistics. Findings: Results for each SF-36 domain (D) in the groups (G1/G2): D1 Physical functioning - 77.3/39.3, D2 Role limitations due to physical health - 48.9/10.6, D3 Role limitations due to emotional health - 52.6/8.1, D4 Fatigue - 59.4/31.6, D5 Emotional well-being - 60.2/34.8, D6 Social functioning - 75.5/36.7, D7 Pain - 76.1/36.3, D8 General health - 53.8/29.9. Our results show that means of all SF-36 domains in G2 were significantly higher than in G1 (p<0.001). Discussion: We found that the higher depression rates are in epilepsy the lower HRQOL is. Depression influences not only emotional domains, but also physical and social functioning.

Application of the Health Action Process Approach to Physical Activity: a Meta-Analysis

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Background: Social-cognitive determinants have been studied to explain and predict the adoption and maintenance of regular physical activity. This review aims to synthesize the outcomes of published studies that have investigated the 21 associations among such constructs and with physical activity on the basis of the Health Action Process Approach (HAPA). Method: A systematic literature search has been conducted for HAPA-based articles that report associations between social-cognitive constructs and physical activity including cross-sectional, longitudinal, and experimental research designs. Findings: Among the 32 studies initially identified, 11 were included in the meta-analyses with a total sample size of 2677 participants. Their age ranged from 12 to 93 years (mean 43.91 years). The majority (63%) were women, 36.75% were patients, and countries of origin were the U.S., South Korea, Germany, and France. The summary effect sizes for all model associations, except for paths involving risk perception, were positive and significant (all p<.001) but they remained heterogeneous. Moderator search yielded no evidence that moderators (i.e., country, age, gender, study design, and sample type) had systematic effects on the associations. Conclusions: Meta-analyses on the 21 paths in the HAPA resulted in high associations among social-cognitive constructs and with physical activity. To identify more homogeneous subsets of associations, another meta-analysis with a larger sample of studies is needed that allows to test a multitude of putative moderators.

Psychic Resistances in Loss of Weight by Patients in Preparation for a Bariatric Surgery : a Qualitative Research

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Background: Medical care are developed to combat obesity such as bariatric surgery. In spite of the existence of many therapeutic education programs, a significant number of therapeutic failures are observed with patients, because of presence of psychic resistances that prevent them for adopting behaviors in favor of the loss of weight. This research is focused on the psychic resistances in the loss of weight and attempts to highlight the emotional, cognitive and behavioral processes which explained the origin of these resistances. Methods: Population : Four patients with obesity (average : 40,5 years). Methodology: qualitative approach. Data collection: semi-structured interviews. Data analysis : using IPA and clinical analysis. Finding: - Most of patients lived traumatic experiences. To defend themselves against the psychic tensions, they adopt a compulsive consumption of food ; - The patients associate their eating habits with the family model ; - Their feeling to exist become intensified by consuming food ; - Submit to a conflict in the Ego, these patients are urged to adopt behaviors sometimes in favour, sometimes against a loss of weight. Discussion : This research allow us to consider that these defensive and identity functions are at the origin of the psychic resistances in the loss of weight. A therapeutic education, which would consider these elements related to the subjectivity of patients, could constitute an interesting way for the care of patients in preparation for a bariatric surgery and to decrease the incidence of therapeutic failures.

The Right Tracks Study – Development and Piloting of an Incentive Scheme to Promote Active School Travel in Year 5 Children

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Background: Active school travel (AST) (walking/cycling to school) can augment youth's physical activity but 50% of UK children travel to school by car or bus. Evidence suggests that incentive schemes may be effective at promoting AST. Aim: To test the feasibility of an incentive scheme to promote AST in year 5 children. Methods: Using a cluster randomised design, schools will be invited to take part and two will be selected by a match of features (e.g. area, free meals). An information pack and parent questionnaire will be sent home. Participation may be complete or limited to baseline assessment, intervention phase or semi-structured interviews about taking part in the study. Both intervention and control groups will report their daily travel mode to school via parental forms and wear an accelerometer, to help validate the reports. The procedure will last seven days at baseline and one school term during the intervention. Once a week, the researcher will visit the intervention classroom, collect the forms and accelerometers, download the data and count the "points": the number of parent-reported AST days. Each point is a ticket with the child's name on entering a weekly £5 voucher draw. Similar contact will be kept with the control school (no incentive scheme). Interviews will be conducted throughout the intervention. Findings: Data on barriers and facilitators will inform a future trial.

The Role of Condom use Skills Development Techniques in Condom Promotion Interventions – a Systematic Review

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This review explored the role of technical condom use skills development techniques in improving consistent, correct and complete condom use, and reducing sexually transmitted infection (STI) incidence. The optimal mode of delivery for specific techniques was explored. Electronic databases, reference lists and citations search located 18 relevant studies (21 conditions). Supplemental materials were acquired. Narrative synthesis was chosen to analyse the findings. Demonstration, practice, and self-monitoring were amongst components of interventions reporting increased condom use frequency and consistency and improved correct condom use. Together with home practice and behavioural experiment they contributed to reducing condom use errors and problems and improving condom use experience. No links were found between specific techniques and condom use self-efficacy or STIs incidence. Guided individual practice was superior to practice in a group setting. The review findings help to elucidate the factors and processes responsible for behaviour change. They may guide evaluation and design of interventions aiming to improve consistent, complete, and correct condom use.

Interactive Effects of Frame, Motivational Orientation and Perceived Message Quality on Fruit and Vegetable Consumption

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Health messages congruently framed with peoples' motivational orientation are more effective in promoting health behavior change, but inconsistencies have been found in the literature. This study aimed to test whether the perceived quality of a health message may moderate the congruency effect. Participants (N = 109) were exposed to a health message promoting fruit and

vegetable (FV) intake that was either congruent or incongruent with their motivational orientation. Perceived message quality and intention to increase FV intake were assessed after message exposure, and actual FV intake one week later. Main effects for congruency were not found, but significant interactions of congruency and perceived message quality were found for intention and FV intake. When messages were congruent, higher intention and FV intake were found when perceived message quality was high, and lower when perceived message quality was low. Smaller or no differences were found between levels of perceived message quality in incongruent conditions. Matching the frame to the recipient's motivational orientation is only effective when the message is perceived as having good quality.

Participant Observation as a Methodology in Health Psychology to Study the Practice of Health Care on Diabetes Mellitus

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Background Participant observation refers here to a specific health psychology research methodology in which the researcher takes on a role of participant observer in the practice of health care under observation into natural situation of daily work of diabetes therapy. The researcher immerses him/herself in the institutional context and into the health care setting in order to experience with the other(s) professional(s) the daily routine of the treatment and prevention with patients on carrier of this illness. **Method** Studying the reality of doctor patient communication in the field of diabetes mellitus the researcher try to comprehend the motives and meanings of the subject's actions from the viewpoint of those involved. On everyday lives questions may be propose: How this health care practice is been occurring? How the accompaniment of the therapeutic and prevention process is been working? This accompaniment is been working successfulness? How the relationship between professionals and patients take place? There is a dialogical communication in this interaction? Which events seem to be relevant in this context? To register the observations and data collection the researcher generally use techniques resources as field notes, self-analyses notes, reflexivity journal, interviews. **Findings and Discussion** The assemblage of those registered informations is organized and analysed according to health psychology theoretical reference on treatment and prevention in diabetes mellitus, type II. The results of this study must be discussed with the group where the participant observation takes place. Nevertheless, the results are relative to local and institutional micro-analyse. The research results are compared with the others been realised in similar organisational context and methodology and will be transformed in the education of patient - doctor communication in Brazil.

Participant Observation as a Methodology in Health Psychology to Study the Practice of Health Care on Diabetes Mellitus

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Participant observation in this context refers to a specific health psychology research methodology in which the researcher takes on a role as participant observer in the daily routine of the health care in a natural situation of everyday work. The researcher immerses himself/herself in the institutional context and into the diabetes mellitus health care setting in order to experience the daily routine of treatment and prevention. To register the observations and data collection he/she uses technical resources: field notes, self-analyses notes, reflective journals and interviews. This set of collected data is organized and analyzed in a critical movement between the experience of the participant researcher and the health psychology theoretical reference on the treatment and prevention of diabetes mellitus. The results are relative to local and institutional micro-analyses and must be compared with other researches carried out in similar organizational contexts and methodologies.

Virtual Reality in the Prevention of Risk Factors in Eating Disorders in Mexican Adolescent Girls

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The study's main objective was to analyze and evaluate the effectiveness of a Virtual Reality Program (VRP) in the prevention of risk factors in eating disorders. The nonrandom sample of 30 adolescent girls (M = 13.4 years old, SD = 1.13), were selected from a greater sample of girls (130) who had chosen a thin ideal figure and had dieted in the past six months. The research adjusted to a pretest and posttest design. Once the informed consent was obtained, a baseline was established using a self-report questionnaire (alpha = .90). The results were statistically significant in the expected direction, some of these were: ideal figure $t(27) = 4.42$, $p = .0001$; Mpre = 1.99 SD= .60; Mpost = 2.64, SD =.49 body image dissatisfaction $t(27) = 4.67$, $p = .0001$, Mpre = 2, 21, SD = 2, 1; Mpost = .50 SD= 1.3; Restrained diet, $t(27) = 1.25$ $p = .001$, Mpre = 2.49, SD= .70; Mpost = 1.61; SD = .52. The posttest was estimated a month after the pretest. The clinical significance test showed that a significant percentage of participants (48% - 70%) were in the out of risk category after the intervention. Although these results are preliminary, as it is necessary to evaluate their effects over time, they are encouraging because they showed not only a decrease in the risk factors,

but also a congruent relationship between variables related to body image and eating behavior. KeyWords. An intervention program of virtual reality, a prevention program of risk factors, body image variables, disordered eating behavior, adolescent girls.

Medical Encounters About Medically Unexplained Symptoms: Pathways to Improve Satisfaction of Doctor and Patient

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Encounters involving patients with Medically Unexplained Symptoms (MUS) are challenging for general practitioners (GPs) and patients who have different views on the origin of pain and divergent expectations, which can weaken the doctor-patient relationship. The study aims to highlight GPs' abilities to preserve the doctor-patient relationship and their job satisfaction and investigate if they match patients' expectations. 15 semi-structured interviews were conducted with GPs to explore their perceptions and reported practices about these encounters. Then online forums for MUS were analysed to highlight the patients' experiences and expectations. Qualitative data were analysed with computer-assisted thematic analysis. Results show that the use by GPs' of various sources of knowledge to give explanations to patients and the involvement in reflective practice groups improve their job satisfaction and understanding of patients' condition. At once these GPs' abilities tend to match the patients' expectations about medical encounters. The findings could open ways to increase GPs' and patients' satisfaction about medical follow-up by improving GPs' communication and reflective skills.

Non-pharmacological Prevention of Delirium in Patients Hospitalized on Internal Geriatric Ward – Design and Efficiency Evaluation of Wholesome Contact Project (part of Symposium: The Wholesome Contact)

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Delirium is the most frequent complication of hospitalization in elders. Delirium is treatable with anti-psychotic drugs but, due to their iatrogenic effect and worse prognosis after delirium onset, screening for risk factors and prevention are most efficient management of it. The innovative, interdisciplinary, multifactorial, volunteers-based non-pharmacological delirium prevention was founded on internal geriatric ward. Aim of the speech is to present the programme that is still in process of design and initial results of evidence-based evaluation research on its efficiency. Details of research design, advantages and difficulties of conducting study in highly contextualized hospital environment will be discussed. The efficiency and cost-effectiveness of delirium prevention on the ward is evaluated retrospectively. Medical documentation of every patient introduced to the programme (patients being in logical contact and over the age of 70). Initial results will be available in spring after completing the first phase of the research. Randomized clinical trial is also planned in future phases of programme evaluation. Details of the design will be discussed during the presentation.

Health Related Psychological Quality of Life, Self-rated Health and Usage of Addictive Substances in Adults

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Background: The usage of alcohol, tobacco and other addictive substances (ATA) is a well known risk factor for chronic diseases and premature mortality (WHO, 2013) depending on complex biopsychosocial obstacles. The aim of study was to disclose the relationship between health related psychological quality of life (HRPQoL, SRH) and usage of ATA. Methods: The sample for this analysis was extracted from Kaunas regional health project, including 859 male and 1035 female investigated by scales of psychological domain of WHO HR QoL -100, SRH scale and selected items for ATA evaluation. Findings: Males and females of worse psychological functioning tend to cut usage of alcohol but generally use it more often. They are more willing to seek consultation of psychologist. Similar linkages were found with SRH ($p < 0,001$) and spirituality evaluation. No linkages were found between psychological functioning and usage of tobacco and other drugs in males and females ($p > 0,05$). Discussion: The findings disclosed complex relationship between indicators of psychological functioning SRH and ATA in adult population. It may be useful for health psychologists working in the area of prevention.

Action and Control: Men's Narrative Accounts of Coping Across the Life Course

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Background: Men are often portrayed as poor at managing their emotional health, but research is starting to explore ways in which men constructively engage with their wellbeing. This study aimed to explore men's narratives of coping across the life course as part of a larger project looking at successful ageing. Methods: In-depth interviews were conducted with 40 older men (50-90 yrs), purposively sampled from Australia and the UK. Data was analysed using thematic analysis. Findings: Men's strategies of coping across the life course were characterised by action and control. In childhood, coping tended to be passive as men lacked the agency to confront difficulties or find effective solutions. By adulthood men predominately described 'taking action' to cope with struggle and distress. Conversely, 'go with the flow' reflected a shift away from notions of taking control, with more men adopting this attitude in older age. Men's accounts of 'positivity' also appeared to privilege attitude above action. There were tendencies towards community (voluntary work) and constructive physical practices (yoga) in later life. Discussion: These findings highlight ways in which men's wellbeing is organised through age-relations and particularly sense of control. With age, some men shifted away from action-orientated approaches whilst others sustained control through a variety of strategies.

Development of a Complex, Home-based Intervention to Support Self Care for People With Heart Failure.

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Background: We aimed to develop a home-based self-care support programme to improve quality of life in people with Heart Failure (HF). Methods: Intervention Mapping methods included 1) Needs Assessment: Interviews with patients, service providers and caregivers; systematic reviews of quantitative and qualitative evidence; consultation with experts and a 9-member patient group. 2) Construction of 'mapping matrices' of intervention objectives and determinants 3) Selection of intervention strategies using existing theory, a taxonomy of change technique and expert opinion. Findings: We produced a written 'Heart Failure Manual' and a training programme for intervention providers (who provide 4-6 contacts). There are 4 main self-care objectives (maximise physical fitness, manage stress/anxiety, manage medications, manage fluid balance) and 19 secondary objectives. The intervention is individually tailored and aims to increase understanding of HF and mastery of self-care through practice, self-monitoring and facilitated problem-solving. Discussion: Our self-care support intervention is grounded in theory, evidence and patient perspectives. A feasibility study and RCT are in progress.

Stand by ME' - Assisted Peritoneal Dialysis Confers Equivalent QUALITY-OF-LIFE and Emotional Well Being Outcomes to Self Care Peritoneal Dialysis for Patients and CAREGIVERS.

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Introduction: Assisted Peritoneal Dialysis (PD) involving family members allows more patients to get started on home-based dialysis with good clinical outcomes. The impact of assisted PD on patient and caregiver is not well understood. This study aimed to compare assisted-PD vs. self-care PD on adjustment outcomes for patients and caregivers. Methods: N=231 PD patients (89/142 assisted PD/self-care) completed measures of QOL and emotional distress. Caregivers (N=112) completed the Lay Care-Giving for Adults Receiving Dialysis questionnaire and Zarit Burden Interview. Findings: Casemix adjusted comparisons indicated comparable QOL between assisted-PD and self-care PD in all dimensions with the exception of the SF-12 physical component score) and the KDQOL- effects of kidney disease in favor of the self-care group (<.01). Levels of anxiety and depression were equivalent. Caregiver of assisted-PD patients reported more task orientated-duties (p < .01) yet levels of perceived burden were equal to family members of self-care PD. Discussion: Our findings of equivalent caregiver and patient outcomes in assisted-PD and self-care PD support the expansion of assisted PD utilization.

Positivity, Burnout and Work Engagement: how Much Positivity is Enough?

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Background: According to Fredrickson and Losada, positivity ratio (PR) is the proportion between positive and negative

emotions. Relationship between PR and well-being seems to be non-linear with a curve point around 3 for PR. The aim of our study was to examine the effect of positivity on burnout and work engagement. Methods: A group of white-collar workers (n=139) was evaluated with JAWS (PR), OLBI (burnout: disengagement and exhaustion) and UWES (work engagement: vigor, dedication, absorption). Results: The relation between PR and burnout subscales had a curvilinear pattern with a curve point around 2. A curvilinear relation was also found for PR and vigor, whereas for dedication and absorption it was linear. After the adjustment for the relation between burnout and work engagement, only vigor and dedication were associated linearly with PR. Discussion: The results confirm that in the work context the moderate positivity ratio is associated with the lowest burnout level. However, the relationship with work engagement is more complicated, suggesting a rather beneficial effect of PR increase on vigor and dedication. The mechanism underlying these relations needs further research.

Current State of Workplace Health Promotion in Switzerland. Prioritization of Measures and Appraisal of Requirements

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Background: This study aggregates insights of three studies evaluating manager's and employee's view on workplace health promotion (WHP) in Switzerland. The studies' objectives were to analyze requirements and measures taken by companies and their appraisal from involved parties. Methods: Based on the findings of a quantitative study, inquiring 190 HR managers, two qualitative studies were conducted to evolve the manager's role and the employee's needs. Findings: Data show that managers are highly responsive to WHP issues. A wide range of activities are reported, however, activities are not embedded in a holistic concept. The employee's interest in WHP activities is moderate. Employee's participation in activities is low, ranging between 12 and 16 percent. Both, employees and managers rate infrastructure and workplace organization as their first priorities. Psychological dimensions, such as decision-making, responsibility, task fulfillment, are not perceived as important. Discussion: It is argued that WHP has become a growing issue among Swiss managers and employees. However, WHP is much linked to an understanding of health in a core sense, disregarding psychological dimensions.

Evaluation of Life Quality of Home-Care Patients

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Despite the fact that the prolongation in life span is considered as a positive progress, the preparedness of communities for this process is not satisfactory. World Health Organisation (WHO) defines the life quality as individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. This study was conducted to evaluate the life quality and effecting factors among elderlies taking home-care. WHOQOL-OLD was used to collect data from (49 female, 51 male) elderlies who accepted to participate in the study. Mean score was 72,91±1,15. Participants who are female, with relatively high educational status, have more frequent contact with their children, and think that their life quality increased after receiving home-care have higher life quality score. Health promoting behaviours have become important in maintaining the functional independence and life quality. Since elderlies' contact with their people affects the quality of home-care positively, a special attention should be given to develop home-care and to improve the communication skills of home-care providers.

Prevention of Delirium in Hospitalized Geriatric Patients - Literature Review (part of Symposium: the Wholesome Contact Project...)

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Delirium is frequent complication of hospitalization in elders. Symptoms include cognitive and mood disturbances. Risk factors are: coexisting medical conditions, dementia, sensory impairment and many factors connected with treatment and hospital environment. Anty-psychotic drugs are treatment of choice but it might be iatrogenic: past delirium episode increases the mortality, morbidity and necessity of institutional care. Therefore, prevention of delirium plays a significant role. Literature review on methods used for delirium prevention will be presented. Delirium prevention divides into pharmacological and non-pharmacological methods. Pharmacological methods base on administering preventive anti-psychotic drugs' dose every hospitalized patient. Non-pharmacological methods include medical staff education, supportive care, information- and care-giving. Special attention will be given to second group of methods due to their additional benefits for patients. Because they avoid the implementation of additional drugs they protect patients form side effects and hospital from additional costs, what is a reason for further development of non-pharmacological delirium prevention.

Psychosocial Factors and Problems With Voice Production Among the Primary School Teachers

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The subject of the research is connection between psychosocial factors like: anxiety, life satisfaction, stress and self-esteem problems with voice production among the primary school teachers. 113 teachers have been examined. The group was examined by questionnaire methods (for measuring psychosocial factors) and Sheet of the Voice Emission Diagnosis (SVED) for measuring principle problems with voice production: breathing (respiration), phonation, articulation, efficiency of articulatory apparatus and resonators. It has been proved that there is correlation between psychological factors like: stress, anxiety and life satisfaction and problems voice production among teachers. Research can help with preparing for prophylactic programs for teachers in context of counteraction problems with voice production.

Balancing Family-work Priorities: Time Demands, Coping Strategies, and Eating Behaviours in Families With Working Parents

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Background: Working parents experiencing time scarcity use food coping strategies to manage balance between work and family roles, potentially making more poor nutritional choices for their families. This study aimed to determine associations between working parents' time demands, parents' food coping strategies and their children's eating behaviour. Methods: A cross-sectional design; 53 parents of children aged 0-11 years completed measures on time demands, food coping strategies, their own and their child's food choices and meal patterns. Correlation and regression analyses were used to determine contributions to eating behaviour. Results: Mothers' time demands were associated with lower child fruit ($r=-.30$, $p<0.05$) and child vegetable intake ($r=-.34$, $p<0.05$), reduced child healthy eating ($r=-.52$, $p<0.01$), and mothers' higher missing of meals ($r=.38$, $p=0.05$) and poor meal planning ($r=-.34$, $p=0.05$), while mothers' food coping strategies contributed to children eating on their own ($r=-0.37$; $p=0.01$). Discussion: Working parents' perceptions of time scarcity and demands likely contribute to poorer family eating behaviour choices and meal patterns, suggesting perceptions of time scarcity may be an important factor counterbalancing more positive determinants of change and may need to be considered when applying current coping and behaviour change models to intervening with eating patterns and food choices.

Comparing Family Performance Component Between Patients Suffering and not Suffering From Tension Headache

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This research was casual – comparative and The purpose of this study was to compare the components of family Functioning in family of patients with Tension-type headaches and patients without Tension type headache. The sample size in this study was 120 patients (including two groups with and without tension headache) who referred to headache clinic and public center of Baghiat Allah in 1392. The first group was selected by Convenience sampling method and the second group was selected randomly. For data collecting we used family functioning device (FAD) and for data analysis t-test and MANOVA analysis was performed. The results showed that there is a significant difference between family functioning in patients with tension-type headache and patients without tension headache totally. Also results showed that there is significantly difference between two groups in factors of problem solving, Communication, affective responsiveness, affective involvement, behavior control, and general functioning. we can conclude that one of the factors that causing or maintaining family functioning is tension-type headaches.

Keeping Kids sun Safe: Exploring Parents' Beliefs About Their Young Child's Sun-protective Behaviours

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BACKGROUND: Melanoma of the skin is the third most commonly diagnosed cancer in Australia. Given the high incidence of sunburn in children and level of sun protection provided by parents is often infrequent and/or insufficient, this research employed qualitative methodology to examine parents' beliefs about their young child's sun safe behaviours. METHODS: Parents (N= 23; n=14 mothers, n=9 fathers) of children aged 2-5 years participated in focus groups to identify commonly held beliefs about their decisions to sun protect their child. Data were analysed using thematic content analysis. FINDINGS: A range of advantages (e.g., reducing the risk of skin cancer, developing good habits early in life, parental peace of mind), disadvantages (e.g., false sense of safety, prevent vitamin D absorption), barriers (e.g., inaccessibility, child refusal), and facilitators (e.g., routine, accessibility) to performing sun safe practices were identified. Normative pressures and expectations also affected

parents' motivation to be sun safe with their child. **DISCUSSION:** These identified beliefs can be used to inform strategies and interventions to improve sun safe behaviours in young children.

Integrating FAMILY-FOCUSED Practice Into Routine Addiction Services

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Background: The problems associated with substance misuse pervade the lives of the family as well as the individual drinker or drug user. As a result of being concerned about a person with an alcohol or drug problem, it has been estimated that approximately one hundred million people worldwide experience considerable daily dilemmas and stress. Treatments for substance misuse problems have, historically, tended to focus on the individual substance misuser only. **Methods:** An evaluation of a training program promote a whole organisation shift towards greater involvement of affected family members within one UK addiction treatment service. A two-phase mixed-methods quasi-experimental design, integrating action research, is described. **Findings:** Staff receiving training reported significant increases in positive attitudes towards family-focused practice; and increases in the proportion of family-focused practice in their daily routine work. Improvements in attitudes were also evident in the absence of the training package in the comparison group. **Discussion:** Supports an organisational platform to implement change towards more family-focused addiction treatment.

Existential Well-Being in old age - the Influence of Existential Analysis on the Paradox of Well-Being

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Aim: The aim of the project was to reveal the relation between the existential and psychological models of well-being and to examine its influence on the paradox of well-being. **Method:** The Existential Quality of Life Questionnaire (Görtz) measuring existential well-being on the basis of the Existential Fundamental Motivations (Längle), the Psychological Well-Being-Scales (Ryff) capturing psychological well-being, the Satisfaction with Life Scale (Diener et al.) eliciting subjective life satisfaction and the European Quality of Life Questionnaire (EuroQualgroup) measuring health status, were given to 65 elderly people. **Findings:** Existential well-being was highly correlated with psychological well-being and life satisfaction. When taking existential well-being into account, the correlation between health ratings and satisfaction with life disappears. **Discussion:** The high correlation of existential well-being with other forms of well-being displays its convergent validity and highlights its central role in surveying well-being. Furthermore, existential well-being might be seen as a factor of resilience protecting a person's life satisfaction in spite of low self-reported health status.

Coping Assessment: Importance of Identifying Person-situation Interaction Effects.

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Coping assessment has focused on coping as a general trait and has overlooked the context effect, although it has been noted that considering the situation could improve the explanatory power of tests. Therefore, we aim to develop a contextual coping questionnaire for adults (CCQA). After reviewing previous coping studies and measures for our correlational study, we developed a 40 item scale related to five problem areas – work, close person relationships, own health, close person health and economy. It was completed by 416 adults. Confirmatory factor analyses were carried out with AMOS to compare a basic model which did not consider the context to a nested model that considered it. Reliability analyses were also conducted. The analyses yielded good reliability indexes ($\alpha=.78$ for the complete scale; from $\alpha=.71$ to $.88$ for the coping strategies subscales). The nested model fit was acceptable ($X^2/df=2.49$; $GFI=.82$; $CFI=.86$; $RMSEA=.06$), and better than that of the basic model ($X^2/df=3.24$; $GFI=.77$; $CFI=.77$; $RMSEA=.07$). These results emphasise the importance of considering the different contexts when assessing coping strategies for designing interventions to improve health and well-being.

What Does it Mean to Tailor Support in a lay Health Worker Intervention?: a Qualitative Study

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Childsmile Support Workers facilitate parents with child dental registration and attendance. Their approach is tailored to families' needs. However the specific actions or strategies involved in tailoring are unclear. This study explores how tailoring is defined, why it is thought to be important and how it is implemented. Focus groups/interviews were conducted with Childsmile stakeholders and service users. Thematic analysis was conducted using the Framework approach in NVivo. Themes relating to the

meaning and implementation of tailoring were; 'taking account of delivery environment', 'responding to differing needs', 'empowering parents', 'considering preparedness for change', 'utilising flexible communication strategies' and 'developing a relationship'. Tailoring was thought to be important 'because it is more likely to be effective', 'there is flexibility to address specific barriers' and 'tailoring promotes engagement'. Understanding if and how tailored support can be implemented lays the foundations for later phases of this project which, ultimately, will lead to a better understanding of how lay health worker interventions can be tailored in order to optimise effectiveness.

Consulting With Citizens in the Design of Wellbeing Measures and Policies

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Background: Current thinking suggests measuring social progress and national wellbeing requires something more than GDP. **Method:** We employed a novel approach to the design of a national wellbeing index by experts, citizens, and politicians. Participants first generated a list of strategic objectives to guide efforts to enhance the wellbeing of the Irish public. A systems science methodology, Interactive Management, which optimises deliberation and co-design in group settings and graphically represents inter-relations between ideas generated, was later employed. This facilitated participants in further developing strategic objectives within each domain. **Findings:** Domains for which strategic objectives were developed included Education, Business and Employment, Community, Health, Democracy, Environment, Sustainability, Governance, Lifestyle and Equality. An influence structure highlighted governance involving community participation as the primary driver. **Discussion:** Different countries have focused more or less on citizen consultation in the design of wellbeing measures and policies. We believe involving citizens to be crucial and have developed an effective way of doing so.

Aspects of Health Condition and Quality of Life in Patients With Osteoarthritis

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Background: This study focuses on aspects related to osteoarthritis, emphasizing how persistent pain and complications occurring can lead to impaired quality of life, psycho-behavioral disturbances such as inability to engage in activity, psychological complaints / somatic and affective disorders and sleep disorders. **Methods:** The study included a number 72 patients with osteoarthritis, aged between 19-78. Data collection was performed using SF-36, SCL-90 and VAS scale. **Findings and Results:** The evaluation of results on the whole group revealed as the most affected domain the pain one, in which 78,3% of osteoarthritis patients declare problems. Evaluation on age groups reveals that osteoarthritis patients aged 30-40 have the highest score in D6 and D7 domains and patients in age group 55-78 declare severe pain and interrupted sleep. **Conclusions:** Patients with osteoarthritis tend to report that they are hampered severely in their capacity to perform their day-to-day physical and social activities, and those with severe disease have the worst SF-36.

Quality of Life Assessment in Patients With Haemophilia Arthropathy

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Background: The aim of the study was to assess quality of life in patients with chronic haemophilia arthropathy (CHA), and evidence of correlation between chronic pain and life quality domains. **Methods:** The study included a number of 46 patients with CHA, aged between 16-45 in the period 2012-2013. For this study we used quality of life questionnaire WHOQOL and VAS to measure joint pain. **Findings:** The statistical analysis has revealed a significant correlation between chronic pain and quality of life ($p < .01$). Our results revealed that haemophilia severity had influence on physical and psychological domain, independence level and the general state of health. We observed significant differences in social relationships, personal beliefs and pain related to socio-professional status ($p < .05$ and $p < .01$). **Discussion:** Limitation of articular mobility and pain leads to a decrease in life quality of haemophilia patients. WHOQOL data may impact on care options and therapeutic process.

Parents Restrict Children's Eating, Children Hide Snacks: Longitudinal Dyadic Study.

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Methods: 200 parent-child dyads participated in this longitudinal study (with a baseline measurement and 6-month follow-up). Self-report measures, such as Comprehensive Feeding Practices Questionnaire (Musher-Eizenman i Holub, 2007) were applied, along with objective measures of body weight and fat tissue. **Findings:** High levels of restrictive practices reported by parents (parental control the child's food intake and limiting sweets and fatty food intake) were predictive of children's report of their

hiding behavior (hiding eating unhealthy snacks, eating more than allow parents), which in turn was related to unfavorable changes in fat tissue among children. Discussion: Parental who strongly rely on practices aiming at a restriction of specific types of food may promote fat tissue increase, with hiding behavior playing the mediating role.

Effects of Organizational Characteristics on Employees' Health and Performance in the Geriatric Care Sector

D. Horstmann

Due to the demographic change the health care sector faces a particularly intense shortage of skilled staff as well as a situation of increasing work-related strains. To support employees' health and to reduce their strains organizational characteristics are of importance. The presented study investigates the effects of organizational characteristics on employees' health and organizational performance. Data was collected in 28 nursing homes, surveying the head of management, supervisors and employees (n = 1.017). Employees' health, commitment and work satisfaction as well as organizational characteristics were measured by questionnaire. First results show significant correlations between employees' health, commitment and organizational characteristics. Moreover multivariate analysis was calculated, identifying organizational characteristics, in particular the care for employees, as significant predictors of employees' health and commitment. The findings underline the importance of organizational characteristics for employees' health. Putting employees' needs in the center of attention reduces not only their strains but leads to greater employee engagement.

Investigating the Effects of tai chi on General Health and Mood

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Background: Considering the burden of widespread mental disorders posing on societies and the urgent need to enhance General Health, the aim of this article is to "Evaluate the effect of Tai Chi(TC)on enhancing General Health and Mood".TC is a mental-physical exercise which can enhance mental health.It is also known as "Meditation in motion" with mindful breathing.Our aim was to determine the effect of TC on enhancing General Health and Mood. Methods: This design is pre-test and post-test design with a control group. A total of 20 men and 20 women practicing TC(beginners)in Tehran gyms, participated in the present study.Materials used in this study were Positive and Negative Affect Schedule(PANAS) and General Health questionnaire(GHQ-28). Findings: Wilks Lambda test showed that General Health trend in pre-test and post-test was significant. TC's effect on enhancing General Health was 38.3%.Co variance analysis showed that TC's effect on changing Negative Affect was 24.6%.TC's effect on Positive Affect change was 2.4%. Discussion:considering the urgent need for inexpensive and effective strategies to improve General Health,TC was proven in our study to be a beneficial alternative.

The Effectiveness of Mindfulness-based Stress Reduction on Stress, Students Payam Noor University, in qom City of Iran

A. Hosseini, S. Ali

The present study examined the effectiveness of mindfulness-based stress reduction, stress reduction training psychology students PNU done. To this end, 30 students were randomly assigned to two groups. Stress levels were determined in all subjects and 8 sessions of mindfulness-based stress reduction training method. Assigned to the control group after group training sessions. The complete 8-session stress levels in both groups were tested again. Results were analyzed using ANCOVA results suggest that reducing stress in the experimental group. Keywords: stress, mindfulness based stress reduction

The Effect of Schema- Focused Group Therapy on Increasing Marital Adjustment in Womens With Multiple Sclerosis

M. Hosseinzadeh Taghvaie, S. Sodagar, F. Meschi, F. Mohammadi Shir Mahaleh, M. Bahrami

The purpose of this study is to investigate the effect of schema-focused-group therapy on increasing marital adjustment in Womens with Multiple Sclerosis. The data was gathered by giving the Dyadic Adjustment Scale)DAS(to 30 individuals were selected through accessible sampling method in Iran MS Association.These females were randomly assigned to the experimental and control groups. After random selection of the groups a pre-test was given to the both groups. The experiment group received the treatment (SFT) and finally both groups were given a post-test. Data was analyzed using ANCOVA. The findings of this study indicated the significant differences between two groups after intervention . Key Words: Schema-Focused-Group Therapy, Marital Adjustment, Multiple Sclerosis. Faculty of psychology of karaj slamic Azad University, Moazen Blvd.,end of Gohardasht Ave.

Relationship Between Attachment Style With Affective Self Regulation in Patients With Multiple

Sclerosis

M. Hosseinzadeh Taghvaie, S. Sodagar

The aim of this research is to study the relationship between the attachment style with affective self regulation. The sample of 117 individuals, was drawn through the accessibility mode from a larger statistical population consisted of female patients with Multiple Sclerosis . Adult attachment style and affective self regulation were also administered. In addition to methods of descriptive statistics, Pearson correlation test have been to analyse the data. Results indicated that secure attachment style was negatively, significantly correlated with the negative affective self regulation. Key Words: Attachment Style, Affective Self Regulation , Multiple Sclerosis

Affective and Interpersonal Processes Relating to Psychological Resilience

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Background This study aimed to examine the role of affective and interpersonal processes in the relationship between trait resilience and psychiatric symptoms. **Methods** A total of 284 Chinese university students were recruited and administered questionnaires that assessed trait resilience (Resiliency Scale), positive rumination (Responses to Positive Affect), negative rumination (Response Style Questionnaire), adult attachment styles (Relationship Structures questionnaire), relationship satisfaction (Relationship Assessment Scale), anxiety symptoms (State-Trait Anxiety Inventory), and depressive symptoms (Beck Depression Inventory II). **Findings** Latent-variable structural equation modeling revealed that affective and interpersonal processes mediated the association between trait resilience and psychiatric symptoms. The inverse association between trait resilience and psychiatric symptoms became positive in the mediation model, suggesting that the associations between trait resilience and psychiatric symptoms could be observed only after considering the impact of the two processes. **Discussion** This study provided evidence on specific underlying affective and interpersonal processes of resilience and possible direction for intervening resilience.

Neurologists' Real-life Experience When Breaking bad News, Dealing With Patients' Reactions and Complexity of the Therapeutic Alliance With Multiple Sclerosis Patients

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Background : This study is focused on neurologists' real-life experience of breaking bad news in multiple sclerosis, their perception of their patients' relationships and their perception of patients' emotional, cognitive and behavioral reactions during this announcement in order to improving communication with multiple sclerosis patients. **Methods**: population : 15 neurologists ; data collection : semi-directive interviews ; data analysis : IPA and clinical analysis (qualitative approach). **Findings**: Themes with IPA : neurologist's real-life experience of breaking bad news ; communications aspects and content of the diagnosis announcement ; complexity of the doctor-patient relationship in multiple sclerosis ; medical training and specificities of their profession... /Clinical analysis approaches: micro-traumatic impact on the doctor when he breaks bad news ; defence mechanisms mobilized ; empathy ; doctor's anguish... **Discussion** : Psychic elements that we analysed, management of nonverbal communication and neurologist's analysis of the patient's reactions have an influence on the quality of the doctor-patient relationship, on the treatment adhesion and on the patient's well-being.

Current Representations of the Medicine and Risks of Self-medication by Young Adults

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Background: Self-medication behavior, promote by the successive health policies and by many pharmaceutical groups, tends to become generalized. The fast development of self-medication has to ask us questions about the factors that underlies it and on the potential negative consequences that can infer on people's health. That's why this study is focus on the self-medication behavior by young adults and on the psychic mechanisms that induce them. **Methods**: Population: 11 young adults; Data collection: semi-structured interviews. Data analysis: Grounded Theory and clinical analysis. **Finding**: themes developed: representation of the medicine and the self-medication behaviour; self-medication and feeling of autonomy; patient's expectations and complexity in the general practioner-patient relationship; self-medication, relationship with the body and health capital; psychic mechanisms underlying self-medication behaviour; incorrect use of medical prescriptions. **Discussion**: Young adults have new representations of medicine and they express their difficulty to conciliate medical recommendations and the feeling of having to manage alone their heath capital (autonomy and responsibility).

Problematic Internet use and Risk of Eating Disorders Among Slovak Female University Students

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Background: There are numerous studies exploring eating disorders (ED) in association with substance use. However, few studies have focused on the associations between ED and problematic internet use (PIU). Aims: (1) to explore the differences in PIU between female students at risk and those not at risk of ED and (2) to specify which ED indicators are the most important in relation to PIU. Methods: The sample size consisted of 453 Slovak female university students (average age 19.68, SD=1.56). The respondents completed a screening tool for detecting ED (SCOFF) and the PIU questionnaire (GPIUS 2) online. Mann-Whitney U tests were used for data analysis. Findings: The results revealed (1) significant differences in PIU between those at risk and those not at risk of ED, with more PIU for those at risk and (2) an analysis on the level of individual indicators showed that a higher PIU was found if these indicators were present: control over eating, body image distortion and impact of food on life. Discussion: The results support and contribute to previous studies and can be applied to prevention strategies of ED and PIU.

Research on the Stress in Childcare Training: Turn to the Improvement of Childcare Training

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Background: In process at becoming a childcare worker can bring lots of unnecessary stress. Examining the stress of childcare training could help eliminate much of the stress that comes with being a childcare worker. A survey was done to help improve the technical college childcare worker training program. Methods: In the survey, 41 students were asked the following 5 questions (Ex. What drove you to this training? What do you want to take from it? What did you find difficult about the training?). Findings: The source of stress during training often varies. Upon completing the training, many students expressed an interest in learning how to better handle their children. Many trainees expressed that one difficulty in the training was the poor communication between training trainees, causing the trainees to lose confidence. Finally, a request from the trainees on how to better record the things they learned in a training journal. Discussion: Our school, as a technical school for childcare, reconfirmed the importance of nursing the character of the students. Therefore helping them cultivate strong children as a childcare worker.

Stress-Related Growth Model in Japanese Junior High School Students Facing an Entrance Examination

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Background: This study examines a stress-related growth model in Japanese 3rd year junior high school students facing an entrance examination, based on the conceptual model of Schaefer and Moos (1992). Methods: The participants were 191 students (96 male, 87 female, and 8 unspecified), who answered a socio-demographic questionnaire comprising the following: perceived social support (Hosoda et al., 2009); personality (Oshio et al., 2012); positive acceptance of adversity (Hatori et al., 2012); proactive coping (Iimura et al., in press); and stress-related growth (Iimura et al., 2012). We performed model process estimation through statistical analysis using structural equation modeling. Results: Structural equation modeling confirmed that perceived social support and personality correlated positively with stress-related growth ($R^2 = .67$) via positive acceptance of adversity ($R^2 = .48$) and proactive coping ($R^2 = .90$). The fit indices of the model were CFI = .90, RMSEA = .06, and AIC = 1153.00. Discussion: These findings suggest that environmental and personal systems affect cognitive appraisal and coping response; therefore, examination stress stimulates students' psychological growth.

Efficacy of a Tailored Education Program for Caregivers of Asthmatic Children

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Background: The purpose of this study was to examine the efficacy of a tailored education program based on behavioral and psychological factor. Methods: Caregivers of asthmatic children were randomly assigned to the tailored education or non-tailored education groups. The former underwent a tailored program using a touch-screen computer, in which they received tailored messages generated by a computer program. A research nurse and clinical psychologist used computer-based resources to tailor the education messages and provided counseling to the caregivers, using motivational interviewing. The second group received

only a booklet on asthma. Participants were asked about their asthma knowledge, self-efficacy on self-management, asthmatic parents' quality of life scale (QOLCA). Findings: A total of 65 caregivers were randomly assigned to each group. The results of general linear mixed models, the tailored education group was observed to have increasing asthma knowledge scores and QOLCA scores over time, as compared to the non-tailored education group. Discussion: The current educational intervention was thus shown to significantly improve the quality of life of the caregivers.

The Role of Sport and Physical Activity in Prevention of Inadequate Body Image Among Children

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Background: Children involved in sport or physical activity related to their body image more adequate than children not practicing physical activity. Coach usually plays an important role in the formation of body image of children involved in sport. Methods: Participants were 125 adolescents, 9-12 years: 110 athletes (55 girls, 55 boys) and 115 non-athletes (60 girls, 55 boys). The "Questionnaire measuring body image and dissatisfaction" was used. Findings: The images of the real and the ideal body in the group of athletes were almost identical. Sports protect athletes from dissatisfaction with their body. But athletes are more critical for their bodies. Girls more than boys are worried about their weight, and girls-athletes more than non athletes. In sports environment children are less teased by their peers than in the school. The formation of body image is greatly affected by parents and peers, and among athletes - by coaches. Discussion: Sport and physical activity facilitate the formation of an adequate image of the body in childhood. Regular practice of physical activity may be a method to overcome personal complexes associated with the perception of their body.

Development and Validation of a Resilience Against Terrorism Scale (RATS)

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The present study describes the development and validation of an indigenous scale for Pakistani population to assess their resilience against terrorism. An extensive exercise and effort was put in to identify resilience related constructs particularly in Pakistani cultural context along with considering its theoretical and literature background. Initially, a fairly large pool of 120 items, ultimately reduced to 74, was generated out of 3 focus groups and in-depth interviews with experts, university students, teachers, police, army and rescue personnel, common public witnessing terrorist attack or being victim to it. Empirical evaluation was done on 435 men and 324 women from all walks of life throughout country. Principle component factor analysis with was computed to determine construct validity that provided four factors solution with 52 items (loading $\geq .40$) labeled as Pessimism, Self efficacy, Optimism, and Religiosity/Education; all four sub-scales showed significantly high reliability and for total RATS. Hence, the resilience construct for Pakistani public fighting against war on terror were discussed in the international as well as national context particularly.

Psychosocial Factors and Common Mental Disorders in men With Erectile Dysfunction

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The present study aimed to explore the Psychosocial Factors and Common Mental Disorders in men who were seeking treatment for Erectile Dysfunction from different health professionals. A Structured Interview was devised by the researcher to look into demographics, interpersonal, marital/sexual, health and treatment related areas of the participants. The International Index of Erectile Function (IIEF-15) and General Health Questionnaire (GHQ-28) were used to assess erectile functioning, depression, anxiety, somatic complaints and social dysfunctioning in the sample. From March to June 2012, a total of 109 men from outpatient clinics of different health professionals were recruited who fulfilled the ICD 10 and DSM IV criteria of Erectile Dysfunction. The results of this study showed that most of the men were seeking herbal treatment, had a mean age of 33 years, educated up to matriculation, were married and living in joint family system. The correlates were found to be relationship with father, relationship with wife/partner, effects of Erectile Dysfunction on life, interest in sex, frequency of sex, satisfaction with sexual life, anxiety, and depression. The strongest predictors of Erectile Functioning were relationship with wife/partner, interest in sex, relationship with father, drug abuse before Erectile Dysfunction and satisfaction with sexual life. The men reported substantial implications of this dysfunction on their psychological well-being so there is a need to cater the Psychosocial Factors in devising a complete treatment plan for men having this problem. Key Words: Erectile Dysfunction, Psychosocial Factors

The Effects of Giving and Receiving Social Support on Improvement of Health Behavior and Subjective Well-being

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Background: The purpose of this study was to examine the effect of giving and receiving support on self-efficacy and health behaviors. **Methods:** Participants: 50 healthy college students. **Measures:** Giving and Receiving Emotional / Instrumental support Scale. Generalized Self-Efficacy Scale. General Health Questionnaire. Life Style Questionnaire **Procedures:** Participants were randomly assigned to two groups (the providing support group and the receiving group). Participants of providing support group were instructed to make a program for improvement of their peer's health behavior and to act as a peer coach (60min-5sessions). The receiving group had 5 traditional health education. **Results and Discussion:** The result showed that the improvement of health behavior in the providing support group were superior to the receiving group. And the providing support group demonstrated significantly higher scores on Generalized Self-Efficacy. They suggest that providing support could increase not only their knowledge in their life style problem but also positive motivation for health behavior.

Cognitive and Emotional Factors of Machiavellianism.

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Background: Different research showed that Machiavellianism highly correlates with manipulative behavior and also based on the self-regulation deficiency. The problem becomes dramatic in case of high suicidal risk of borderline patients, vulnerable to disorganization as a consequence of experiences of abandonment and stress because of brittle mental representations of self and others named by P.Fonagy "mentalization deficit". **Methods:** Mach-IV scale, Cognitive Scale for level of abstraction qualification, Rosenzweig Picture-Frustration Study. In our research took part 40 patients with suicidal attempt passing the therapy in hospital and 40 people without suicidal attempt (control group). **Findings:** Experimental group has statistically higher level of Machiavellianism than control one. Moreover, patients with high Mach have multiple suicide attempts and severe thinking and mentalization disturbances. **Discussion:** understanding special manipulative style including cognitive and mentalization deficits of such patients will help to establish productive relations with them and, in general to increase the effectiveness of psychotherapy and decrease suicidal risk.

Is the Factor Structure of the Internet Addiction Scale Replicable?

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Background: The Internet Addiction Scale (ISS), developed in the field of health psychology, is a German questionnaire consisting of 20 items. It is used to screen for Internet addiction. The study aims to replicate the factor structure of the ISS. **Methods:** Exploratory (EFA) and confirmatory (CFA) factor analyses were used to replicate the factor structure of the ISS in a sample of 1123 German adolescents and young adults ($M=22$, $SD=3$ years, 52% female). **Results:** EFA with default on 5 factors yielded no satisfactory solution; the results spoke for a one-factor solution. CFA of the original factor structure (5 scales and total value) showed insufficient model fit criteria ($\chi^2=1504.3$, $df=165$, $p<0.001$, $RMSEA=.09$, $CFI=.86$, $TLI=.83$). Based on these results, items were eliminated. CFA showed acceptable model fit criteria ($\chi^2=985.2$, $df=125$, $p<0.001$, $RMSEA=.08$, $CFI=.90$, $TLI=.87$). **Discussion:** The proposed scale structure of the ISS could be replicated neither using EFA nor using CFA in the present sample. The results indicate that some items should be eliminated and others reworded. Further conceptual and psychometric research on the dimensionality of Internet addiction is needed.

Expert Interviews to Capture the Support Needs of Siblings of Chronically ill or Disabled Children

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Background: Distress and resources of healthy siblings of chronically ill or disabled children have been investigated only in a few studies. Findings point to a reduced quality of life and increased prevalence of behavioral problems, but they're hardly any approaches to primary prevention. Aim of the study was to carry out expert interviews to detect the need for support from an expert point of view. **Methods:** 10 experts, people who work with chronically ill or disabled children or with their siblings in the medical, educational and or social area, were studied with semi-structured interviews concentrated on help and support requirements. Interviews were analyzed according to qualitative content analysis. **Findings:** The results showed that the experts consider the relief of the parents and the child-oriented teaching of coping strategies, social skills training and resource activation as very important elements of support. **Discussion:** Apart from the results of the expert interviews, interviews with siblings should be carried out to take account of their needs when developing a primary intervention for siblings of chronically ill or disabled children.

Factors Associated With Changes in Alcohol Consumption Among Slovak University Students

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Background: The aim of this study was to explore the role of social support, emotional well-being and personality traits in changes of alcohol consumption among university students. **Methods:** 190 Slovak university students participated in a longitudinal online study. We compared the data collected in the first and second year of their university studies using Wilcoxon tests and regression analysis. We modelled the change in the alcohol consumption score for each individual as a function of changes in their social support, emotional well-being, personality traits and intimate relationships. **Findings:** We observed a significant decrease in social support and a significant increase in emotional well-being and alcohol consumption. The increase in alcohol consumption can be explained by the decrease in social support, by changes in emotional well-being, by having no intimate relationships, by higher levels of agreeableness and by lower levels of extroversion. **Discussion:** The results point to several important variables which could explain the increase in alcohol consumption among university students and which may prove useful for precise targeting in health-related prevention programmes.

Self-regulation as a Moderator of the Relationship Between the Obesogenic Environment and Nutrition

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The aim of the present study was to evaluate the association between accessibility of healthy and unhealthy foods, the use of self-regulatory strategies, nutrition and body weight of children and adolescents. The questionnaire study was attended by 1,170 pupils aged 12 -17 ($M = 14.09$, $SD = 1.63$). There is a significant association between the accessibility of unhealthy foods at home and outside of home and snacks eating, but the relationship wasn't significant if the level of the use of self-regulatory strategies based on controlling and avoiding temptations was high. Similarly, there is a significant association between the accessibility of unhealthy foods at home and the consumption of sweetened beverages but the relationship wasn't significant if the level of the use of self-regulatory strategies based on avoiding temptations was high. In summary self-regulation was a moderator of the relationship between the accessibility of the unhealthy foods and nutrition. The relationship between the foods accessibility and body weight were not significant.

Emotional and Psychophysiological Reactivity to Cognitive Stressor of Individuals Having Type A Behavior Pattern

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The aim of the study was to evaluate emotional and psychophysiological reactivity to cognitive stressor of individuals having type A behavior pattern. 100 undergraduate students (50 type A and 50 type B) participated in a study. Attention concentration ABQ test was used as a stressor. The participants were asked to perform ABQ test while given 3 different situations: when giving basic instructions, when giving the instructions with time limitations and stimulus to compete and when criticizing while doing the task. Psychophysiological reactivity to stressors was measured using biofeedback device Nexus-10 by Mind Media. Emotional reactivity during the performances of the tasks was evaluated using Emotional Assessment Scale. The results of the study showed that type A individuals had higher psychophysiological reactivity to cognitive stressor than individuals having type B behavior pattern and they felt more negative emotions during the task. The findings explain one of the possible mechanisms why type A individuals are more likely to suffer from coronary heart disease.

Illness Perception in Relation to Cancer Care Settings and Healthcare Information

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Background: Our knowledge about illness perceptions among persons treated for colorectal cancer (CRC) and their partners is incomplete, as is our knowledge about how the context of cancer care environments affects illness perceptions. The aim of the present study was to explore illness perception in relation to cancer care settings and healthcare information among CRC survivors and their partners. **Methods:** Nine survivors and nine partners were interviewed, and grounded theory was undertaken, using the method presented by Katy Charmaz. **Findings:** The results were presented in the core category Outlook on the cancer diagnosis in a 'quick-fix' environment, which illustrated how the illness perceptions of survivors and partners were influenced in various ways by environment and healthcare semantics as well as personal approaches and lay beliefs described in the conceptual

categories outlook on the cancer diagnosis, experiencing a 'quick-fix' environment, approaching information and interpreting healthcare language. Discussion: Healthcare professionals should pay attention to illness perceptions among survivors and partners and adjust the information provided to different perceptions. The commonsense model of illness representations offers the practical guidance needed to recognize the potential of illness perceptions and to achieve the goals of contemporary cancer care.

Negative Life Events and Stress Among Adolescents: Does Subjective Well-being Matter?

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The main goal of the present study was to examine the protective function of subjective well-being against the negative effects of stressful life events among adolescents. The sample consisted of 317 Serbian adolescents (52% females, mean age = 17 years). The following scales were used: Life Events Checklist-Adolescent version, Satisfaction with Life Scale, Positive and Negative Affect Schedule and the Stress subscale of the Depression, Anxiety and Stress Scale. Moderation effects of affective well-being and life satisfaction in the relations between negative life events and symptoms of stress were tested with multiple regression analysis. The results did not support the buffering hypothesis regarding the protective role of subjective well-being. Neither affective component nor cognitive component of subjective well-being moderated the negative life events-stress relationship. The findings of the presents study suggest that high subjective well-being does not protect adolescents from adverse effects of stressful events.

Does the Transtheoretical Model Show Health Behaviour Changes for Ischemic Heart Disease Patients?

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Background: The use of motivational interviewing (MI) for changing unhealthy behaviour of ischemic heart disease patients forces us to find methods for its effectiveness evaluation. One of the solutions could be the transtheoretical model (TTM). It is a stage-based theory of behaviour changes. Movement through the stages is hypothesized to be caused by the processes of change, decisional balance and temptation. The objective of this study is to find out how TTM can show health behaviour changes for ischemic heart disease patients. Methods: One to three MI sessions has been successfully applied for 12 cardiac patients during their rehabilitation treatment period. TTM's Readiness to Change Questionnaire was used to evaluate behaviour changes at the beginning and at the end of MI treatment. Findings: There were 7 patients at precontemplation, 5 at contemplation and none at action stages at the beginning of MI sessions. Results showed that 5 patients stayed at contemplation stage but 4 patients moved from precontemplation to contemplation and 3 from precontemplation to action stages after MI interventions. Discussion: TTM evaluates health behaviour changes even after brief intervention.

Social Representations of Health in Allied Health Professional Students and Lecturers

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Current challenges of the healthcare system call for interdisciplinary cooperation of health professionals. The university is responsible for disposing students accordingly. Social representations theory was used as a framework for studying the social representations of health of allied health professional students and faculty. Study 1: Students (N = 465) completed a pile sorting task (sorting 142 health terms according to perceived similarity). Non-parametric multidimensional scaling yielded three essential dimensions: individual vs. system, therapy vs. prevention, and health threats vs. controllability (Kada et al., 2013). Study 2: Leading items from each dimension were presented to 131 lecturers in pairwise comparisons of health terms' importance for education (N = 8724 completed paired comparisons). Conditional logistic regression models were applied for analysis. Judged importance was highest for terms covering specific duties of lecturers own professions (McFadden's LRI = 0.127). Thus, interdisciplinarity was not regarded a key element of education. Results call for and may support the creation of learning environments enabling students to think outside the box of their own professions.

Prevalence and Risk Factors of Smoking Among Nurses in LITHUANIA'S Hospitals That Undergo Restructuring

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Background: Smoking put nurses' health in danger and it can become a serious obstacle for taking tobacco use prevention initiatives at their work. Methods: A cross-sectional study was conducted to estimate the prevalence of smoking among nurses and to identify restructuring related psychosocial risk factors associated with this health damaging behavior. The sample consisted of 775 nurses (age: $X=38.8$, $SD=8.8$; response rate was 91.25%) from 13 randomly selected hospitals that undergo restructuring in Lithuania. The questionnaire was designed according to European Model Questionnaire of European Monitoring Centre for Drugs and Drug Addiction, special scales were developed to measure restructuring related psychosocial risks at work. Binary logistic regression with bootstrap was used to analyze the data. Findings: In the studied group, 20.1% of nurses reported smoking in last 12 months what was quite similar to the corresponding prevalence rates among 35-64 year old Lithuanian woman (21.9%). Procedural justice of hospital restructuring implementation, working hours per week and hospital level predicted smoking behavior of nurses. Discussion: The results suggest that it is important to reduce the smoking behavior risk for nurses by creating health promoting psychosocial work environment particularly in the period of intensive changes at work such as hospital restructuring. Key words: smoking, nurses, hospital restructuring, psychosocial risk factors

Families First: a Mentalization-Based Group Intervention for First-Time Parents to Promote Family Health

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Background: The more sensitive parents are to their children's developmental and emotional needs, or the better the parents are to mentalize, the more successful the child's socioemotional and cognitive development. The aim of the present project is to enhance parental mentalization capacity through a new group intervention for first-time parents. Generally, the aim is to support well-functioning models of parenting, prevent transmission of negative parenting models over generations and thus promote child development and overall family health. Methods: The intervention is a renewed format of a 12-session group intervention originally developed at Yale University. Parents are trained to reflect on their child's experiences, feelings and needs in relation to child behavior. A web-based research evaluation (200 intervention families, 1000 control families) is performed evaluating mentalization capacity, parental stress, marital satisfaction and overall child development. Evaluations are performed for baseline data, at pre-intervention (3-4 months), post-intervention (1-year) and a follow-up (2-years). The intervention, research design and preliminary data will be presented.

Dynamics of Care-giving – Qualitative Study on Experience of Volunteers Working on Geriatric Internal Ward (Wholesome Contact Project) (part of Symposium: the Wholesome Contact Project...)

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Volunteers-based non-pharmacological delirium prevention was founded on internal geriatric ward. Volunteers' daily assistance is known to improve patients' well-being and are proved to be effective in delirium prevention and outcomes improvement. Qualitative study was conducted to explore variety and dynamics of experience of voluntary work on geriatric ward. The special interest was given to volunteers' motivation, values, beliefs concerning work and attitudes toward elders and the change of those aspects in process of care-giving. 20 volunteers were interviewed about their lived experience of voluntary. Transcribed data were submitted to IPA. Great emotional burden connected with the care-giving in geriatric ward and confrontation with corporeity, severe illness, difficult aging, death and traumatizing hospital environment lead to decreased motivation and frequent drop-outs. The necessary need for supervision and psychological support for volunteers were identified. Context-dependent findings have significant implications for proper management and safe environment for volunteers on geriatric ward with respect to individual differences of motivation, values and attitudes.

Migrant Children and Their Parents: Links Between Their Subjective Well-being and Migration Intentions

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Many children in Europe live in families that have migrated to other countries. Yet little is known how their parent's migration decisions and their subjective well-being impacts subjective well-being of these children. This paper examines subjective well-being of Latvian immigrant children in the UK using a sample of 50 families who have children who were born in Latvia but have moved with their families to the UK and have lived there for at least five years. A questionnaire developed for the purpose of this study was used to measure cognitive and affective components of subjective well-being, as well as parent's migration

intentions and children's migration preferences. We found that there was a strong positive correlation between children's and their parents' subjective well-being levels; intentions to stay in the UK also were positively link to subjective well-being of children and parents. This research has been funded by the EU project "The emigrant communities of Latvia: National identity, transnational relations, and diaspora politics" No. 2013/0055/1DP/1.1.1.2.0/13/APIA/VIAA/040.

Examination of Meaning-making Processes in Stressful Events: Focusing on Rumination

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Although rumination is an important factor of meaning making to overcome stressful experiences, this relationship has not been clarified in detail. This study used a retrospective method to examine how intrusive rumination and deliberate rumination influence meaning making and clarify the mechanisms underlying meaning making. First, 97 participants completed a questionnaire assessing executive function, self-rumination, and self-reflection. Next, they answered questions about stressful events to ascertain aspect of subjective evaluation, intrusive rumination, deliberate rumination, the contents of meaning making, and posttraumatic growth (PTG). Results showed that self-reflection promoted deliberate rumination, which also facilitated positive meaning making, and subsequently, positive meaning enhanced PTG. Further, when both intrusive and deliberate rumination immediately following the event were low, the content of meaning making was more negative. These findings indicate the importance of having time to deliberately consider the event for adaptive meaning making, and avoiding trying to inhibit rumination immediately after the event to prevent maladaptive meaning making.

Do Personality Traits Lead to Cyberchondria and What are the Outcomes for Well-being?

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The current study is based on the hypothesis that cyberchondria leads to poor well-being. We also hypothesise that certain personality traits are prerequisites for unfounded concerns about personal health following online information search. For the purposes of the study, in which 615 respondents took part, we applied a battery of questionnaires measuring: anxiety aroused by online health information seeking, cyberchondria, satisfaction with life, psychological well-being, eudaimonic well-being, depression, and personality traits. After carrying out regression and mediation analyses with the data, we registered that Neuroticism predicts anxiety aroused by online health information seeking, escalation and persistence of concerns. Negative associations were registered between Consciousness and escalation of concerns, and between Openness and health anxiety. Furthermore, the assumption that cyberchondria leads to decreased well-being was justified. The current study is the first of its kind in Bulgarian context and the results enrich research achievements in the field by bringing out new characteristics about cyberchondria which should be considered in addressing the problem.

Relationships Among Aggression, Life Skills, Social Support, and Mental Health in Japanese College Students

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Recently, aggression has been paid attention as a risk factor of mental health in college students in Japan, and then to cope and prevent an expression of aggression have been an important issue. To reduce aggression, improving life skills and increasing perceived social supports are considered to be effective. The purpose of the present study was to investigate the relationships among aggression, life skills, social support, and mental health. Subjects were 545 college students (222 males, 323 females, mean age: 19.8±1.2 years). Japanese Version of the Buss-Perry Aggression Questionnaire (Ando et al., 1999), Daily Life Skills Scale for College Students (Shimamoto et al., 2006), Japanese Version of Social Support Scale (Iwasa et al., 2007), and Japanese Version of the 12-Item General Health Questionnaire (GHQ12; Nakasugi, 1987) were measured by questionnaire method. Covariance structure analysis showed that the life skills scores were positively related to the social support scores directly, and then, social support scores were negatively related to the GHQ12 scores directly, and negatively related to the GHQ12 scores via the aggression scores (GFI=.998, AGFI=.992, RMSEA=.000). These results suggest that improving life skills contributes to promote mental health and to reduce aggression via increasing perceived social support from "Family", "Friends", and "Significant other".

Association Between Cardiovascular Recovery Function After Stress and Affective Factors

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Background: Biological recovery function after mental stress has to date been proposed for the mediation process of stress into

physical health. Methods: We continuously measured blood pressure of 142 young men before, during, and after mental stress tasks. Recovery function was calculated by our newly developed index, mean recovery rate (MRR) that is the recovery time-averaged area under the curve (AUC) divided by the task-induced reactivity. Before this experiment, we evaluated their state of depression and optimism by CES-D and LOT-R questionnaire, respectively. Moderation analysis was done using Johnson-Neyman technique. Findings: We found a significant association between the MRR and optimism above the 21.4 score of depressive symptom. Discussion: The MRR offers an advantage independent of the effect of the initial level of stress reactivity. The recovery function after stress is likely to be adequately associated with positive affective state at the high level of depression.

Protective Factors, Drug use and Depression in Young Drug Users in Pakistan

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Background: The present examined relationship between protective factors, drug use and depression and meditational role of drug use in relationship between protective factors and depression. Methods: Sample comprised of 200 male drug users recruited from different hospitals and clinics in Lahore, Pakistan. The Communities that care youth Survey, Drug Abuse Questionnaire and Depression Scale were used for assessment. Findings: The results revealed that protective factors had negative relationship with drug use and depression while drug use had positive relationship with depression. Self controlling coping and interaction with pro social peer were the significant predictors of drug use and family rewards and drug use were the significant predictors of depression. Drug use mediated the relationship between protective factors and depression. Discussion: The findings have important implications for drug rehabilitation services, drug users, their families and communities who can play an important role as protective factors against drug use.

Optimism, Affect and Post-traumatic Growth in Victims of Domestic Violence Living in Shelter Homes in Pakistan

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Background: The present study was conducted to investigate Optimism, Affect and Posttraumatic growth in the victims of domestic violence living in Shelter Homes in Pakistan. It was hypothesized that optimism, positive affect are likely predictors of posttraumatic growth in the victims of domestic violence. Method: The sample of (N=100) women was recruited from Darulaman, Dastak, Social Welfare Center, Lahore, Darulaman Bahawalpur and Darulaman Lodhran, Pakistan. Life Orientation Test, Positive and Negative Affect Schedule and Posttraumatic Growth Inventory were used for assessment. Results: Hierarchical regression analysis showed that Positive Affect significantly predicted posttraumatic growth but optimism did not predict posttraumatic growth in the victims of domestic violence living in Shelter homes. Conclusion: Findings have important implications for destitute women who find respite in shelter homes in Pakistan.

Psychosocial Risk Factors of Suicidal Ideation in Adolescents in Pakistan

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Background: Recently, a growing trend of suicide has been seen in children and adolescents in Pakistan, therefore the present research explored psychosocial risk factors of suicidal ideation such as personality, parental and teacher acceptance-rejection, anger impulsivity, depression, interpersonal relations, academic stress and intolerance in adolescents in Pakistan. Methods: Sample included 180 adolescents with equal number of suicide ideators and non ideators who were recruited from public and private schools and colleges in Lahore. The Big Five Personality Inventory, Parental acceptance rejection questionnaire, teacher acceptance and control-teacher acceptance-rejection/ control questionnaire, Inventory of Parent and Peer Attachment, Educational Stress Scale for Adolescents, Frustration Discomfort Scale were used for assessment. Findings: Class marks percentages; father's monthly income, depression, anger impulsivity and worry about grades were significant predictors of suicidal ideation in adolescents. Discussion: the findings highlight the role of counseling and support for adolescents to help vulnerable adolescents cope effectively with stress.

Perceived Stigmatization in Drug Addicts in Relation to Perceived Social Support and Coping Strategies

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Background: The present research was designed to investigate social support, coping strategies and perceived stigmatization in

drug addict patients. It was hypothesized that perceived social support and coping strategies are likely to predict perceived stigmatization in drug addict patients. Methods: Sample comprised of 100 males drug addicts ranging in ages between 20 – 45 years and were recruited from different rehabilitation services based in Lahore, Pakistan. Perceived Stigma of Substance Abuse Scale (PSAS), Multidimensional Perceived Social Support Scale (MSPSS) and Coping Strategies Questionnaire (CSQ) were used for assessment. Findings: Perceived social support, use of active practical coping, religious focused coping had negative relationship with perceived stigmatization. Friends and significant others' support and use of religious focused coping were significant predictors of perceived stigmatization.

Type D Personality and Disease: is Stress – Reactivity the Possible Mechanism? Present Situation and Future Directions

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Type D (the distressed) personality is associated with various noncommunicable diseases, their outcomes. Distressed personality is related with both physical as well as mental health (Molls, Denollet, 2010). Despite that the association between type D personality and cardiovascular diseases and their outcomes has been confirmed by scientific evidence (Denollet, 2005; Martens et al, 2010), the mechanisms accounting for these associations is still unrevealed (Kupper et al., 2013). One of the possible mechanism – Type D personality and stress reactivity (Habra, Linden, Anderson, Weinberg, 2003; Molloy et al., 2008). The objective was to review literature concerning Type D (distressed) personality disease-promoting mechanism - stress reactivity. The controversial results of the systematic literature review confirms stress - reactivity of the Type D personality being one of possible mechanism revealing association between Type D personality and diseases. Better understanding of possible mechanism is an important impact for the prevention and intervention, especially, talking about cardiovascular diseases. Implications for the future research are discussed.

Evaluation of One-year Healthy Hill-walking Program for Japanese Elderly on Mood Alteration and Physical Condition

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Background: The aim of this study is to evaluate mood alteration and physical condition through a One-year Healthy Hill-walking Program for retired elderly in Kaminoyama, Japan. This program was designed as health promotion for retired elderly. Methods: Quantitative and follow up study was used for the study. Twenty-three retired elderly (range=59-70) participated in this program as subjects. Mood alteration was measured with MCL-S.2. Physical condition was measured with some questions, constructed by authors. Data were collected on 12-days hill-walking from 2012 to 2013. Participants answered the questionnaire before and after walking, and on the following day. Findings: Pleasantness and Relaxation scores in MCL-S.2 significantly increased after 9 and 6 times of walking, respectively ($p < 0.05$). Anxiety score decreased after 4 times of walking ($p < 0.05$). Waist and knee pain decreased after 6 times of walking ($P < 0.05$). Some elderly commented positive relation between their sleep condition and this walking. Discussion: The elderly was able to promote perception of their mental and physical conditions and motivation for healthy custom.

The Relationship Between the Hardiness and Happiness Among University Students

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Background: The hardiness is one of the personality characteristics which include the ability to have a right understanding from the environment and also the ability to make decisions for the individual, and the happiness is the positive individual's idea toward themselves and their lives. The object of the present study is to evaluate the relationship between the hardiness and happiness among university students. Methods: In this study the correlation design was used. The sample consisted of 300 students which were randomly chosen. The measurement tools consisted of Kobassa and oxford scales were used. Data were analyzed via correlation coefficient of Pierson. Findings: The research findings stated that there is a direct and meaningful relation between the hardiness and happiness rate ($r = 0.80$). Other results stated that there are also relations between happiness and the variables depending on hardiness such as commitment ($r = 0.44$), control ($r = 0.26$) and the challenge ($r = 0.33$). Discussion: The results stated that there is a relationship between the hardiness and the variables depending on happiness, i.e. individuals, who consider stressful events of life as instructive, challenging and flexible events, and are prosperous with getting involved, influencing and open to challenges, and consider the changes as the common and unavoidable parts of the life, gain more happiness feelings.

Internet-based Stress Management Program: Effects on Health and Functioning

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Background: Recent studies on e-health web-based solutions show promising results. The main goal of this study was to facilitate change and increase daily life functioning for people who experienced traumatic stressors. **Methods:** 10 women aged from 20 to 61 years, who experienced at least one traumatic event, participated in this study. 8 session internet-based stress management program developed by the authors of this study included writing task once in a week, with a response from a professional psychologist. Functioning and health measures were made online. Research was funded by a grant (No. MIP-011/2012) from the Research Council of Lithuania. **Findings:** Stress management program had significant positive effects on health and daily functioning of participants. **Discussion:** This study demonstrated promising results of web-based e-health solutions for trauma exposed persons, and indicates perspectives of cost-effective stress management programs for prevention of health related problems.

Minimum Price Policies for Alcohol: What do uk and Western Australian People Think?

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Background. Excessive alcohol drinking, and binge drinking in particular, have direct negative outcomes in terms of economic, social, and health consequences. Investigating how to overcome binge drinking is an important area. One proposal is to raise the minimum price per unit/standard drink of alcohol beverages. **Methods.** Focus groups (28 UK; 14 WA) were conducted to gain insight into participants' views towards price policies. Transcribed focus-group discussions were analysed for emergent themes using inductive thematic content analysis. **Findings.** Analyses indicated that participants in the UK and WA showed 3 main themes: dislike, skepticism, and concern the policy may exacerbate problems. However, participants did outline several ways in which the policy may be made more acceptable. **Discussion.** UK focus groups agreed cost and availability was more of an issue than WA groups – which focused more on social and cultural influences. There is some support for minimum price policies only under certain conditions. The current research is important for policy makers attempting to raise the price of any product as a means of controlling its use.

Health-related Connections of the Czech Longitudinal Study

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Background: The project aims for exploring the paths to optimal development using empirical data of the longitudinal studies following individuals since 1956 (Prague) and 1961 (Brno). **Methods:** The sample of 88 Czech adults (49 women, 39 men) was examined besides the set of psychological methods also by somato-physiological measures (weight, height, BMI, WHR, systolic and diastolic blood pressure), selected biochemical measures (total cholesterol, triacylglycerides, glycaemia) as well as using the health questionnaire, and measures focused on selected behavioural aspects of health. **Findings:** As regards results of the linear regression analysis, BMI should be predicted in our study by NEO-C (Conscientiousness), interpersonal sensitivity, anxiety and self-concept, WHR by discipline, social competence, life satisfaction and self-concept, systolic blood pressure by optimism, discipline, favorable memories of home and social competence. **Discussion:** There is a higher number of participants with over-limited values of blood pressure – nearly in 40% of systolic, and in 25 % of diastolic blood pressure. There are no gender differences in this trend.

Psychological and Social Influences on Inequalities in Health in European Countries

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Background: The basic data concerning social influences on equity in health in Czech districts (2002, 2005, 2008, 2011) are in our study compared with results from 18 European countries, and the EU data. **Methods:** A representative sample of Czech citizens obtained by random quota sampling completed data on self-reported health, income, and level of education in conjunction with Czech national, statistical data on sick leave, unemployment, income and Gini coef. in respective districts of the Czech Republic. **Findings:** The poorer Czech districts report a higher morbidity and higher unemployment rate. The similarities and differences in social influences related to health inequalities within the EU will be demonstrated using the comparison of national and European statistical data. **Discussion:** One of the most important problem of European integration are social

influences on equity in health, and its psychological reflection at both individual and social levels. Health Psychology should focus on the closing this gap.

Exploring Psychological Underpinnings of Medical Professionals' Perceptions of Telehealth Implementation in Palliative Care

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Telehealth technology advancements have renewed interest in its potential to provide more home-based care by extending human resources, improving access to services and minimizing costs of the provision and receipt of specialist care (Herbert, Korabek, & Scott, 2006). The aim of this study was to explore how medical professionals perceive telehealth and what psychological factors contribute to the formation of these opinions. A qualitative design was employed using semi-structured interviews to obtain the views of medical professionals (N=8) who carried out a range of roles involved in palliative care. An inductive thematic analysis was conducted on verbatim transcriptions. Three themes were recurrent across the interviews; a changing culture within society and organizations, elements of the patient-professional relationship which included trust and the importance of human touch. The final theme identified was perceived technological competence. Increased knowledge of the psychological constructs of medical professionals' perceptions of telehealth will benefit healthcare managers responsible for making decisions about implementing and training for telehealth in care delivery.

Psychosomatic Symptoms and Dysfunctional Family Organization

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Family organization (FO) has a significant effect on the well-being and healthy status of the family members, as well as we can often recognize dysfunctional FO in psychosomatic families (PF). The aim of my study was to explore the characteristics of the family structure in two illnesses with heavy breathing: (1) asthma bronchiale (AB, the classic psychosomatic disorder) and (2) panic disorder (PD that is already said to be a partly somatization disorder). It is remarkable that the preceding disorders are comorbid with one another, but at least PD is the most frequent mental problem in AB. In this way, I supposed if there is some kind of symptom-changing by patients linking to the psychosocial background. My theory was tested with Gehring's Family System Test (FAST) that was used both in static- and dynamic forms. There were 5-5-5 families in my research with a healthy, AB- and PD-people. The demonstrations of the families' dynamic representations were recorded on video for later analysis. My results confirmed particular patterns of the perceived family structures and behaviors in PF. In this way, more rigid family system, the family members' peculiar influence on the FO and role in the system were found linking to the (psycho)somatic disorders. Although further studies are needed to understand better the interactions of the individual factors.

Testing the Effects of Real-Time Smartphone Alerts and Financial Incentives in Moderating Young Driver Speeding.

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The number of road collision deaths for those under the age of 25 has reached a global crisis point. A recent approach to improving outcomes has been the introduction of Phone App' Driver Monitors (PADMs). These smartphone apps provide real-time, in-vehicle feedback and summary reports. They also enable the generation of personal, subsidised insurance rates. This study is the first to examine the impact of PADM use on young driver behaviour (in this case, speeding violations and mean speed). 125 licensed, insured, smartphone-using drivers (aged 18-24) were recruited. All participants completed an initial demographics questionnaire, simulated 20km drive and were then split into groups. Group 1 (control) completed the 20km drive as before, while Group 2 (monitoring) were informed their driving would also be monitored. Group 3 (monitoring + alerts) could also receive smartphone audio alerts for unsafe driving. Group 4 (monitoring + financial incentive) could earn up to €5 for safe driving while monitored. Group 5 (monitoring + alerts + financial incentive) could receive payment and alerts for unsafe driving. Following a data collection period of three months, the time I and II simulator data was processed and within-between ANOVAs with interactions conducted. The results identify the optimal medium for successfully moderating young driver speeding, and the potential roles of PADM feedback and financial incentives in improving this risky health behaviour are discussed.

Are Dermatology Clinicians Trained to Deliver Behaviour Change in People With Psoriasis?

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Background: Psoriasis is associated with risk of cardiovascular disease thus lifestyle behaviour change (LBC) is key to patient management. Healthcare professionals, well placed to support LBC, lack the skills to do so. We examined the extent of training received by specialist and general healthcare staff to manage LBC. Methods: Training documents from UK professional accrediting groups were content analysed to examine: a) health promotion and LBC as part of the professional role; and/or b) health promotion and LBC as explicit training competencies. Findings: References to health promotion and LBC appeared mostly in the General Practitioner (GP) curriculum (n=42), followed by the Dermatology Specialist Nurse curriculum (n=14) and Dermatologist curriculum (n=11). None were found in the GP with a Special Interest in Dermatology curriculum. There was no evidence of clearly specified LBC knowledge, skills and attitudes; only basic level competencies were described. Discussion: Given the evidence linking unhealthy lifestyles with psoriasis outcomes, the training of specialist healthcare professionals should include LBC competencies to support psoriasis patients.

Relationships Among Dietary Life Style, Inner Strength, and Mental Health in Japanese College Students

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Several studies showed that the attitudes of deprecating dietary moods in dairy life were associated with mental health among college students in Japan. Additionally, inner strength has been paid attention as a personal resource that promotes mental health. However, the relationships among these factors have not been studied. The purpose of this study was to investigate the relationships among dietary moods, inner strength, and mental health in Japanese college students. Subjects were 187 college students (112 males, 75 females, mean age: 19.2±1.3 years). Dietary Life Style Scale for Japanese College Students (Takano et al., 2009), Japanese versions of Inner Strength Scale (ISS-J; Endo et al., 2013) and General Health Questionnaire (GHQ28 Nakagawa & Daibo, 1985) were measured by questionnaire method. Covariance structure analysis showed that the deprecating dietary moods scores were positively related to the ISS-J scores directly, and negatively related to the scores of GHQ28 via the ISS-J scores ($\beta(1)=1.74$ ($p=.19$), GFI=.994, AGFI=.963, RMSEA=.063). These results suggested that dietary moods were important factor to improve inner strength and mental health in college students.

Japanese Nurse Awareness in Relation to the Children of Female Cancer Patients

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Aims: The purpose of this study was to clarify the awareness of Japanese nurse in relation to the children of female cancer patients. Method: Data were collected 7 Japanese nurses through semi-structured interviews and content analysis was performed. Findings: The following 7 categories were extracted: "background of nurses who are practicing family nursing", "cooperation between medical teams that support the children and the families", "patients who are mothers as well", "Nurse consideration for children", "families who support children affected by the mother's cancer treatment", "family functions", "connection between families with children and the local community" Discussion: The nurse had taken into account the fact that the female cancer patients had children, so they were aware that their work also extended to patient's family.

Women's Developmental Processes Within the Framework of Multi-family-therapy: The Role of Sense of Coherence and Coping

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Background: Everyday life with a child with behavioral problems is associated with stressors for women. Multi-family-therapy (MFT) stimulates a therapeutic process for developing coping strategies. Considering own and child-related bonding experiences and personal and social resources the study examines the developmental processes of women in relation to coping strategies and SOC. Methods: 16 women were interviewed pre-/post-therapy using semi-structured interviews. The interviews were transcribed and analysed by using a grounded theory approach. Results: Preliminary results of the study show positive change of perceived self-efficacy and sense of meaningfulness. The confidence factor changed from "hope in the success of the experts" (pre) to "trust in their own abilities" (post). By the solution-oriented approach of the MFT, positive bonding experiences are recalled and changed the relationship between mother and child. Discussion: MFT seems to enhance sense of coherence and coping skills in mothers of children with behavioral problems.

Resilience Among Community-Living Old-Old Elderly: Focusing on Growth

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Background: People experience a range of stressors related to the decline of health in mind and body. This research seeks to explore how the elderly deploy resilience to recover their health in the face of stressful life events, in particular, how they experience moments of growth away from adverse events, and what the turning points are for that growth. **Methods:** In this study, a two-hour interview was conducted with an 85-year-old Japanese man with four diagnosed illnesses such as multiple brain infarction, living alone in public housing in a suburban area. Based on Modified Grounded Theory Approach (M-GTA), a word-to-word record was fractionated and categorized, and the relationship was analyzed. We obtained consent from the Research Ethics Committee at J. F. Oberlin University. **Findings:** The process took place over three stages: Stage 1, where the subject faced difficulty and he deployed both positive and negative interpretations; Stage 2, where the subject ascertained the benefits and disadvantages of available social resources, and he used the good aspects of them to move into actions. They were undergirded by psychological momentum and energy; and Stage 3, where the subject took measures to change his lifestyle towards a healthier one. **Discussion:** Through this research, we learned how resilience is deployed as an elderly person with illnesses living alone improves his QOL.

Does Duration of Treatment Affect OUTCOME?: a Comparison Between SELF-REGULATION Interventions

H. Koelewijn, N. Kuipers, V. van Mourik

Background: From 2010-2011 Dutch primary care psychologists offered insured care programs of 8 meetings per year for their clients. Due to cutbacks, this amount was lowered to 5 meetings in 2012-2013. Our aim is to study the assumption that efficient care programs of 5 meetings are as effective as care programs of 8 meetings. **Methods:** Socio-demographics & psychological complaints were assessed at baseline and after the intervention in 2 selfregulation intervention groups (int-5:N=400 & int-8:N=924). MANOVA was used to analyze data. **Results:** A larger decrease in psychological complaints was observed in the int-8 group, but there was no significant difference ($P > .05$) between the 2 groups. We also found that a larger group of clients ($P < .05$), who initially started with 5 meetings 1) used additional insurance or 2) were willing to pay themselves for extra meetings or 3) were more often referred to secondary psychological care. **Discussion:** Based on the results we conclude that the length and intensity of care should be adjusted to clients specific situation and complaints. Cutting back on insurance does not ensure lower costs, because other forms of compensation or counseling will be found.

Overweight and the Experience of Teasing and Ridicule: Associations With the Fear of Being-laughed at in Children and Adolescents

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²University of Zurich, Switzerland

Background: Is the fear of being-laughed at (i.e., gelotophobia) a problem for adolescents with overweight and obesity? **Methods:** In two online interviews with gelotophobic adults (Study I: 102 English-speaking participants, Study II: 22 German-speaking participants) assumed reasons for the personal development of gelotophobia were asked for. Experiences of teasing and ridicule related to physical appearance (including weight-related topics) were reported quite often. In Study III (participants: 75 Zurich adolescents) associations between objective weight status, weight perceptions (e.g., "much too big"), experience of weight-related teasing and ridicule, and gelotophobia were analysed. **Findings:** Whereas weight perceptions were unrelated to the psychological variables, objective weight status was linked with the experience of teasing and ridicule and thereby indirectly to the fear of being laughed at. **Discussion:** Given the debate on overweight and health risks, implications of the study are discussed within the context of an increasing tendency to stigmatize overweight individuals (Funding: SNF International Short Visit).

Intention-behavior Relationship of Social Activity for Post-stroke Patients

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Background: Post-stroke patients tend to reduce their social activity, which engenders decreased quality of life. This study was conducted to clarify the intention-behavior relationship of social activity of post-stroke patients. **Methods:** The study was approved by the hospital's medical ethics committee. As participants, 45 people were included (29 men; mean age: 64.2 ± 12.1).

Intention was assessed using the Intention of Social Activity Scale. Social activity was measured using the Social Activity Scale before discharge (T1), at 3 months after discharge (T2), and at 6 months after discharge (T3). Changes in intention and social activity were tested with ANOVA. The intention-behavior relationship analysis, using multiple regression analysis, was based on the assumption that intentions are the proximal predictors of subsequent behavior. Findings: Intention showed no change over T3 from T1. However, social activity was reduced over T3 from T2. At T2, intention was a predictor of behavior. However, at T3, intention was not a predictor of behavior. Discussion: At 6 months after discharge, an intention-behavior gap was found. The moderators or mediators in this intention-behavior gap must be examined.

Test-retest Reliability of a Questionnaire on Adolescent Motives for Physical Activity

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Background: Motives for physical activity are very important determinants for being physically active. The aim of this study was to investigate the test-retest reliability of motives for physical activity items from the HBSC questionnaire among adolescents and differences by gender, age group and country. Methods: We obtained data from male and female students aged 11 or 15 years old who participated in a test and retest study with a four-week interval in 2013 via the HBSC pilot study in the Czech Republic and Slovakia (n=580, 51.2% boys). We estimated the test-retest reliability of all 13 dichotomised motives by using Cohen's Kappa statistic in the whole sample and stratified by gender, age group and country. Findings: We mainly observed strong or moderate correlations between test and retest for most motives. Weak correlations (0.1-0.3) were observed in two items ("to make new friends" and "to enjoy the feeling of using my body") and a trivial correlation in the item "to improve my health" in the whole sample and also stratified by gender, age group and country. Discussion: The HBSC questionnaire seems to be a reliable instrument for measuring motives for physical activity among adolescents.

High Rate of Physical Activity Promotion by German Speaking Smoking Cessation Advisors as an aid for Quitting

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Objectives: Physical activity (PA) can reduce cigarette cravings and aid quitting but little is known about its promotion during smoking cessation counselling. This study aimed to determine the extent to which smoking cessation advisors promote PA. Methods: Self-report surveys assessing PA promotion within the Transtheoretical Model (TTM) framework, advisors' own PA levels and demographics were completed by 122 German speaking advisors. Results: 95.9% of advisors reported promoting PA to most smokers and were in the maintenance phase (TTM). Advisors spent an average of 6.4 mins and 11.8 mins per session promoting PA during the longer (7 weekly sessions) and shorter clinics (3 weekly sessions), respectively. Advisors delivering shorter clinics rated PA as more important for smoking cessation. A positive correlation was found between self-reported physical activity and minutes spent promoting PA in advisors using the short form, but no other factors predicted PA promotion. Conclusions: In this study nearly all smoking cessation advisors promoted PA. Advisors using a short-form seem to be aware of the importance of promoting PA despite the limited time-frame of this approach.

Using Implementation Intentions to Improve Breakfast Consumption: the Effect of Baseline Intention

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Background: The aim of this study was to determine whether implementation intentions could increase breakfast consumption in Australian young adults aged 18-25. The moderating effect of intention on the relationship between implementation intentions and breakfast consumption was also examined. Method: Participants (n=71) responded to a baseline questionnaire measuring intentions and breakfast consumption, and were randomized to either the implementation intention or control group. A similar survey was then completed one to two weeks from baseline to determine whether breakfast consumption had increased. Findings: It was found that participants in the implementation intentions did not significantly increase breakfast consumption compared to the control group. Intention moderated this effect, such that the intervention was effective for those participants with weaker intentions to consume breakfast at baseline. Discussion: By building on further research in the area, this study supports the endeavour to increase breakfast consumption through the use of implementation intentions. However, such research must account for the impact of baseline intention on intervention efficacy.

Going for a Smear: too Much Information?

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In a review of 50 systematic reviews we found that information levels have been considered frequently as predictors of screening uptake. The evidence from the literature suggests that increasing information offers limited benefits to Pap test attendance. In addition, thematic analysis of data from 4 semi-structured focus groups (N = 15) indicates that women attending for Pap tests, though feeling informed, objectively lack knowledge about cervical screening. Cross-sectional findings from a survey of 256 women corroborate this conclusion: information levels correlate positively with intention, but failed to predict intention in multiple regression or attendance (logistic regression). How much information is necessary? This presentation discusses the difference between being informed and feeling informed. Successful intervention may need to focus on practical information to create a sense of mastery. Ethical approval was obtained before data collection.

Communicative Competence Influence on Quality of Life Satisfaction in Russian and Belarusian University Students

G. Kozhukhar, T. Karpovich

Background: The purpose of the research was to study the relationship between the quality of life satisfaction and such characteristics of communicative competence as emotional intelligence, perceptive and interactive competence in Russian and Belarusian university students trained to become specialists of helping professions. Methods: The sample consisted of 93 Russian psychology students and 92 Belarusian student-teachers, aged at 18-20. The students completed Quality of Life Index Scale (R. Eliot, adapted by N. Vodopianova), Emotional Intelligence Scale (G. Rezapkina's version) and Communicative Competence Questionnaire (N. Fetiskin). Findings: The results of correlation, multiple regression and comparative analyses revealed two different models of communicative predictors of quality of life index in Russian and Belarusian students. For Russians the main predictors are self-motivation and mutual understanding, while for Belarusians they are emotional intelligence, self-regulation and mutual understanding. At the same time for Russian students such quality of life indicator as state of health depends on mutual understanding competence, while for Belarusians it is predicted by self-regulation. Discussion: We consider the received data to specify the influence of communicative competence on quality of life index due to cultural differences.

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G. Kozhukhar¹, T. Karpovich²

¹Moscow State University of Psychology and Education²Minsk State Linguistic University

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Qualitative Study Assessing Technology Usability in People who Have Participated in Multimodal Weight Loss Study.

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Background: Recent technology development, miniaturisation and simplification of electronic equipment have made health psychology research more feasible. The aim of this study was to assess usability, practicality and user-friendliness of novel technology aided research using the Technology Acceptance Model (TAM3) as a framework. Methods: We undertook in depth interviews with 12 study participants (Mean age 50.58, SD=9.92; 3M,9F) who had all taken part in research which used mobile-phone/touch-pad aided ecologic momentary assessment, on-line supported activity monitoring and real time on-line

administered weight assessment. Qualitative data was analysed using the Framework method. Results: Employing technology in research was seen as useful, practical and accessible. TAM3 variables were often referred to, particularly 'perceived usefulness' and 'perceived ease of use'. Technology was reported as easy to become accustomed to, including among older participants. Discussion: Technology-aided research is seen as valuable and easily embedded in everyday life. TAM3 provides a starting point for conceptualising technology acceptance in health-related behaviour research.

Psychological Well-being is Improved Through Outdoor Training in Postmenopausal Women

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Acute exercise in natural environments increases affective responses compared to indoor exercise in adults. This intervention study aimed to compare the long term effects of outdoor and indoor training environments on psychological well-being and exercise adherence in postmenopausal women. In a 12-week randomized trial, 24 healthy overweight (BMI 22 to 29 kg/m²) postmenopausal women (52 to 69 years old) were assigned to either: 1) Outdoor training, 2) Indoor training, consisting in three weekly 1h-session of identical aerobic and resistance training. Main outcomes were affective valence (Feeling Scale), measured before and during every mid-week session, and affective states (Exercise-Induced Feeling Inventory), which were measured at weeks 1, 6 and 12 of the intervention. Depression symptoms (Beck Depression Inventory) were assessed before and after the training. After 12 weeks of training, exercise-induced changes in affective valence was higher for the outdoor training group ($p < 0.05$). Positive engagement and tranquility decreased only in the indoor group ($p < 0.05$). Adherence to exercise was also higher ($p < 0.01$) and depression symptoms decreased ($p < 0.01$) for the outdoor group. As a conclusion, outdoor training enhanced affective responses to exercise and improved psychological well-being in postmenopausal women to a greater extent than indoor training.

What do we Know About Brief Interventions to Promote Physical Activity? Systematic Review of Reviews

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Background: The potential for brief interventions (BIs) to promote physical activity (PA) is increasingly recognised. It is timely to examine the evidence from reviews to determine what is known about BIs that could be delivered in primary care consultations. Methods: Databases were searched for systematic reviews of individual level BIs promoting PA in adults, reporting a PA outcome. Findings: Ten reviews were included. Three provided definitions, one specifying a maximum duration of 30 minutes. BIs increased short-term self-reported PA. Providing intervention supplements may increase effectiveness. It was unclear if BIs were more or less effective when targeting patients with certain characteristics. Many factors may influence their feasibility and acceptability e.g. time constraints. Discussion: Definitions include interventions that are too long for routine consultations. Practitioners and commissioners should be aware of this when interpreting the evidence. Intervention effects on objectively measured and self-reported PA in the long-term need further investigation. Future research should develop and evaluate very brief interventions that could fit into a routine consultation.

Acute Exercise Bout Affects Urges for Sweets and Physical Activity Participation in Overweight Regular Sweet Consumers

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Background: We investigated the effects of an acute exercise bout (AEB) on urges to consume sweets, affect and responses to stress and a sweet cue. Potential long-term effects on physical activity (PA) were assessed 12 months later. Methods: Following 3 days of chocolate-abstinence 47 overweight, sweet consumers were assessed, on separate days, in 2 randomly ordered conditions, in a within-subject design: 15-min brisk walk or passive control. Following each, participants completed 2 tasks: Stroop color-word interference task, and handling sweets. Urges for sweets, affective activation and valence were assessed. 30 of the 47 participants completed questionnaires about their exercise behaviour 12 months later. Findings: ANOVAs revealed sig. condition x time interaction effects for: urges for sweets ($p < 0.01$, $\eta^2 = 0.245$), valence ($p < 0.01$, $\eta^2 = 0.183$), and activation ($p < 0.01$, $\eta^2 = 0.130$). 65.6 percent of those surveyed reported more PA since study participation. Discussion: Obtained data show a potential of AEB in reducing food craving in overweight people; participating in an AEB study may increase PA – levels. The potential of AEB in weight reduction programs should be explored.

Exploring Distinct Types of Procrastination Behavior and Coping Strategies Among University Students: Latent Profile Analysis

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The study explored heterogeneous patterns of academic procrastination behavior within college students who came to the student counseling center for academic issues. Latent profile analysis was conducted to differentiate the types of procrastination behavior among undergraduates. Participants were 323 undergraduates who visited the student counseling center for academic difficulties. Academic procrastination and professional efficacy were the class indicators to determine the number and types of procrastination behavior. The results identified 4 classes, the optimal solution that best represented the sample. Additional analyses revealed how the groups differ in using coping strategies. Non-procrastinators engaged in more problem-focused and social support seeking coping while procrastinators tended to engage in more emotion-focused and wishful thinking. Procrastinators with low-efficacy used less coping strategies in general. Findings have significant implications for interventions designed to overcome procrastination and help their academic adjustment. Specific needs of distinct procrastination types should be considered to customize the right intervention to each individual.

Development of Playfulness Scale in Active Free Play Context of School-aged Children

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Background: This study aimed to develop a scale measuring playfulness of schoolchildren in active play context. Methods: The playfulness scale was developed on the basis of literature review, focus group interview, and experts review. A sample of 526 elementary school children responded to the playfulness scale and children's perceived stress scale. Factor analysis, reliability analysis and validity analysis were conducted to establish structure of the scale, and to obtain evidence for validity and reliability of the scale. Findings: The scale consisted 19 items with a five-factors structure: Engrossed, self-determine, self-efficacy, team rule, and socialization. Cronbach's α were from .788 to .876. The scale had high internal reliability ($r = .903$) by using the split-half method. Results of the regression indicated that playfulness significantly predicted the number of perceived stress ($\beta = -.325$, $p < .01$, $R^2 = .106$, $p < .01$). Discussion: The playfulness scale in active play context demonstrated acceptable reliability and validity, which could be applied for assessing playfulness in school-aged children.

Well-being Scores of Non-medical/non-nursing Health Professionals and the Correlation With of job Demands and job Satisfaction

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In health psychology research, insufficient attention is being paid to non-medical/non-nursing health professionals. This investigation examines the subjective well-being of physiotherapists, psychologists, and social workers and the interplay with job demands and job satisfaction. An employee survey was conducted in 2010/11 in certified breast cancer centers in the state of North-Rhine-Westphalia, Germany. In the heterogeneous sample of the non-medical/non-nursing hospital staff, physiotherapists, psychologists and social workers were the largest vocational groups. First, subgroup analyses and descriptive statistics were performed. Second, relationships between well-being scores, job demands and satisfaction for the three subgroups were analyzed. The mean scores of subjective well-being were significantly different between subgroups ($F = 5.43$, $p < .01$). On average, physiotherapists and psychologists perceived decent to high well-being scores. Social workers' mean well-being score was lower than in the later professional groups. Job satisfaction and specific kinds of job demands did not play a decisive role for the professionals' well-being in each of the subgroups.

Acute Effects of Brisk Walking on Psychological Well-being in Depressive Patients

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Background: We investigated effects of an acute exercise bout (AEB) on psychological well-being in depressive in-patients during psychiatric treatment. Methods: 23 patients with a total beck depression inventory score ≥ 18 were assessed on separate days in 2 randomly ordered conditions in a within-subject design: 30-min brisk walk or passive control (sitting and reading). Mood, psychological well being, affective activation and valence were assessed pre- and post- treatment, using mood survey scale (MSS), Activation Deactivation Adjective Check List (ADACL), Feeling Scale (FS) and Felt Arousal Scale (FAS). Findings: ANOVAs revealed significant condition x time interaction effects for MSS dimensions "lack of energy" ($p=0,035$), "activation" ($p=0,017$), "psychological agitation" ($p=0,028$) and "worry" ($p=0,030$) as well as for ADACL dimension "energetic arousal" ($p=0,012$). Discussion: Obtained data show positive effects of AEB on psychological well-being in depressive patients during inpatient treatment. Further trials should explore whether moderate physical activity at the beginning of psychiatric treatment

improves the therapeutic outcome or not.

Acceptance and Change in a Rheumatology Pain Management Programme: an Interpretative Phenomenological Analysis of Patients' Reflections.

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Quantitative evidence supports the effectiveness of acceptance based cognitive behavioural therapies (CBT) for chronic pain. Qualitative research has explored the experiences of chronic pain sufferers. However, there is an absence of literature examining the processes through which improvements are made. This study sought to qualitatively analyse the experiences of 6 adult patients who completed an acceptance based CBT pain management programme (PMP). Semi-structured interviews were carried out and verbatim transcripts were subjected to Interpretative Phenomenological Analysis. Three superordinate themes were identified: acceptance of a renewed sense of self; feelings of insecurity in the context of healthcare; and sustained motivation for change. These results add to the evidence base regarding a loss of sense of self. However, in addition, a renewed sense of self was found amongst patients' reports of their subjective experiences of participation in the PMP. The findings also highlight the processes by which the renewed sense of self was reached and these are discussed in relation to chronic pain literature. Potential areas for improvement in clinical practice are identified.

Patients' Causal Representations of Mental Disorders

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Background: Illness representations are an important determinant of health outcomes. The cognitive representation includes personal ideas about causes of the illness. This study aimed at analyzing causal representations of patients with mental disorders. Methods: The open-ended response item on causal representation from the IPQ-R was answered by 648 patients (73% female, mean age 47 years, 52% diagnosed with depression) receiving psychotherapy. According to qualitative content analysis, 2 raters agreed on 9 main categories and coded 1771 responses ($\kappa = .88$). Findings: Most frequently, respondents referred to "problems on the job" (47%) and "problems in the social environment" (44%) as causes for their mental disorder. Further relevant causes were "person-centered" (35%), "threatening life events" (29%), and "stress" (21%). Correlations were found between causal representation and demographic and clinical factors. Discussion: The analysis demonstrates the multifaceted causes patients attribute to their mental disorders. Demographic and clinical variables affect patients' causal representations. Further analyses will be conducted related to causal representations and psychotherapy outcome.

A Qualitative Exploration of Men's Strategies for Preserving Emotional Well-being in Advanced Prostate Cancer

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Background: Whilst research has documented the physical and psychological burden of advanced prostate cancer, there has been limited exploration of approaches to well-being. This study explored men with advanced prostate cancers' practices for promoting and maintaining emotional well-being. Methods: Semi-structured, in-depth interviews with five men with advanced prostate cancer from around the UK. Transcripts were analysed using Interpretative Phenomenological Analysis. Findings: Within narratives of lost and regained well-being, two super-ordinate themes emerged: 'living with an imminent and uncertain death' and 'strategies to manage living with death and uncertainty.' Well-being was threatened by reduced sense of the future, isolation and uncertainty. Yet the men pursued well-being by managing their emotions, striving for the future whilst enjoying life in the present, taking care of their families and renegotiating purpose. Discussion: Practitioners could encourage men with advanced prostate cancer to explore their own existing resilience and coping strategies. In particular, sense of purpose, social connectedness and life-engagement were revealed as concepts central to improving well-being. Additionally participants sought to take action and problem-solve, pointing to the relevance of CBT-based interventions for this population.

The Feasibility of an Active Lifestyle Intervention in People With Bowel Polyps: a Self-Determination Approach

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Self-Determination Theory (SDT) has been used successfully as a model for health behaviour change in weight loss programs.

However, the effectiveness of SDT for promoting physical activity (PA) behaviour change in an elderly population at elevated risk of colon cancer is unknown. This study investigated the feasibility of implementing an SDT approach in this population and provides preliminary evidence of its efficacy for modifying motivational regulation. Methods: Patients (n=27) with bowel polyps were randomised to a usual care (UC) (n=12) or an active lifestyle group (AL) (n=15) in a 6-month randomised-controlled feasibility study. Motivational regulation was the main outcome assessed at 3 time-points. Other measures included body composition, PA, and fitness. Results: Significant changes between the groups were seen in amotivation ($P<.05$), identified ($P<.05$), intrinsic regulation ($P<.01$) and relative autonomy index ($P<.01$) at 6-months in favour for the AL group. Total leisure time activity was higher in AL at 6 months compared to UC ($P<.05$). Discussion: The findings suggest that SDT could be an effective strategy for promoting long-term PA behaviour change in this population. A larger randomised controlled trial is needed to further explore the utility of SDT in this context.

Negotiating Health and Social Goals Over the Lifespan: the Mediating Role of Future-time Perception

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Background: With the age-related changes in future-time perception (FTP), individuals may differentially prioritize health and social goals. This study examined whether FTP mediated the age effects on goal prioritization and intentions to be physically and socially active. Methods: Older and younger adults (n=262) elicited 3 health and 3 social goals, ranked the goals on importance, and reported their FTP and intentions to exercise and engage in social activities. A goal priority index and the 2 intentions were regressed on age groups in 3 models. The mediating effects of FTP were also tested. Findings: Older adults more often prioritized health over social goals, and had stronger exercise and social engagement intentions than younger adults. FTP did not predict prioritization but mediated the age effects on intentions. Discussion: The age-related preference toward health goals might be attributed to the concerns over the age-related physical decline. FTP did not predict prioritization, as health goals might become emotionally meaningful with age. The suppression effects of FTP on age suggested the importance of an extended FTP in physical and social engagement.

The Effects of the Constructed Family Therapy Assessment Model for High-school Dropouts in Taiwan

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Background?The purposes of the research were to construct a “family therapy assessment model for the drop-out students in the middle way school” , and to evaluate the effects of the model. Method?The qualitative research method was adopted and the systemic theory was used to analyze the data. The family therapy assessment model was applied to 10 dropouts’ families, including home visit, 1.5 hours family interview, and 30 minutes family negotiation. All of the interview and negotiation were recorded and analyzed to provide the school staff the intervention maps. After one year’s intervention, the improvement of the dropouts’ behaviors as well as the family functions and relationships were evaluated. Findings? 1. The family therapy assessment showed (1) Parenting monitoring function badly. (2) Families had insecure attachment issues. (3) Rigid family interaction patterns reflected ineffective family communications and the parenting authorities failed. 2. The dropouts’ behaviors and the family function and relationship improved. Discussion? The assessment model for the high school dropouts was well built to improve the family health and the adolescents’ behaviors. It could be a potential model for other schools to use it. The rigid family interaction patterns, insecure attachment, and lack of parents’ monitoring in the dropouts’ families found implied a clinical intervention map.

Attitudinal Ambivalence Toward Health Behaviours in a Cross-cultural Sample

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Background: Attitudinal ambivalence can arise when individuals endorse both positive and negative attitudes toward a target object. Ambivalent attitudes are relevant for health behaviours, as they may have both positive and negative evaluations. By assessing ambivalence toward health behaviours, the underlying structure of attitudes toward them can be realised. Furthermore, attitudinal ambivalence toward health behaviours was assessed across different cultures. Methods: All participants (257 Australians, 105 Singaporeans) completed ambivalence measures and self-report assessments for five health behaviours: drinking alcohol, exercising, increasing fruit and vegetable intake and smoking. Findings: Singaporeans and Australians had similar levels of ambivalence toward health-risk behaviour but not health protective behaviours. Singaporeans reported being significantly more ambivalent toward health protective behaviour than Australians. Discussion: As ambivalence toward health protective behaviour was found to be high in Singaporeans, interventions aiming to increase these behaviours may need to be more explicit in highlighting the positives of such behaviour.

Relationship Between the Parental Feeding Practices and Healthy and Unhealthy Diet, Body Weight and fat Tissue Among Children; Parent-child Dyads. a Longitudinal Follow-up Study

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Background: The aim of the study was to determine the relationship between the Parental Feeding Practices and healthy, unhealthy diet, body weight and fat tissue among children. **Methods:** Parental Practices were assessed with measures by Food Parenting Practices Scale (Vereecken, 2004), Comprehensive Feeding Practices Questionnaire (Musher-Eizenman, Holub, 2007), Child Feeding Questionnaire (Birch i in., 2001). The participants were 250 dyads of child (6-11 years) - parent. Data were collected with standardized interviews, questionnaires, and using certified body weight and fat scales. It was a longitudinal 6-months follow-up study **Findings:** After controlling for parental body weight, child's adipose tissue, body mass index and diet relate to following parental practices, reported by both parents e.g. involvement in meal planning/preparation, pressure to consume more food at meals, restriction for weight control, monitoring, stimulation healthy intake, restriction unhealthy intake, encouragement through material reward, permissiveness, and making healthy foods available. **Discussion:** Accessibility, meals planning and rewarding were the key factors related with body fat tissue.

Psychopathy in Light of the Dark Triad: Inter-correlations Between the Capp and the Lsrp

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This study investigated inter-correlations between the Comprehensive Assessment of Psychopathic Personality (CAPP) and popular measures of the Dark Triad of Personality as the CAPP has not yet been applied in this context. The Dark Triad was measured using the Mach-IV (Machiavellianism), NPI (Narcissism), LSRP (Psychopathy) and the CAPP. Participants were 100 adults (aged 18-65) currently in leadership roles. The LSRP measures primary (P1; interpersonal/affective variant) and secondary (P2; behavioural variant) psychopathy, while the CAPP measures six domains of psychopathic personality: Self, Attachment, Behavioural, Dominance, Emotional and Cognitive. Correlational analysis revealed significant correlations between all four measures, but divergences were also found. Total CAPP scores were significantly correlated with both P1 and P2 of the LSRP. When controlling for the LSRP the CAPP was significantly correlated with the Mach-IV, but not with the NPI. Findings suggest that the CAPP may tap the same underlying construct as the LSRP and Mach-IV. As the CAPP is a relatively new measure of psychopathic personality, validating its use in different populations is of high importance.

Walking as Physical Exercise in Fibromyalgia: Identifying Profiles in Patients' Associations According to Psychological Treatment

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Background: Physical exercise and psychological intervention are evidence-based practices in Fibromyalgia. Our aims are to identify the prevalence of walking and psychological treatment in fibromyalgia, and their characteristics related to walking. **Methods:** 920 women belonging to Fibromyalgia patients' associations returned a mailed questionnaire (41.31%). **Results:** Of the sample, 59.2% reported walking but 48.07% under the minimum recommended by experts. 50.2% attended psychological treatment mainly due to depression (35.8%). These women scored higher ($p < .001$) in pain, fatigue, sleep and cognitive problems. Prevalence of medical advice to walk was 79% and was not associated with psychological treatment. However, women in psychological treatment perceived more interference of chronic problem in walking ($M = 29.1$, $p < .0001$) and 63% perceived interference of their psychological problems in this behavior. **Discussion:** Psychological problems are relevant both to symptom perceptions and recommended health behaviors. The adherence to walking is a main objective for psychological intervention from a Health Psychology perspective. Supported by Spanish Ministry of Economy and Competitiveness

Psychological and Health Status Determinants of the Motivation for Walking as Physical Exercise in Fibromyalgia

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Background: Walking is recommended by experts to improve health outcomes in fibromyalgia. Our aim is to identify the predictors of walking intention in patients with fibromyalgia using the Theory of Planned Behavior and considering other

fibromyalgia variables. Methods: 274 Fibromyalgia women of several patients' associations completed a self-reported questionnaire based on the theory of Planned Behavior, pain-related fear, distress, pain intensity and fibromyalgia impact. Multiple regression analyses were conducted. Findings: Intention was predicted by Attitude ($\beta = .29, p < .001$), perceived behavioral control ($\beta = .14, p < .05$) and subjective norm ($\beta = .13, p < .05$) (24% of explained variance). Discussion: Only TPB constructs were relevant in the motivation of walking, mainly the attitude. Other emotional, symptom and impact variables were not relevant. Results are coherent with previous research except in the main predictor which was attitude and not perceived behavioral control. Supported by Spanish Ministry of Economy and Competitiveness (Grant: PSI 2011-25132).

The Effect of Direct and Indirect Education on Attitudes of Parents of Children With Attention Deficit Disorder and Hyperactivity Towards Medication Treatments

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Background: Attention deficit hyperactivity disorder is one of the most common childhood behavioral disorders causing hyperactivity, attention deficit and education decline among children. Regarding the importance of medication treatment, this study was performed to compare the effect of two methods (Direct and Indirect) of education of parents of children with ADHD on their attitudes about medication, treatment satisfaction and medication compliance. Methods: In this quasi-experimental study, sixty one parents of children with ADHD who referred the child and adolescent psychiatry clinic in Shahrekord were randomly assigned to direct and indirect education groups. The first group (direct group) was attended in groups four sessions. The second group was given education booklet with the same content. Participants were evaluated before and one month after education in terms of their attitudes to medication, treatment satisfaction and treatment compliance. Results: After intervention, the mean scores of attitudes about medication and satisfaction with treatment were care significantly improved in the direct education groups. There was significant difference in the direct education group whereas in indirect education group, significant difference was not statistically observed. Both groups had significantly increased treatment compliance one month after education, change of mean score attitudes to medication consumption at the end of the periods was significantly different in direct group comparing indirect education group. Conclusion: Direct or conventional education was more effective in treatment rather than indirect education on improvement of attitudes towards medication and increase in treatment satisfaction, this study suggests and significant influence on disorder children in family and school environment.

The Relation Between Quality of Life in Elders and Their Attitudes Towards Aging

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Background: Quality of life in elders is often considered to be lower due to the risk of disease and disability that clearly increase as people grow older, but poor health might not be an inevitable consequence of aging. Methods: We investigated the directionality of the dynamic relationship between quality of life in elders and their attitudes towards aging and we hypothesized that negative attitudes toward aging might be linked to poor physical health and functioning outcomes in late life. Participants in this study were elders from urban areas (N=154) over the age of 65 with no prior history of dementia. Findings: As hypothesized, when aging attitudes were less favorable, the quality of life of elders was reported as being lower. Discussion: Although previous research has identified a strong association between quality of life and attitudes towards aging the present study highlights the direction of this relationship which can give practitioners insights when designing interventions aimed to improve the quality of life in elders.

Identifying Factors That Motivate People to Continue Hill-Walking for Their Psychological and Physical Health Promotion

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Background: This study aims to identify factors that motivate people to continue hill-walking to promote their psychological and physical health. Methods: Three males and 20 females participated in a one-year health promotion program, including 12 hill-walkings in 2012 - 2013. Questionnaires were given each time, in which we asked, using 4-point-scale, degrees of expectation for motivational factors such as enjoying scenery, exercising in nature, interaction with people and refreshing their mind before walking and degree of satisfaction with them after walking. Findings: Expectation for factors such as scenery varied each time (mean value ranged 3.07-3.71). Its post-walking satisfaction was significantly lower than pre-walking expectation one

day ($p<0.05$). Expectation for improving physical condition remained low (overall mean value 3.11). However, the satisfaction with interaction with people was consistently high (mean value 3.44 to 3.80), and significantly greater than the pre-walking expectation twice ($p<0.05$ and $p<0.01$). Discussion: While environmental and physical factors are unstable as motivation, social factors may play a key role for people to continue hill walking.

Quality of Life and Level of Physical Activity of Members of the University in Brazil

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Objective: To evaluate the perception of quality of life, nutritional status and level of physical activity of the academic community. **Methods:** The perception of quality of life, we used the WHOQOL-bref instrument of the World Health Organization (WHO). The nutritional status was assessed using the body mass index (BMI). The level of physical activity was measured using the International Physical Activity Questionnaire (IPAQ). The instruments composed of computerized data collection system with voluntary participation. The data analysis considered comparisons by the Kruskal Wallis test. **Results:** Among the 1966 volunteers, the women are the majority (61.6%). The nutritional status, 32.3% of individuals are over the ideal body weight and 65.5% practice physical activities regularly, in about quality of life, respondents ranked the environment in 63.85%; social relationships 67.96%; psychological aspect 68.04%; physical condition 73.03% and general aspect 68.46%. **Discussion:** The results corroborate the idea of the need for the implementation of specific actions to promote health and quality of life for the maintenance of good life habits during aging

Predicting and Intervening in Type 2 Diabetes: Using the Health Action Process Approach

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Background The purpose of this study was to explore the predictive utility of the Health Action Process Approach (HAPA), and test a brief HAPA based healthy eating intervention, in adults with Type 2 Diabetes (T2D). **Methods** Seventy-seven participants took part in a prospective RCT. Outcome measures collected prior to the intervention and four months later included; BMI, blood pressure and blood glucose levels as well as HAPA variables (e.g. risk awareness and planning). **Findings** HAPA predicted BMI (16.6%) with risk awareness and recovery self-efficacy significant independent predictors. Risk awareness, intentions and self-efficacy were also independent predictors of health outcomes such as diabetes distress, HbA1c, diastolic blood pressure and HDL cholesterol; however, the HAPA did not predict healthy eating. The intervention did not result in changes in diet ($p=.84$) or HAPA outcome measures compared to the control group. **Discussion** HAPA may be of some utility in predicting and explaining but not changing behaviour for people with T2D. Other health models may be more effective, and alternative brief-low cost health interventions for those with T2D should be explored.

Relation Between Physical Activity, Student Performance and Life Satisfaction

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Background Physical activity has many benefits for health. The aim of this study was to investigate the relationships between students' physical activity status and their academic performance, academic stress, general self-efficacy and satisfaction with life. Theory of planned behavior was the main theoretical approach. **Methods** A cross-sectional study was undertaken among 96 psychology students (73.2% female). In this study, the Concise Physical Activity Questionnaire, the Academic Stress subscale of the School Perception Scale, the General Self-Efficacy Scale and Life Satisfaction Scale have been used. Previous semester average was considered as a measure of student performance. **Findings** The results show that physical activity reported by students positively and significantly correlates with their satisfaction with life and negatively with perceived academic stress. General self-efficacy mediates the relationship between physical activity and student performance. **Discussion** The results from this study are potentially relevant to the development of physical activity programs in university helping students to reduce academic stress and improve their satisfaction with life.

Mental Health in Obese Patients From a Positive Psychology Approach

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Background: The literature has found that obese patients usually report less depression and anxiety than normal weight individuals. However, not many investigations have studied the relationship between obesity and quality of life from a Positive Psychology approach. **Methods:** A total of 221 participants were selected to conduct the study. Participants were obese outpatients from the Valme Hospital (Seville) and a control group comprised of students from the Spanish Open University. The Spanish versions of the Ryff's Scales of Psychological Well-Being and the SF-36 were used to measure psychological well-being and mental health respectively. **Findings:** Obese participants showed less psychological well-being than normal weight individuals but there were not statistically significant differences in the case of mental health measured with the SF-36. **Discussion:** According to the results, it could be concluded that reports of psychological well-being problems are much more common in participants with weight problems than in the control group.

Child Abuse Scale: Revision, Validation and Norms Development

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Child Abuse Scale (CAS, Malik & Shah, 2007) was revised and standardized. Separate forms for mother and father were developed; 17 new items were generated for sexual abuse. A sample of 700 children (356 boys and 344 girls) of 8-12 years ($M = 10.31$, $SD = 1.14$) was drawn from five cities in Pakistan. Principal component factor analysis revealed 3 factors structure for CAS-Revised comprising of 38 items with factor loadings > 0.50 which was supported by item analysis. Factors were labeled as Physical and Emotional Abuse, Physical and Emotional Neglect and Sexual Abuse. Child Abuse Scale-Revised showed significantly high alpha coefficients for Mother and Father Forms as well as its three sub-scales. There were significant inter-correlations among all sub-scales and with total CAS-R score. Levels of abuse were determined by computing percentile scores for mild, moderate, moderately severe and severe for the total sample as well as clinical and non-clinical samples separately. Age and gender norms were computed for CAS-R. The results are discussed in the light of cultural context of Pakistan

Your Happiness Depends on Your Own: Relations Between Self-leadership, Happiness and Depression

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Self-leadership is a self-influencing process through which people achieve the effectiveness necessary to reach their own goals. Goal attainment leads to a sense of achievement, thus influencing our personal well-being, while failing to achieve personal goals leads to feelings of helplessness associated with depression and withdrawal. Considering the influence of self leadership on one person's expectations about his/her own effectiveness the authors examined the relationship between self-leadership skills and their impact on personal happiness and depressiveness. A sample of 448 students completed an online questionnaire, consisting of the German version of the Revised Self-leadership Questionnaire, the Optimism Pessimism Scale, the Oxford Happiness Inventory and the Health Questionnaire for Patients. The results showed both a positive relationship between self-leadership and happiness, and a negative relation between self-leadership and depressiveness. In addition regression analysis with self-leadership as predictor confirmed the described relationships among variables. The authors discuss the role of goal attainment by self-leadership skills as a path to increased happiness.

Low Fruit & Vegetable Consumption and Risky Food Safety Behavior Among Older Persons

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Background: Previous studies indicate that older people are not well aware of dietary recommendations according fruit and vegetable consumption. Further, older people are not aware of risks about food safety and those who are still living at home might be a vulnerable group when it comes to obtain relevant health information. **Methods:** A questionnaire was responded by 317 respondents (73% women, $n=232$; and 22% men, $n=70$; 5%, $n=15$ excluded) in central part of Sweden. Confirmatory Factor Analysis were used as a statistical method (SAS 9.3). **Finding:** Few respondents reported a daily intake of fruit and vegetables of exactly 5 portions. There was a significant association between knowing the recommended amount of fruit and vegetables to be eaten per day and the amount actually eaten. The results also show a significant association between fruit and vegetable consumption showing that women consume more than men and that responders living together eat more than those living alone. Positive correlations imply that answering that it is harmful to taste raw minced meat will raise the probability of actually not tasting raw minced meat. One reason not to taste raw minced meat is that it might contain Verotoxin-producing

Escherichia coli, a dangerous of bacteria. Regarding refrigerator temperature, the study indicates that it was common to think that 8 °C, since this is the temperature often written on food products. A negative correlation is indicating that the respondents do not know the recommended temperature for the refrigerator which should be < 5°C. Discussion: The present results are in line with earlier studies performed in this group. Knowledge regarding daily consumption of fruit and vegetables as well as an awareness of the risks of tasting raw minced meat might have an impact on behavior. Further research should focus on relevant channels for health communication targeting older people. One limitation of this study might be that the larger proportion was women. Thus, further studies should include a larger proportion of men.

Positive About Dementia – an Interdisciplinary Project for Designing Dementia Education in Europe

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Background: Dementia is a worldwide health issue. The need for an effective dementia workforce has been stated at national, European and international level (WHO, 2012). The multi-lateral project "Positive About Dementia" is dedicated to the development of an interdisciplinary Masters Programme. Methods: One work package deals with Quality Assurance and Evaluation(QA&E). The QA&E concept applies Mixed Methods (Plano Clark & Creswell, 2008) by combining qualitative and quantitative methods. Formative and summative evaluation is realized. For example, the project's progress is evaluated continuously; an external expert group reviews the developed Curriculum. Findings: The survey of the project's meeting (N=16) shows that getting to know the partners, the various expectations and the different work packages were liked most (n=11). On the other hand, the meeting's time frame was rated as too short (n=11). Discussion: An interdisciplinary approach, combining health psychology, management, neuroscience and nursing is a promising way for the development of high-quality dementia education. For a sustainable implementation close collaboration must be realized.

The Approach Towards the Economics of Happiness in the Baltic States

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Background: Economics of Happiness (EoH) examines the relationship between individual satisfaction and economic issues: what factors increase or decrease human well-being and quality of life. In our research we looked at prevalence of ideas of EoH among various socio-demographic groups of Latvian and Lithuanian population. Methods: Using anonymous survey, 15 questions in 5-level Likert scale, we determined 292 respondents' attitude towards concepts of EoH and implementation of them in work, family, education, health care, public administration. Findings: People with higher education, high income, residents of the capital, and employees aged 36-55 had the most positive attitudes towards the EoH. Men's responses tended to be on extremes: either positive or negative, while women's attitudes clustered around the middle of the scale. The most negative attitudes were observed among individuals with primary or secondary education, living in rural areas. Discussion: Our finding contribute to the understanding of who and to what extent supports the ideas of EoH.

When it Comes to Happiness: the Relationship of Emotional Self-efficacy and Coping With Marital Satisfaction

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This study was designed to investigate the effects of emotional self-perceptions and stress coping strategies on marital satisfaction. We tested whether married couples who were high on emotional intelligence had different coping strategies and high marital satisfaction than those with low emotional intelligence. Eighty heterosexual couples (N=160, Mean of age=39.87, SD=12.61) were administered with the Trait Emotional Intelligence Questionnaire (TEIQue) (Petrides, K. 2009); the short demographic questionnaire and the COPE Inventory (Carver, C., Scheier, M., & Weintraub, J. 1989) along with ENRICH Marital Satisfaction Scale (Fowers, B. & Olson, D. 1993). The results indicate that trait Emotional Intelligence strongly correlates with and therefore has high predictive value for individual's marital satisfaction. Couples emotional self-efficacy is highly related to their reports of marital satisfaction as well as to their coping strategies. Stress coping strategies are related to marital satisfaction. The results have implications for health psychology as high marital satisfaction may contribute to individuals' physical or psychological health and well-being and protect them from certain diseases.

The Role of Illness Perceptions, Treatment Beliefs and Goal Cognitions in Nonadherence After Kidney Transplantation

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The aim was to investigate the role of illness perceptions, treatment beliefs and goal cognitions in predicting medication adherence after kidney transplantation. Consecutive patients were invited to participate in an interview 6 weeks (T1: n=113), 6 months (T2: n=104) and 18 months (T3: n=87) after transplantation. The following concepts were measured: adherence (BAASIS®); illness perceptions (Brief IPQ); treatment beliefs (BMQ); goal cognitions (adapted from Pomaki); and socio-demographic and medical characteristics. Nonadherence significantly increased from 17%, 27%, to 31%. Controlling for T1 adherence, logistic regression showed that lower age and an increase in perceived graft longevity were related to nonadherence 6 months post-transplant ($p < .05$). Controlling for T1 and T2 adherence, a decrease in self-efficacy between T2 and T3 was significantly related to nonadherence 18 months post-transplant ($p < .05$). Various psychological factors were found to be pertinent at different stages in the post-transplant period. Unrealistic beliefs and self-efficacy are potential targets for interventions aimed at reducing nonadherence after kidney transplant.

Stress Reduction in Healthy Adults: Does the Initial Stress Level Make a Difference?

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Background: The stress-relieving effects of methods including physical activity and/or relaxation were investigated. It was examined whether participants with an initial high vs. low stress level showed a different relaxation response. Methods: Participants took part in four methods: (1) physical activity combined with resting, (2) physical activity combined with balneotherapy, (3) combined relaxation (resting and balneotherapy) or (4) resting only. Blood pressure, saliva cortisol, state of mood and the status of relaxation were measured pre- and post-intervention. Groups with a high vs. low stress level were determined by validated questionnaires. Findings: 81 healthy participants were analysed (31% in the high stress group). Both groups showed significant and similar relaxation responses. The high stress group felt more awake after methods including balneotherapy (2 and 3). In this group saliva cortisol increased after physical activity combined with resting (1), while in all other groups it decreased significantly. Discussion: Results indicate that the development of personalized strategies for stress reduction that take into account the initial stress level could be beneficial.

Older Adults' Experiences and Management of Multiple Conditions: a Systematic Review and Qualitative Meta-synthesis

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Background Multimorbidity, the co-occurrence of multiple conditions, is particularly prevalent in older populations. Developing effective interventions requires an awareness of how multimorbidity impacts patients' lives. The aim of this review is to develop a conceptual framework of older adults' experiences and management of multimorbidity through a systematic review and meta-synthesis of qualitative studies. Methods Electronic databases were searched using multiple condition and qualitative methodology search terms. Included papers were synthesised using the meta-ethnographic approach described by Noblit and Hare. Findings The use of meta-ethnography allowed for the development of a higher order interpretation of older adults' experiences of managing multiple conditions. Preliminary analysis indicates that multiple-medication issues are a key challenge across studies. Discussion This review will contribute to the development of a patient-focused evidence base to inform intervention development, clinical care and policy. The review findings will also be used to explore how existing health psychology concepts may need modification for use with older multimorbid populations.

Exploring Cooking and Mealtime Needs of Older Adults Living Independently in the Community

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Background: Older adults living independently often require cooking and nutritional support. Our aim was to explore cooking and eating patterns among Irish older adults, as well as exploring the recommendations of geriatric healthcare professionals, in order to inform future design of mealtime support for older adults. Methods: User and expert consultations in the form of interviews and focus groups were held with 7 users and 25 experts from relevant professions. All data were recorded, transcribed, and analysed using content analysis by two independent researchers. Findings: Overall a need for cooking support for older adults living independently was evident. The data revealed 14 recommendations including: dyadic peer-based partnership; active,

person-centred, additive, multi-componential intervention; prioritising energy intake; and the mealtime as occasion, and as an opportunity to evaluate improvement. Discussion: Implications for supporting cooking and mealtimes in a social cognitive framework are discussed. We also describe the development of our own novel peer-led intervention arising from this research, entitled "RelAte".

Psychosocial Factors in Healthy Ageing: a Health Psychology Perspective.

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Background: Healthy ageing is an international policy priority. This paper reviews research on psychosocial factors in healthy ageing, and considers how Health Psychology can best contribute. **Method.** A structured review of the scientific literature from 2000–2013, building on a previous review in 2010. The search term 'healthy ageing/aging' was combined with 'older people', also using conceptually overlapping terms. Following a review of identified abstracts, full articles on the central topic of the review were obtained and evaluated. **Results.** Three main factors contributing to healthy ageing were: physical exercise, social engagement, and diet; other important factors included perceived control and potentially important but neglected factors included sleep quality. Few studies considered the interactive effects of contributing factors, there were few intervention studies, and little model-testing. **Conclusions.** Contributing factors to healthy ageing contain a substantial behavioural component, indicating the relevance of a Health Psychology perspective. More model-testing and intervention studies are needed –to which Health Psychology is well-suited to respond.

From Smoking to non Smoking - Tobacco Cessation on the Phone? That Works With the Rauchfrei Telefon in Austria

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Smoking is a major avoidable risk factor for developing diverse diseases which are caused by tobacco use. Changing the smoking behaviour into non smoking behaviour therefore is a big challenge for the health care system. Health psychologists are those who can take care of this topic in a well grounded way. Behavioural therapeutical models of treatment have proven to be efficient and effective for nicotine dependence, a chronic addiction disorder. The treatment is not only efficient in the single or group face to face setting. Psychological tobacco cessation is also efficient when it is performed on the phone. The characteristics of the communication medium telephone – anonymous accessible anytime from everywhere - are practical for tobacco cessation. It is a low – threshold service. It therefore helps to provide tobacco cessation for a very broad and divers range of smokers and exsmokers. One important aspect of the effectiveness is the proactive element of the counselling calls. The austrian „Rauchfrei Telefon - 0800 810 013“ is offering tobacco cessation since 2006 through a team of clinical and health psychologists. The treatment emphasises the preparation, the implementation and the maintenance of tobacco abstinence as well as the relapse prevention. In addition to counselling, information on tobacco and on cessation services all over the country is offered. Treatment, experiences with different target groups, support by homepage, self help materials and supporting online - programm will be presented and discussed .

A Systematic Study About the Victims' Psychological Suffering of Medical Malpractice.

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Background: With technological development and innovation in medical resources, there has become a growing number of lawsuits sued against medical professionals in Brazil, and consequently, an increase in the number of cases of medical malpractice. Medical malpractice can be understood as the damage caused to the patient by act or omission of practitioners in the medical profession, through incompetence, imprudence or negligence. We have analyzed this situation, within the Brazilian context, and looked at how psychological treatment could be instated to act in an attempt to minimize the suffering of victims and their families. **Methods:** Studies were identified through electronic database searches. **Findings:** It was found that the Brazilian and international medical literature does not mention the psychological suffering of these victims, this leaves them vulnerable and lacking resources to fight for their rights or report incidences of malpractice. **Discussion:** The Brazilian Psychology community need to accept the reality of the psychological suffering of victims of medical malpractice, their sufferings and anxieties need to be worked on clinically. Families of victims could also benefit from psychological treatment to help deal with issues such as attachment and death.

Comparison of Clinical Patterns of Personality Based on MCMI-III

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the aim of study is comparison of patterns personality based on the Million Clinical Multi-axial Inventory III (MCMI-III) had two groups of males with chronic pain and normal. Methodology: to this end 202 participants, including 119 patients and 83 group control using randomly selected. primarily people with chronic pain by medical expert groups evaluated for diagnosing chronic pain. Then both groups of participants were completed MCMI-III. Results: data from the study were analyzed by one-way analysis of variance. The results showed that among groups with various types of chronic pain with each other and with the control group in some of the clinical patterns of personality subscales there was statically significant difference. Conclusion: people with chronic pain usually deal adjustment problems such in personality disorders. therefore further study could be focused on types of pain, separation and their differential and their relation with abnormal psychology. Key Word: chronic pain-clinical patterns of personality-MCMI-III Inventory

Implementation Intention to Improve Medication Adherence Behaviors in Patients With Heart Failure

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Background: Patients' sub-optimal medication taking behavior with respect to their therapeutic regimen leads to poorer clinical outcomes and quality of life, and generates economic loss. The implementation which explains where, when and how to act in a situation encountered, could be a solution to this problem. Method: In a randomized control study, we will test the effect of the implementation intention on medication adherence problems in 50 patients with heart failure. After choosing the daily barriers they encounter among a list of the barriers to medication adherence, participants in the experimental group will form an implementation intention by finding their own solution, which takes the form of "if I encounter the situation X, then I will do Y". Medication adherence will be measure with self-report questionnaires. Findings: The result show that medication adherence of the participants in the intervention group will be improved 1 month after the implementation intention. Discussion: Thus, it could be an effective mean to improve treatment compliance. It could be easy to administer by the psychologists or health care professionals, as part of the educational monitoring.

Interpersonal Victimization Experiences in Psychiatric Patients: Preliminary Data

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Psychiatric patients present high rates of interpersonal victimization. Studies fail to examine a large set of victimization experiences, not considering victimization through lifetime. The purpose is to describe the rates of a large set of victimization experiences in a sample of psychiatric patients. 96 psychiatric patients (51% female, 49% male, mean age 46.23, SD: 13.46), answered to the Life Trauma and Victimization History, and the Structured Clinical Interview for DSM-IV. Psychiatric disorders included Depression (44.8%), Schizophrenia (15.6%), Anxiety (11.5%), Bipolar Disorder (10.4%) and Alcohol Dependence (10.4%). Victimization experiences varied between 0 and 7 for childhood, 0 and 8 for adolescence, 0 and 8 for adulthood and 0 and 9 for lifetime. Verbal abuse (76%), physical violence (54.2%), threaten of physical violence (53.1%), discrimination (50%), and witnessing victimization (42.7%) were the most prevalent. Data show that psychiatric patients do experience a wide range of victimization experiences, through lifetime. Mental health care practitioners should evaluate all possible victimization experiences, in order to ensure the best suitable intervention.

Late Eating is Associated With an Unhealthy Diet

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Background: Eveningness preference ("late chronotypes") and night eating syndrome are associated with higher nocturnal food intake and higher body-mass-index (BMI). Beyond consuming large portions of food in the evening, diet quality in late eaters might also be a factor contributing to weight gain. Methods: Female students (N = 133) completed the Night Eating Questionnaire (NEQ) and the Food Frequency List (FFL). Height, weight, and body composition were measured. Findings: The total score of the NEQ, and particularly its subscale evening hyperphagia, was negatively correlated with the Diet Quality Index of the FFL, indicating eating a more unhealthy diet with increasing night eating scores. When looking at the specific food categories, higher NEQ scores were associated with more frequent intake of chocolate, cakes and cookies, candy, cheese, fruit juice and sugary soft drinks. Higher scores were also associated with less frequent intake of fresh fruits and mineral water. However, neither NEQ scores nor the Diet Quality Index were associated with BMI or body fat. Discussion: Habitual late eating is marked by poor diet quality, which may be a risk factor for future weight gain.

Identifying Pathways of how Social Support Influences Physical Activity in Young Women: a Mediation Analysis

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Background: Physical activity (PA) level decreases during the transition from adolescence into adulthood, especially in women. It is well known that social and personal factors influence PA, but little is known about how and why these factors change over time. The aim of this study is to get a better understanding of how social support and personal/cognitive factors relate to PA in women aged 18-30 by exploring changes over time and identifying pathways. **Methods:** Survey data provided by the READI cohort will be analysed for healthy women (n=521) aged 18-30 years living in socioeconomically disadvantaged neighbourhoods in Victoria, Australia. Mediation analysis will be conducted on longitudinal data: T1 (2007/08), T2 (2010/11) and T3 (2012/13). **Findings:** Analyses will be conducted in March 2014. Means, standard deviations and proportions will be calculated for all variables included in the study. Mediation effects and proportions mediated will be calculated. All regression models will be adjusted for possible confounders. **Discussion:** Results will contribute by identifying modifiable risk factors for PA and future interventions targeting PA among women will benefit.

Testing an Integrated Model of tpb and sdt for Patients With Diabetes Physical Activity Behavior

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Background. Insufficient physical activity (PA) in patients with diabetes raise concern. The aim of the study was to examine integration of Self-determination theory (SDT) and Theory of planned behavior (TPB) to explain PA behavior in people with diabetes. **Methods.** It is a descriptive survey based on the TPB and SDT integrative model. Sixty patients with T1 diabetes participated in the study (Mage = 29.16). PA was measured with scale from the SDSCA, Autonomy by TSRQ for Diabetes Management, Autonomy support (AS) by Modified HCCQ For Diabetes Management. Scales to measure TPB variables were self-designed. **Findings.** Regression analysis confirmed association between perceived behavioral control (PBC) and autonomy (? = .50; p < .01), but not AS (p > .05), however latter predicted subjective norms (SN) (? = .46; p < .01). Intentions to be physically active were predicted by SN (? = .52; p < .01) and PBC (? = .45; p < .01), but not attitude (p > .05). Finally, controlling all other variables from SDT and TPB, intentions failed to predict PA (? = -.01; p > .05) while PBC (? = .34; p < .05) and AS (? = .36; p < .01) did. **Discussion.** Results did not confirm all hypothetical relationships within integrated model.

Relationships Between Coping Strategies and Emotional Problems in Chronically ill Adolescents

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Background: Current study examined the relationship between adolescents' coping strategies and emotional problems across different types of chronic conditions (cancer, asthma, diabetes type I and chronic renal failure). **Methods:** One hundred-nineteen (65 boys, 54 girls) chronically ill adolescents aged between 12-16 years-old (M = 14.18; SD = 1.39) recruited from Polish hospitals filled in measures for coping strategies and anxiety and depression symptoms. **Findings:** Type of diseases had direct effect on coping strategies and emotional problems. Adolescents with cancer used significantly less self-blame, planning and putting into perspective than adolescents with other chronic diseases. Also, having cancer predicted significantly more anxiety than having asthma, respectively more depression than having diabetes. Among the coping strategies used, only planning mediated the relationship between type of disease and anxiety. **Discussion:** Findings suggest that a categorical approach is useful in understanding the coping strategies used by chronically ill adolescents. Still, the relationships between coping strategies and emotional problems are consistent across categories of disease.

Personal Growth and Psychobiological Stress Responses to Acute Laboratory Stress

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Background: Recent years have witnessed increased interest in adaptive functions of well-being to deal with stress. In our previous study, we observed the association between personal growth (PG: a sense of continued growth and development, the sub-construct in psychological well-being) and psychobiological stress responses. However, the effect of PG on psychobiological responses induced by acute stress is not clear. The aim of this study was to experimentally verify whether difference of levels of perceived PG reflects on stress reactivity or post-stress recovery process. **Methods:** Twenty healthy students (11 men and 9 women, mean age = 20.6 years) were recruited, and participants were classified into high (average + 0.5 SD) or low PG groups (average - 0.5 SD) screened according to levels of perceived PG among 203 participants. PG was measured by psychological well-being subscale. At the laboratory mental stress testing session, 12 high and 8 low PG participants were required to complete a 5 min speech task and a 5min arithmetic task preceded by a 10 min baseline period. Salivary free- 3-methoxy-

4-hydroxyphenylethyleneglycol (MHPG: the major metabolite of norepinephrine) and perceived stress was measured at baseline, immediately after task and recovery period. Heart rate and High-frequency heart rate variability (HF: index of parasympathetic activity) was monitored during the entire period. Findings: High PG group showed significantly lower psychobiological stress responses and quickly returned to a basal level during the recovery period (MHPG and HF) compared with low PG group, although a change in subjective and objective indicators during task period was observed in both groups. Discussion: These results suggest that perceived PG in younger adults may be related with adaptive responses which facilitate recovery from daily life stress.

Personality, Coping and Quality of Life in Patients With Multiple Sclerosis

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Background Type D personality is associated with poorer health status and affects quality of life (QoL). The aim of this study is to explore whether different coping strategies mediate association between Type D personality and QoL in patients with multiple sclerosis (MS). **Methods** We collected 156 consecutive patients with MS (response rate: 72.9%; 75% women; mean age 39.95±9.97). Patients completed Type-D Scale-14 (DS14), Coping Self-Efficacy Scale (CSE) and Short-Form Health Survey (SF-36) measuring physical (PCS) and mental (MCS) component of QoL. The mediating effect of coping was analysed using the Sobel z test. **Findings** In PCS no mediation between studied variables was found. In MCS all three studied coping strategies mediated the association between Type D personality and QoL (z=-3.7 for problem focused coping, z=-3.37 for emotion focused coping and z=-4.11 for coping focused on stopping unpleasant emotions and thoughts). **Discussion** Our results can be implemented in educational programs, psychotherapies and counselling. Caregivers and physicians can teach patients to use various coping strategies in order to mitigate the adverse effects of Type D personality on patient's QoL

Motivational Correlates and Consequences of Spontaneous Action and Coping Planning Within the Context of Physical Activity

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BACKGROUND: Past research (Brickwell & Chatzisarantis, 2007) has shown that motivation can influence spontaneous action planning toward exercise. Using self-determination theory (Deci & Ryan, 2000), this study explores the motivational correlates of two measures of spontaneous planning within the context of physical activity (PA), namely action and coping planning, as well as how these two types of plans are related to PA practice. **METHOD:** A cross-sectional design was used and 352 adults (N= 291 women, mean age of 35.5 years), filled-in a web-based survey. **FINDINGS:** Results of a path analysis revealed that only identified regulation predicted AC while introjected regulation and intrinsic motivation both predicted CP. Indirect effects were tested using the bias-corrected bootstrap confidence limits. Results showed that: 1) AC mediates the relationship between identified regulation and PA frequency, 2) CP mediates the relationship between both intrinsic motivation or introjected regulation and PA frequency. **DISCUSSION:** Results are discussed with reference to SDT framework and the need for future research to examine the motivational consequences of spontaneous AP and CP.

The Effect of Resilience on Subjective Stress Response and Salivary Secretory Immunoglobulin a (sIgA)

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Background: The concept of resilience as an individual characteristic has attracted recent attention. The clarification of the relationships between stress, resilience, and immune function may contribute to the prevention of psychosomatic disease. Therefore, we examined the effects of resilience on life stress through the measurement of psychological and physiological responses. **Method:** Subjects were 32 college students who complained of some stress during the experimental term (3 months). At the start of this study, participant resilience levels measured innate and acquired resilience. Stress level was additionally assessed with the Stress Response Scale-18 (SRS-18). Saliva was also collected so that levels of sIgA could be measured. Moreover, these parameters were evaluated again. **Finding:** The SRS-18 scores of the innate low resilience group were significantly higher than those of the high resilience group. The sIgA levels of the acquired high resilience group were significantly higher than those of the low resilience group. **Discussion:** These results suggest that high acquired resilience

attenuates the subjective stress response and improves immune function.

Physical Activity and Quality of Life in Children Aged 9-12 Years

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Introduction The aim of this study was to explore the associations between the duration of physical activity (PA), the kind of PA and the intensity of PA on the one hand and quality of life (QoL) on the other hand. **Methods** This cross-sectional study was based on a database which gradually expands. At the time of the analyses of which the results are presented here, the database comprised information about 825 Dutch primary school children aged 9 to 12 years. PA was measured with the modified Sport Monitor Questionnaire Youth 8-12 Years. The Kidscreen-10 was used to assess QoL. **Results** Children in the highest three quartiles of duration of PA had a better QoL than children in the lowest quartile. With respect to the kind of PA the research findings showed that participating in sports is also positively associated with QoL. The intensity of PA appeared to be not related to QoL. **Discussion** The observed positive effects of a longer duration of PA and participating in sports offer possibilities to develop preventive programs that promote the QoL of Children.

The Effects Mindfulness in Behavioral Inhibition System (bis) and Behavioral Activation System (bas) in Patients With Diabet

F. Mohammadi Shirmahalleh, Z. Mohammadi, M. Hosseinzadeh Taghvaie

this study examined the effect of mindfulness in Gray's behavioral activation system (BIS) and behavioral inhibition system (BAS) in patients with diabetes. 55 patients were selected through accessible sampling method. The present research is a semi-experimental study with pre-test, post-test and follow up. We measured BIS and BAS before and immediately after, and then 3 months after an 8-week training program mindfulness meditation. Data was analyzed using ANCOVA/repeated Measure Design. The findings of this study indicated the significant differences between groups after intervention and the effect of therapy was permanent after follow-up period. These findings demonstrate that a short program in mindfulness meditation produces demonstrable effects on BIS and BAS system. **Keywords:** mindfulness, behavioral inhibition system (BIS), behavioral activation system (BAS), diabetes.

A Qualitative Analysis of the Importance of Work in the Sustenance of Psychological Health & Well-being.

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Background: Work is known to be a determinant of positive mental health, particularly for those with a mental health issue. This study explored the significance of paid work to the perceived wellbeing of people with bi-polar disorder & its impact in supporting their illness management. **Methods:** Semi-structured interviews were carried out with a purposive sample of 6 participants to elicit their experiences of paid employment. Transcripts were analysed using Interpretative Phenomenological Analysis. **Findings:** Seven themes emerged from the analyses which were subsequently conceptualised into three superordinate themes: "a desire to be part of the mainstream", "being out of the ordinary" and "finding a fit". Employment was of great value to participants in terms of their mental well-being & they drew on a range of practical and psychological strategies in order to reap the potential benefits of wellness and normality that employment presented. **Discussion:** Clinicians & employers should view the results as lending support to previous research that has stressed the significant benefits of work for well-being. It contributed to feelings of social inclusion, self-empowerment and wellbeing. Additionally it highlights the relevance of the latest government initiative Public Health Responsibility Deal which urges employers to ensure people with mental health conditions can remain in work.

Is Humour Really Responsible for Enhanced Wellbeing?

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Background: Many claims are made that humour enhances wellbeing and is a direct form of coping. **Method:** This paper evaluates the status of positive humour in research on wellbeing. There are numerous forms of humour presented in the literature. In research on wellbeing, humour is most commonly operationalised as either laughter or sense of humour. There are experimental methods to induce laughter, whereas sense of humour is measured as a dispositional trait. **Findings:** Induction of laughter increases pain thresholds; Endorphins are posited as the underlying mechanism explaining the effect of laughter on pain, but there is mixed evidence to support the claims. It is possible laughter works via distraction. In studies on infection, laughter is related to physiological changes, eg SIgA, but not necessarily better health, eg fewer respiratory infections. Sense of humour is

associated with subjective reports of better health, positive mood, and ability to deal with stress. The effects are likely to be mediated by personality. Additionally, greater use of an affiliative style of humour is associated with social support and social networking, themselves important for wellbeing. Finally, some types of humour are harmful. Discussion: Humour has pleasant hedonic qualities and is related to wellbeing across a large array of studies. Such relationships may be mediated rather than direct. Inducing laughter may be easier than changing sense of humour to enhance wellbeing, but less permanent.

A French Study on Factors That Hinder or Facilitate Cancer Patients' Coordination of Care.

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Background: While coordinated care has been associated with better outcomes in cancer patients, French studies on this topic are still sparse. Therefore, we set out to explore the factors that could impact on the continuity of care in cancer settings. **Methods:** 90 semi-structured interviews were carried out with various hospital practitioners (e.g. physicians, nurses, medical secretaries), general practitioners, cancer patients, and patients' relatives. A thematic analysis was performed using N-Vivo 10 software. **Findings:** Contrasting themes emerged between the different interviewees. Healthcare professionals highlighted a lack of time and material resources, and of clear task assignments concerning the continuity of patients' care. On the other hand, patients and relatives focused on the quality of relations with healthcare professionals as a major determinant of healthcare coordination. Patients also pointed out the importance of their relatives' help in the management of their care. **Discussion:** The links between various French cancer healthcare professionals should be reinforced, and the role of relatives more taken into account as facilitators of patients' care.

Incidental sun Exposure in North Queensland: a Study of Whether Prototype Perceptions Influence Sun-related Behaviour

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Background: The factors that contribute toward incidental sun exposure are relatively unexplored. Incidental sun exposure is neither planned nor deliberate, thus theoretical frameworks adopted for its exploration must account for this. The current study adopts the prototype willingness (PW) model as a framework for examining incidental exposure in an extreme ultra-violet radiation (UVR) environment. **Method:** An experimental 1-factor design with three levels aimed to manipulate the favourability of the incidental exposer prototype. Community participants (N=96) were exposed to positive or negative information about the prototypical incidental exposer. Participants responded to items assessing PW model variables and sun-related behaviour. Skin reflectance spectrophotometry was used to measure skin colour at T1 and T2 (1-month later). **Findings:** Preliminary findings after wave 1 recruitment suggest that the manipulation was effective with within-group differences detected for prototype favourability ratings. **Discussion:** Findings suggest that the PW model provides a useful framework for examining an underlying mechanism of incidental sun exposure behaviour.

English Community Pharmacists' Experiences of Providing Health Behaviour Advice to Patients With Cardiovascular Disease

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Background: The progression of cardiovascular disease (CVD) is modifiable through health behaviours. Community pharmacists are ideally placed to facilitate CVD self-management however research demonstrates varying levels of pharmacist engagement in providing behaviour change advice (BCA). This study explored pharmacists' experiences of providing BCA to patients with CVD. **Methods:** Semi-structured interviews were conducted with 15 pharmacists recruited from community pharmacies across the English Midlands. A thematic analysis was conducted using a Framework approach. **Findings:** Pharmacists categorised patients according to their perceptions of patients' ability to benefit from advice; this influenced BCA provision. Self-efficacy to provide BCA varied. Professional identity was a key theme; beliefs concerning whether pharmacists should provide BCA varied. Professional identity and associated role conflict appeared to underpin many perceived barriers to providing BCA. **Conclusions:** Interventions designed to increase pharmacists' self-efficacy to provide BCA, to integrate BCA into regular practice, and challenge pharmacists' perceptions of patients' receptiveness to BCA may be beneficial.

Reconsidering Exercise: the Role of Expectations for Positive Health Effects of Acute Exercise

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Background: This study investigated whether the effects of acute exercise are the result of a placebo effect, i.e. different expectations towards the exercise. Methods: 78 subjects were tested in a double-blinded, randomized controlled design. Expectations regarding the health effects of a subsequent 30 min bicycle ergometry were manipulated in four groups through different videos. In addition, we measured expectations towards mood and health changes following exercise that already existed in participants before the experiment. Mood, anxiety, blood pressure and EEG were measured before and after the exercise. Perceived exertion was quantified during the activity. Findings: Results show that positive expectations following the experimental manipulation resulted in reduced perceived exertion during the activity ($p < .01$). In addition, most of the health effects of the acute exercise (increased mood, reduced anxiety, reduced blood pressure and characteristic changes in EEG) were dependent on expectations that already existed before the experiment. Discussion: This study supports the hypothesis that health effects of acute exercise are at least in part result of a placebo effect.

Breaking bad News in Different Medical Conditions : Exploring the Physicians and Patients Perspectives.

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Background: We aim to explore factors influencing the breaking bad news process in different medical contexts with irreversible conditions (others than cancer). Methods: 23 patients and 18 physicians concerned by different chronic diseases were interviewed by psychologists. They received/broke bad news in the few months preceding the interview. Findings: Thematic analysis of interviews allowed to identify higher-order themes, and more specific themes for both, patients and physicians. The main topics covered by physicians concerned the determinants of the strategies to communicate with patients, the encountered difficulties, the initial training, the information, interpersonal relationships, emotional reactions, perception of its role, the specifics of the disease. The discourse of patients referred to three stages including specifics topics: the communication of bad news, the health care pathways, and the life with disease. Discussion: Data analysis highlight importance of patient and physician's profiles, and specifics of disease, in the breaking bad news process. Recommendations to build tailored intervention for physicians by using formative self-assessment will be exposed.

Setting the Record Straight: Homosexual Tendencies in Organ Donor Registration

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Background: Even with demand for transplant organs exceeding supply, registration of homosexuals remains controversial. While some theorists suggest positive experiences lead to prosocial behavior, others like Staub, posit group hardship leads to helping. We break ground by being the first to examine the prevalence and psychological correlates of this altruistic action in those with homosexual tendencies. Methods: In 13,856 individuals from Wave III of Add Health, we examined sexual orientation controlling for gender and education using decision trees and analyzed personality correlates. Findings: Homosexual tendencies, being female, and having higher education were associated with increased registered organ donor rates. In groups with at least a high school education, individuals with homosexual tendencies' rates were almost 14 percentage points higher. No differences in altruism existed, but those with homosexual tendencies were more liberal and less conservative. Discussion: Although individuals with homosexual tendencies were higher in registration, altruism measures did not underlie the relationship. Research is needed to understand the behavior's mediating factors.

The Profile of Quality of Life and Fear of Falling in a Multi-ethnic Sample

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Falls is a major health issue among the elderly. It instils fear of falling (FoF) and affects quality of life (QoL). However few studies have examined this issue in a multicultural population like that in Malaysia. Our aim is to evaluate the association between FoF and QoL among Malaysian older adults. Respondents aged 58 and above, able to give consent, were recruited from University Malaya Medical Centre and community centers (n=486). QoL and FoF were measured using CASP-19 and short Falls Efficacy Scale-International respectively. Questionnaires were administered face-to-face by trained interviewers. Participants were mostly female (66%). The ethnic distribution of participants was: Chinese (60%), Malay (24%), Indian (12%) and others (4%). Mean score for QoL is 43.8 ranging from 10-57 while FoF mean is 13.2 ranging from 7-28. QoL declined as FoF increased ($r = -.47$, $p < .01$) Malays have the highest QoL in Malaysia. QoL scores decrease with increased FoF. Further study is necessary to establish the role of economy or livelihoods as well as investigating are cultural practices of a particular ethnic influencing QoL in anyway

Motivation to Change in Substance Abuse TREATMENT: Psychosocial Factors Affecting Different Motivation Stages

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Background. There are a lot of difficulties in keeping chemically dependent young people in treatment programs. Researches show that a lot of them relapse because of the lack of motivation to maintain treatment changes. The aim of this study is to examine psychosocial factors which affect motivation to seek treatment and maintain those changes. **Methods.** A cross-sectional design was used to survey chemically dependent young people. Special scales were created to measure socio-demographic characteristics and features of substance abuse. Measures is being used: URICA Questionnaire and TCU Psychosocial Scales. **Participants (N=58)** were taken from the addiction treatment programs. **Findings.** Precontemplation, contemplation, action and maintenance stages of motivation to change were significantly related with different self-esteem, depression and anxiety levels and also with social factors (risk-taking behavior, social conformity and hostility). **Discussion.** In order to enhance motivation to change in substance abuse treatment it is important to evaluate comorbidity level and the role of social factors. It is essential for the improvement of the motivational programs for young drug abusers.

The Development of a Context Aware Smoking Cessation app (QSense)

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Background: Context aware smartphone apps for behaviour change have become a reality due to a rapidly growing smartphone market and the presence of sensors on smartphones as standard. **Aim:** to describe the development of a novel smartphone sensing smoking cessation app (QSense). **Methods:** The development of QSense has been informed by: a) a sparse literature on how smokers' cravings are cued by contextual triggers, b) the tailored message libraries from two theory-guided tailored SMS text message support systems for smoking cessation (MiQuit and iQuit), c) early piloting work, d) a qualitative study using data assisted interviews of smokers who have tested out the app. **Findings:** This system has been designed to deliver real-time behavioural support triggered by a smoker's proximity to a pre-identified high risk location for a cue-induced craving episode. However, there are many challenges to developing context-aware eHealth behaviour change interventions to avoid user disengagement. **Discussion:** New clinical and theoretical insight is required to inform the next generation of digital interventions which promise context awareness.

Occupational Stress and Counterproductive Behaviour: the Moderator Role of Negative Affectivity

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In this research we study the relationship between the level of stress and counterproductive behavior, moderated by negative affectivity. The main objectives are: the analysis of the stress, as a component of counterproductive behavior, the identification of the relationships between the occupational stress and counterproductive behavior, the identification of the relationship between the negative affectivity and counterproductive behavior, and the decrease of the occupational stress, by individual and organizational strategies. Subjects (N=94) are employees of an aeronautical organization. Statistical results show a positive and significant correlation between stress and counterproductive behavior ($r=.357$, $p<.05$). Regarding negative affectivity and counterproductive behavior, we measured a positive and significant correlation ($r=.373$, $p=.011$). The regression model for the moderator effect show that stress is a powerful predictor for the counterproductive behavior ($p<.005$), but the interaction between occupational stress and negative affectivity adds an increment of .04, compared to separate predictors, and this difference is statistically significant ($p=.038$).

Having Breakfast is Beneficial to Students' Wellbeing

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Background: Few studies were conducted on the covariates of having breakfast among young adults. The present study examined the association of having breakfast with other health behaviors, alertness, mood, and achievement (=grades) among students. **Methods:** 213 students (mean age=25) filled an online cross-sectional survey. Having breakfast was the independent variable, and other health behaviors (not drinking sweet beverages, exercising, fruit and vegetables intake), alertness (10 items, $\alpha=.90$), mood (10 items, $\alpha=.86$), and mean grade were the dependent variables. Age and parental SES were recorded. **Results:** Students who ate breakfast engaged significantly more in other health behaviors, had better mood, and reported higher mean grades. There was no

difference between the two groups in alertness. Conclusions: The study is first on reporting higher reported grades among students eating breakfast and joins other findings in the literature demonstrating the beneficial covariates of having breakfast among young adults, thus extending the findings from children and adolescents to adults.

Cardiac Rhythm Regulation in Emotional Situation and Inner Health Picture in Children

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The purpose of the research was to analyze the connection between conscious attitude to the health and cardiac rhythm regulation in emotional situation. Inner health picture – the term proposed by Yu. Nekrasova (1984) - is the system of the human representation about health, its value and understanding the methods of its support and forming. 83 pupils of the primary school were participants (9,1± 0,5 yr. old). Children answered on the questions about health using the questionnaire about inner health picture. Later they were asked about the methods of the punishment and the rewards in their families and variability of cardiac rhythm were registered during this conversation. SPSS program were used for the data analysis. Regression analysis shows that the higher level of the inner health picture the child has the better cardiac regulation is. The research was supported by RGNF grant N 14-06-00195 and 14-16-48005

Pain and Social Activity in Colorectal Cancer PATIENTS.

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Background: Colorectal cancer is among leading causes of cancer related deaths in men and women in many countries. This investigation was carried out to examine the contribution of pain to decreased social activity in colorectal cancer patients. Thirty two (32) patients were examined. The mean age of patients was 64.1 years (SD = 10.6), 56% were male, 52% did not know their cancer diagnosis which was related to colon (42%) and rectum (58%). The second research group consisted of twenty eight (28) patients with chronic low back pain. All patients were assessed based on clinical standards (physical examination, laboratory results, histological diagnosis and analysis of medical records). The methods used were Visual Analogue Scales (VAS), Cold pressure test, standardized interviews and self-questionnaires – Back Depression Inventory and State-Trait Anxiety Inventory for Adults. 29 patients experienced pronounced anxiety because of their pain and 23 patients expressed depressive pain-associated symptoms. We found significant differences between cancer and non-cancer groups in level of functional activity decreasing especially mental functioning and social activities.

Positive and Negative Emotions and Well-being in Japanese University Students

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Objectives: This study was designed to identify the relationship between positive and negative emotions and physical and psychological well-being. Methods: Japanese university students (N = 200) participated in a self-administered questionnaire survey by responding to the Positive and Negative Affect Schedule (PANAS), Subjective Well-Being Scale (SWBS), and certain items of the Cornell Medical Index (CMI). Results: There were significant positive correlations between positive emotions and physical and psychological well-being, as well as significant negative correlations between negative emotions and physical and psychological well-being. A stronger correlations was observed between psychological well-being and positive and negative emotions among women than men. Moreover, there was a significant difference in psychological well-being depending on positive and negative emotion scores, and their interaction. Discussion and Conclusions: Well-being was associated with both positive and negative emotions. Moreover, these emotions had a stronger influence on women than on men. Also, the results indicated that having high positive emotions was more important for psychological well-being than the absence of negative emotions. It is suggested that further investigations on populations with a wider age range should be conducted to replicate these results.

Effects of “Ibasho” (Sense of Belonging) on Relational Aggression Among Fourth and Fifth Grade Students

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Present study investigated the effects of “Ibasho” on relational aggression such as bullying among schoolchildren. The purpose of this study was to prove that children with “Ibasho” would not be aggressive against others even if they had been under some

stress. What is “Ibasha” in Japanese? According to the definition, it contains two keywords; sense of belonging and sense of authenticity. My first concern is to determine whether “Ibasha” is a mediator of the relation between stressors and relational aggression. My second concern is to determine whether there is a difference among schoolchildren who belong to two schools; one school (School A) which has many opportunities to interact with adults living in its local area and the other (School B) which has few opportunities to do so. The participants were 604 fourth and fifth grade students; 258 in School A, 346 in School B. The results indicate that children in School A have less achievement stressor, more “Ibasha” and better cooperation, and that the interaction with adults in the community may be a unique predictor to reduce problem behaviors among schoolchildren. Implications of these findings are discussed.

Mindfulness and Critical Thinking: Investigating Theoretical Links and the Role of Executive Functioning

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Background: Critical thinking (CT) involves successful analysis and evaluation of evidence and arguments as well as the inference of reasonable conclusions and is crucial in modern workplaces (Facione, 2013). According to dual-processing accounts, such reflective responses require the intervention of executive functioning (EF; Evans & Stanovich, 2013). One proposed way of enhancing EF is through mindfulness practice (Chiesa et al., 2011). This study investigated whether mindfulness facilitates CT and whether this relationship is mediated by EF. Method: The FFMQ (Baer et al., 2006), an EF battery (Miyake et al., 2000) and the Halpern Critical Thinking Assessment (Halpern, 1998) were administered to 196 undergraduates. Findings: Structural Equation Modelling showed relations between (1) mindfulness and CT performance; (2) each EF process (Updating, Inhibition and Shifting) and CT performance; (3) the Observing and Acting with Awareness facets and Updating; (4) the Observing and Acting with Awareness facets and Shifting; and (5) Non-reacting and Non-judging and Inhibition. Discussion: The possibility of enhancing CT through mindfulness practice is compelling as it would be synergistic with improved well-being outcomes.

Self-Efficacy as Mediator for Spiritual Well-Being and Treatment Motivation of Drug Addicts

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The levels of self-efficacy, spiritual well-being and their relationship with treatment motivation in under treatment drug addicts were investigated in the current study. It was hypothesized that self-efficacy would mediate between spiritual well-being and treatment motivation. A sample of 60 under treatment drug addict volunteers was drawn from 4 drug rehabilitation centers in Lahore. The measures used included Urdu version of Spiritual Well-Being Scale (Booth & Martin, 1998), Treatment Motivation Questionnaire (Ryan, Plant, & O'Malley, 1995) and Generalized Self-Efficacy Scale (Jerusalem & Schwarzer, 1981). The results showed a significant positive association among spiritual well-being, self-efficacy and treatment motivation in drug addicts and self-efficacy and spiritual well-being both predicted treatment motivation. The meditational analyses depicted that self-efficacy significantly mediated between spiritual well-being and treatment motivation. The married participants showed more treatment motivation than unmarried participants. The results are discussed in the light of existing literature as well as in particular cultural context of Pakistan.

A Theory-based Online Health Behaviour Intervention for new University Students: One-month Follow-up Data

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Background: The transition to university can be associated with a decrease in health-promoting behaviours (e.g., exercise) and an increase in health-risk behaviours (e.g., alcohol). An online intervention, combining self-affirmation, the theory of planned behaviour and implementation intentions, targeted fruit and vegetable intake, exercise, binge drinking and smoking during the transition to university. Methods: New students (N=2621) were randomly allocated to an online health-behaviour intervention (U@Uni: LifeGuide) or a measurement-only control condition one month before starting university. Participants were followed-up one month after starting university (N=1319). Findings: At one-month follow-up, participants in the intervention group reported eating more fruit and vegetables, $F(1, 1280) = 4.19, p = .04$, than participants in the control group. No significant differences were found between the two conditions on the other three health behaviours targeted in the intervention. Discussion: The findings suggest that a theory-based intervention targeting multiple health behaviours may have a modest impact on the health behaviours of students during their first month at university.

Personality Precursors and HEALTH-RELATED Consequences of SELF-HANDICAPPING as a Form of

Coping Inadequacy

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Background. An individual resorts to self-handicapping in the situations of the anticipated failure to protect one's self-esteem (Feick & Rhodewalt, 1997). The objective of this research was to identify its personality precursors and outcomes for mental health. **Method.** On a sample of 120 university undergraduates, using the methods of factor and cluster analysis its intercorrelations with the likely personality precursors including coping strategies were assessed. **Findings.** The phenomenon appeared to have significant negative correlations with belief in self-efficacy, disposition to self-actualization, self-esteem and problem-focused coping, both reactive and proactive. It positively correlates with emotion-focused coping and neuroticism, all being the members of the same cluster. The cluster analysis revealed statistically significant differences between clusters with higher and lower self-handicapping tendencies on the subjective well-being ($t= 2.97$, $p<.05$) and mental-health continuum (Keyes, MCH-SF, 2009; $t= 4.05$, $p<.01$). **Discussion.** Self-handicapping can be claimed to merit the status of a maladaptive proactive coping strategy affecting mental health.

Self-regulation and Religious Coping Among Religious Women Undergoing Infertility Treatments

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Background: Infertility is highly stressful for religious women. Based on the Self-regulation Model, we tested the associations between perceptions of infertility, coping, and psychological adjustment. **Methods:** 186 religious Israeli women undergoing infertility treatment filled in questionnaires assessing perceptions of infertility (based on the IPQ-R), religious coping (turning to God /the community /Rabbis), and psychological adjustment (distress and well-being). **Findings:** The full study model was tested by structural equations modeling. Perceptions of lower control and greater severity (chronicity and consequences) were related to poorer adjustment. Religious coping did not mediate these associations but had independent associations with adjustment: Seeking Rabbi support was associated with lower distress and seeking community support had both positive and negative associations with adjustment. **Discussion:** The data support the importance of illness perceptions and coping for adjustment to health threats yet suggest that coping is an independent factor, not a mediator. The findings highlight the importance of studying coping and adjustment within the socio-cultural context.

A Taxonomy of Health Behaviors

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Background: Public health research, practice and policy focus on many health behaviors (HBs). Therefore, five studies were conducted to create the Health Behavior Taxonomy (HBT), a classification representing meaningful clusters of HBs, based on lay-perceptions. **Methods:** A comprehensive list of HBs was elicited from lay people and professionals ($N=100$), and their perceived importance was rated ($N=266$). A card sorting task and cluster analysis were applied ($N=374$), and replicated ($N=510$). **Results:** 66 HBs were reduced to the 45 most important ones. Hierarchical cluster analysis using similarity data revealed a taxonomy consisting of 4 main clusters (General well-being, Avoiding risk, Nutrition, and Physical health routines), representing the cognitive schema by which people process and integrate information regarding HBs. Clusters differed by importance judgments, and minor yet interpretable variations in clustering were associated with gender and age. Compared to the HBT, engagement reports formed a divergent structure. **Discussion:** The HBT can advance health promotion programs and cost-effectiveness of interventions by targeting clusters of meaningfully linked health behaviors.

Maternal Post-Attachment Scale: Validation Studies to the Portuguese Population

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Due to the relevance of attachment as predictor for maternal disorders and family functioning, this study's aim is to validate the 19 items Maternal Postnatal Attachment Scale-MPAS (Condon & Corkindale, 1998) to Portuguese population. After back-translation process and a pre-test, MPAS was applied in a cross-sectional study to 219 women, aged from 18-47 ($M=30.97$; $SD=5.49$), mostly married (83.1%), with a 1-12 months child ($M=7.01$; $SD=3.23$). After item's exclusion due to lack of variance or significant correlations, KMO (0.71) and Bartlett's test ($p<.001$) enabled the PC Analysis -Varimax rotation. One item eliminated due to low factor loading. A two-factor solution emerged, explaining 30.45% of total: 1st factor-attachment quality (7 items; $\lambda^2=.65$); 2nd factor-maternity feelings (7 items; $\lambda^2=.56$). The final version (14 items; $\lambda^2=.69$), is adequate for future studies. Although relational and maternal experiencing dimensions are coherent with attachment theory, this structure doesn't support the original tri-factor model (Pleasure in proximity; Acceptance and tolerance; Competence). Cultural and social desirability

factors may explain current results.

Communication in Families Living With Childhood Epilepsy: Hyper-vigilance and the Restriction of Social Activities

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Background Stigmatising feelings are common among parents of children with epilepsy. Parents who harbour fear of their child with epilepsy being viewed differently may restrict the child's social participation. This study aimed to explore issues related to the interpersonal processes and context surrounding parent child dialogue about epilepsy, including consequences of communicating, or not, about epilepsy related issues, such as the restriction of participation in social activities. **Method** Phase one of this mixed method study involved conducting qualitative interviews with 30 children (6–16 years) with epilepsy and their parents. Data were thematically analysed. **Findings** Findings revealed a core theme of parents' restriction of social activities in response to their child's epilepsy. Sub-themes included hyper-vigilance (a heightened sense of watchfulness) and avoidance of communication about epilepsy to minimise social restrictions. **Discussion** Parental over-protection can relay to children the limitations that their epilepsy imposes on them. The impact of these limitations can not only support a child's negative attitude towards epilepsy but also promote child exclusivity and isolation.

Relations Between Personality Dimensions and Social Sharing of Emotions: the Example of the Painful Experience

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Background: The relationship between the experience of pain and its emotional expression has been previously demonstrated. The present study explored the associations between the experience of pain, the social sharing of emotions (SSE) linked to the painful experience and personality. **Methods:** 230 laypersons (165 women and 65 men) with an average age of 31 years (20-65; SD = 11.5) were invited to recall a recent (within 3 months) painful experience. Questionnaires assessed quantitative and qualitative aspects of the SSE related to this experience, as well as personality factors. **Findings:** The quality of SSE showed significant correlations with the following personality factors: extraversion, agreeableness and neuroticism. In a multiple regression analysis these personality factors explain 11% of the variance concerning the interpersonal quality of the SSE $F(3.226)=9.6$; $p < 0.001$. **Discussion:** Along with previous research showing the crucial role of positive social interactions and well-being, these findings gather further information when it comes to the role played by personality in individuals' perception of such interactions. Further research should examine this matter in chronic pain patients.

Can Visual Illusions Change Motor Performance in Crps Patients?

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Body Perception Disturbance (BPD) is a part of CRPS, whereby sensory distortions occur. Visually altering the affected hand may normalise disturbed perceptions, encourage limb engagement (Lewis & McCabe, 2010) and improve rehabilitation outcomes. The MIRAGE device has been found to relieve pain and affect movement via digital manipulation of painful limbs (Preston & Newport, 2011). Mixed methodology with 6 patients. Data analysed with non-parametric tests using SPSS. Qualitative data analysed using Thematic Analysis. Participants' hands within MIRAGE, performed movement tasks, rated statements on hand appearance, and answered questions on perceived and desired hand movement. Affected hand digitally altered to desired appearance and viewed for 1 minute before answering measures. Fear of movement and BPD measured at baseline and post intervention with BPD and TSK scales. Non-significant changes in response time and accuracy, significant changes in perceptual ratings. Themes identified: loss, self-evaluation, fear of movement, and overall effect of intervention. Results infer potential to normalise disturbed bodily perceptions, improving quality of life and rehabilitation outcomes.

Feasibility Study Investigating the use of Amazon's Mechanical Turk for Online Positive Psychology Intervention Trials.

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Background: Amazons' Mechanical Turk (MTurk) is fast becoming a key tool for conducting online cross-sectional and

experimental health research. This study evaluated the feasibility of employing MTurk for a longitudinal randomised controlled trial (RCT) using simple positive psychology activities aimed at increasing wellbeing and social relationships. Methods: Using Unipark software, 465 MTurk participants were randomised to one of four intervention conditions (or control) and were assessed on psychosocial and wellbeing measures at three time points (baseline, post intervention and one month). Participants were given online instructions on how to complete their assigned positive psychological activity. Findings: MTurk was found to be an inexpensive and speedy resource for recruiting participants and testing a longitudinal RCT paradigm. Although compliance to the assigned wellbeing enhancing activities was good, attrition rate was high at final follow-up (>50%). Discussion: MTurk is identified as a cost and time effective mechanism for conducting ehealth intervention research. However caution is urged on several grounds regarding high attrition rates and generalizability of samples.

Predictors of Subjective Well-Being Among People Living With hiv in the Netherlands

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Background: Health psychology interventions are increasingly expected to improve subjective well-being (SWB), rather than health-related quality of life (HRQOL) only. However, little is known about how SWB relates to HRQOL and other quality of life (QOL) domains among HIV-patients. Methods: HIV-patients treated in the Netherlands completed a cross-sectional survey on SWB (Satisfaction With Life Scale); HRQOL (SF-12); social, financial, sexual, and environmental well-being (WHO-QOL), as well as demographic and clinical characteristics. Exploratory structural equation modeling was conducted in AMOS to predict SWB. Findings: The questionnaire was completed by 191 participants. In univariate analyses, all (HR)QOL domains were significantly related to SWB (range $r=.17-.42$). Physical health ($r=.14$; $p<.05$), mental health ($r=.27$; $p<.01$), and environmental well-being ($r=.41$; $p<.01$) directly predicted SWB, while financial and social well-being explained SWB indirectly. Discussion: Health psychology interventions among HIV-patients are mostly focused on mental and physical health. To further promote SWB, services should also focus on promoting environmental, financial, and social well-being.

The Effect of Camphor Essential oil That Promotes the Recovery Process From the Psychobiological Stress Responses Induced by Mental Stress Testing

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Background: Camphor essential oil can sedate the autonomic nervous system. However, no study has been undertaken in the past to investigate its sedative effects using biological markers. The purpose of this study is to evaluate the sedative effect of camphor essential oil on the recovery process from the psychobiological stress responses induced by mental stress testing. Methods: Twenty healthy participants were recruited, and they were randomly classified into the aroma group and the control group. Salivary MHPG (the major metabolite of noradrenaline) and HF-component (index of parasympathetic activity) were measured at the baseline, immediately after speech & arithmetic tasks and the recovery period. Findings: The level of MHPG in the aroma group returned to the basal level during the recovery period more quickly than the control group, although an increase in MHPG during the task period was equally observed in both groups. HF-component increased in both groups during the recovery period, but these levels were significantly higher in the aroma group than in the control group. Discussion: These results indicate that camphor essential oil could produce sedative effects which promote the recovery process from the psychobiological stress responses.

University Student's Images and Knowledge of the Elderly: Relation With Recognition to Grandparents and Parents

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Background: In Aged society, smooth exchange between generations is expected. In this study, relations of images and knowledge to the elderly, and feeling of consideration to grandparents and parents in developmental process were examined. Methods: Scores of image factors (integrity and tenderness, activeness, maturity and positiveness, extracted with a principal factor analysis) and knowledge of 183 university students were compared with two-way ANOVA at pre-post of lecture of Aging psychology and between groups according to recognition to grandparents and parents. Findings: Main effects of pre-post were significant in integrity and tenderness, positiveness, and knowledge (post >pre). Main effects of groups were significant in integrity and tenderness, maturity, and positiveness (to grandparents and parents > to grandparents or parents, or to neither). Discussion: Although knowledge was acquired through lecture regardless of recognition to grandparents and parents, change of images were different according to recognition. The affirmative recognition formed with consideration attitudes of grandparents and parents promotes understanding in various sides of the elderly.

Moderating Role of Intuition/Deliberation in Predicting Implicit/Explicit Motives Choice Congruent

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We tested the hypothesis that decision made in intuitive mode tapped into non-declarative, affective-based motive system (implicit), while decision made in deliberative mode tapped into declarative, cognitively elaborated, socially influenced motive system (explicit). Mixed design study was used; motives and decisions measured within, while intuitive-deliberative manipulation was between. As decisions (dependent var.), scenarios with options corresponding to Achievement, Power, and Affiliation motives were used. Regression analysis (N=66) indicated no meaningful interaction when instruction followed standard means of inducing intuitive-deliberative modes. When focused on self vs. others were used instead, same analysis (N=80) showed the expected interaction effect, between explicit motives of affiliation and preference for affiliation options, only in deliberative ($t=2.35$, $p=.02$) and not in intuitive ($t=-.20$, $p=.84$) condition. Similar findings were found for explicit power motive on choice; high ($t=4.42$, $p=.00$) and low ($t=-.26$, $p=.80$) deliberation. Decisions congruent on implicit motives ensure affective satisfaction and enable automatic self-regulation, resulting in well-being and personal growth. Decision mode, however, is a mediator in choice-congruent motives. Results of the study showed that current decision making trend which focuses on deliberation and ill-defined intuition, goes contrary to the aim of well-being enhancement.

Emotional Intelligence of Teachers Working in a Disadvantaged Environment

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Background: The primary objective is to provide answers to research questions about the way in which teachers working in a deprived environment, experience and manage their challenges, and the characteristics they display. Methods: This was a qualitative investigation. The participants came from the schools of a disadvantaged township and were selected by means of purposive sampling, meeting a set of pre-determined criteria. The data were collected through drawings and narrations and then analysed into themes, according to the steps of Tesch. An independent researcher confirmed the findings via re-coding and consensus. Findings: The following themes emerged from this study: The teachers working in a deprived environment experience even more context-related challenges than other teachers. They display a specific approach to their teaching. The maintenance of their efforts is based on their personal strengths. They draw on their available assets and support. Discussion: When the findings are screened against the essential components of emotional intelligence, it becomes clear that the teachers, who work in this deprived environment, handle their specific teaching challenges in a mentally healthy way. This makes a comprehensible contribution to the existing theory on well-being, emotional intelligence and health psychology.

Socioeconomic Inequalities in Fatal Opiate and Cocaine Related Overdoses: Transgenerational Baggage Versus Individual Attainments

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Background. To determine socioeconomic inequalities in opiates and cocaine related Fatal OverDose (FOD) cases and their implications in terms of prevention. Methods. Cross-examination of healthcare and forensic data in a nested case-control study design. FOD cases (272) were individually matched with 4 controls (1,056) according to sex, year of birth, drug administration route, duration of drug use and compared through conditional logistic regression. Findings. Employment [OR=0.662(95% CI 0.446–0.985)], salary as main income [OR=0.417(95% CI 0.258–0.674)] and educational attainment higher than primary school [OR=0.501(95% CI 0.344–0.729)] revealed to be protective, whereas parental professional status was not associated to FOD. Discussion. Among peers, drug users with lower socioeconomic profiles show increased odds of FOD. However, self-referred socioeconomic characteristics impacting on daily life quality such as education, employment and revenue, were more predictive of FOD than transgenerational factors (e.g. parental social status). Thus, motivational interventions fostering socio-professional integration should be given due attention in dedicated harm prevention policies.

Depression, Social Support and Problematic Internet Use. Longitudinal Study.

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Background: The main aims of this study were to explore (1) the associations between depression, perceived social support (PSS) and generalized problematic internet use (GPIU), (2) the mediating effect of PSS on the relationship between depression and GPIU within a longitudinal design (SLiCE study, www.slice-study.eu). Methods: A total sample of 814 university freshmen (T1), and 237 students (after one year period T2, 29.1% students of T1, 73.5% females, SD=3.67) completed an on-line questionnaire measuring GPIU, depression and PSS. The analyses were carried out using Linear regression (changes in depression and PSS between T1 and T2 were entered as independent variables and changes in GPIU between T1 and T2 were entered as the dependent variable in the model) which was followed by the Sobel test. Findings: Increased depression was associated with increased GPIU (beta=0.216, p<0.01), decreased PSS was associated with increased GPIU (beta=-0.197, p<0.05). The PSS changes were found to mediate the effect of depression on GPIU changes (Sobel test=-1.75, p<0.05). Discussion: The results support the importance of social support in GPIU prevention.

Using Bounded Rationality to Adopt Healthy Decision-Making in Eating

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The focus of the current work is integrating the theory of bounded rationality with decision-making regarding eating behaviour. Bounded rationality outlines how individuals make decisions while constrained to time, cognitive capability, and their environment. It proposes the use of heuristics, or simple mental tools, which show to be both fast and frugal. Bounded rationality's focus is on the interaction between cognition and the environment- that is, the selection of heuristics used will depend on both the environmental context and cognitive capacity. Bounded rationality's emphasis on the environmental context as a major influence in the decision-making process complements present theories in food decision-making. Variance of cognitive capability in the selection of heuristics in food decision-making is less studied, and will be explored. Bounded rationality will be described, related to existing models, and reviewed through empirical evidence. This work has possible implications for designing heuristic-based weight management programs centered around food decision-making, which cater to both the environment and cognitive capabilities of the target group.

Psychosocial Predictors of Well Being After one YEAR, in Persons With Chronic Diseases

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Background-Well being is an important outcome in health. The objective of the study is to identify psychosocial predictors of well being, after one year, in a group of persons with a stable chronic disease Methods -The study is longitudinal: Participants are a consecutive sample of 436 chronic patients with a diagnosis for over three years, age 18 - 65 years, 76.9% female, without cognitive limitations. Patients were assessed for psychosocial variables and one year later for well being. Well-being is a component of SF-36. The psychosocial predictors includes the big five personality inventory, severity of disease, time since diagnosis, adherence, optimism, spirituality, stigma, positive and negative affect, and social support. Regression analysis forward method, with well being variable as dependent variable was used. Results- show an (adj)R² of .35; the order and importance of predictors are: Positive affect, stigma, neuroticism, severity of disease, extraversion, negative affect, adherence. Discussion- A combination of positive and negative variables act together to a better well being. The study helps the orientation for intervention to facilitate adjustment to chronic disease

Does Personality Profile Affect the Intention to Quit Smoking? Evidences From the Hapa Model

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The Health Action Process Approach (HAPA; Schwarzer, 1992) is one of the most widely used model to investigate the adoption and maintenance of health behaviors. The present study aimed to investigate whether the personality profile could affect the preintentional stage of the HAPA in a population of young daily smokers (N=287). The questionnaire was composed of the Big Five Adjectives Scale (BFA) and of scales to measure risk perception (RP), action self-efficacy (ASE), outcome expectancies (OE), and intention to change behavior. A cluster analysis was performed to identify personality profiles. Profiles were then set as cluster variable in a mixed model. Nine personality profiles were identified. The final mixed model included random effects for intercept, RP, and ASE. Results indicated that: resilient profiles had the largest positive effects of both RP and ASE on intention, whereas these constructs did not affect the intention to quit smoking for overcontrolled people; undercontrolled profile showed a positive effect of ASE but not of RP. Findings suggest the importance to consider personality traits in the HAPA in order to improve interventions to help people quit smoking.

Is Thalassaemia Patient's Well-being Impacted by Locus of Control, Gender and Experiential Avoidance?

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Several individual difference risk factors, including the presence of external locus of control, psychopathology and gender have been linked with thalassemia patients' diminished well-being. Experiential avoidance (EA) was found to moderate symptom presentation in chronic patients; however its relation to thalassemia and well-being has not yet been examined. The present study explored differences between 2 levels of locus of control (external vs. internal) on physical and mental well-being in 74 thalassemia patients. The SF-36, AAQ-II and the Multidimensional Health Locus of Control Scale (MHLC-C) questionnaires were used. Individuals with external locus of control had significantly lower mental quality of life compared to those with internal control. Individuals with high EA presented with significantly lower physical quality of life but did not differ in terms of locus of control. There was no significant interaction between gender and EA on well-being. EA was found to be a significant moderator only for internal locus of control on well-being. Implications of the results may aid in the design of individualised health care programs for thalassemia patients.

The Impact of Maladaptive Health Beliefs on Adaptation to Chronic Illness Through Self-regulation

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Background: Little is known about the pathways through which maladaptive beliefs impact adaptation to illness. In this regard, the aim of this study was to examine whether illness representations mediate the relation of maladaptive health beliefs to patients' subjective health. There is considerable evidence that an adaptive representation of a curable/controllable illness is related to better health, whereas a less adaptive representation of a severe, troublesome and less controllable condition is associated with worse health outcomes. Methods: Patients suffering from cancer (N=125) participated in this cross-sectional study. Mean age of the sample was 58 years (sd =11.49), 78 were women and 47 men. Findings: Personal control and emotional representations mediated the relation of maladaptive beliefs to health. Also, personal control and illness coherence mediated the relation of maladaptive beliefs to coping behaviour. Discussion: It seems that maladaptive health beliefs, as deeply-rooted ways of processing health-related information, 'urge' patients to represent illness in a more negative way, which in turn impact adaptation to illness.

Psychological Predictors of Unsupervised Walking in Fibromyalgia

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Background: Regular moderate-intensity walking is recommended for patients with Fibromyalgia. Our aim is to identify the predictors of walking in fibromyalgia patients, using intention and perceived behavioral control (Theory of Planned Behavior: TPB) and taking into account other variables related to the fibromyalgia condition. Methods: 274 Fibromyalgia women completed self-reported questionnaires for the assessment of TPB constructs, previous walking behavior, fear-avoidance, distress, pain intensity and FM impact variables (Time 1) and seven weeks later they repeated the walking behavior assessment (Time 2). Person correlation and multiple regression analyses were conducted. Findings: Intention, perceived behavioral control and fibromyalgia impact in T1 were significantly correlated to self-reported walking behavior in T2, but only perceived behavioral control was a significant predictor ($r = .15, p = .03$) accounting for 6% of the variance. Discussion: Participants did not act on their intentions in Time 2. To increase the control perception will be more helpful than strengthening intentions. Supported by Spanish Ministry of Economy and Competitiveness (Grant: PSI 2011-25132).

Risk of Eating Disorders, Perceived Stress and Social Support in University Students : Slice Study

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Background: We aimed to investigate the contribution of gender, country, perceived stress (PS) and perceived social support (PSS) to the risk of eating disorders (ED) among university students. Methods: 1687 freshmen university students (74.21%

females, mean age 20.30, SD=3.78) from SK (n=607), LT (n=539) & HU (n=541) completed the SCOFF questionnaire, Cohen's perceived stress scale and Multidimensional Scale of Perceived Social Support. Binary logistic regression was performed to calculate the odds of risk of ED as a full model with gender, country, PS and PSS as independent variables. Findings: The model was statistically significant and explained between 10.5% & 16.5% of the variance in the occurrence of ED indicators. Gender and country were significant with an odds ratio of 0.421, 95% CI: 0.301-0.589 (men vs. women) and 2.99, 95% CI: 2.20-4.05 (LT vs. SK) respectively. PS increased the likelihood that respondents would be in the ED risk group with an odds ratio of 1.14, 95% CI: 1.10-1.19 and PSS decreased it with an odds ratio of 0.985, 95% CI: 0.977-0.994. Discussion: Prevention strategies of ED should also be aimed at stress management and looking for social support sources.

A Longitudinal Study of Quality of Life Among Lung Cancer Patients: the Role of Cognitive Predictors in Post-surgery Adaptation

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Background: The aim of the study was to analyze the relationship among illness perception and self-efficacy and changes in quality of life in lung cancer, in the context of the mediation role of coping and posttraumatic growth. **Methods:** Data for the analysis were obtained from 102 patients. The measurement was conducted three times, 3-4 days after the surgery (Time 1), one month after the surgery (Time 2) and 4 months after the surgery (Time 3). **Findings:** Coping strategies based on emotion regulation (T1 and 2) serve as the main mediator between cognitive interpretations of disease (T1) and quality of life (T2 and 3). Coping strategies (T1 and 2) and factor of posttraumatic growth - a sense of personal power (T1 and 2) serve as the main mediator between the self-efficacy (T1) and quality of life (T2 and 3). The analyzed cognitions most frequently predicted such areas of quality of life as: physical functioning, functioning associated with symptoms, functioning associated with lung cancer symptoms and cognitive functioning. **Discussion:** The findings provide an insight into the key modifiable cognitions which may facilitate post-surgery adaptation and better quality of life.

Implication of an Intervention Program for the Promotion of Physical Activity in Relation of Quality of Life and Well Being in People With Multiple Sclerosis

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Background: The aim of this study is to examine the interest for relation between quality of life (QOL) and well being of an implementation of a program of physical activity, with patients of Multiple Sclerosis (MS). **Methods:** This is a correlation study. The study includes 27 patients with MS, mean age 44 years, 58,3 % women, 37,5% currently married, 67% retired, mean school level of 12,5 years. We use the questionnaire and the Multiple Sclerosis Quality of Life scale (MSQol-54) and sub scale psychological well-being (PWB) of Mental Health Inventory The program consists of an intervention to promote physical activity (IPPA) in a group of eight people, in once a week sessions of 90 minutes, during seven weeks. We analyze the results through the Spearman correlation tests between the dimensions of MSQOL-54 and Well-being. **Findings:** The Results the correlations between PWB and the domains of MSQOL-54 before application of IPPA and the end of the implementation of IPPA, showed that there were statistically significant correlations between all variables. **Discussion:** In this study, suggests that IPPA can play an important in the relation between the QOL and PWB of these patients.

Health Related Environmental Quality of Life, Self-rated Health and Usage of Addictive Substances

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Background: Quality of life has multiple influences on behavioural risk factors of chronic diseases, which are important for carrying preventive activities. The aim of the study is to determine the links of environmental domain of WHO HR QoL 100, self-rated health (SRH) and usage of alcohol, tobacco and other drugs (ATA). **Methods:** The study involved 913 males and 1317 females, participants of Kaunas regional Health project investigated by environmental domain of questionnaire WHO HR QoL-100 with SRH scales and items for evaluation of ATA. **Results:** (1) Women who are more satisfied with their environment and value their health higher, consume alcohol once or more per month, and have never attempted to quit. Men who value their health higher, use alcohol more or less often and have never tried to quit. Men who are more satisfied with their environment, use alcohol once or more times per month. (2) Women, who value their health less, do not smoke and/or never have been smokers. (3) Men and women, who are more satisfied with their environment and value their health higher, are less tending to consult a psychologist compared to those who value their health less and are less satisfied with their environment. **Discussion:** Findings confirmed the importance of environmental quality of life and SRH for the usage of addictive substances.

Motivational Interviewing in Groups Increase the Social Participation Among Subjects With Disabilities

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BACKGROUND: The objective of this study is to observe how the motivational interviewing in groups can influence the quality of life and psychological health of people with disabilities. We are interested in knowing if motivational interviewing helps people to change their thinking. Our sample has initially responded to the pre-questionnaire before the motivational interviews and have responded at the same questionnaire after the procedure of motivational interviews **METHOD:** 59 people with motor disability and sensory were selected. We undertook an interview with each of them in order to collect sociodemographic informations. All the subjects were asked to complete questionnaires of accessibility, mobility, satisfaction urban development, depression and anxiety, motivation to engage in a process of behavior change. **FINDINGS:** Results show greater trust in the fact of increasing the output frequency. We note an evolution in the stages of behavior change between T1 and T2. Subjects show a positive and significant increase in their desire to increase their output. **DISCUSSION :** Subjects have a higher score in T2 in the scale of motivation on their mobility. The importance to increase mobility and self-confidence to want to get out more and the feeling of being willing to invest more public places have increased considerably.

Big Five and Risk-taking: Sexual Behaviour and Drug Involvement

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The aim of the study is to explore the relationships between personality characteristics and risk taking in two areas: sexual behaviour and substance use. The participants are Bulgarian young adults (n=178). The Big Five personality dimensions, past sexual behaviour, protection motivation, maladaptive strategies to cope with HIV threat, and drug involvement are assessed with self-report instruments. Extraversion, agreeableness, neuroticism and sensation seeking are positively related to fear and threat appraisal of HIV. More openness to experience reveals less fear of HIV. Sensation seeking is strongly connected with riskier sexual behavior, drug involvement and maladaptive coping strategies. Results are useful for identifying risk-prone personality profile and designing health promotion and behavioral change programs.

Illness Perception, Knowledge and Self-care in Women With and Without Cervical Cancer Precursor Lesions

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Despite prevention efforts, there has been no mortality rates changes in Brazil for the past two decades. Leventhal's Self-Regulation Theory proposes that actions related to health and how self-care is exercised can be guided by the nature and organization of illness representations. This study was conducted in order to compare illness perception, knowledge and self-care in women with and without cancer precursory lesions. In this cross-sectional study, 92 women (with a mean age of 36 years; SD= 11) were enrolled consecutively, from a primary care unit in southern Brazil. The sample was divided into two groups: women with premalignant lesion (n= 46) and without precursory lesions (n=46). The instruments used were the Revised Illness Perception Questionnaire for Healthy People, the Questionnaire on women's cervical cancer knowledge and the Rating Scale of Self-Care Skills. There was no statistically significant difference between groups about illness perceptions, knowledge and self-care.

Maladaptive Schemas in Alcohol Dependent Patients

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Background: Personality disorders (PD's) have been suggested to contribute to pathogenesis of alcohol dependence. The aim of the study was the investigation of maladaptive schemas assuming them to be of more relevance in addiction than axis II diagnosis. **Methods:** Clinical interviews (SCID I and II) were carried out to assess any psychiatric disorder that is prevalent in 60 patients. In 60 controls, Brief Symptom Inventory and SCID II were used. Maladaptive schemas were evaluated by Young Schema Questionnaire. **Results:** Schema analyses yielded significant higher scores in patients than in controls indicating that addicted persons are much more driven by dysfunctional core beliefs. Differences were less marked, however, when comparing patients with and without PD's. In the whole patient group four schemas predominated: self sacrifice, insufficient self control, approval seeking, and unrelenting standards. **Conclusions:** Our findings point to the significance of maladaptive schemas as vulnerability markers for alcohol dependence whereas comorbid PD's appeared to be of minor relevance. Thus, in the treatment of alcohol dependence early maladaptive schemas should be especially addressed.

Positive Revaluation of a Stressful Situation as a Basis for the Personal Activity and Well-being

T. Pilishvili

Background: Activity becomes especially important by periods of personal choice. It was hypothesized that the positive stressful situation revaluation at the level of appraisal-behavioral activity component is associated with proactive coping, while passive behavior - with negative feelings. Methods: There were used the following Russian adapted diagnostic techniques: The Motive-enactment Test (J. Kuhl), Cognitive Orientation (J. Rotter), Indicator Strategies (D. Amirkhan), Motivation to Success (T. Ehlers), Motivation to Avoid Failure (T. Ehlers), The Coping Strategies Inventory (R. Lazarus), Identification of Individual Coping Strategies (E. Heim), Picture Frustration Test (S. Rosenzweig). To study the personal activity 228 Russian students, 19-23 years old were engaged. For processing the empirical data there were used X2 Pearson, t-test, correlation and factor analysis. Discussion: Presented study (Peoples' Friendship University of Russia, Moscow) shows: subjects actively cope with stress tend to solve the problem, motivated by the success of their own activities, can emotionally distance themselves from the source of stress, that lead to improved life quality and well-being.

Prevention of hiv Sexual Transmission in Serodiscordant Couples: Perceptions of People Living With HIV/AIDS

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Background. The prevention strategies of HIV infection has been reinforced by the extended access of condoms and the Post Exposure Prophylaxis (PEP) after sexual exposure to HIV. The study aimed to describe the perceptions of people with HIV/AIDS about the prevention of sexual transmission of HIV in the context of serodiscordance. Method: Study descriptive and exploratory. Two focus groups were conducted with the participation of 13 HIV-positives persons in serodiscordant relationships: one group (n=7) with people in a stable partnership and the other (n=6) in a partnership not stable. The reports were analyzed and categorized from its content. Results: A third percent of the participants were aware of PEP. It was a consensus that in non stable relationships it is easier to use prevention strategies than in stable relationships. Some advantages of the new policies were mentioned, as well as the fear that prevention strategies might be neglect. Discussion: Results pointed to positive aspects about the new strategies for prevention of HIV infection adopted by the Brazilian Ministry of Health, but still pose challenges to their implementation.

Donation, the Donor, and the Donor's Family: a Longitudinal Qualitative Study of Renal Patients

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Background: This research aimed at understanding the subjective experience of patients in deceased donor's (DD) first kidney transplantation (KTX). Methods: Interviews were conducted on 30 patients before until 24 months after KTX. Qualitative analysis was performed: results of 1/12 themes is presented. Findings: Themes evolve with time: 1. Information about brain death is needed (T1) and could help avoiding social stigma (T2-3). 2. The donor and his/her family are sensitive topics, and are present in the thoughts of the patients (T2-3) responsibility towards the graft/donor (T3) feelings of gratitude/sadness are described decreasing while learning to live with the donor (T4). 3. Acceptance of anonymity (T2-4) is part of a grieving process. 4. Taking a pragmatic perspective about the donor helps dealing with social pressure about donation (T2-T3). 5. Living donation might be considered if returning to dialysis (T4). Discussion: The subjective experience of patients waiting for a DD's KTX evolves with time. Evaluating donation choices while waiting is important as the need to explain different donation contexts to the patient's significant ones and to the general public.

Emotional Experience of Patients Awaiting Lung Transplantation: a Comprehensive Qualitative Analysis

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Background In lung transplantation most research focus on negative emotions, on specific personality traits in predictive/evaluative purposes. Few research has comprehensively explored the emotional experience of patients. Methods Interviews (N=15) were conducted after registration on the waiting list, fully transcribed and analysed with a thematic analysis focusing on emotional descriptions. Results I) Analysis of emotional descriptions First, the analysis was structured in positive, negative, neutral emotional descriptions. Secondly, these descriptions were grouped in primary, secondary emotions, evaluative

processes, coping strategies, personal qualities. II) Situational and contextual analysis Emotional descriptions and personal characteristics could be situated in four contextual perspectives a) situational b) relational c) existential d) representational-conceptual. Discussion In these different levels of data analyses we tried to stay the closest possible from the discourse of the patients. This comprehensive account of their emotional descriptions provides a better understanding of how, when and on which aspects psychological support should be defined.

Paternal Post-Attachment Scale: Validation Studies to the Portuguese Population

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In the scope of attachment research, fathers are no longer excluded, assuming that father-baby relationship has an equivalent affective pattern as in mothers. Paternal Postnatal Attachment Scale PPAS, a 19 items – three factor scale was created to support this (Condon & Corkindale, 2008). Due to the relevance of attachment in family functioning, we intend to validate PPAS to Portuguese population. After the back-translation process, pre-test with 10 men, PPAS was applied to 220, 21-57 year old men (M=33.4; SD=6.11), mostly married (82.7%), newly fathers (M= 6.88 months; SD= 6.21). After KMO (0.79) and Bartlett's test values confirmed ($p < .001$), a PC Analysis-varimax rotation was conducted. Two factors were extracted, explaining 32.4% of total variance: 1st factor - Attachment quality (11 items, $\alpha = .77$); 2nd - Patience and tolerance (5 items, $\alpha = .64$). Three items with lower factor loading ($< .30$) were excluded, resulting in 16 items with a good internal consistency ($\alpha = .80$). The bi-factor structure doesn't support the original Condon and Corkindale's model (Pleasure in interaction; Patience and tolerance; Affection and Pride), though it's consistent with attachment theory background.

What do General Practitioners Think About an Online Tailored Self-regulation Programme for Primary Prevention

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Background: General practitioners (GP's) can positively affect patients' behavioural choices. But often GP's report a lack of time and of standardized approaches which may hamper preventive counselling. Therefore a tablet based eHealth programme based on self regulation was developed for general practitioners (GP's). In order to adjust this programme to the needs of GP's, focus group interviews were conducted. Methods: Focus group interviews were conducted in which the determinants for the use of the proposed eHealth programme were discussed. Data were collected from a sample of eight local consultation groups of GP's. In total, 50 GP's participated in the focus group interviews. After the researcher gave a short presentation of the new programme, open-ended questions were used to address the opinion of the GP's to the content and to the use of the proposed programme. The focus groups interviews were audio-taped and transcribed. These transcripts were thematically analysed via NVivo software. Findings: GP's reported the need for a primary prevention method that people can use to effectively change their health behaviour. The majority of GP's were positive about the use of self-regulation in a programme. However they also had some concerns about the delivery method in general practice. The majority of GP's wanted different ways of delivery. The use of ehealth tools was considered as a good method, but not for all patients. According to the participating GP's, the programme is not suitable for people with low education or for older people. Discussion: Self-regulation is a preferred method for ehealth programmes in general practice. The delivery method should exist of a combination of approaches (tablets, flyers and a website). In order to know if the intervention is also suitable for low SES and older people, a pilot test is needed.

Impulse for a Heart-healthy Lifestyle: Bridging the Intention-behaviour-gap at the Cardiology Ward

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Background: Most risk factors for Coronary Heart Disease are behaviour related and should be controlled i.e. by heart-healthy nutrition (NU) and physical activity (PA). To support patients to start with NU or PA brief activating health-psychological group interventions based on the Health-Action-Process-Approach (HAPA) were implemented on an acute cardiology ward. Methods: An intervention (IG) and a control group (CG) were assessed at baseline, two and six months including socio demographic variables, intentions and NU or PA behaviour prior to the hospital stay. Findings: In total 394 patients participated (NU: 63 ± 10.8 years, IG: N=143/CG: N=58; PA: 63 ± 9.2 years, IG: N=115/CG: N=78). From baseline to month 2 the NU-IG reported a significant increase in vegetable fat consumption ($p < .05$) and the PA-IG in general physical activity ($p < .01$), both compared to their respective CG. Six months after discharge the NU-IG consumed significantly more low fat food and fish ($p < .05$), the PA-IG and CG both increased their PA by nearly 50 min/week ($p = ns$). Discussion: The brief intervention was feasibly to be implemented in the acute care routine and is able to influence some lifestyle changing aspects.

Negativity Bias as an Indicator of Vulnerability to Emotional Disorders in Adolescents

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Although it is well documented that adults are more willing to attend to, learn from and make use of negative information, adolescents' behavior in this regard is less investigated. This tendency to preferentially process information encoded in negative stimuli (i.e., negativity bias) is known to play a major role in the development and maintenance of emotional disorders, both anxiety and depression being associated with it in adults. The aim of our study is to investigate the negativity bias displayed by adolescents in relation to their cognitive style and emotional symptomatology. Participants aged 13 to 16 years old (N=108) completed a performance-based measure which assessed their ability to learn both positive and negative outcomes associated with novel stimuli, and also filled in self-report measures of emotional symptomatology and cognitive style (YSR - ASEBA, Achenbach, 2001; PANAS-C, Laurent et al., 1999; CATS P/N, Hogendoorn et al., 2010). Poorer learning and greater asymmetry towards the negative stimuli were associated with greater vulnerability for internalizing symptomatology and a negative cognitive style. Even though previous research has identified a strong relation between negative cognitive styles and emotional disorders, the present study indicates that poor learning of positive stimuli might also be a risk factor for the development of emotional disorders.

Approach for Reduction of Students' Anxiety, Enhancing of Well-being and Harmonization of Mutual Relations

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Background. Implantation of integrative teaching methodology in pedagogical practice is based on the connecting and summarizing of knowledge from different subjects in order to promote the development of students' personality. Methods. An Integrative Teaching Methodology was developed and used in 17 Latvia schools (14 general education and 3 special schools) during one study year. Questionnaire of 615 3-4, 5-7 and 8-12 grade students and 631 teachers was carried out before and after using of integrative teaching methodology. Findings. The results of investigation showed that different parameters of anxiety decreased and well-being increased in all age groups of general education school students after using of integrative teaching methodology. In schools of special education some parameters of anxiety decreased and well-being increased in all age groups. Changes in students' mutual relations were observed as well after introduction of integrative teaching methodology: 3-4 grade students of special schools have become more open and supportive. Discussion. Using of integrative teaching methodology improve students well-being, decrease their anxiety and develop personality of students.

The Impact of an Online Facebook Support Group for Multiple Sclerosis Sufferers on Non-active Users

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Background: This study aimed to explore the experiences of non-active users of an online Facebook support group for multiple sclerosis (MS). Emphasis was placed on the resources and the challenges that were associated with membership to this group. Method: A qualitative design was implemented in this study, whereby thematic analysis was utilized to examine the semi-structured interviews that were conducted with ten non-active members of the support group. Findings: Several resources were acquired through the online support group; namely knowledge, advice, empowerment, empathy, mental assistance and group reassurance. Several challenges also emerged; namely concern for quality of information, excessive posting, negative aspects of the disease and lack of responses. Discussion: This study demonstrates that the online support group is a vital source of resources for individuals with MS; however, these individuals also face several challenges, which could possibly be attributed to their non-active status and/or physical limitations. These findings will hopefully result in the modification of such forms of support to better accommodate the needs of their members.

A South African Perspective on Caring for Family Members who Sustained a Traumatic Brain Injury

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Background: This study aimed to explore the experiences of caregivers who care for a family member who sustained a traumatic brain injury (TBI). Emphasis was placed on the challenges and the resources that were associated with the caregiving role. Method: A qualitative design was implemented in this study, whereby thematic analysis was utilised to examine the semi-structured interviews that were conducted with twelve family caregivers of TBI survivors. Findings: Several challenges

emerged; namely trauma, consequences of a TBI, responsibilities, lack of support, unawareness, financial burden, emotional challenges and coping. Several resources were also identified; namely road to recovery, social support, financial resource and coping. Discussion: These findings suggest that although caregivers who care for a family member who sustained a TBI face several challenges through the caregiving task, these individuals have a number of resources that help them to cope. The findings of this study could be utilised to facilitate the effective implementation of caregiver interventions and help to provide better directed strategies for dealing with the care of TBI survivors.

Emotional Regulation in Patients With Psychosomatic Complaints

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The aim of the study was to examine the differences between 3 groups of patients in terms of severity of symptoms of depression, anxiety and stress and usage of affect regulation strategies, as well as to test the predictive power of affect regulation strategies for these symptoms. Study included 150 respondents (average age 49.7 years, 50% male) divided into 3 groups: healthy people, people with psychosomatic complaints and those suffering from hypertension and/or gastritis due to an organic disorder. They completed: ASQ (Hofmann & Kashdan, 2010), CERQ (Garnefski, Kraaij, & Spinhoven, 2001), and DASS-21 (Lovibond & Lovibond, 1995). The MANOVA analysis indicated that groups significantly differ in the severity of symptoms of anxiety and stress (people with psychosomatic complaints express the highest level of symptoms), but don't in the usage of affect regulation strategies, while ANOVA found differences in the usage of 3 strategies measured by CERQ questionnaire. The multiple regression analyses indicated that affect regulation strategies are good predictors of symptoms of depression, anxiety and stress. Theoretical and practical implications of these findings will be discussed.

Effects of a Group-based Intervention to Facilitate Posttraumatic Growth in Portuguese Women With Non-metastatic Breast Cancer

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Background: In literature there has been increasing evidence of Posttraumatic Growth (PTG) as a positive result from the breast cancer trauma experience. Psychosocial interventions are associated with increased values of PTG. This study presents the results of the efficacy of a socio-cognitive group intervention designed specifically to facilitate PTG. The effects of the intervention on other psychosocial variables were also explored. Method: Women with non-metastatic breast cancer diagnosis (stage 1-3) were randomly assigned to the control group (n= 60), or the intervention group (n= 43) who were offered 8 weekly sessions of group intervention. The psychosocial variables were assessed in 2 measurement points: baseline, after 6 months (post-intervention). Results: Intervention participants reported greater PTG after breast cancer experience, compared to women on the control condition. At the 6-month assessment, statistically significant differences were observed between the two groups over the PTG ($F(1,103) = 12.519; p < .001$). No significant results were found for the other psychosocial variables. Discussion: The intervention programme facilitated the development of PTG.

Burnout in HEALTHCARE: Observational Study on a Sample of Nurses to Evaluate and Prevent Burnout Syndrome

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Background: The word burnout indicates a state of emotional exhaustion, depersonalization and feelings of low personal accomplishment resulting from workplace stress (Maslach, 1981). It occurs in individuals who are employed "people-oriented" as nurses. The aim of this observational study is to analyse the differences among burnout components (Maslach, 1981) based on different average age of nurses (N=142) working in four health facilities in Milan. Methods: The level of burnout was measured by the Maslach Burnout Inventory (Emotional exhaustion: $M=89$; Depersonalization: $M=7$; Personal accomplishment: $M=7$). Findings: One-way ANOVA shows that the older (mean age) the nurses in the structure, the greater the: (A) Emotional exhaustion, $F(1,141) = 13,803, p < .001$, and (B) Depersonalization, $F(1,141) = 13,736, p < .001$, but not the (C) Personal accomplishment, $p > .05, ns$. Discussion: Results indicate that structures with a higher average age of nurses, show higher levels in two out of three components of the MBI. These results can be used for structuring prevention and intervention on burnout for the nursing staff, taking into consideration the age factor.

How Effective is Telephone-based Psychotherapy for Family-caregivers of People With

Dementia? a Randomized Controlled Trial

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Background: Family-caregivers face high demands creating a need for professional support as well as hindering its utilization. Telephone support allows easier access than face-to-face support. The objectives of this study were (1) to test the implementation of a telephone-based cognitive-behavioural therapy (TCT) in established care provision structures, (2) to assess whether TCT improves outcomes compared to usual care, and (3) whether TCT is as effective as face-to-face therapy (FCT). **Methods:** This study was designed as a randomized controlled trial with three measurement points. 274 caregivers were randomized to TCT or usual care; 49 participated in FCT. Primary outcomes were subjective health, health complaints and problem solving ability. **Findings:** Burden of care was high (M=72.58, SD=18.99). WHOQOL-BREF was lower than for the norm population regarding social relations (M=48.61, SD=19.3). 198 (72.8%) had a physical illness and 56 (20.6%) had a mental illness. **Discussion:** This study showed that family-caregivers have a high burden of care and are willing to participate in TCT which potentially improves health outcomes and elevates the utilization rate of support structures.

Benson Relaxation Response Technique - Study of Effect and Process of Learning

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Background Herbert Benson described the relaxation response technique as a mindfulness based breathing technique. Two studies aimed to evaluate the effectiveness of the method in terms of relaxation success and process variables. **Method** In two studies we proved the effects of a ten week/ ten group sessions learning programme of relaxation response technique and measured the effects pre - post and post two in an randomized controlled design. The variables came from standardized stress and relaxation questionnaires and process measurements (TICS, SVF, KUSTA). Group sample size are Treatment Group n=30 and control group n=30. **Results & Discussion** The method shows clear positive relaxation results in effect measures and process-measures and develop the ability to relax of 80 % of the participants (VEV). The easy to teach and to learn method is recommended for German health promotion programmes. The results

Illness Perceptions: Measurements and Application in Oncology

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The concept of illness representations is of major interest in health psychology. It has been described as a predictor of health behaviour and patient's subjective experience. This literature review has two main objectives: firstly to identify and to assess the available scales, and secondly to analyse their use in empirical studies with cancer patients. Our goal is to propose recommendations for future researches. Two consecutive reviews have been carried out through four databases. 7 measuring tools differing from their features and psychometric properties were identified. Only one of them is cancer specific and aims at assessing individual knowledge about cancer. 29 of the 33 included studies use one of the three IPQ versions. They give priority to specific subscales and adapt items to their objectives. Despite the fact that these tools are based on different theoretical frameworks, all of them focus on perceptions conceptualised as universally shared whatever the pathology. Consequently, none of the reviewed tools appear to be more appropriate to the cancer specific context. We highlight the interest of mixed methods to investigate in a more comprehensive way these issues.

Medical Decision Making in Oncology: Observations of Multidisciplinary Team Meetings

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Many cancer patients' management decisions remain to be taken in a context of uncertainty. In this context, social representations theory allows considering that practitioners may refer to lay theories regarding the patient for decision making.

The objectives of this study were to find out what therapeutic options were discussed in Multidisciplinary team (MDT) meetings and what nature of arguments was used by doctors to defend their propositions. Systematic data collection has been made using a pre-constructed observation grid during 32 MDT meetings dealing with patients records suffering from various cancers. Decisions discussed by doctors concern curative or palliative orientation of the treatment, patient's eligibility to enter in a clinical trial and prescription of complementary tests. In the majority of these discussions, medical criterions such as comorbidities are put forward. Some subjective patient's lifestyle or personal characteristics (e.g kindness) also appear in the discussions. These findings contribute to understand psychosocial factors and processes underlying medical decision making in oncology and aim at improving patient's management quality.

Planning Contributes to Fill the Intention-behaviour gap via Action Control

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Background: Action planning and coping planning are promising variables to bridge the intention-behaviour gap. More proximate variables to health behaviour have been studied, such as action control. The degree by which planning exerts its effect on behaviour through action control is studied. **Methods:** A longitudinal study was conducted in Costa Rica with 497 participants (mean age = 18.7 years, SD = 2.8) from humanities courses at the university. Structural Equation Modelling was used to test the model proposed. A 3 steps-mediation was specified where T1 intention and T1 action planning were expected to precede T2 coping planning, T2 action control and T2 exercise. Intention, action planning, coping planning were expected to exert their effects on exercise through action control. T1 exercise, sex and age were specified as covariates on T2 exercise. **Findings:** The model proposed showed a good fit to the data, which indicates that intention, action planning, coping planning have indirect effects on exercise via action control. **Discussion:** The effects of intentions and planning on exercise are explained via action control, which should be considered when designing interventions.

The Effectiveness of cbt on odd Symptoms and Social Problem Solving Skills Among Children and Preadolescent Students

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The purpose of this study was to determine the effectiveness of CBT on ODD symptoms and social problem solving skills among children and preadolescent students. The research method was a quasi-experimental one with Pre-Post design with a control group. The sample included 40 subjects who were divided into two experimental and control groups according to random assignment, including twenty ones in each. Two scales were used Behavioral Disorders Questionnaire (M.Rutter, teacher's form 1967) , and Social Problem Solving Skills Inventory (Dodge,Batez & Petit,1990), accompanied with the diagnostic interview according to DSM-IV-TR. the experimental group received ten individual CBT sessions ,three times a week , each one 45 minutes. the date were analyzed by ANCOVA statistical tool. The Results indicated that there was a significant difference between the scores of the experimental and control subjects ($P < 0.01$). In conclusion , CBT intervention can reduce the symptoms of ODD and can increase the appropriate social problem solving skills in children and preadolescent. **Keywords:** CBT, ODD, social problem solving skills, children and preadolescent.

Risk Indicator of Poor Adaptation (RIPA) for Psychological Screening in Oncology: Development and Validation

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Background: The literature emphasizes the use of screening tools to identify patients with distress due difficulties in adjusting to cancer. This paper presents the development and validation of the RIPA scale, structured on the assumption that identifying risk factors could allow a preventive referring of patients for psychosocial support. **Methods:** The literature was examined to identify predictors of psychological adjustment to cancer. The most frequent were used to develop an instrument with risk indicators - social support (SS), distress, coping and illness perception (IP), whose items were based on previously validated scales. The RIPA was administered in 300 patients with cancer and submitted to exploratory factor analysis. **Findings:** The analysis indicated the retention of five factors. After the principal axis factoring, 27 items were kept and grouped in the following factors: emotional SS (n=6; $\alpha=0.84$), instrumental SS (n=4; $\alpha=0.90$), active coping (n=5; $\alpha=0.71$), IP (n=5; $\alpha=0.78$) and distress (n=8; $\alpha=0.90$). **Discussion:** The instrument demonstrated good psychometric qualities. Future studies need to establish scores, predictive validity, sensitivity and specificity levels.

Illness Perceptions, Postural Performances and Quality of Life of Patients Before Vestibular Schwannoma Surgery

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Background: Vestibular schwannoma induces balance disorders which impaired balance control performances and have an impact on daily life of patient. **Objective:** to identify relationships between postural performances, illness perceptions and quality of life of patients before surgery. **Methods:** Assessments include posturography evaluation and questionnaires (Illness Perceptions Questionnaire-Revised and World Health Organisation Quality Of Life-Bref) three days before surgery. Means were compared with controls. Correlations between postural performances, illness perceptions and quality of life were calculated. **Results:** Postural performances and quality of life of patients are impaired before surgery. Correlations between postural performances, consequences (CES : $p=0.002$) and illness coherence (CES : $p=0.020$) were found. **Discussion:** Impaired postural performances have an impact on physical health and psychological domains of patient's quality of life. Health care of vestibular schwannoma should be focused on patient physical rehabilitation and psycho-education to improve quality of life of patients before surgery and to prepare postoperative recovery.

First Steps - an Early Prevention Program for Children With an Immigrant Background

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Background: By supporting the earliest parent-child relationship and parenting capacities the prevention program aims to have a positive impact on the socio-emotional, cognitive and language development of immigrant children. **Methods:** In the randomized trial study the effects of a psychoanalytically early prevention program are investigated compared to groups organised by paraprofessionals. The sample comprises 190 families being supported from pregnancy until the children enter kindergarten. Two of the major instruments applied are the Emotional Availability Scales (Biringen, 2008) for analysing the quality of parent-child-interactions and the children's hair cortisol level as a marker of stress. **Findings:** Since FIRST STEPS is a still ongoing study the research design as well as a sample description will be presented. **Discussion:** Children with an immigrant background are more likely to live in high-risk environments. We expect that supporting immigrant families from pregnancy on should have a positive impact on the quality of the parent-child relationships and on the children's ability to cope with stressful events such as the transition kindergarten.

Not Seen, not Felt, not Heard – Similarities and Differences in Acceptance of Chronic Pain and Chronic Tinnitus

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Background Recent findings show the importance of acceptance in the treatment of chronic tinnitus. Acceptance has also been identified as a key construct in the treatment of chronic pain. Our aim was to determine main parameters influencing acceptance in pain and tinnitus patients and to detect similarities across those groups. **Method** The samples consisted of outpatients taking part in a tinnitus coping therapy group (N1=97) and a pain coping therapy group (N2=56). Via stepwise regression analysis the different influencing factors on acceptance in pain and tinnitus (dependent variables) were determined. **Findings** In the tinnitus group three predictor variables could explain 45% of the variance in the pain group two variables could explain 54% of the variance. In both groups emotional strain was a significant predicting variable. Global screening instruments as the Brief Symptom Inventory could not explain any further variance. **Discussion** The identification of factors supporting the development of acceptance in different populations are important to promote well-being. Due to the findings it is advised to use specific instruments to assess acceptance in different clinical populations.

Sexual Risk Behaviors in Mexican Youth With Hearing Impairment

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The present study had two aims, firstly, to contribute with information to identify sexual risk behaviors in Mexican youth with hearing impairments, and secondly, to know to what extent the frequency with which young people communicate with their parents and mothers about the care of your sexual health is related to the sex of the young, the type of disability (deafness or hearing loss), age of onset (congenital or acquired) and their pattern of sexual behavior. The study was conducted with a purposive sample of 300 young people (53.5% male) with hearing impairment with a mean age of 19.4 years (SD = 2.59), chosen from four institutions that serve people with this disability. Instrument adapted for hearing impaired people of Robles et

al was used (2013) to assess history of disability , sexual risk behavior of participants, and sexual communication with parents . An instructor fluent in sign language for the deaf explained the content and how to respond to the assessment instruments . We found that 38.3 % (n = 115) have had sex, 49.1 % reported that their first sexual intercourse was forced , and 66.7 % did not use any contraceptive method. Differential effects by sex, type of disability and sexual behavior of participants on the frequency with which they communicate with their fathers and mothers on the care of their sexual health were found . We discuss the need for more research and education programs with young people with disabilities to assure a healthy sex life and respect for their sexual and reproductive rights.

Condom USE: Relationship Between KNOWLEDGE, Correct Application and Failures in Their use

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The purpose of this study was to evaluate the relationship between the level of knowledge on how to use a condom, the demonstrated ability to place and remove it from a penis model for teaching and, the frequency of the condom use failures that occurred during the intercourse, as well as investigate whether these variables are associated with breakage and slippage of the condoms during the intercourse. The participants were 939 sexually active Mexican university students (62.5% women) with a mean age of 19 years. The results show that the level of knowledge was positively correlated only with the demonstrated ability to use condoms ($r = .373$, $p < .01$), and this one, in turn, was negatively correlated only with the frequency of condom failures ($r = -.355$, $p < .01$). Also, condom breakage and slippage were associated with failures in their use. Finally, the frequency of condom use was negatively correlated only with the frequency of the failures ($r = -0.254$, $p < .01$). The results are discussed in the context of HIV/AIDS prevention, considering the importance of collecting data that serve as objective indicators of correct condom use.

Factorial Structure of a European Spanish Version of the Posttraumatic Growth Inventory (PTGI)

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The PTGI attempts to evaluate the perceived positive changes following a vital crisis. In the original study 5 factors emerged. However many studies failed to replicate this factorial model having been found 1, 2, 3 and 4 factors. Our aim was to analyse the structure of the PTGI and to contrast previous models in a sample of parents after having a child admitted on a Paediatric Intensive Care Unit (PICU). A total of 130 parents responded the PTGI 6 months after their child's discharge from PICU. We have used the factor analysis of principal components, and an analysis with the structural equations model to contrast the factorial structure. Also, we did ANOVAS to study the influence of demographic and medical variables. Through the principal component analysis, we found 3 factors that explain 67,99% of the variance. Using confirmatory analysis of this model, we found an acceptable adjustment ($\chi^2/df = 2,2$; $GFI=0,86$; $CFI=0,92$; $RMSEA=0,09$). We called the first factor personal growth, the second interpersonal growth and the third transpersonal growth. None of the other previous models had a better adjustment. We found statistical difference in posttraumatic growth by gender, spiritual beliefs, illness severity and length of the admission. Using the European Spanish PTGI in parents after a child's PICU admission, 3 dimensions of growth emerged. This suggests the need to assess these dimensions after crisis.

Economic CRISIS, Health Psychology and PERSONALITY: a Preliminary Study of Personality Organization in "CRISIS-RELATED" Subjects

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Background. A deep mental health distress has been introduced by the current economic and social crisis. Methods. A control group observational research design has been used to point out the differences among the personality organization (Kernberg 1975, 1984) in subjects affected by "crisis-related" disorders who asked help to "Crisis and Psychopathology Observatory" of "Ospedale Maggiore Policlinico" of Milan, compared to the other subjects taken over the same Mental Health Care Center. Participants (N=35) were tested at the first psychiatric visit with Inventory of Personality Organization (Lenzenweger et al., 2001); - Primitive Defense, $\alpha=.83$; Reality Testing, $\alpha=.88$; Identity Diffusion, $\alpha=.85$. Findings. One-way ANOVA points out that "crisis-related" subjects show (A) higher identity diffusion: $F(1,33)=10.48$; $p<.003$; (B) higher use of primitive defenses: $F(1,33)=30,67$; $p<.001$; (C) a lower reality testing: $F(1,33)=20.12$; $p<.001$. Discussion. Results suggest that "crisis-related" patients show a particular configuration of personality organization. They also suggest a way in the research to better understand who the "crisis-related" subjects really are.

Wholesome Contact Project – What Prevents Elders From Complications of Hospitalization? (part of Symposium: the Wholesome Contact Project...)

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Our aim is to introduce to ideas motivating Wholesome Contact Project. In 2012 interdisciplinary, volunteers-based programme for prevention of iatrogenic influence of elders hospitalization was founded. The Project is to improve well-being and to protect patients in geriatric internal ward from somatic and psychological stress connected with hospitalization. The programme focuses on the most frequent complication – delirium: suffering itself, marker of poor outcome, higher mortality and institutionalization for older patients. In the design of prevention a special interest is given to risk and protective factors of delirium, to the use of experience and motivation of volunteers chosen from professionals-to-be (students of medicine and psychology) and to development of social and communication skills in medical staff to improve doctor-patient relationship. The parallel goal is evidence-based evaluation of designed prevention with the ideal of methodologically strict and highly contextualized study. The quantitative research on efficacy and cost-effectiveness of the programme as well as qualitative research on volunteers' experience and proper management of their work is being made.

Depression in Coeliac Disease and the Impact on ADHERENCE: a Systematic Review of the Literature

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Background: Psychological symptoms are common in coeliac disease (CD). This review examined the incidence of depression in CD, focusing on factors responsible for the link between the two conditions and the impact of depressive symptoms on gluten free diet (GFD) adherence. Methods: A literature search was conducted across several electronic databases using the following search terms: coeliac/ceeliac disease OR gluten free diet adherence AND depression OR psychological. Findings: 41 studies were included. 16/22 studies found evidence for increased depressive symptoms in CD compared to healthy controls/norms; 11/14 established a link with poorer adherence. Mechanisms to explain the link included gluten exposure in newly diagnosed/poorly treated patients via deficient serotonin metabolites; psychosocial reaction to the restrictions of the GFD; and comorbidity with other gastrointestinal or autoimmune conditions. Discussion: Regardless of the direction of the relationship, CD patients with comorbid depression had poorer adherence and may require psychological treatment to experience symptom relief and reduce the negative impact of depression on adherence and quality of life.

Consumers' Perception of Bread From a Health Perspective- an Exploratory Study Among a Swedish Population

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Background For strategies to increase the consumption of healthier bread one aspect to explore is consumers' quality perceptions of bread from a health perspective. Method Survey, response rate 38 % n=1134. Open-ended questions regarding perceptions of healthy bread were content analyzed. Statistics: Correspondence analysis, Mann-Whitney U test and Chi-square. Findings 1/3 had decreased their intake of bread, mainly to maintain/improve health. 1/5 did not know any bread that they considered healthy. Among respondents who did know healthy bread, 1/3 found it hard to identify. Most frequent descriptions of healthy bread were coarse, fiber, wholegrain, sourdough, dark. Most listed health effects were: good for stomach, fiber content, bowel health and satiating. Discussion Increasing consumers' awareness of different types of breads contribution to a healthy diet is a challenge. The general health perception of bread was in line with recommendations but cues used may be misleading. Health is a credence quality attribute, but health effects that to some extent can be evaluated by the consumer after consumption are more relevant forming health related quality expectation of bread.

Social Support of Youth Involved in Road Traffic Accidents

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The Road Traffic Accidents (RTA) causes around the world a large number of victims and is one of the biggest health problems facing by the world community. This kind of event, quite common in young people, can affect the personal, social, professional and familiar lives of patients (WHO, 2007). Some studies report that the attitude of family and friends to the disability can affect the welfare of the patient and his/her recovery, because it may increase their sense of security for survival (e.g. Ross & Mirowsky 2002; Sousa, Relvas, & Mendes, 2007). The main aim was to understand family and friends' support on youth adjustment after the crash. This is a quantitative and longitudinal study, conducted in Portugal with 302 young people, aged between 16 to 24 years, involved in road traffic accidents. For data gathering, it was applied a questionnaire to access background variables, road traffic accidents variables and family and friend's support variables (Network of Relationships Inventory, Furman & Buhrmester,

1985, 1992). The finding reveals some reliable differences in regard to family and friends' support. In addition, time had a significant effect on family and friends' support. Youth involved in road traffic accidents felt that their family provided higher levels of companionship, affection, admiration, instrumental aid, intimacy, nurturance and reliable alliance.

Evaluation of an act Internet Based Intervention on Smoking Cessation for Adolescents

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Research supports that internet-based interventions are cost effective and cater to individuals who are unable/unwilling to attend weekly treatment sessions with a therapist. An advantage they may have is that they utilize technology attractive to youth (interactive games, animation, video clips etc.) and may reach and engage a wider range of individuals than traditional face-to-face interventions. Acceptance and Commitment Therapy (ACT) is an empirically-based intervention that uses acceptance and mindfulness strategies and has been shown to increase psychological flexibility. Smoking remains a global concern especially in adolescence. The present study aimed to create and investigate the usefulness and effectiveness of an ACT internet-based smoking cessation intervention for high school student smokers. This intervention was compared to a waitlist control group. Participants were asked to complete questionnaires relating to process and outcome measures pre-, during, and post-treatment. Results indicate an increase in psychological flexibility, self-efficacy and motivation to quit smoking and show promise that internet-based interventions can reach youth for smoking cessation.

The Role of Self-efficacy and Social Support on Self-care in Older People With Diabetes

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Background: Diabetes is a common problem in older adults, which requires numerous life-style changes for optimizing blood glucose control. To target effectively self-care, interventions with young and middle-aged patients focus on self-efficacy and social support, but as yet there has been little focus on older people in these studies. Methods: This cross-sectional study examined the effect of self-efficacy and social support on self-care among patients with type 2 diabetes. Data were collected from seventy-two patients (mean age 63.9 yrs) using structured interviews and self-report measures of diabetes-related self-efficacy (DES-SF), of diabetes self-care activities (SDSCA), and of perceived social support (WSUD). Findings: Self-efficacy, but not social support was associated with self-care in the areas of diet and exercise. No mediators were found, but self-efficacy and social support were closely associated. Discussion: The consequences for improving self-care in older diabetic patients will be discussed.

Self-rated Health and Well-being in Recently Retired People: the Influence of Subjective Aging

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Background: As self-rated health (SRH) and subjective well-being (SWB) are important determinants of mortality in later life, there is a major interest to identify influences on elderly people's SRH and SWB. There is high evidence that self-perceptions of aging are also related to health. Former studies indicate an association between a positive perception of aging with a higher SRH. However this relation has not been addressed adequately. Methods: Data from the German Aging Survey (DEAS) are used to investigate the relationships between self-perceived aging, SWB and SRH in the transition period to retirement including effects of social relations. DEAS is a nationwide representative cross-sectional and longitudinal survey of the population 40+. Findings: Correlations of subj. aging and SH/SWB are going to be presented. In particular the moderating effects of social relations as well as parameters of retirement such as voluntariness and timing are discussed. Discussion: This research shows the importance of self-perceptions of aging for SWB and SRH. Identifying ways to promote a positive self-perception of aging from retirement on seems to be an important task for health promotion.

Subjective Well-being and Social Relationships of Young Adults

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Background: The transition to young adulthood is a period of life with many changes, developmental tasks, uncertainties and important decisions in life. Recently this age period is being studied under the headline "emerging adulthood". Usually young adults are physically in good health, whereas mental health and subjective well-being (SWB) are more heterogeneous. This study focuses on the role of social relationships for SWB. Methods: Data from the population representative study German Socio-Economic Panel (SOEP) are analysed cross-sectionally. The outcomes affective balance, global life satisfaction and domain satisfaction based on the 2011 data set are of special interest. Findings: The association of social relationships and SWB in young adulthood will be presented. The meanings of social support, quality of friendships and relationships to relatives are

shown. Especially close friendships seem to be an important determinant of SWB. Discussion: The importance of social relationships for SWB is discussed. Young adults should be more in focus as a target group for health psychologists and in health promotion as this is a sensitive life period concerning health and well-being.

Do Lifestyle Habits and Self-regulation Predict Changes in Emotional Well-being Among University Students Across Seven European Countries?

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Background: The purpose of this study was to test whether lifestyle habits (alcohol consumption, smoking cigarettes, marijuana use and healthy eating habits) and self-regulation skills predict changes in emotional well-being (EWB). **Methods:** A sample of university students from Slovakia, Lithuania, Hungary, Poland, Bulgaria, Turkey and Czech Republic participated in an online survey at the baseline (n=3560) and the follow up 12 months later (response rate 29%; n=1044; 25.8% males). The administered measures included: AUDIT, items on smoking & marijuana use, the Food Frequency Questionnaire (FFQ), the Short Self-Regulation Questionnaire and the WHO-5 Well-being Index. Linear regression was performed to assess the relationship between the life style habits (T2), self-regulation (T2), and changes in EWB (T2-T1). **Findings:** Healthy eating habits and self-regulation were shown to be a strong positive predictor of an increase in EWB. Alcohol use, smoking and marijuana use were not found predict any changes in EWB. **Discussion:** This study confirmed a positive role of self-regulation skills and healthy food habits in relation to increases in EWB.

Adherence of People Living With HIV/aids Beginning Antiretroviral Treatment: Effects of Cognitive-behavioral Intervention

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Background. The study aimed to describe a cognitive-behavioral intervention to patients beginning antiretroviral therapy and analyze the intervention effects on adherence behavior. **Methods.** Quasi-experimental design, without control group, with evaluation at baseline and twelve months after intervention. Participants were 22 patients, 17 men, aged 20 to 61 years (mean=40.8; SD=9.68). The instruments included semi-structured interview and a self-efficacy scale for treatment adherence on HIV/AIDS. The individual intervention included techniques such as self-monitoring, problem solving and cognitive restructuring about the treatment. **Results.** Fifteen participants reported adherence at or above 95% of the number of pills prescribed in the follow up. Analysis of self-efficacy indicated a statistically significant difference in the average score twelve months after intervention ($p < 0,01$). Blood tests showed a reduction in viral load levels, reaching undetectable limits for 19 cases. **Discussion.** Intervention proves to be feasible and their inclusion in the routine of health service should prevent future problems of adherence, in a perspective of comprehensive care.

Effects of Resilience in Japanese Nurses on Organization-based Self-esteem and Stress Responses

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Backgrounds: Recently, medical treatment has improved, but patients are getting older, symptoms are getting serious, and nursing work has become diversified in Japan. Therefore, many nurses get exhausted and leave their jobs. The effect of resilience of nurses on organization-based self-esteem (OBSE) and stress responses was investigated. **Methods:** Participants were full-time nurses working in hospitals. A questionnaire survey was conducted using the Resilience Evaluation Scale for Nurses. Organization-based self-esteem and stress responses were also assessed. Cluster analysis was conducted using the resilience score. ANOVA and multiple comparison were conducted to investigate differences in OBSE and stress responses based on resilience. **Results:** Resilience was classified into four clusters. Results of an ANOVA indicated significant between-group differences in OBSE and stress response. The first cluster with high resilience showed higher OBSE and lower stress responses than other clusters. **Discussion:** It is suggested that offering support and solutions for work related problems, as well as controlling emotions and thinking might increase OBSE and decrease stress responses.

Exercise Self-efficacy Predicts Attendance and Functional Exercise Capacity During Pulmonary Rehabilitation

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Background: The aim of this study was to determine if exercise self-efficacy predicts attendance and functional exercise capacity at the end of pulmonary rehabilitation over and above demographic and clinical indicators. **Methods:** Sixty-four people with Chronic Obstructive Pulmonary Disease completed assessments of exercise self-efficacy (task, coping, and scheduling) and the 6-minute walk test (6MWT) at the beginning and end of pulmonary rehabilitation. Demographic and standard clinical data were obtained from health records. Hierarchical multiple regressions were conducted to predict attendance and post rehabilitation 6MWT, with demographic and clinical indicators entered before exercise self-efficacy. **Findings:** Task self-efficacy ($\beta=.32$) was the only statistically significant predictor of attendance. Age ($\beta= -.15$) and coping self-efficacy ($\beta=.20$) were statistically significant predictors of post rehabilitation 6MWT, after controlling for baseline 6MWT. The 6MWT increased by 32m from baseline to post rehabilitation, $p=.00$, $\eta^2=.18$. **Discussion:** Future research designing and implementing strategies to increase exercise self-efficacy in pulmonary rehabilitation are warranted.

An Exploration of Effective Communication Channels for Improving Physical Activity and Diet Messages

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Background: While much research attention has been given to the impact of health behavior interventions, relatively little is known about the efficacy of communication channels for health messages. The purpose of this study was to evaluate the efficacy of various communication channels for behavior change messages that focus on promoting physical activity and healthy diet in Japanese suburban populations. **Methods:** A health communication campaign was created collaboratively in 2011–2013 with researcher-designed materials derived from enhanced community health resources presented in a variety of communication channels. Participants ($n = 1,500$) were recruited from the community. **Findings:** Public relations magazines, leaflets and newsletters were found to be effective channels for communicating health messages than other resources (Chi-square = 328.25, $df = 7$, $p < .01$, Cohen's $w = .74$). This finding remained constant across gender and age differences. **Discussion:** These findings suggest that using a combination of public relations magazines, leaflets, and newsletters based on community health resources is effective way to disseminate health information in suburban populations.

Is Teachers' Perfectionism Associated With Their job Adaptation?

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The aims of this study were to develop Teachers' Specific Perfectionism Assessment Scale (TSPAS) and School Job Adaptation Scale (SJAS) and to examine the relationship between teachers' perfectionism and their job adaptation. The subjects of 412 school teachers (elementary and middle) were asked to answer a questionnaire composed of socio-demographic questions, teachers' perfectionism questions and school job adaptation questions. Exploratory and confirmatory factor analyses and reliability analyses were conducted to develop TSPAS and SJAS. Multiple regression analyses were employed to examine the relationships between TSPAS and SJAS. The results yielded a 6-factor model for TSPAS and a 1-factor model for SJAS. The structural validity and Cronbach's alpha reliability of each scale were statistically acceptable. Some of the sub-scales of TSPAS had positive and the others negative association with SJAS. The results above suggest that teachers with a high degree of perfectionism have a high risk of maladaptation. This implies that appropriate psychological interventions to mitigate their perfectionism can help teachers to better adapt in their workplace and prevent their burnout.

Development of the new Mental Health Scale for the Japanese Disaster Victims and Supporters

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The assessment of mental health is becoming the center of attention in disaster victims and supporters of the 2011 Tohoku Earthquake in Japan. Although there were many mental health scales, those possessed several problems to apply to them, e.g., troublesome tasks accompanied by many items. The purpose of this study was to develop the new mental health scale (Rikkyo University version: MH-R), and to examine the reliability and validity. Subjects were 328 Japanese college students (192 males and 136 females, 19.6 ± 1.2 years). They answered three scales, the MH-R (ten items), GHQ28 (Nakagawa & Daibo, 1985), and CES-D (Shima et al., 1985). As the results of exploratory factor analyses, three factors [low negative response ($\beta=.77$), vivid

response ($r=.86$), calm response ($r=.67$)] were chosen finally. The result of confirmatory factor analysis showed the validity of the hierarchical model was fit to the data. There were significant negative correlations between the MH-R scores and the GHQ28 ($r=-.59$) or CES-D scores ($r=-.52$). It was suggested that the MH-R had the adequate reliability and validity. Then, the scale should be examined through the data including adulthood and senior persons.

Still Healthy? Personal Stories of Procrastination

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Background: The focal concept of this study is procrastination. The author examines the experience of 35-44 years old men in terms of their health related procrastination behaviour. Currently delays in seeking help from medical practitioners are an increasing problem in Latvia, especially among 35-44 years old men (Centre of Health Economics, 2010). Any failure in primary and secondary prevention creates a number of negative consequences. Nevertheless, aforementioned group often avoids medical treatment. The aim of the study was understand the experience of procrastination of this group in qualitative terms. **Method:** Semi-structured in-depth interviews with 20 men aged 35-44 were conducted. Data were analyzed by means of inductive thematic analysis. **Findings:** The following dominant dimensions emerged: (1) understanding of one's own health from the time perspective; (2) models of the relationship to the medical practitioner; (3) cultural aspects of procrastination behaviour. **Discussion:** There are two main concepts - time discounting and task aversion - that bring together the experience of procrastination for the studied group.

Do Empathy and Group Norms Predict Mental Health Stigma in Adolescents?

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Background: The main aim of this study is to examine whether Empathy and Group Norms contribute to the expression of explicit and implicit mental health stigma in adolescents. Stigma was conceptualised as involving cognitive, emotional and behavioural aspects. **Method:** 256 secondary school students (108 males, 148 females) from within the Republic of Ireland were recruited to this study. All participants were aged between 15-18 years. Participants were asked to read two vignettes and to respond to a series of questions that assessed their beliefs, attitudes and behavioural intentions toward each vignette character. One vignette depicted a peer with depression while the other vignette described a 'typically developing' peer. Participants also completed measures assessing their dispositional trait of empathy and perceptions of group norms. Implicit attitudes were assessed using the Implicit Association Test. **Results:** Results were analysed using Multiple Linear Regression. It was found that Group Norms significantly predicted aspects of explicit stigma. **Discussion:** There is evidence to suggest that Group Norms may be an important factor to target in future stigma-reduction programs.

Perceived Respect in Persons With Learning Difficulties as Buffer Against Negative Effects of Loneliness

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Background: People with learning difficulties often experience social exclusion which may influence their psychological well-being. Little is known whether perceived respect can buffer these negative effects. **Methods:** Study 1: We tested whether loneliness affects anxious and depressive mood in persons with learning difficulties (N=20), physical impairment (N=23) and without impairments (N=20). Study 2: We tested whether perceived respect in social interaction influences reported depressive and anxious mood in people with learning difficulties (N=28). **Findings:** In Study 1, persons with learning difficulties and persons with physical impairment reported significantly higher levels of loneliness than persons without impairments. Loneliness was related to depression. In Study 2, perceived respect and anxious mood were negatively correlated but only in the subsample of persons working in sheltered workshops. **Discussion:** Loneliness is a severe problem in individuals with disability and related to mental health problems. Social factors such as perceived respect can buffer against negative effects of loneliness. Respect as influencing factor and practical implications will be discussed.

Cognitive Appraisal as a Mediator in the Relationship Between Stress and Burnout

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Background: This study analysed the mediating role of cognitive appraisal on the relationship between occupational stress and burnout. **Methods:** Participants were 333 university teachers, from north of Portugal (Age: M = 42.67; SD = 6.87). Measures included the Stress Questionnaire for Academic Staff (Gomes, 2010) to assess occupational sources of stress; the Cognitive Appraisal Scale (Gomes, 2008) to measure primary and secondary cognitive appraisals; and the Maslach Burnout Inventory-Educators Survey (Maslach et al., 1996) to evaluate burnout dimensions. **Findings:** Model 1 tested the mediating role of primary cognitive appraisal (e.g., threat and challenge perceptions) between stress and burnout. The model presented good fit indices (RMSEA = 0.054; CFI = 0.91; TLI = 0.90), explaining 69% of the variance in burnout. Model 2 tested the mediating role of secondary cognitive appraisal (e.g., coping potential and control perception) between stress and burnout. The model presented good fit indices (RMSEA = 0.052; CFI = 0.94; TLI = 0.91), explaining 50% of the variance. **Discussion:** Data confirmed that cognitive appraisals partially mediated the relationship between occupational stress and burnout at work. These findings constitute a promising underlying mechanism in the explanation of adaptation at work, which must be considered in occupational stress intervention programs.

The Relationship Between Dating Violence Profiles, Coping Strategies and Trauma Symptoms

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The study examined the relationship between dating violence profiles, coping strategies and psychological adjustment in sample of 220 high school students, aged 16 to 19 years. Subjects completed self-administered questionnaires: The Conflict in Adolescent Dating Relationships Inventory, The Ways of Coping Scales and Trauma Symptom Checklist-40. Regression analyses have shown that gender and different roles in dating violence are significant predictors of all measures of psychological adjustment expressing on Trauma Symptoms Checklist. All types of psychological difficulties, expect of sexual problems, were more frequent in girls than in boys. Victims of dating violence, as well as subject who were victim and perpetrators of dating violence experienced the most of psychological difficulties. Furthermore, younger age has been predictive for depression and sexual problems, while non-adaptive coping strategies were significant predictors of dissociation, anxiety, depression, sexual abuse trauma and sleep disturbance. These results suggest that coping stress strategies may be important in reducing difficulties in psychological adjustment for adolescents involved in dating violence.

Relationships Between Humor Style Patterns and Psychological Well-being

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Background: This study aimed at detecting clusters of specific combinations of humor styles, as measured by the Humor Styles Questionnaire (HSQ), and at identifying eventual association of such combinations with indicators of psychological well-being. **Methods:** The participants in the present cross-sectional study were 458 Italian female high school students from central Italy (ages ranged from 13 to 18 years). The HSQ was employed to assess different styles of humor according to a multidimensional approach. The Ryff's Psychological Well-Being Scales (RPWB) was used to evaluate psychological well-being by six intercorrelated dimensions; in addition, the Self-Esteem Questionnaire (SEQ), and the General Self-Efficacy (GSE) were applied. A cluster analysis, based on the scores reported on the HSQ, as well as the differences between group means of the well-being indicators were computed. **Findings:** The two emerged groups (high and low in positive humor styles) differed in group means for all dimensions of RPWB, SEQ, and GSE. **Discussion:** The implementation of specific training in the effective use of humor may contribute to enriching programs that inspire psychological and psychotherapeutic well-being.

Well-Being of Children From Military Families: the Role of Parental Deployment

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Background: Research suggests that military life stressors have a negative impact on the well-being of children from military families. However, little research has been conducted to examine the well-being of children from military families in Canada. This study examined the impact of military stressors on the well-being of children in Canadian Armed Forces families. **Methods:** Focus groups were conducted with children between the ages of 8 and 13 (N=85 children). MAXQDA software was used for the thematic analysis of the qualitative data. **Results:** Parental deployment and frequent relocations were found to be the main stressors reported by children. The overall well-being of the children decreased during parental deployment. Nevertheless, the vast majority of the children believed it was good to be part of a military family. Moreover, several strategies, such as seeking social support, communication with the deployed parent, and active distraction were reported to buffer the stress related to military life. **Discussion:** It is crucial to understand how children from military families can maintain resiliency in the face of the military life

stressors. This research shows that several factors, including effective coping strategies and supportive networks, may buffer the effects of military life stressors on child well-being. Recommendations to military family service providers are offered.

Living With Cystic Fibrosis (CF): a Brief Psychological Intervention to Increase Self-Management

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Background: CF affects multiple body systems and requires complex and time-consuming daily care: chest therapy, medication and enzyme intake, nutritional monitoring and sports. Despite the importance of health, many CF patients struggle with the high level of adherence required. To support patients with advanced stages of illness in their therapy management, an intervention programme focussed on nutritional issues based on the Health Action Process Model was developed. **Methods:** The intervention includes goal setting, individual and detailed action plan, identifying and breaking down barriers. Since August 2013 nine inpatients (7 f/2 m; 13.6 yrs - 25.9 yrs.) were selected and participated. Up to now eight patients were re-evaluated (after 3 months), regarding appraisal of personal profit and medical outcome. The CF care team with its specific expertise was involved in the process. **Findings:** All patients reached personal goals, their medical outcome (BMI und FEV₁) showed improvement or stabilization. **Discussion:** Cases investigated show that the intervention might be effective and applicable to increase self-management in CF patients over 16. Younger participants are more responsive to external reinforcement. Due to the complexity of treatment, involvement of the CF-care team was decisive in generating high-quality plans, even for this experienced and well-educated patient group.

Predict Physical Well – Being After Allogenic Bone Marrow Transplantation Based on Demographic characteristics in Patients With Acute Leukaemia

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The purpose of the study is to predict physical well – being of post – allogenic BMT patients based on demographic characteristics (economic status, occupational status, marriage status and gender). **Methods:** This study is correlation. Statistical universe is all of the patients with acute leukaemia ages 18 – 45 years who have allogenic BMT conditions. Pre – allogenic BMT data were gathered on 58 patients (38 men and 20 women) ages 18 – 45 years selected during 13 months via census procedure. Demographic characteristics patients were studied before allogenic BMT by questionnaire then, physical well – being of the subjects were assessed after one, two and three months post – allogenic BMT by CBC test. It was analyzed using univariate and multivariate analysis in general line model. **Results:** results showed that there was no significant relation between variables in multivariate analysis. But, in univariate analysis, there was significant relation between occupational status and white blood cell (WBC) in the second months post – allogenic BMT. So, occupational status could predict physical well – being after allogenic BMT. **Key words:** physical well – being, allogenic bone marrow transplantation, demographic characteristics and acute leukaemia

Variables Related to Smoking Cessation Among Greek Young Adults: Applications for Health Promotion Interventions

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Young adults display the highest smoking rates and the lowest smoking cessation rates. However, this group until recently has gained little interest. The present research aims to study variables related to smoking cessation, which can contribute to a more effective design of relative interventions. Participants 18-30 years old (N=507;M=22.5;SD=2.9) completed a battery of questionnaires, assessing smoking behavior, beliefs related to smoking initiation, maintenance and cessation, developmental variables and psychological discomfort. Smokers were 47% of participants, 26% heavy and 9% former smokers, 17% reported high motivation to quit smoking. Motivation to quit smoking was negatively correlated with beliefs about positive effects of smoking and denial of negative impact of smoking. In regression analysis models, age, beliefs, developmental characteristics and psychological discomfort predicted motivation to quit (R²=0.33, p<0.000). High smoking rates, low motivation to quit and low predictive value of variables tested, emphasizes the necessity of public health interventions, which focus on cognitive change and motivation to quit smoking, but also on contingency management measures.

Quality of Life and Health of air Traffic CONTROLLERS, são PAULO, Brazil

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Background: The quality of life (QoL) and health of shift workers can be influenced to the changes in the circadian cycle as have loss on concentration and in work performance, and in family and social relationships. Methods: For average sleep duration (ASD) was used the Questionnaire Chronotype Munich(shift), the nutritional status by Impedance, the QoL for the WHOQOL-BREF and PAL by the IPAQ in METs. Findings: 23 ATC was studied, mean age 41.96 years, 70% men and 30 % women, social class B1 (54.55 %) and B2 (31.82); 15 or more years of education (57 %); work 6 hours/day and 2 days off. They were with overweight, excess body fat, normotensive. The ASD was 366min (work days), 488min (days off). The QoL showed the highest mean values to physical domain (74.69) and the psychological domain (73.91). Workers (60%) had insufficient PAL to maintain health (< 1200METs/week). The QoL was negatively correlated with BMI (-0.4459) and diastolic blood pressure (-0.4542), the psychological domain had positive correlation with METs (0.5344), the environment domain correlated positively with weight (0.4684) fat free mass (0.4416) and basal metabolic rate (0.4429). Discussion: Maintain BMI and blood pressure in the normal range and be active physically contributed to a better perception of overall QoL and for psychological and the environment domains for the ATC studied.

Postpartum Posttraumatic Stress Disorder: Consequences Concerning Quality of Life Until 6 Month Postpartum

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Background: Literature highlights that postpartum PTSD is a major health issue for between 1-3% of women in the first year after childbirth (Ayers et al. 2014). The aim of our study is to compare women presenting significant PTSD symptoms (group PS) to women without symptoms (group control) in a longitudinal design. Method: 97 women completed questionnaires on three time points: 3rd trimester of pregnancy, 2 and 6 months postpartum. At each time, were assessed postpartum PTSD (PPQ, Pierrehumbert et al., 2004) and Quality of life (SF 36, Warren et al., 1992) Findings: In our French population 11 women presented significant PTSD symptoms (PS) at 6 month postpartum (11,5%) called Group PS . These women showed significantly worst scores in quality of life dimensions such as Role-Emotional (Problems with daily activities as a result of emotional problems) during pregnancy and at 2 month postpartum. Further, group PS describes also more difficulties concerning their social functioning (Extreme and frequent interference with normal social activities due to physical and emotional problems), specially in the first 2 month postpartum. Beyond both groups did not differ for age, number of children, and level of education in our population. Discussion: Our results emphasize the impact of postpartum PTSD on women's life and should be an issue for health psychologists.

Validation of Modified Health Care Climate Questionnaire (mHCCQ) in a Perinatal French Population

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Background: Self-determination theory suggests that autonomy-supportive contexts will facilitate a feeling of control. During childbirth, a major life event, perceived control is an important factor for successful psychological adaptation. Our aim is to validate the mHCCQ (Williams et al., 2005; 2007), short version of the "Health Care Climate Questionnaire" (Williams & Deci, 2001). Six items allow to measure the patient's perception of health care professional's support for autonomy. Method: 2 month postpartum, 177 women completed our questionnaire: mHCCQ, GSES (general self-efficacy), HAD-A (anxiety) and SF36 (quality of life). Findings: Factor analysis points out one single factor (resuming 72.04 %) and its 6 items range from 0.76 to 0.91. Our results show excellent internal coherence (Cronbach's $\alpha = 0.92$). Concerning external validity the score of the mHCCQ is correlated to self-efficacy ($r = .314^{**}$) and negatively associated to anxiety ($r = -.308^{**}$). As regards quality of life, 4 significant correlations were found between healthcare climate and mental health ($r = .214^{**}$), role emotional (.156*), social functioning ($r = .217^{**}$), vitality (.202*). Discussion: Our findings are encouraging for the psychometric validation of the mHCCQ for a French population. Further, our results highlight the relation between support for autonomy and positive psychological outcomes.

Measuring Real-time Snack Consumption Among low ses Youth: a Mobile-based Ecological Momentary Assessment (mEMA) Study

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²TNO

Background: We examined contextual predictors of low socio-economic status (SES) youth' snack consumption (SC) from a dual process perspective. Craving and intention were therefore added to our theoretical model. Methods: 80 participants (68% female)

received prompts from the mEMA-app four times a day during seven consecutive days, containing questions regarding contextual factors that influenced their SC during the previous 3.5 hours (i.e., location, physical activity and social context). Multilevel analysis (i.e., time of day (ToD) nested within individuals) was conducted in SPSS. Findings: Multilevel regression analysis indicated that SC differed for ToD (SC increased over time). Univariate analyses indicated that, when controlling for ToD, SC was more likely when they were in the presence of other people (OR= 3.3) or experienced feelings of craving (OR = 17). Multivariate analysis showed that SC was explained by craving (OR= 15.4), and seeming suppressor effects by intention (OR=0.7) and the social context (OR= 0.5). Discussion: Low SES youth' snack consumption seems mainly impulsive in nature at the end of the day, and may be triggered by the context.

Influence of new Consumer Culture on the Teens Health

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The main purpose of this study was to find out how the consumer oriented culture is manifested in the lives of teens (N= 234; age= 11,5). Using the Consumer Culture questionnaire (Schor, 2004), completed by few additional items, the following factors were observed: dissatisfaction, consume orientation and brand awareness. Acquired results prove influence of the consumer oriented culture over ways of spending leisure time which are due to this fact rather passive and unhealthy. Involved teens were mostly consume oriented, preferred brand clothes and wished to earn a lot of money when they grow up. Generally speaking teens are acquainted with financial instability in the family that has subsequently impact on perceived tense family atmosphere and the inability to purchase desired goods. Gender stereotypes appearing in the society were present in the following areas: boys were oriented on consume and brands whereas girls appeared to have a need to collect various goods through shopping - also caused by watching more commercial television channels in comparison to boys. This study underlines the big significance of the improvement of a consumer and health literacy.

Social Support and Survival: a Longitudinal Study of Blood and Lymphoid Cancer Patients After Allogeneic hct

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Background: Close relationships have been linked to morbidity and mortality in healthy individuals and patient populations, with effect sizes comparable to risk factors such as smoking and obesity (e.g., Holt-Lunstad, Smith, & Layton, 2010). The pathways that explain the protective effect of close relationships are still unknown. The current study aims to understand the link between social support from a dedicated caregiver to survival in blood and lymphoid cancer patients after allogeneic hematopoietic cell transplant. Methods: We present data from a retrospective study of patient charts (N = 117) and a prospective multi-method study (N = 30). Findings: Caregiver presence correlated with increased probability for survival post-allogeneic transplant. The multi-method study pointed to concrete caregiver support strategies facilitating survival during this harsh treatment (e.g., practical support for daily medication and fluid intake, nutrition, healthcare system navigation; emotional support: encouragement and calming presence). Discussion: The findings underscore the need for studying the links between support strategies with health outcomes.

The Value of Valued Living Questionnaire for Chronic Illnesses: the Case of Thalassemia

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ACT core processes (values, psychological flexibility) are said to function as mechanisms of change during treatment. Assessing these processes would further examine the efficacy of ACT. The Valued Living Questionnaire (VLQ) is a clinical tool aimed at values clarification and assessment. Acting in accordance to ones values has in the past been linked to improved QOL in chronic conditions. The current study aims at examining the VLQ for chronic illness sufferers. The sample consists of 120 chronic pain patients, 55 asthma patients and 100 patients with thalassemia major. Five outcome variables were tested for convergent validity (CAMS-R, HADS, AAQ-II, MAAS, SACS) and one was tested for divergent validity (PBI). The VLQ-G is a reliable measure consisting of two subscales, Importance ($\alpha = .81$), and Consistency ($\alpha = .88$). Analysis yielded one factor for the first scale (34% of the variance) and 2 factors (43%, 11% of the variance) for the other. A negative correlation between the VLQ and the convergent measures provided support for the validity of the VLQ. Results will be discussed in terms of the application of the VLQ in the assessment and treatment of health related conditions.

Daily Dyadic Coping Predicts Changes in Marital Adjustment Among Couples in Stepfamilies Across 2 Years

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Background: Stepfamilies tend to experience both greater amounts and varieties of stress and are at a higher risk of marital distress and divorce than are nuclear families. This study examined stepparents' day-to-day coping with family stress as a predictor of changes in marital satisfaction over a two-year period. **Methods:** Both members of 67 stepfamily couples were interviewed about their marital adjustment at baseline and again two years later. They also each completed twice-daily reports for a period of one week assessing family stressors and strategies used to cope. Multilevel modeling was used to examine the effects of coping via confrontation, compromise and withdrawal on marital adjustment over time. **Findings:** Wives who reported higher levels of withdrawal in coping with daily family stress had poorer marital adjustment over time. The impact of wives' confrontation on marital adjustment was moderated by her husband's tendency to use compromise and confrontation. **Discussion:** Findings support a dyadic coping model in which the responses of both husbands and wives must be considered in tandem to understand the impact of family stressors over time.

The More - the Worse? Body Image and Personality in Pierced Adults

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Background: Body piercing and other body modifications have increased tremendously in popularity in recent years. Surprisingly few studies have explored the extent to which body piercing is also related to aspects of body image. The main of the study was to gather precised data on personality characteristics and various aspects of body image in pierced adults. Further we wanted to know if single pierced and multiple pierced differ in these parameters. **Methods:** 62 persons with piercing were investigated with questionnaires assessing body image, personality traits including sensation seeking. **Findings:** Our questionnaire survey confirms that there are no remarkable values in all psychological parameters studied. Significant differences can be found between persons with one body piercing and those with more than one, who are characterized by a lesser feeling of attractiveness and less self-confidence and a higher feeling of uncertainty and anxiety toward their body. **Discussion:** Physicians and therapists who are confronted with patients' desire of getting pierced should always mention the subject of enhancing attractiveness through piercing and potential problems with body image.

Hiv Status Disclosure by Patients in Health Care Contexts: Patient and Provider Perspectives

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Perspectives on HIV disclosure to health care providers by people living with HIV (PLWH) were investigated via semi-structured interviews with 22 PLWH and 14 health care professionals. Perspectives on disclosure varied substantially across PLWH and between PLWH and health care providers. Some PLWH felt they should always disclose to health care providers so that providers can take necessary precautions or because disclosure optimizes care. Others felt that disclosure is not an obligation but a courtesy. Still others felt that disclosure is unnecessary as all health care providers should apply universal precautions or because knowledge of HIV status is not relevant to said care. Interestingly, most health care providers claimed that they should always be informed about a patient's HIV status as this reduces occupational risks of infection and improves the care PLWH receive. These participants felt that disclosure concerns among PLWH are unnecessary given health care providers' duty of professional confidentiality. Some health care providers acknowledged that disclosure is not always necessary but still indicated that they would rather be informed. Implications will be discussed.

Hiv in the Workplace: HIV-positive Health Care Providers' Experiences

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The experiences of people with HIV working in health care (n=10) were studied via semistructured interviews that focused on reactions to HIV disclosure at work, the impact of reactions, and coping. Positive reactions included colleagues viewing HIV as a non-issue, sincere interest in one's well-being, social support provision, empathy, and maintained confidentiality. Participants felt that such responses are and should be normal and that, as such, they do not significantly impact well-being. Some conveyed that positive experiences make them feel comfortable at work and compensate the adverse impact of negative experiences. Negative reactions to disclosure at work included management unnecessarily wanting to inform employees, restrictions being

placed on duties, difficulties acquiring employment, gossip, and judgmental comments. Participants reported being upset, taken aback, angry, depressed, and feeling resigned because of negative experiences, and dealt with these reactions by providing accurate information about infection risks, standing above the negative experience, attributing negative reactions to ignorance, seeking social support, and, in some cases, leaving their job.

How to Divide Time Between Family and Friends?

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Background: The aim of study was to assess how adolescents divide time between family and friends and whether it's related to their mental health and quality of life **Methods:** The survey was conducted on a sample of 2300 students, mean age 14.8. A standard Health Behaviour in School-Aged Children study questionnaire was used with questions about time spent with family (common meals and physical activity), friends (meetings and electronic media communication), life satisfaction, mental health (GHQ-12) and quality of life (KIDSCREEN) **Findings:** Mental health and quality of life are the best in groups (clusters) of adolescents with many family common activities regardless time spent with friends. Stepwise linear regression revealed that time spent with family explains 6% of variance of adolescents' mental health and quality of life and 9% of life satisfaction, whereas time spent with friends on meetings only 3% of quality of life; electronic media communication with friends explains less than 1% of analyzed variables variance **Discussion:** Time spent with family protects adolescents' mental health and quality of life, and time spent with friends in virtual world is unable to change this.

Mental Health Promotion for Children After Disaster in Japan

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Tremendous earthquakes occurred around the north area of Japan in March 11 of 2011. Soon afterward, Tsunami also damaged everything on the coasts of Tohoku. Lots of people died and buildings were destroyed. While interventions have been largely directed towards the survivors suffering mental health problems, different types of interventions have been expected to aim at building positive mental health over time. Specially, ideas are necessary for children in keeping their good mental health as well as preventing for mental health problems although they are influenced from physical and social environments. From what we have learned about resilience from studies in positive psychology, children seem to do best when ordinary needs are strengthened. So anything that supports building self-regulation, or having strong connections with friends, family members, and caring adults, or being part of consistent community resources will all help resilience. We have replicated success of the Mentally Healthy WA, Act-Belong-Commit campaign (Donovan, 2010) as population approach to enhance resilience for children in the area stricken by disaster although we slightly changed the concepts as if Act-Belong-Challenge in Japanese. We began the campaign by the multiple strategies such as posting the poster in each class room, encouraging the activities from teachers in accordance with instructional manuals, providing with some goods such as seal and sticker, delivering the recommendation explaining the purpose to caregivers and so on. Although this campaign is still in progress, we are expecting to improve their scores of Act-Belong-Challenge activities and then to lead to their stress relief.

Interpersonal Stressors, Interpersonal Stress Coping, and Depression Among Japanese Teachers

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Background: Many studies have found that Japanese teachers experience various stressors such as difficulties of instruction, excessive workload, and interpersonal relations (Takagi & Tanaka, 2003). Among those stressors, interpersonal stressors has been getting a lot more attention lately (Akaoka & Taniguchi, 2009). This study examined the influences of interpersonal stressors and interpersonal stress coping on depression among Japanese teachers. **Methods:** Participants consisted of 424 Japanese teachers. They completed the Scale of Interpersonal Stressors (Hashimoto, 2005), the Interpersonal Stress-Coping Inventory (Kato, 2000), and the Japanese version of the Center for Epidemiologic Studies-Depression Scale (Shima et al., 1985). **Findings:** One-way ANOVA on the interpersonal stressors was significant. Interpersonal friction was significantly higher than interpersonal conflict or interpersonal blunders. One-way ANOVA on the interpersonal stress coping was also significant. Reassessing coping was significantly higher than distancing coping or constructive coping. Moreover, reassessing coping was negatively and significantly related to depression. **Discussion:** In order to reduce Japanese teachers' stress responses, it seems effective to promote the use of reassessing coping in the stressful situations caused by interpersonal relations.

Narratives of Mothering a Child With Autism Spectrum Disorder in Ukraine

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Background: The aim of the study was to explore the experiences of Ukrainian mothers of children with Autism Spectrum Disorder (ASD). The lack of formal education regarding ASD and of specialised therapy and education services in Ukraine may negatively impact the way mothers adjust to caring for a child with ASD. **Methods:** In-depth semi-structured interviews were conducted with 25 mothers of children with ASD. The recorded data was transcribed and processed using thematic analysis with elements of narrative methodology approach. Codes, themes and categories were developed during the iterative analysis and then metanarratives were constructed. **Findings:** Three general ways of experiencing and adjusting to caring for a child with ASD were identified: (1) child's advocacy and personal transgression; (2) life reorganization and working; and (3) spiritual re-evaluation and normalizing the family life. These categories will be illustrated by the most representative narratives of the mothers. **Discussion:** Despite the lack of formal support, Ukrainian mothers show positive ways of adaptation to rearing a child with ASD in the challenging socio-economic conditions of the developing country.

Emdr and Treatment of the Phantom Breast Syndrome

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Background: The aim of this research was to challenge the use of EMDR - Eye Movement Desensitization and Reprocessing - therapy in the treatment of the phantom breast syndrome. Phantom breast syndrome (PBS) can be defined as a subjective experience of the perception and sensation of the presence of one or both breasts after ablation by mastectomy. PBS is manifested in more or less precise sensations, pain, or both at the same time. **Methods:** 13 patients agreed to participate in this study and were treated by EMDR, focusing on two target types: traumatic events related to disease experience and PBS. Quantitative evaluations were conducted before the first session, just after the last session and as a follow-up three and six months after. Intensity of the pain and intensity of the sensation were measured, as well as Post-Traumatic Stress Disorder (PCL-S), anxiety (STAI) and depression (CES-D). **Findings:** Results show significant effectiveness of EMDR therapy on all quantitative measures, but also show that EMDR approach can be an encouraging, non-invasive and relatively short strategy. **Discussion:** While these results need to be completed by other studies covering a larger population and the use of a control group, they are still encouraging because they suggest that a psychological treatment based on EMDR techniques and adapted to the specificity of PBS could be effective in bringing relief to patients.

Self Regulation and Maladaptive Schema in ms Patients and Healthy People

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Background: Schemas are cognitive patterns that have a major impact on cognition and behavior. So check schema determination and change in health-related behaviors appear to be necessary in patients with MS. **Method:** The purpose of this study was to compare maladaptive schema in MS patient and healthy individuals. The sample consisted of 202 persons, whose 102 of them are MS patient and purposefully selected and the left are healthy ones. The research instrument were Emotional ineffective strategy Young Schema Questionnaire (short form), and Emotion Regulation Questionnaire (ERQ). Data were analyzed using analysis of variance. **Findings:** Based on the analysis of research data, patients with MS are using early maladaptive schema rejection, social isolation/ alienation and failure much more than others. There was no significant differences between two groups in elements such disconnection. Abandonment/ instability, Dependence/ incompetence, vulnerability to harm and illness, subjugation and Emotional inhibition.

Relationships Between Cancer Patients' Functioning, Psychological Distress, Perceived Social Support, and Coping Strategies Employed

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Background: The study examined psychological distress and functioning, in relation to perceived social support, coping strategies employed and quality of life in cancer patients attending the outpatient department of BOCOC. **Methods:** One hundred and twelve cancer patients completed the HADS, FACT-G, Brief COPE, and Modified SSQ questionnaires. **Findings:** Quality of life positively correlated with perceived social support ($p < 0.05$), while it negatively correlated with psychological distress ($p < 0.00$), and some negative forms of coping. Similarly, psychological distress was found to correlate positively with dysfunctional methods of coping such as self distraction and avoidance. Interestingly, psychological distress was found to correlate negatively with perceived social support by family ($p < 0.05$) and friends ($p < 0.01$), but not by partners. **Discussion:** Although overall psychological distress levels were relatively low in this sample, findings in Cyprus reflect those of previous research conducted elsewhere. The findings, in terms of prevalence of psychosocial needs, are going to be used to design appropriate screening methods and interventions for cancer patients in Cyprus.

Changes in Mental Health Among Living Kidney Donors After Donation: a Matched Control Study

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Background It is unclear whether living kidney donors experience psychological burden as a result of their donation. Research is hampered by the lack of a suitable control group: changes in mental health could reflect normal fluctuations. We used a control group from the general population to compare changes in mental health over time. **Methods** Controls were matched with 125 living kidney donors on gender and baseline mental health. Donors and controls completed the Brief Symptom Inventory (BSI) and Mental Health Continuum twice, 6 months apart. Donors donated their kidney median 3 months after baseline. Multilevel linear models were used as well as the reliable change index (RCI) of the BSI. **Findings** Multilevel modelling showed that donors and controls did not differ in changes of mental health over time. Based on the RCI, 2 donors versus 4 controls showed a decrease in psychological complaints and 10 donors versus 5 controls showed an increase. RCI changes were not significantly different between donors and controls. **Discussion** We conclude that changes in donors' mental health 3 months after donation do not significantly differ from natural fluctuations found in the general population.

The Psychology in the Brazilian Public Health: Investigating the Case of Support Nucleus for Family Health

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The Family Health Strategy is the main gateway to the Brazilian Unified Health System. The Psychology has increased its presence in this public policy in the last years, especially after the structuring of Support Nucleus for Family Health. This nucleus, created by the Brazilian government in 2008, was conceived as a team composed of various health professionals (physiotherapist, nutritionist, psychologist, etc.) in order to expand the health interventions in primary health care, by providing technical support to the family health teams (doctors, nurses, dentists, etc.) and assistance to the population. We investigated the practices developed by psychologists inserted in these nuclei, in trying to understand how these professionals relate to the health care team, with the patients and community in general; well as the impact of their actions on primary health care. We conducted semi-structured interviews with six psychologists who work in these nuclei in a city located in the Brazilian Northeast. Moreover, we conducted an ethnography study through monitoring and observing their daily activities. We used the hermeneutic method to analyze the data collected, starting from the inner speech of respondents, categorizing it in an attempt to reach the field of historicity in which the speech was produced and expressed during the interview. We find confusion in the performance of the psychologists about their roles and responsibilities in primary public health, difficulties in coordination with the health teams, difficulties on the techniques and approaches which could be used. Moreover, it was found that psychologists prioritize individual and clinic activities. The results indicate that we need to discuss the limits and the possibilities of disruptions of traditional identity models of psychology in Brazil, contributing to the maturation of a health psychology really committed to reducing social inequities.

Dyadic Adjustment and Social Support in Patients With Spinal Cord Injuries

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Background Spinal cord injuries (SCI) can cause physical impairment and complications such as pain and bladder dysfunctions. Social support plays a key role in psychological adjustment, but there is evidence that its effect is mediated by other variables. The present study aimed at examining the correlations between social support, dyadic adjustment and quality of life. **Methods** Thirty-four patients with SCI (23 M, 11 F; Average age 56.12 ± 14.74) were administered questionnaires for the evaluation of dyadic adjustment (DAS), social support (MSPSS) and health-related quality of life (SF-36). Bivariate correlations (Spearman's R) between the scales and subscales were calculated. **Findings** Dyadic adjustment was positively correlated with the social support received within the couple ($r_s = 0.67$; $p < .01$) and with the mental health subscale of the SF-36 ($r_s = 0.51$; $p < .01$). On the contrary, the latter was not correlated with social support. **Discussion** Our data suggest that the perception of social support is strictly related to the quality of the couple relationship, and that dyadic adjustment is related to mental health more strongly than social support itself.

Psychosomatic Aspects and Personality Profile Modification in Essential Hypertension

Background: Essential Hypertension (EH) produces significant changes in personality structure, both through intrinsic mechanisms, consequently emphasizing certain personality traits, as well as through psychological mechanisms. **Methods:** we studied a group of 30 patients, diagnosed with EH for the past 3 years, being treated inconstantly or through a poorly controlled therapeutic regimen. We applied a CAQ personality questionnaire, accentuating personality structures located within the broad spectrum of normality, as well as clinical scales from the register of depression, anxiety, suspiciousness. **Findings:** a high correlation between evolution of EH for a period of at least 3 years and a typical personality profile. The results outline a group of features, of which the dominant ones are in the non-clinical field. High scores on scales such as Dominance, Self-sufficiency, Emotional insecurity, coupled with lower scores on emotional warmth and Ingenuity. **Discussions:** The study acknowledges the importance of correctly diagnosing and treating patients, without discontinuity. It gives information on the appropriate psychological approach, in order to increase adherence to treatment.

Health-related Quality of Life and Preferred Sexual Activity Among Women With Endometriosis After Surgical Treatment

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Background: The quality of life (QoL) is a multidimensional concept relating to different areas of life and human behavior. The World Health Organization defines quality of life as the health-related quality of life (HRQoL). HRQoL is an assessment of how the individual's well-being may be affected over time by a disease. Endometriosis is a disease defined as the presence of the endometrium (glandular and stroma cells) outside the uterine cavity. The endometrium outside the uterine cavity functions similar to in the uterine cavity. This consequences are very serious, because the menstrual excretions gather at the site for implantation. This disease puts the most commonly on the ovaries, fallopian tubes, sacral ligaments and ligaments cross - uterine, as well as other organs: brain, lung, urinary bladder or intestines. Endometriosis is one of the most common gynecological diseases. It applies from 6% to 10% of women of childbearing age. The chronic pain in the pelvic, dyspareunia, and dysmenorrhea (abundant or scarce, irregular bleeding) are associated with this disease. Endometriosis is one of the most important causes of the infertility. The removal of outbreaks of the disease pain relief and fertility restoration are an important goal of treatment. The treatment of endometriosis in most cases carried out by surgical intervention. Endometriosis impossible to meet the many important for a woman needs, including sexual needs and may impair functioning in a relationship. This may affect the quality of life of these women. The aim of the study is to examine correlations between the level of quality of life and sexual activity in women with endometriosis after surgical treatment. We formulated the following research questions in relation to the basic aim of this research: 1. What is the level of general quality of life among women with endometriosis after surgery? 2. What is the level of quality of life in the dimension of somatic, psychological, social and environmental among women with endometriosis after surgery? 3. Which sexual activity give the greatest pleasure to women with endometriosis? 4. Has the quality of life a relationship with preferred sexual activity by this patients? **Methods:** 24 women aged from 27 to 38 participated in the study. The mean age of patients was 31.5 years. The subjects were recruited from patients who were: 1) over 18, 2) with diagnosed endometriosis, 3) the form of surgical treatment was used, 4) and gave informed consent to be part of the study. All patients gave informed consent. Medical and psychosocial variables were analyzed in this study. The medical variables included: 1) the stages of endometriosis, 2) duration of endometriosis, calculated to the date of diagnosis to this study, 3) the location of endometriosis. The psychosocial variables were: 1) the general quality of life and its four dimensions: somatic, psychological, social, environmental, 2) sexual activity, 3) current marital status, 4) the level of education. Two research tools were used in the study: 1) the WHOQoL-BREF. This questionnaire was developed by the World Health Organization and is an abbreviated version of the WHOQoL-100. It can be used to assess quality of life in both healthy people and patients, for both cognitive and clinical purposes. The WHOQoL-BREF has 26 items. Respondents respond on a five-point Likert scale. A quality of life profile can be charted for four aspects of life: psychological, physical, social and environmental. The higher the score on a given scale, the better the quality of life. 2) Sexual Stimulus Scale (SSS) by Z. Lew-Starowicz. SSS consists of 43 sexual activity structured to reflect a wide range of sexual behavior. Respondents evaluated each activity on a 4-point scale (1 - "not suit me" to 4 - "I very like it"). All sexual stimulus were divided into four groups: face and body caresses, sexual positions, sexual activity, non-standard sexual behavior and orgasm as a result of stimulation. The data were analyzed statistically using SPSS 18 software. The $p < 0.05$ criterion of statistical significance was adopted. **Findings:** Patients with endometriosis were characterized by good quality of life ($M=4$). Women also highly assessed their quality of life in terms of four aspects: psychological ($X=16,20 \pm 1,41$), physical ($16,67 \pm 1,91$), social ($16,40 \pm 2,59$) and environmental ($17,20 \pm 1,62$). There were no statistically significant relationship between the general quality of life and duration of endometriosis. Similar observations were reported in the case of the analyzed dimensions of quality of life - somatic psychological, social and environmental. The hugging (86,7%) and face's kisses (73,3%) provide the most pleasure patient with endometriosis in terms of face and body caresses. Sexual behavior associated with stimulation of the vagina by hand (53,3%) provide the least pleasure. The level of general quality of life was characterized by a positive correlation with the pleasure of hugging ($\rho=0,389; p=0,017$) and kissing face ($\rho=0,379; p=0,020$). Similar relationships were recorded in the case of dimension psychological and environmental functioning. Women had the most pleasure from the classical position (66,7%), but the least from the back position (53,3%) and a standing position (46,7%). The pleasure of making sex in classical position positively correlated with the general quality of life ($Rho=0,600; p=0,000$) and four aspects of

life: psychological ($Rho=0,554;p=0,001$), physical ($Rho=0,585;p=0,000$), social ($Rho=0,372;p=0,022$) and environmental ($Rho=0,536;p=0,001$). The most pleasure provided advantage of active partner in sexual intercourse (60%) in women with endometriosis. The patients had the smallest pleasure from the advantage of themselves activity in sexual intercourse (46,7%). The pleasure of provided advantage of active partner in sexual intercourse positively correlated with the general quality of life ($Rho=0,423;p=0,010$) and four aspects of life: psychological ($Rho=0,567;p=0,001$), physical ($Rho=0,588;p=0,000$), social ($Rho=0,381;p=0,019$) and environmental ($Rho=0,539;p=0,001$). Patients with endometriosis declared the smallest pleasure from making sexual activity associated with group sex (20%) and intercourse with two partners (20%). Women declared the greatest pleasure from the use of elongated techniques of sexual intercourse (53,3%) in terms of non-standard sexual behavior. The pleasure of use of elongated techniques of sexual intercourse positively correlated with the general quality of life ($Rho=0,603;p=0,00$), and four aspects of life: psychological ($Rho=0,887;p=0,000$), physical ($Rho=0,797;p=0,000$), social ($Rho=0,669;p=0,000$) and environmental ($Rho=0,801;p=0,000$). Women with endometriosis declared the greatest pleasure from orgasm due to excite by hand (46,7%), and the smallest of achieving orgasm due to excite by water during shower (33,3%). The pleasure from orgasm due to excite by hand positively correlated with the general quality of life ($Rho=0,407;p=0,013$) and four aspects of life: psychological ($Rho=0,872;p=0,000$), physical ($Rho=0,833;p=0,000$), social ($Rho=0,679;p=0,000$) and environmental ($Rho=0,801;p=0,000$). Discussion: The pain is a major cause of physical, psycho-social and emotional problems among women with endometriosis. The surgical treatment relieves pain and can affect the quality of life of these patients. Our research showed that the quality of life of women with endometriosis characterized by a significant correlation from pleasure of sexual activity. This may affect the quality of the closed relationship of these women and satisfaction with life and their sexual activity. Further research is warranted to evaluate the impact of endometriosis on HRQL. The studies concerning the relationship between quality of life and pleasure of sexual activity are a new area of interdisciplinary research combining the achievements of health psychology and other sciences.

Mindfulness and Satisfaction With Physical Activity: a Cross-sectional Study in 317 Dutch Participants.

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Background: Physical activity has been shown to increase well-being. However, it has proven difficult to sustain behavioral change in physical activity. Satisfaction with physical activity might help to prolong physical activity, which in turn may be promoted by mindfulness (the ability to focus on the present moment). The present study examined the role of mindfulness in satisfaction with physical activity. Methods: Using a cross-sectional design, 317 Dutch participants responded to the International Physical Activity Questionnaire (IPAQ), Mindful Attention and Awareness Scale (MAAS), Five-Factor Mindfulness Questionnaire (FFMQ), Mindfulness during physical and Satisfaction with physical activity. Results: Physical activity correlated only with mindfulness during physical activity, satisfaction and the non-judgment factor of the FFMQ. Satisfaction mediated the relationship between mindfulness and physical activity and this relationship was moderated by non-judgment. Discussion: The relation between mindfulness, satisfaction and physical activity could be used to develop interventions to sustain physical activity.

Body Awareness in Self-knowledge Processes: the Association Between Body and Emotional Awareness, Authenticity, and Mindfulness

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Background: While some indicate that body awareness, similar to emotional awareness, enhances self-knowledge, others demonstrate its association with anxiety. This inconsistent picture suggests that the orientation towards subjective experiences, i.e. mindfulness, interferes in the way bodily information is addressed. This study examines the pattern of relations of body awareness with emotional awareness, authenticity, and the moderating role of mindfulness. Methods: 341 students completed questionnaires assessing body awareness (BAQ) emotional awareness (FFMQ) mindfulness (MAAS) and authenticity (AI-3). Findings: Body and emotional awareness were correlated. A 2-factor model for authenticity was generated, each predicted by a different set of associations. Mindfulness moderated the association between body awareness and authenticity, and mediated the association between emotional awareness and authenticity. Discussion: The findings offer an explanatory model for adaptive use of bodily and emotional information for well-being. While emotional information seems directly accessible for authenticity enhancement, the adaptive use of bodily information is conditioned by mindfulness.

Prevention and Psychotherapy of Mental Trauma in the Light of Clinical-dynamic Model of Acute Stress Disorder

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Background: Effectiveness of mental trauma (ASD and PTSD) prevention and psychotherapy may be caused by qualitative transformation in personality evaluation of the traumatic situation. Methods: 1) complex clinical research of 221 medical rescuers and rendering the help personal of clinics (situation of Railway Disaster) under standard and special psychiatric protocols; 2) evaluation of effectiveness of psychotherapy based on the principle of shutdown of traumatic stress triggers. Findings: 1. Our clinical-dynamic model of ASD with two phases of ASD development includes: phase of initial reaction, phase of reduction/localization. The initial reaction phase includes subphases of (1) mental stress actuations and (2) canalization. The actuations subphase is characterized by development of nonspecific complex psycho-vegetative alarm symptoms. The canalization subphase divides ASD population on predominantly (1) mental and (2) somatic type of ASD development. The reduction/localization phase is characterized by reduction or further development of mental or somatic disorders. 2. Integration of traumatic estimation into the individual's world model with subsequent modification of estimation of potentially traumatic event from "abnormal" into "normal" – the "normalization" of traumatic estimation – pretends to become one of the essential principles of ASD and PTSD prevention and psychotherapy. Discussion: Elaborated models of ASD and trauma triggers form an integrated representation of the clinic of mental components of ASD. According to our model, ASD and PTSD prevention and therapy needs expansion of personal range of "usual" within the framework of profession and life experience, state of the individual's health.

Dirty Toilets a Health Threat: Social-cognitive and Dilemma Factors Influencing Collective Cleaning of Shared Toilets in Kampala's Urban Slums, Uganda

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Introduction We use the RANAS (risks, attitudes, norms, ability and self-regulation) model and items derived from social dilemma theory to assess behavioural determinants influencing shared toilet users' collective cleaning. Methods A cross-sectional quantitative study conducted in three slums of Kampala. Linear regression used at multivariate analysis to test for associations. Results Out of 424 respondents, 44.3% cleaned their toilets daily. Dirty toilets were attributed to many users (40.9%) and non-cooperation (30.2%). RANAS factors significantly ($P < 0.05$) associated with respondents' collective cleaning behaviour were affective ($\beta = -0.13$) and self-regulation factors such as coping planning ($\beta = 0.42$), commitment ($\beta = 0.24$) and remembering ($\beta = 0.10$). The social motive social dilemma factor of respondents cleaning cooperation ($\beta = 0.15$) was also significant. Conclusion We found that the RANAS model is important for the assessment provided health behaviours such as the collective cleaning behaviour of shared toilet users investigated in this study. The model explains 77% of the variance in respondents collective cleaning behaviour.

The Relationship Between State and Trait Gratitude, and Subjective Well-being

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This study investigated the relationships among gratitude, emotion and subjective well-being. Participants ($N = 135$) completed the scales for measuring state and trait gratitude, positive and negative affect, and well-being. For assessing how inducing gratitude would affect participants' affective disposition, we used the method of grateful contemplation and the result supports the immediate benefits of intervention. Specifically, compared to those in the control condition, participants in the gratitude condition reported a strong decrease in negative affect at post-test. Moreover, state gratitude moderate the relationship between trait gratitude and negative affect. When we explored the relationship between trait gratitude and different dimensions of well-being, the results showed that gratitude had small correlations with autonomy, and medium to large correlations with environmental mastery, personal growth, positive relationships, and self-acceptance. Our results may be of particular interest for psycho-therapeutic interventions designed to increase well-being. Keywords: trait gratitude, state gratitude, positive affect, negative affect, well-being

Need for Surgery-related Information and Preoperative Anxiety

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Background: People differ in need for surgery-related information. Knowing more information about upcoming event should make the situation less threatening and thus decrease anxiety. The primary objective of the study is to explore relationship between preoperative anxiety and need for surgery-related information. Methods: To assess surgery-related information need, self-report questionnaire APAIS (The Amsterdam Preoperative Anxiety and Information Scale) was administered to patients before surgery

(n=138, M(age)=62, SD(age)=16). Patient's anxiety was rated by nurse using the scale Anxiety level-12 at the same time. Findings: Analysis showed that patients who reported higher need for surgery-related information experienced significantly more anxiety, as measured by self-report measures and observed by nurse. Discussion: Results contribute to the evidence that people differ in the need to seek information in threatening situation and that information need is related to anxiety. More research is needed in studying preoperative anxiety interventions according to people with different information needs. Results also provide evidence for validity of Anxiety level-12 rating scale.

Examining Predictors of Psychological Resilience Behavior in Female Athletes Using the Health Action Process Approach

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Background: The increase in female athletic participation has resulted in the emergence of a set of health problems unique to female athletes. This study developed a psychological resilience behavior model (PRBM) that applied the health action process approach (Schwarzer, 1992) to female athletes. Methods: During September–December 2013, the participants, 107 female athletes (mean age = 19.5, SD = 1.2), were asked to respond to a questionnaire comprising question items based on psychological resilience behavior, environment, self-esteem, and competitive performance. Structured equation modeling was used to examine the hypothetical mediation model. Findings: The PRBM results for structured equation modeling indicated that fit indices satisfied statistical requirements (GFI = .90, AGFI = .84, CFI = .92, RMSEA = .08). Moreover, it was found that each pass in the PRBM significantly influenced each variable. Discussion: The findings of this study partially support our hypotheses based on the PRBM. Furthermore, the results suggested that the health action process approach is effective for predicting psychological resilience behavior.

Preventing Boys in Residential Youth Care From Sexual Offending: Process Evaluation of Pilot Implementation

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Background: An effective intervention should not only be evidence- and theory based, but also requires complete and faithful implementation. Especially among difficult target groups, successful implementation can be very challenging and requires serious efforts. Make a Move is a group-intervention targeting boys aged 12-18 in residential youth care, to prevent sexual offensive behavior. Elements of adoption and implementation theory were used to evaluate the pilot implementation. Methods: Diaries and interviews were used to evaluate how 6 trainers worked in 14 groups. Both interviews and diaries were encoded and analyzed using Nvivo. Findings: All trainers reported low levels of completeness and fidelity. Program-related beliefs and skills and self-efficacy were related to levels of implementation. Main external barriers were organizational constraints in the youth care institute and group dynamics, both of major influence. Conclusion: These findings emphasize the importance of addressing completeness and fidelity. Besides improvements on the program itself, lessons learnt from the pilot are especially valuable in guiding successful adoption and implementation of the program.

Illness Representations and Quality of Life in Patients Suffering From a Chronic Pain Condition and Chronic Patients Without Pain: Similarities and Differences

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Background: ALGEA, the Greek word for suffering, is a joint research effort developed by the Universities of Cyprus and Crete in order to examine the quality of life in patients with a chronic pain condition and develop an intervention program based on ACT. Here, we report some preliminary results that refer to differences in illness perception and quality of life between patients suffering from chronic pain and patients suffering from a chronic condition not involving pain. Methods: 70 patients suffering from pain (mostly diagnosed with rheumatoid arthritis) and 70 patients suffering from a cardiovascular disease participated in this cross-sectional study. Results: Only tentative differences were noticed in terms of quality of life, between the two groups of patients. However, patients with chronic pain perceived their health condition as more inconsistent and unpredictable. Also, in this group of patients, the perception of illness seemed to play a less central role for quality of life compared to patients with no pain. Discussion: Patients suffering from chronic pain face unique challenges which should be taken into consideration in the implementation of intervention programs.

Sports Participation Negatively Associated With Study Stress Among Undergraduate Students

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Background: The purpose of this study was to test the association between participation in different types of activities (sports, social and study) and perceived study stress among undergraduate students. **Methods:** 4440 Dutch students (48% males, Mean age: 20.9 yrs) completed a cross-sectional survey on perceived study stress. Other measures included membership in sports, social, and study clubs, and time spent on these activities. **Findings:** 38% of the students reported to experience at times excessive study stress (45% of females and 31% of males). This percentage differed by being member of a sport club (Chi-square= 17.5, $p < .001$), but did not differ by membership of a social club (Chi-square= .41, $p = .27$) or study club (Chi-square= 1.71, $p = .10$). Log regression showed that, after correcting for sex and age, students who spent >3 h on sports per week were 0.70 times less likely to report excessive study stress compared to those who spent <1 h. **Discussion:** These cross-sectional findings show a negative association between sport participation and study stress. However, longitudinal research is needed to confirm whether sports acts as a protective factor against study stress.

Stressors and Post-traumatic Embitterment Disorder Among Asylum Seekers and Refugees

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The objectives of this study were to qualitatively sort out various stressors arising from Administrative, social, financial and acculturation difficulties among refugees and asylum seekers as they struggle to settle in their host country. Also, assessing Post-traumatic embitterment disorder (PTED) forms a major concern for the work at hand. While 33 asylum seekers participated in the semi-structured interview, 102 completed the 19 items PTED screening instrument. The data collection took place in Luxembourg. Preliminary findings indicated that, administrative process install fear of repatriation while social isolation, loneliness, lack of friends and communication with families was link to social, financial and acculturation difficulties. PTED instrument obtained an alpha Value of .90 thus making it reliable for used among this population. While there were some significant differences at 0.01 levels among score check against gender and Marital status, more than 80% of participants score above the cut off point of ?2.5. With the help of results from this study, a Psychological model of Stressors and PTED is set up and suggestions for health care practitioners discussed.

From Person to Environment: Living With a Disability in Romania

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Background: The well-being and quality of life of people with disability is strongly influenced by the experience of disability, which cannot be isolated from the context of the place one lives in. This study aims to investigate the meanings of living with a motor disability in the physical, social and cultural context of Romania. **Methods:** Thematic analysis was conducted upon the content of online discussion forums for persons with disability. The content was coded into categories, subsequently leading to the major themes related to the experience of living with a disability in Romania. **Findings:** The main emerging themes are related to loss, social isolation, environmental barriers, as well as positive reinterpretation, renegotiating the self-image, and rebuilding social roles. **Discussion:** Negotiating self-care, day-to-day activities, and social and professional roles varies as a function of individual, environmental, social and cultural factors. These findings shed light upon the everyday life of a population that remains significantly invisible in Romania, as well as on possible actions that can be taken to enhance participation and well-being for persons with disability.

On the Road Again: the Impact of an Exercise Intervention on Wellbeing in a Clinical Sample: Preliminary Results.

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Background: There is significant evidence for the impact of exercise programmes on mental and physical health, including individuals with mental health difficulties. On The Road Again is a personal development programme designed to deliver such a programme to vulnerable individuals. **Methods:** Baseline data was collected for 31 participants, follow-up data was collected for 12 at half-way point in programme (i.e. after 12 weeks of a running programme 3 times a week) **Results:** Results indicated that over half participants had BMI's above 25 (i.e. overweight or obese). Sixty percent reported that they been diagnosed with anxiety, depression or both and 50% of participants did not rate their health as good. Follow-up data suggest that Social

Support has increased from Time 1 (M= 12.31) to Time 2 (M= 16.46), $t(12) = (-2.21, p < .05)$, fitness has increased (resting pulse) (M= 72.19 at T1, M= 68.13 at T2), $t(15) = 2.18, p = 0.05$. Positive trends were observed in exercise, self-efficacy and physical functioning. Discussion: Preliminary results indicate positive mental and physical effects of a physical fitness programme in a clinically vulnerable population. Implications are discussed.

Burnout and Occupational Stress in the Context of the Work Satisfaction in Nursing Profession

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Background. Prolonged shifts are weariness for nurses and night shifts leads to dysregulation of circadian rhythm. Rewards may protect against negative consequents at work. The aim of the study was to assess the relationship between occupational efforts, rewards and burnout in context satisfaction work among nurses. Methods. 250 nurses average age 34 years, working on the 12-hour day-night shifts filled out following questionnaires: Effort Rewards Imbalance (Siegrist et al., 2004), Maslach Burnout Inventory (Maslach, 1996) and Minnesota Manual for Satisfaction Questionnaire (Weiss et al., 1967). Findings. Emotional exhaustion was explained by efforts in the group of low work satisfaction ($R^2 = .25$) and in the group high work satisfaction ($R^2 = .20$). Esteem and job promotion were not related to burnout. Discussion. The results have confirmed that emotional exhaustion is a key component of burnout related to efforts in nurses. The research indicates that more attention needs to be paid to efforts.

Does it Hurt or Not? Predictors of Pain Perception in People With Chronic Back Pain

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Background: Perception of pain depends on the degree of tissue damage and mental functioning, mood or pain catastrophization. Hope and optimism appears to be important factors predicting well-being and coping in stressful situations. Methods: 128 patients with chronic back pain participated in the cross-sectional study. Following methods were used: VAS, IPQ-R, PCS, Distress Thermometer, LOT-R, Hope Scale and illness-characteristic query. Findings: Various patterns of pain predictors were observed depending on the presence of pain during the measures. Considering individuals without pain, the model explains 39% of variance and contained following pain predictors: belief of chronic course of symptoms, helplessness and cyclical relapses. For individuals with pain, the model explained 60% of variance, with following pain predictors: helplessness, personal control, duration of illness, hope-state and distress. Discussion: Contrary to expectations hope-trait and optimism did not have an important influence on pain perception. Working with patients experiencing chronic back pain requires different psychological methods depending on whether the patient is currently feeling pain or not.

Resourcefulness as a Factor in Recovery From Accident Related Trauma Among Polish Immigrants in Canada

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Background Psychopathological reactions are common occurrences after accident related trauma. This study intended to find out whether psychological resources can be seen as a factor preventing a Major Depressive Disorder after trauma. Methods 89 immigrants were examined. The average age was 46.6 years. 61% of the group were married. MVA were 80% and work-related 20%. The level of psychological resources of those with MDD diagnosis was compared to those diagnosed with PTSD, anxiety, adjustment and pain disorders. The measure of resources was the 18 scales of the Resourcefulness for Recovery Inventory. The severity of depression was measured by the Beck Depression Inventory II. Findings On every measure of resources those who responded to the accident with MDD had lower scores than those who did not ($p = .0001$). Among the most important resources seem to be: Hope and Expectations, Self-Responsibility, Positive Emotions. A further finding is that in the group of RRI scales called Health Promoting Factors those with MDD were especially low on the scale referring to Acceptance of Reality. The severity of depression measured by Beck Depression Inventory II was significantly correlated ($r = 0.5$) with a low level of Fundamental Values. Conclusion Our findings indicate that an adaptive reaction to MVA or work related accidents is associated with a high level of internal resources which are also needed for recovery from post traumatic conditions.

Coping With Stage Fright in the Context of Health Promotion

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Background: A study on the relationship between level of stage fright, coping styles and personal resources of musicians and

actors is presented. The theoretical base of the researches is Functional Model of Health (FMH, Wrona-Polańska 2003), in which health is a function of creative coping with stress. Examined persons were: 208 students of music and actors schools, 83% musicians, 17% actors - 36% men and 64% women. Methods: Examined methods were the questionnaires: Spielberger's STAI, Ender's, Parker's CISS, Antonovsky's SOC-29, Rosenberg's self-esteem scales, 10-point rating scales of sense of health and sense of calm. Findings: Effective coping with stage fright depends on coping styles and level of personal resources: sense of coherence, positive self-esteem, social support and good instrumental preparation for the performance. The level of stage fright is a function of creative coping and personal resources. Discussion: To promote health should: increase personal and social resources.

Relationship Between Happiness and the Psychobiological Stress Response

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Backgrounds: This study aims to investigate the relationship between the psychobiological stress response induced by mental stress testing and Happiness (SHS) on the field-experimental paradigm. Method: We carried out SHS on 330 volunteers and extracted the high (more than 4.5) happiness group and the low (less than 4.5) happiness group. Participants took 10 minutes' rest in an armchair prior to the task period, and were exposed for 10 minutes to mental stress testing (the speech task and the arithmetic task). After the task period, participants rested quietly for 30 minutes during the recovery period. Findings: The level of cortisol in the high happiness group was higher than that of the low happiness group during the task and the recovery period. HF in the high happiness group was higher than that in the low happiness group during the experimental session. HR in the high happiness group was lower than that in the low happiness group during the experimental session. Discussion: These results indicate that subjective happiness is likely to overcome psychobiological stress responses, namely, the person who feels happy more subjectively gets the feeling of less psychological demand.

Interpersonal Factors on Adaptation in Adulthood: a 17-year Longitudinal Study

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To improve our quality of life, it is important to investigate what kind of factors relate to adaptation or well-being, especially interpersonal factors. The purpose of this study was to investigate quantitatively how interpersonal factors in adolescence and adulthood related to adaptation in adulthood using longitudinal data. Participants were 40 females who had answered the questionnaire in 1994 when they were nursing students, and participated in the longitudinal study in 2011. They answered the questionnaire consisting of Internal Working Models (mental representation of attachment conceptualized by Bowlby, abbreviated "IWM" hereafter) and interpersonal cognition related to IWM in two waves, and in 2011 the questionnaire included scales assessing adaptation – time perspective, resilience, and life satisfaction. The main results were as follows: 1) the three scales of adaptation and IWM and father's warmth in adolescence were positively correlated, but mother's warmth wasn't. 2) IWM and nurturance were also correlated to the three scales of adaptation, and sometimes numerical values in adolescence outperformed those in adulthood. 3) regression analysis showed that interpersonal variables predicting time perspective were ones of adulthood and that, as to predicting resilience and life satisfaction, variables of adolescence were important. These findings suggest that the sense of adaptation or well-being in adulthood is affected not only by IWM and cognition of the father in adulthood, but also by variables in adolescence measured 17 years earlier.

Correlates of Low-readiness of Exercise Adaptation in Japanese Adolescents: a Cross-sectional Study

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Background: A large proportion of Japanese adolescents were inactive. The aim of this study was to examine the correlates of low-readiness to adopt exercise behavior (Precontemplation [PC] in stage of exercise behavior) in Japanese adolescents. Methods: Cross-sectional data were collected with a convenience sample of 566 first-year university students (female, 47.7%). The independent variables were physical activity (PA), sitting time, and exercise self-efficacy (ESE). Findings: The distribution of the subjects in the PC stage was 16.4% (contemplation, 28.3%; preparation, 22.8%; action, 25.6%; maintenance, 6.9%). Results of the logistic regression analysis indicated that the PC was associated with total PA (odds ratio, 0.97; 95% confidence interval, 0.95-0.98), high-intensity PA (0.94; 0.92-0.97), moderate-intensity PA (0.97; 0.94-0.99), ESE (0.77; 0.72-0.83), and weekday (1.08; 1.03-1.13) and weekend (1.10; 1.04-1.15) sitting time after controlling for gender difference. Discussion: These results suggest that being low-readiness to adopt exercise may be related to not only PA and ESE but also sitting time in Japanese adolescents.

Examining Effective Health Messages to Promote Exercise: a Test of Extended Parallel Process Model (EPPM)

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Background: This study used the Extended Parallel Process Model (EPPM) to examine if perceived health risk and efficacy about exercise influences attitude and intention. It was hypothesized that in a high-efficacy perceived group, attitude and intention would be enhanced as individuals' perceptions of risk increased and protection motivation would mediate the relationship between perceived risk and attitude and intention; in the low-efficacy group, attitude and intention would be reduced as perceptions of risk increased and defensive motivation would mediate the relationship between perceived risk and attitude and intention. **Methods:** A 2(risk) by 2 (efficacy) experiment was conducted. 160 participants (Mean age= 25.3, male=41.9%) responded to questionnaires about severity, susceptibility, response-efficacy, self-efficacy, protection motivation, defensive motivation, attitude and intention toward exercise. Data were analysed using analysis of variance and Structural Equation Modeling. **Findings:** An interaction effect between perceived risk and efficacy on attitude and intention was found. In the high-efficacy condition, attitude and intention were higher when perceived risk was high; in the low-efficacy condition, attitude and intention were higher when perceived risk was low. The mediation hypotheses were also supported. **Discussion:** Loss-framed messages applying EPPM to promote exercise are suggested.

Targeting Versus Tailoring of Online INFORMATION: can Bowel Cancer Screening Decision Stage be Used to Predict an INDIVIDUAL'S Information Needs

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Background: Tailoring content is a way of improving health behaviours but it's complex and not always effective. Targeting aims to present information to 'groups' of users. The present study investigates if bowel cancer screening decision-stage is a suitable variable for targeting techniques. **Method:** N=1,387 Participants completed a questionnaire assessing decision stage, as well as preferences for categories of information. **Results:** Decision stage predicted preferences for certain categories of information: individuals who had never heard of screening were twice as likely to preference 'information about bowel cancer' over 'information about screening' (OR=1.98), and more likely to preference 'information about screening' over 'information about completing a screening test' (OR=1.73). Demographics including age and sex were unrelated to preferences. **Conclusions:** This study suggests that individuals at different decision stages prefer to engage with different types of content. Thus, it might prove beneficial to use decision stage as a targeting variable when presenting web-based content.

Relationship Between Subjective Health Evaluation and Driver Behavior in Older Drivers Sample

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Older driver age is associated with higher risk of traffic accidents and injuries. However not age but health variables are the main reasons of unsafe driving in older age. The aim of this study was to evaluate relationship between subjective health evaluation, risk perception and driver behavior in a sample of older drivers. **Methods.** 74 drivers (41.9% males, 58.1% females) age range 50-78 (M=57.7, SD=6.8) participated in the study. Participants completed Drivers Behavior Questionnaire (DBQ, Reason et al. 1990), answered questions about their health (Goštautas, 1999) and driving safety. **Findings.** Older drivers (age>61) did not rate themselves as more risky drivers compared with middle age drivers (age 50-60). However older drivers reported receiving more negative remarks about their driving from their passengers. Older drivers reported more driving errors and lapses but they didn't differ significantly on intentional violations of traffic rules. Better evaluation of health was related to less driving errors and lapses independently from drivers' age. **Discussion.** Older drivers' perception of their changing driving skills and importance of health variables will be discussed.

The Association Between Weight Discrepancies, Thoughts About Eating, and Eating Disorders Symptoms in Adolescence

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Background: The study investigated whether automatic thoughts about eating mediated the effects of body weight discrepancies

on eating disorders (ED) formation and whether weight discrepancies mediated the effects of thoughts about eating on ED formation in non-clinical population. Methods: Late adolescents (N = 55; age 15-18) filled out the SCOFF and the Eating Disorder Thoughts Questionnaire, answered questions about actual and ideal weight, and their body weight was measured objectively at three points with 2- and 12-month intervals between Time 1, 2 and 3, respectively. Findings: The negative thoughts about eating (T2) are mediating the relation between weight discrepancies (T1) and symptoms of ED (T3). Furthermore, the association between negative thoughts (T1) and ED symptoms (T3) was mediated by weight discrepancies (T2). The negative thoughts and weight discrepancies form a vicious circle, related to ED symptoms. Discussion: The findings shed new light on main tasks of the ED prevention, which should focus on adolescents who manifest high levels of negative thoughts about eating and large weight discrepancies, as they are at risk for developing ED symptoms.

Psychometric Properties of Polish Adaptation of Holland Sleep Disorders Questionnaire

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Background. Sleep disorders are among the most common problems of contemporary society. The best method to reduce those numbers is prevention and quick recognition. In order to distinguish between patients who suffer from sleep disorders there is a need to develop easy to administer self-report measure. Methods. In current study we have adapted to Polish conditions the Holland Sleep Disorders Questionnaire. Sample was constrained of university students aged between 18 and 24. Findings. All of the statistics were performed in SPSS 20.0. We have performed the exploratory factor analysis, extraction method: maximum likelihood since data were normally distributed ($Z = .82$; $p = .51$) and oblimin rotation because factors were internally correlated. Factor structure of Polish version is similar to original version of HSDQ. Reliability of questionnaire was assessed by Cronbach's alpha coefficient and was satisfactory for all of the scales with exception for Sleep related Breathing Disorder scale. Discussion. Further studies requires to perform analysis on clinical sample, especially when assessing Sleep related Breathing Disorders scale since its frequency among students is extremely low.

Epidemiology of Sleep Disorders Among Polish University Students

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Background. Epidemiology of sleep disorders emphasize that they are one of the most common problems in population. Frequency of Insomnia in general population is from 10 to 15 % and frequency of other sleep disorders is elevated as well. Methods. Sample was constrained of students aged from 18 to 24 years. We have used Holland Sleep Disorders Questionnaire which is a self-assessment measure based on International Sleep Disorders Classification-2. In original study there were distinguished six scales responding six different sleep disorders. Basing on cutoff scores evaluated by receiver operating characteristic curve in original study we have differentiated clinically significant patients from healthy sample. Findings. Clinically significant traits of insomnia were exhibited by 14,56% of sample, for parasomnia it was 5,83%, for hypersomnia 2,91%, for circadian rhythm sleep disorder 6,8%, for restless leg syndrome 9,71% and finally for sleep related breathing disorder it was 0%. Discussion. Literature suggest that sleep related breathing disorder is common in population aged over 40 which explains our results. Other results are consistent with other epidemiologic studies.

Social Support as a Mediator in the Relation Between Coping Strategies and Emotional Functioning in Patients With Chronic Illness

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Chronic illness is a critical life event which requires an individual to adapt to a new life situation. The process of adaptation to the illness may be explained by transactional model of stress. The major open question is if social support (SS) play a role of mediator variable in a relationship between stress coping strategies and emotional functioning in patients with chronic illness. The research group included 647 patients with chronic illness: IHD, DM, RA. Patients were asked to fill out following questionnaires: COPE, CES-D, SWLS, WS. Statistical analyses showed that the patients with chronic illness who scored high in SS are more satisfied with their lives ($t=-7,78^{**}$; $d=1,03$) and they are less likely to present symptoms of depression ($t=8,13^{**}$; $d=1,07$). Moreover, SS was recognized to be statistically significant mediator in two relationships: relationship between problem-focused coping and life satisfaction ($z=5,82$; $p<0,01$; $95\%CI[0,06;0,15]$); relationship between problem-focused coping and depression ($z=5,98$; $p<0,01$; $95\%CI[-0,15;-0,07]$). Conducted research provides an evidence that SS play a significant role in the process of coping with chronic illness

The Link Between Women's Spirituality, Health Beliefs and Prevention of Breast Cancer

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Background: The aim of the study was to identify the link between women's spirituality, health beliefs and prevention of breast cancer. Method: The participants of study were 233 female participants from 25 to 68 years old (mean age 37,58±10,97) with no breast cancer diagnosis were investigated by regularity questions of prevention practice, Spirituality Scale (Delaney, 2005) and Health Belief Model for Breast Self-Examination (Champion, 1984). All items were analyzed by using Spearman correlation, T-test and Logistic Regression. Findings: The results of the study showed that relation between the higher women's spirituality (self-discovery), beliefs and BSE depend on the age of women. Women's under 50 higher spirituality (self-discovery and relationships) is related to more positive beliefs of BSE and with more frequent participation in breast self-examination, clinical examination and mammographic screening. Women's over 50 higher spirituality (eco-awareness and relationships) is related to less frequent practice of breast self-examination. Discussion: According to the age, women's spirituality is an important factor planning preventive activities of breast cancer.

Is Lasting Improvement in Well-being Mediated by Change in Personality?

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Background: Personality traits are relatively stable and are associated with well-being, thus having important implications for the health and resilience of individuals. Methods: Participants were solicited via Facebook, and randomized into intervention group/waiting list (N=95). A structured internet-based intervention was administered over a 6-week period to the intervention group, and subsequently to the waiting list group. Measures included subjective well-being, and three personality traits. Measurements were taken at outset, again at 6 weeks with completion of the intervention, and 4 weeks later at follow-up. Results: Growth curve analysis yielded highly significant gains in well-being as well as in personality traits in the intervention group. The most parsimonious model for predicting the gain in well-being included the mediation the personality trait Self-Directedness. Discussion: The stability of change in well-being may be mediated by change in personality traits, which are basically more stable and enduring than changing life-circumstances. Thus resilience and well-being may hinge on affecting a change in the individual's personality traits.

Processes of Change in Heroin Addiction - a Transtheoretical Perspective.

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The processes of change are a dimension of Transtheoretical model of change, representing hidden or obvious experiences which people use trying to change various behavior (Prochaska et al., 1991). They will be more or less active depending on person's readiness to change - Experiential processes are used primarily in early stages of change, while behavioral processes are used primarily in later stages. The aim of this research was to test this hypothesis on a sample of heroin addicts engaged in an outpatient methadone substitution. 200 outpatients (74% males) with the average age of 30 completed the Processes of Change Questionnaire for Heroin Addiction (Žuljević & Gavrilov - Jerković, in press) and the Stages of Change Questionnaire (Maurischat, 2001). The analysis of variance revealed a general difference in processes of change usage in different stages of change (Willks $F(4,9)=1.7$; $p<.05$). Post-hoc tests revealed that only Self-Liberation, Stimulus Control and Dramatic Relief follow the theoretical expectations, while other processes did not differ across the stages of change. Theoretical and practical implications of these findings will be discussed.

Cognitive Emotion Regulation Strategies as Mediators of the Relationship Between Negative Life Events and Stress

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The aim of the present research was to examine the mediating role of cognitive emotion regulation strategies in the relation between negative life events and stress. The hypothesis that greater magnitude of negative life events was indirectly linked to higher levels of stress through cognitive emotion regulations strategies was tested. The sample consisted of 476 students (age range 18-34 years) from the University of Novi Sad, Serbia. During an initial assessment, participants completed the Life Events Scale and the Cognitive Emotion Regulation Questionnaire (CERQ). Six months later, participants completed the Stress subscale from the Depression, Anxiety and Stress Scale (DASS-21). A regression analysis showed that magnitude of life events was significantly associated with the level of stress. The bootstrapping procedure, with 1000 replications was applied to test mediation. The model explained 13% of variance. The results suggested full mediation, with two cognitive emotion regulation strategies: rumination and catastrophizing, mediating the relationship between negative life events and stress.