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On: 08 August 2012, At: 09:44

Publisher: Routledge

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## Psychology & Health

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/gpsh20>

### EHPS 2012 abstracts

Version of record first published: 01 Aug 2012

To cite this article: (2012): EHPS 2012 abstracts, *Psychology & Health*, 27:sup1, 1-357

To link to this article: <http://dx.doi.org/10.1080/08870446.2012.707817>

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## EHPS 2012 abstracts

### Oral presentations

#### Creating Change that Counts: Evidence-led Co-creation as a Pathway to Impact

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How can we create individual and social change that matters to clients, patients and clinicians? It will be argued that working in partnership with clients within multidisciplinary teams is foundational. The importance of (i) conceptualising social processes, (ii) intervention mapping, (iii) use of multiple change techniques, (iv) representative samples, (v) piloting, (vi) designing trials to scale, (vii) conducting process, as well as outcome, evaluations and (viii) creating accessible materials will be emphasised as key elements of research likely to change health and health care practice. The thesis of this talk is that pathways to research impact depend on co-creation combined with methodologically-rigorous trials which examine mechanism. The talk will integrate conceptual frameworks, draw upon a report on “Behaviour Change” produced by the UK House of Lords and illustrate research practice using ongoing work at “PenCLAHRC” and Exeter Medical School.

#### Reliability and Utility of the SHARP Taxonomy of Behaviour Change Techniques

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**Background:** Interventions promoting condom use to prevent sexually transmitted infections have proved effective but it is unclear how intervention content is related to effectiveness. **Methods:** The SHARP (Syntheses of HIV/AIDS Research Project) taxonomy of behaviour change techniques (BCTs) organizes 47 commonly-used BCTs in relation to 9 broad change targets. For example, consolidating motivation, enhancing self-efficacy and skills, and maintaining behavior change. The taxonomy was used to analyze content in 74 intervention conditions and 57 control conditions reported in evaluations of interventions recommended by the Centres for Disease Control and Prevention. **Findings:** BCTs could be reliability identified across behaviors (e.g., abstinence vs. condom use) and in generic and tailored applications. Specific BCTs significantly predicted effectiveness e.g., promotion of injunctive norms and

skills training. Results also confirmed under-reporting of intervention content in articles compared to manuals. **Discussion:** The taxonomy provides a reliable approach to identifying intervention content likely to promote behaviour change.

### **Do changes in occupational stressors predict work-related and generic stress outcomes in emergency (ER) nurses?**

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**Objectives:** Examine effects of changes in occupational stressors on job satisfaction, turnover intention, work engagement, psychosomatic distress and emotional exhaustion in emergency (ER) nurses. **Methods:** 170 ER-nurses completed questionnaires at baseline (T1) and one year later (T2). Hierarchical regression analyses were conducted with changes in job stressors from T1 to T2 (Leiden Quality of Work Questionnaire, LQWQ-N) as predictors and job satisfaction and turnover intention (LQWQ-N), Work Engagement (Utrecht Work Engagement Scale), psychosomatic distress (Brief Symptom Inventory) and emotional exhaustion (Maslach Burnout Inventory) at T2 as outcomes. **Findings:** Dimensions of the Job Demand Control model significantly predicted job satisfaction, work engagement and emotional exhaustion. Social harassment predicted distress and emotional exhaustion, Home/work interference and lack of material resources predicted distress, poor work agreements predicted turnover intention, and rewards predicted work engagement. **Discussion:** Occupational stressors have important long-term effects on ER-nurses. Creation of healthy work environments is crucial for hospital management.

### **Impact of work demands on health professionals' smoking and drinking behaviour in seven European countries**

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**Background:** The aims of the study are to compare smoking and drinking behaviour of health professionals from seven European countries, and to analyze how these behaviours are influenced by work demands. **Methods:** Quantitative survey was conducted among doctors, nurses and residents in Greece, Portugal, Bulgaria, Romania, Turkey, Croatia and FYROM. Through regression analysis we analyze the influence of Physical, Emotional, Organizational and Cognitive work demands on health professionals' smoking and drinking behaviour. **Findings:** The highest smoking rates are observed among health professionals from Bulgaria, FYROM, Turkey and Greece; the highest drinking rates – among health professionals from Bulgaria, Greece and Turkey. Analyses show that higher work demands are generally related to higher risk for smoking and drinking and that negative affectivity has a significant mediation effect. **Discussion:** The results are relevant to improving health professionals' health through organizational interventions, focusing on specific aspects of the work process and work demands.

## Good planners can already plan but poor planners benefit from action plans

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**Background:** Action plans (if-then plans) can help people enact behavioural intentions, but may be less effective for individuals who are independently able to generate and execute high quality plans. **Methods:** In a prospective, between-participants design, 120 participants (26M, 94F) in a dietary monitoring study completed an objective measure of planning ability (Tower test) before being randomised to form (or not) an action plan about food diary completion. Diary completion rates with and without action plans were compared in good and poor planners. **Findings:** Action plans did not significantly increase the likelihood of intention enactment in skilled planners (73% vs. 67%;  $\chi^2_{(1)} = 0.32$ ,  $p = 0.57$ ) but did in poor planners (67% vs. 37%;  $\chi^2_{(1)} = 5.41$ ,  $p = 0.02$ ). **Discussion:** Naturally good planners did not benefit from action planning but achieved high rates of intention enactment. Poor planner gained most from action plans, and should therefore be the main target for planning interventions.

## Psychometric properties and validation of the Resourcefulness for Recovery Inventory

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**Background:** The aim is to present psychometric data concerning the properties, validation and outcome utility of the Resourcefulness for Recovery Inventory (RRI). The RRI was developed and refined for use in rehabilitation psychotherapy, and assesses adaptive and maladaptive behavioral, cognitive, emotional and physiological responses to trauma and other stressors. **Methods:** Data for scale construction and properties, factor analytic findings, cross validation and utility as an outcome measure will be presented from a variety of sources. The RRI was developed and refined on a population of over 500 Canadian trauma victims, but data from other international sites will also be presented. **Findings:** The RRI has low correlations with traditional measures of distress and psychopathology, and is a sensitive diagnostic and outcome measure. **Discussion:** The RRI has very broad applicability. It provides a comprehensive assessment, and supports a fresh, practical and positive approach to rehabilitative assessment and psychotherapy.

## Cognitive flexibility increases the predictive validity of the Theory of Planned Behaviour for sun-protection behaviours

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**Background:** Although most people are aware of the danger of skin cancer and intend to protect themselves from this risk, many do not sufficiently perform sun-protection behaviours. This research was aimed at improving the prediction of sun-protection behaviours by applying the Theory of Planned Behaviour (TPB) with the additional variable of

self-regulatory capacity. **Methods:** Self-report questionnaires measuring TPB variables and objective measures of self-regulatory capacity were administered to 178 university students. One week later, participants completed questionnaires measuring behaviour. **Findings:** The TPB significantly predicted intentions and prospective behaviour. Self-regulatory capacity, specifically cognitive flexibility, predicted additional variance in behaviour such that those with a greater ability to shift their cognitions when circumstances changed were more likely to perform sun-protection behaviours. **Discussion:** The addition of self-regulatory capacity to the TPB was supported for sun-protection behaviours. Interventions attempting to increase sun-protection behaviours should aim to modify intention and cognitive flexibility capacity.

### **Adverse childhood experiences, crime and health**

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Incarcerated women have substantial health needs and histories of adverse childhood. As part of a study about the health of women prisoners, we pursued an exploration of the correlation between adverse childhood experiences, number of incarcerations, anxiety and depression symptoms, and health complains, in a sample of 195 incarcerated women. Participants filled out self-report questionnaires (life history, health complains, anxiety and depression). The results show significant correlations between adversity and number of imprisonments ( $r=0.198$ ,  $p=0.006$ ), anxiety ( $r=0.255$ ,  $p=0.000$ ) and depressive ( $r=0.320$ ,  $p=0.000$ ) symptoms, and health complains ( $r=0.293$ ,  $p=0.000$ ). These results emphasize the association between adverse childhood experiences, delinquency and physical and mental symptoms of inmate women. We point out the importance of taking in consideration the adverse history in the layout of intervention towards this population in order to minimize consequences of early victimization.

### **How to improve participation in school oriented health promotion for disadvantaged parents**

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Health promotion in the school setting is challenged by the fact that disadvantaged families with low economic, cultural and social resources do hardly participate in such programs. We investigated how to improve the reachability of disadvantaged parents in particular with migrant background. Motivators to improve participation in a particular health promotion program were identified by experts, and were put into practice in an elementary school in Switzerland. A number of 109 parents filled in a questionnaire about their motivation for participation. Parents with low motivation for participation indicated several decisive barriers: e.g. fear (not being able to help his/her child) and former discrimination experiences. However, the rate of participation improved from 26 to 49%, due to the implementation of the motivators. The results showed the importance of structural factors and network building to reach parents with high level of fear and low levels of motivation to participate in health promotion.

### Telephone-delivered stress management intervention for chronic fatigue syndrome: Evidence for a biobehavioral model

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**Background:** Stress relates to chronic fatigue syndrome (CFS) symptom exacerbation and related neuroimmune processes. Interventions designed to reduce perceived stress may decrease CFS symptoms and improve neuroimmune regulation. We tested a telephone-delivered group-based cognitive behavioral stress management (T-CBSM) program. **Methods:** We recruited 114 men and women diagnosed with CFS and randomized them to 10-wk T-CBSM or a 10-wk attention-matched Telephone Health Information control (T-HI). Patients completed questionnaires and provided saliva and mid-day blood samples at baseline and 5-month follow-up. **Results:** Those in T-CBSM reported reduced CDC-based symptom frequency and Perceived Stress Scale (PSS) scores, and reductions in serum pro-inflammatory cytokines at 5-month follow-up, with no changes in controls. Within T-CBSM greater stress management skill improvements associated with greater decreases in PSS, CDC symptom severity, fatigue interference, disruption in recreations and pastimes, and sleep disruption. **Conclusions:** Group-based T-CBSM may decrease CFS symptoms and alter neuroimmune processes by improving stress management skills.

### Positive and Negative Affect and Pro-inflammatory Gene Expression in Women Undergoing Treatment for Breast Cancer

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**Background:** Affect states are associated with inflammation, which may be relevant in breast cancer (BCa) treatment, since inflammation may delay recovery and promote disease progression. We tested whether positive and negative affect related to transcripts associated with inflammation and disease-promoting processes in women undergoing treatment for BCa. **Methods:** Women ( $N = 79$ ) undergoing treatment of Stage 0–III BCa at 2–10 wks after surgery completed the Affect Balance Scale (ABS) and provided blood samples. **Findings:** Leukocyte transcriptional profiling revealed 177 genes up-regulated in association with lower positive/negative affect ratio, including genes encoding pro-inflammatory cytokines (IL1a, IL1b, IL6, TNF), inflammatory chemokines, and transcripts involved in tissue remodeling and epithelial-mesenchymal transition (MMP9),  $p$ 's  $< 0.0001$ . **Discussion:** Women with BCa reporting lower positive-negative affect ratio showed greater leukocyte gene expression for pro-inflammatory and cancer-promoting processes during treatment. Psychosocial interventions that decrease negative affect and promote positive affect may facilitate recovery from cancer treatment.

### The role of goal management for successfully adapting to arthritis. Pursuit goals or let go?

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**Background:** Persons with arthritis often experience difficulties attaining personal goals due to disease symptoms. This study examines the relationship of four goal management strategies (goal maintenance, goal adjustment, goal disengagement, goal reengagement) with indicators of adaptation (purpose in life, positive affect, participation, work participation) and maladaptation (depression, anxiety) to arthritis. **Methods:** 305 patients diagnosed with arthritis participated in the questionnaire study (62% female, 29% employed, mean age: 62 years). Hierarchical multiple regression analyses were used. In addition, self-efficacy in relation to the goal management strategies was studied. **Findings:** For all indicators of adaptation, the goal management strategies added substantial explained variance to the models ( $R^2$ : 0.07–0.27). Goal management strategies were important predictors of adaptation to polyarthritis. Self-efficacy partly mediated the influence of goal management strategies. **Discussion:** Adjusting goals to personal possibilities and striving for goals proved to be the most beneficial strategies for adapting to polyarthritis.

### Experimental Test of a Volitional Help Sheet to Reduce Weight in an Overweight/Obese Sample

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**Background:** Enhancing the effectiveness of weight loss programs is vital to dealing with morbidity/mortality associated with being overweight/obese. The present study tested a 'volitional help sheet' – a tool that enables people to link critical situations with appropriate solutions – to promote weight loss in overweight/obese people engaged in a weight loss program. **Methods:** Seventy-two overweight/obese participants enrolled in a weight loss program were randomly allocated to either an experimental condition or a control condition. The main outcome measures were weight and body mass index. **Findings:** Controlling for baseline, there were significant differences in follow-up weight and body mass index between the experimental condition and the control condition. Further analyses revealed that the volitional help sheet boosted the effects of the weight loss program by 55%. **Discussion:** The findings support the efficacy of the volitional help sheet to promote weight loss in an overweight/obese sample engaged in a weight loss program.

### A prospective study on risk factors for persistent post-surgical pain in women undergoing benign hysterectomy

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Persistent post-surgical pain (PPSP) is a major clinical problem. The aim of this study was to examine the role of psychological, demographic and clinical risk factors in the development of PPSP after benign hysterectomy. In a prospective predictive study, a sample of  $N=186$  women was assessed 24 hours before, 48 hours and 4 months after surgery. Four months following hysterectomy, 93 (50%) participants reported experiencing persistent pain. Age, pain due to other causes and type of hysterectomy emerged as significant predictors of PPSP. Baseline pre-surgical psychological predictors identified were anxiety (OR, 1.116; 95% CI, 1.014–1.228), emotional representations (OR, 1.751; 95% CI, 1.174–2.611) and pain catastrophizing (OR, 3.112; 95% CI, 1.664–5.821). Post surgery, pain frequency (OR, 2.251; 95% CI, 1.043–4.861) and anxiety (OR, 1.155; 95% CI, 1.015–1.315) were predictive of PPSP. These results increase the knowledge on PPSP risk factors and identify specific intervention targets.

### Why do Romanian mothers refuse vaccination against HPV for their daughters?

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**Background:** The HPV vaccination campaign resulted in a very low acceptance level (2.5%). The present study explores attitudes and representation of the HPV vaccine in Romanian mothers. **Methods:** Three focus groups and 11 individual interviews were conducted with mothers. Thematic analysis was used to identify the main themes. **Findings:** Most mothers felt strongly that their daughters should not be vaccinated, as it is unlikely to become sexually active in the next 2–3 years. The HPV vaccine was represented as dangerous and risky. The main reasons for decline were: lack of information, fear about side effects and reduced cervical cancer risk perception. Mothers believed that pharmaceutical companies are interested in selling the vaccine and that this is being tested on their daughters; and the locus of decision making concerning the HPV vaccine uptake should reside within parents. **Discussion:** Educational interventions are necessary to enhance parents' knowledge about vaccine safety, efficacy and the value of prevention.

### The value of rewards and their role on the burnout among surgical nurses

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**Background:** Esteem, career, money and job security are important resources for employees. They can balance the efforts invested in the work and protect from stress and burnout (Siegriest et al., 2004; Bakker et al., 2004). Changes in the labor market increase the meaning of job security (Laszlo et al., 2010). The aim of our study was to verify the role of individual rewards (and their absence) in the burnout among nurses. **Methods:** The group consisted of

263 surgical nurses. Effort – Reward Imbalance Questionnaire and Maslach Burnout Inventory in correlational design were used. **Findings:** Nurses experienced the largest deficiencies in salary and prestige. Exhaustion and depersonalization were explained by the efforts and the lack of respect (medium effects). Personal achievement was explained by the less effort and greater job security (trivial effect). **Conclusion:** Excess demands and lack of esteem are essential for burnout among surgical nurses.

### **The long-term effect of implementation intentions on physical activity: a randomized controlled study**

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**Background:** Implementation intentions (II) represent a promising way to promote physical activity among clinically relevant populations. The aim of this study was to test the long-term effect of a two-month II intervention among obese older adults. **Methods:** At baseline, 101 participants were randomised to an experimental (II) or a control condition. An objective measure of behaviour was obtained by means of a pedometer (steps/day). Seventy-eight participants completed the six-month follow-up. **Findings:** Mixed model repeated-measures ANOVAs revealed a significant within-condition effect ( $p=0.02$ ) but a non-significant between-condition effect ( $p=0.20$ ). However, a significant time  $\times$  condition interaction was observed ( $p=0.01$ ) showing that the increase in the number of steps/day at follow-up was significantly higher for participants in the II condition. **Discussion:** Results suggest that a short II intervention could be an appropriate approach to favour maintenance of physical activity among obese older adults.

### **The stressful perioperative period in cancer patients: Potential prophylactic measures against immunosuppression and metastasis promotion**

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**Background:** Animal studies indicated that psychological stress and surgical stress can advance cancer recurrence through direct hormonal impact on malignant tissue and through immune-suppression. **Methods:** To devise prophylactic measures, we aimed at identifying specific endocrine and immunological mediating mechanisms. Various immunological indices relevant to cancer progression were studied in animals and in surgical patients. Cancer progression was studied using several syngeneic rodent models of experimental and spontaneous metastasis. **Findings:** Patients exhibited marked immune perturbations even before surgery, which further exacerbated postoperatively. Stress and surgery suppressed NK cytotoxicity, Th1-cytokine levels, and cell activation markers, and in animals also increased cancer metastasis. Most importantly, in animals, perioperative  $\beta$ -adrenoceptor blockade combined with prostaglandin synthesis (COX2) inhibition, counteracted most of the above immune perturbations, reduced metastasis, and doubled postoperative survival. **Discussion:** These drugs could be applied perioperatively in most cancer patients with minimal risk and low cost, and may improve patients' long-term survival rates.

## Community Health Workers' role in supporting non-western immigrants in the Netherlands to lower cardiometabolic risk

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**Background:** Self-regulation programs led by Community Health Workers (CHWs) appear promising in lowering cardiometabolic risk in non-western immigrant populations. However, little is known about the specific role of the CHW. Aim of the study was to identify essential competencies and effective behaviour change techniques (BCTs). **Methods:** A needsassessment was performed using focus group and face-to-face interviews among non-western immigrants. Additionally, a systematic review identified CHW tasks, competencies, and effective BCTs. **Findings:** Non-western immigrants reported somewhat different CHW tasks than those emerging from the review. Immigrants stressed the importance of fear arousal and reflecting on own behaviour, whereas the review underlined goal-setting, self-monitoring, and identifying barriers. Both emphasized the importance of integrating care into the social context by mobilising social support, and restructuring the environment. **Discussion:** In a theory and evidence based CHW-led program, CHWs should use effective BCTs and pay special attention to the social context of non-western immigrants.

## Health threat beliefs and coping in the context of genetic risk for cancer

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This research examined concerns and coping during assessment for genetic risk of breast cancer. Participants were 301 women undergoing genetic risk assessment. Analysis involved exploration of the relationship between specific beliefs and the use of coping strategies, changes in coping strategies over each of three phases of the assessment process, cluster analysis to identify groups using similar coping strategies, and the relationship between concerns, coping, and changes in negative emotions and frequency of worry. Overall, the data show that participants used one dominant strategy for coping with each concern (limited to positive appraisal, acceptance, and seeking family/social support) and used other coping strategies much less often. Cluster analysis revealed four clusters of coping responses, including the use of positive appraisal as an almost unique coping response. The associations between coping and changes in emotions and worry were modest although statistically significant.

## Predicting PTSD following first onset acute coronary syndrome: testing a theoretical model

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This research aimed to identify which theoretically predicted factors (Joseph et al. 1997) were associated with the severity of PTSD symptoms one and six-months following acute coronary syndrome (ACS). Predictor variables included event factors, including fear and dissociation at the time of the event, and maintaining factors including coping strategies, social support, and re-appraisal of event threat. One hundred and fifty participants completed questionnaires in hospital and at one and six-month follow-up. Hierarchical multiple regression explained 50 percent of the variance in PTSD symptoms at both times. At one-month follow up, predictors of PTSD symptoms were: fear at onset, concern over symptoms, and illness comprehension. At six-month follow-up, predictors were: fear at onset, lack of confidant support, use of emotion-focused coping, and continued symptoms. The Joseph et al model was supported, but apart from fear at onset, no consistent predictor of symptoms was identified.

### **The association between causal beliefs about symptoms and healthcare seeking among women in midlife**

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**Background:** Our aim was to assess women's causal beliefs about physical symptoms and the associations of these attributions to seeking healthcare. **Methods:** A representative sample of 814 Israeli women ages 45–64 reported the occurrence of six bothersome symptoms, beliefs about their cause, whether they sought care, and if not, why. **Findings:** Causal beliefs were categorized into six groups: Stress, age-related, past health, lifestyle, external/environmental, and unknown. Rates of healthcare seeking were highest for attributions to past health problems (81%–95%) and lower for age (37%–71%), stress (38%–67%) and lifestyle (29%–61%) attributions. Reasons for not seeking care included believing that the problem is natural/not serious, self-treatment, etc. **Discussion:** A substantial number of women at midlife experience potentially serious and/or treatable physical symptoms (e.g., chest pain) yet refrain from seeking care, in part because they attribute them to factors such as stress or age and do not believe in their seriousness or in the treatment.

### **Economic evaluation of two smoking cessation counselling methods with nicotine replacement therapy for cardiac inpatients**

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**Background:** Evidence about cost-effectiveness and cost-utility of smoking cessation treatment methods for cardiac inpatients is scarce. This study compares costs and effects of usual care with two smoking cessation counselling methods for cardiac inpatients; i.e. face-to-face (FC) and telephone counselling (TC) both combined with nicotine replacement therapy (NRT). **Methods:** A cross-over controlled trial in eight cardiac wards with a baseline and follow-up measurement after six months is used. Costs, Quality of Life (QoL), and 7-day smoking

abstinence were measured. Cost-effectiveness and cost-utility were determined from a societal perspective. **Findings:** Costs were lowest for usual care, followed by TC. There were no significant group differences in QoL. Both counselling methods resulted in significantly higher smoking abstinence rates compared to usual care. Cost-effectiveness and cost-utility analyses tend to be in favour of TC. **Discussion:** On balance, TC combined with NRT constitutes the most cost-effective treatment to help cardiac patients to quit smoking.

### Adolescents' adjustment to parental Multiple Sclerosis: the role of parental expressed emotion towards their offspring

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**Background:** Adolescents with a parent with Multiple Sclerosis (MS) appear more distressed than adolescents with healthy parents. The aim of this study was to explore the impact of parental emotional expression on adolescents' adjustment to parental MS. **Methods:** 75 adolescents, their parents with MS ( $n = 56$ ), and their well parents ( $n = 40$ ) participated in this cross-sectional study. Both parents completed the verbal Emotional Expression speech sample, which was adapted for this study. Adolescents completed the Work and Social Adjustment Scale and Strength and Difficulties Questionnaire. Pearson's correlations were used. **Results:** Parents' with MS emotional expression was associated with conduct difficulties ( $r = 0.24$ ,  $p < 0.05$ ) and hyperactivity ( $r = 0.40$ ,  $p < 0.01$ ) for adolescents. Well parents' positive and critical comments were associated with adolescents' hyperactivity scores ( $r = 0.42$ ,  $p < 0.01$ ;  $r = -0.44$ ,  $p < 0.01$ ). **Discussion:** Parental emotional expression seems to impact adolescents' adjustment to parental MS. More studies are needed to explore emotional expression construct in the context of MS.

### How to make more salient and effective a message promoting clinical trials

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**Background:** Problems with recruitment of healthy participants to clinical trials (CT) decrease their efficacy in developing new health technologies and therapies. The present study aimed to analyse if message framing and illness's contagiousness affect individuals' intentions to participate to a CT. **Methods:** 101 university students read a scenario promoting the participation to a CT. Four different scenarios resulted from the 2 (frame: gain vs. loss)  $\times$  2 (illness: contagious vs. non contagious) experimental design. Participants then filled-in a questionnaire analysing their perception of the illness and of the CT's utility, concluding with a measure of their intention to participate. **Findings:** MANOVAs showed that individuals have the highest perception of the CT as useful and the highest intention to participate when reading a gain-framed message underlining the illness's contagiousness. **Discussion:** Results are discussed according to social cognition models, concerning the influence public communication have triggering cognitive factors and, consequently, influencing individuals' intentions to enrol in CTs.

### Doctor's view on doctor-patient-communication in a multilingual and multicultural setting

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Since interpersonal communication between people having the same cultural background may already potentially lead to false conclusions, the probability of misunderstandings in multicultural and multilingual interactions may be substantial. Here, we start from the proposition that those misunderstandings may have substantial consequences especially in health settings (i.e., inadequate treatment and endangerment of health). Practitioner's communication skills and intercultural competence may therefore be essential for the course of the medical treatment. The present study investigates the perception of the communication in medical encounters by general practitioners with a special emphasis to intercultural encounters. The research questions are explored by a qualitative research design. Interviews are conducted with 20 practitioners and those are analysed by qualitative content analysis. The results show the main aspects of doctor-patient communication in relation to intercultural interactions and intercultural competence. The findings allow construct validation and the development of quantitative instruments of intercultural communication and competence.

### Testing a social comparison intervention to increase cancer patients' quality of life: A randomized trial

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**Background:** Social comparison information about fellow patients' experiences can improve cancer patients' quality of life (QOL) in the recovery phase. The objective was to improve QOL and life satisfaction by offering recovering cancer patients such information, taken into account two health perspectives patients can endorse. **Methods:** In an randomized field experimental with a pre and post measurement, patients received either an adapted interview or not. Recovering Dutch cancer patients ( $N = 150$ ;  $M_{\text{age}} = 52$  years; 81% women) participated in the study by responding to a request in the media. QOL and life satisfaction were measured. **Findings:** From the 62 patients in the experimental condition, those with poor health perspectives benefitted significantly ( $\eta_p^2 = 0.05$ ;  $\eta_p^2 = 0.08$ ), however, patients with high health perspectives deteriorated. **Discussion:** The brief intervention had impact on patients' QOL and life satisfaction. Individual differences in health perspectives should be acknowledged when psychosocial interventions are considered.

### Health literacy in youth – The interplay of competence, behavior and quality of life regarding health

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**Background:** The purpose of this study was to explore the relationship between health literacy, health behavior and health-related quality of life in adolescence. Health literacy was specified

as the general competence to make healthy choices in various areas of daily life. It was assumed that health behavior mediates the effect of health literacy on physical and psychological health. **Methods:** A questionnaire comprising personal information, health literacy, health behavior, self-efficacy expectations and subjective well-being was completed by 131 male and 238 female 17 years old German high school students. Hierarchical multiple regression analyses and structural equation models were performed. **Findings:** Three health literacy subscales (self-control, taking responsibility and communication/cooperation) correlated significantly with health behavior. Health literacy explains 26% of health status' variance. Students' behavior mediates a substantial part of the subscales' effect on quality of life. **Discussion:** Health literacy explains youngsters' well-being better than health behavior alone.

### **Burnout, Job Demands and Turnover Intentions among Romanian Health Professionals**

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**Aim:** This research investigates the relationship between burnout, negative work-to-home conflict, job demands, workload and turnover intentions among health professionals (HPs), using a two-wave longitudinal design. **Method:** A sample of 220 HPs at time 1 and 95 at time 2 filled out the Maslach Burnout Inventory, the Questionnaire on the Experience and Evaluation of Work, the Work-Family Interaction Nijmegen Survey and a turnover intention index. **Results:** Multiple regression analysis shows that workload, negative work-to-home conflict and emotional job demands at time 1 predicted exhaustion at time 2, while emotional job demands predicted cynicism six months later. Exhaustion, cynicism and negative work-to-home conflict at time 1 predicted turnover intentions at time 2. **Conclusions:** The Romanian healthcare system has long been confronted with a shortage in personnel and more recently with HPs migration. Our results have implications for designing interventions focused on reducing burnout and turnover intentions in health professionals.

### **Psychological interventions for young people with type 1 diabetes**

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**Background:** To determine the effectiveness of psychological interventions for adolescents with type 1 diabetes in improving glycaemic control (HbA1c) and psychological outcomes, and the efficacy of theoretically guided interventions. **Methods:** A systematic search of eight databases was conducted. Randomised controlled trials utilising psychological interventions for young people (8–21 years) with type 1 diabetes were included. **Findings:** 21 papers were identified. Effect sizes were calculated for 15 studies. An overall mean effect size of 0.31 (median 0.23), indicated a small to medium effect size of intervention on HbA1c. Further, 13 studies showed improvements on psychological measures. Theoretically guided interventions had a greater effect on HbA1c with an effect size of ( $d=0.37$ , median 0.23;  $d=0.13$ , median 0.12 respectively). **Discussion:** Our findings suggest psychological interventions for young people with Type 1 Diabetes are effective at improving both HbA1c and psychological outcomes. Theoretically guided interventions result in greater improvements on HbA1c.

### Brief physician advice and smoking cessation: Cross-sectional findings from an English household survey

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**Objectives:** To estimate the prevalence of different types of physician advice on smoking in England and assess associations between these and cessation. **Design:** Cross-sectional national household surveys between 02–10 and 11–11. **Participants:** 6229 adults who smoked in the past 12-months and consulted their physician. **Measures:** Recall of physician advice on smoking, having made a serious quit-attempt and smoking cessation in the past 12-months. **Findings:** 42.8% ( $n=2663$ ) of smokers recalled having been advised to stop and offered some kind of support, while 17.8% ( $n=1109$ ) received advice-only. Those offered support were more likely than those receiving advice-only or no advice to have made a quit attempt in the past year ( $OR_{adj}=2.36$ , 95%CI=2.04–2.74;  $OR_{adj}=3.12$ , 95%CI=2.78–3.51 respectively) and still not to be smoking ( $OR_{adj}=1.47$ , 95%CI=1.07–2.01;  $OR_{adj}=1.28$ , 95%CI=1.02–1.61 respectively). **Discussion:** This population-level study, together with a meta-analysis of RCT-evidence, supports the idea that physician advice has maximum impact if it involves offering support to all smokers to help them quit rather than advising them to quit.

### Patient-caregiver differences and dyad concordance towards psychosocial impacts of stroke

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**Background:** Are patient-caregiver dyads concordant when applying to stroke psychosocial impacts? **Methods:** Two questionnaires administered two years poststroke in Luxembourg to 62 patients and their 62 natural caregivers include 15 common items assessing psychosocial impacts of stroke on both patients and caregivers. We (1) compare these impacts of stroke on patients and caregivers, and (2) use paired analysis of the concordance in responses within dyads. **Findings:** Patients feel ashamed, more often than caregivers imagine (11.3% vs. 3.2%\*). Patients perceive less often than caregivers an upheaval in their couple (19.4% vs. 38.7%\*), and preponderance of psychological difficulties (41.9% vs. 69.4%\*\*). Loss of friends (90.7% convergent vs. 9.3% divergent\*), social life (75% vs. 25%\*) and family upheavals (76.8% vs. 23.2%\*) are concordant subjects within dyads, contrary to feeling undervalued (62.8% vs. 37.2%; ns) and bonds' strengthening (81.5% vs. 18.5%; ns). **Discussion:** Improving communication about feelings within patient-caregiver dyads may enhance their social capital as a health capability.

### The role of family support and coping in predicting depression and anxiety in paediatric diabetes

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**Introduction:** The role of several psychosocial factors was explored in children and adolescents with type 1 diabetes, to better understand the psychosocial profile of those experiencing psychological concerns. **Method:** Eighty participants aged 7–15 years were recruited from a paediatric diabetes clinic in Melbourne, Australia. Participants had been diagnosed with type 1 diabetes for at least twelve months. Screening of depressive and anxiety symptoms (using the CDI and RCMA-2) was undertaken. Family support, self-efficacy, coping and knowledge were also assessed. **Results:** Discriminant function analyses confirmed significant models differentiating depressed *versus* non-depressed (Wilk's lambda = 0.686,  $\chi^2(7) = 24.309$ ,  $p < 0.01$ ) and anxious *versus* non-anxious participants (Wilk's lambda = 0.696,  $\chi^2(7) = 23.758$ ,  $p < 0.01$ ). **Conclusions:** Impaired family support and poor coping with diabetes issues that 'upset' were related to psychological distress. Interventions to identify and manage depression and anxiety in pediatric type 1 diabetes may be aided by the consideration of family support and coping with diabetes issues.

### **A qualitative study of staff, stakeholder and parental perspectives of non-attendance at paediatric outpatient clinics**

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**Background:** Non-attendance at healthcare appointments may have serious consequences for patients in delayed diagnosis or treatment and implications for waiting times, patient-provider relationships and financial resources. This study explored non-attendance at paediatric outpatient clinics from the service provider and parent perspective. **Methods:** Semi-structured interviews were conducted with 37 NHS staff and stakeholders from secondary or primary care and 22 parents of children referred for a paediatric outpatient appointment. Data were analysed using a thematic framework method. **Findings:** All respondents discussed the importance of parents' motivations, values and beliefs about appointments and their child's health. Organisational and procedural problems were also emphasised e.g. forgetting; travel, financial or time barriers; communication issues. However staff focused on perceived characteristics of families who missed appointments. **Discussion:** There are parallels in these findings with models of non-adherence to medication. Developing a model of non-attendance may contribute to more effective strategies for managing missed appointments.

### **On therapeutic attachment: The health professionals' input in the Speech Therapy setting**

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Attachment style is considered an influent variable in establishing and maintaining a therapeutic relation. Research has been mainly focused on examining the patient's input to the therapeutic process; the current study aims at exploring the therapist's input to the dance that takes place in this specific inter-subjective encounter. Fifteen speech therapists who develop clinical activity in the public and/or private sector have participated in the present study,

which furthers a previous exploratory, transversal, comparative and correlational research conducted with both patients and therapists. Three instruments were applied: a socio-demographic questionnaire, the Adult Attachment Scale and the Working Alliance Inventory (therapist version). Results from the current study show that the therapist's attachment style has an impact on the components of the established relationship. The relational quality imprinted by the therapist is weighted as a key-element both in the patient's adherence to the therapy and in the therapy's outcome.

### **The role of individual and relational variables in understanding the risk of adolescent pregnancy**

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**Background:** In the last decades a decline in the incidence of adolescent pregnancy rates in Portugal has been reported— even though Portugal heads the EU as the countries with the higher rates of pregnancy in adolescence. It is, therefore, most relevant to identify predictors of adolescents' relational variables consensually associated with its occurrence. **Methods:** In this cross-sectional study ( $N=380$ ) logistic regression models were built to understand the contribution of individual and relational variables (assessed by: Semi-structured interview; EMBU) to predict their impact on the occurrence of pregnancy. **Findings:** Adolescent's age, lower educational levels and boyfriend's professional status increased the risk of pregnancy in adolescence. In turn, earlier first sexual intercourse, less contraceptive information and mother's age also emerged as predictors. **Discussion:** Multidisciplinary efforts should be made at individual and family levels to provide information on sexuality. Comprehensive interventions on school attendance and relationships, given its importance predicting sexual behaviours associated with adolescent pregnancy.

### **Lack of recognition in the workplace and worker's mental health: a gender-based perspective**

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**Background:** Previous research showed that lack of recognition in the workplace is harmful for workers' mental health. This study investigates the association between lack of recognition, anxiety and chronic fatigue within a gender perspective. **Methods:** Two Belgian databases – Belstress III and Somstress – were merged resulting in 4013 participants (2304 women), aged 21–66, working in 9 organizations. Items from ERI, JDC-S, and mobbing scales were used for measuring 4 recognition facets: (1) worker's value, (2) worker's rights, 3–4) emotional recognition from colleagues, and from supervisors. **Findings:** Results show that the association between lack of recognition and poor mental health is weaker for women (ORs: 2.13 to 2.61) than for men (ORs: 2.29 to 3.39). Stratified analysis shows that this tendency varies sharply as a function of the sector gendered nature. **Discussion:** Findings suggest that while studying worker's health, scholars should take account of the gendered representations of the workplace.

## Transition into aged care: Highlighting the experience of older persons and their family members

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**Background:** Relocation into residential care is a significant life event that can decrease physical health and wellbeing, for older persons and their family members. It is complicated by navigation of environmental change and by conflicting emotions and responsibilities. **Method:** This qualitative study aimed to explore the experience of this transition from the perspective of older persons and their relatives. Interviews were undertaken with 14 residents from two aged-care facilities as well as 12 family members. **Findings:** Thematic analysis identified six themes in older persons: safety and security, rationalisation of loss, poor environmental mastery, communication difficulties, low autonomy, and lack of procedural knowledge. Similarly, six themes were identified for family members: communication difficulties, relationship conflict and consolidation, guilt and sadness, acceptance over time, relief, and lack of procedural knowledge. **Discussion:** It is concluded that orientation programs to strengthen positive aspects and protect against negative aspects of relocation into residential care are important to assist adjustment during this vulnerable period.

## Universality of the Challenge-Resilience-Resourcefulness Framework for coping with adversity

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**Background:** If a person withstands tension and evaluates the situation as a challenge that is worthy of deliberate efforts (resilience), there are possibilities for mobilization of cognitive and emotional resources to either find a creative solution or to accept an extended coping. The question is how universal is this conceptual framework with respect to dealing with life adversities and clinical problems. **Methods:** Philosophical and psychological formulations along with empirical research pertaining to family life, work, military and to serious physical and psycho-traumatic conditions, chronic pain and anxiety disorders will be reviewed together with usefulness of measures of resilience and resourcefulness for enhancing therapeutic outcomes and promoting further research. **Findings:** Research supports applicability of the C-R-R framework for dealing with life adversities and various clinical conditions and clinical usefulness of resilience and resourcefulness measures. **Discussion:** Life adversities and clinical problems may be effectively dealt with within the C-R-R framework.

## Biomedicine at home: Why medication adherence 'fails'

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**Background:** Considerable research demonstrates that adherence to medication is poor. Such research typically operates within a biomedical imperative that constructs drugs as pharmacological agents, rather than what they are in the hands of users – complex material

and symbolic objects within changing socialised spaces. This paper explores medication practices in the domestic setting. **Methods:** Multiple methods – household focus groups, mapping, and photo- and diary-elicitation interviews – were used within 55 households of diverse composition. **Findings:** Medications are both resisted and taken for a wide variety of reasons within homes. These may be accounted for by the fluid and contextual symbolic meanings of medications and the social relationships involved in their use. **Discussion:** Homes are places with particular structures and rhythms and socio-spatial routines that constitute everyday domestic life. Biomedical imperatives take on a new shape when they collide with domesticity, forcing us to reconsider the nature of medication-taking as a health behaviour.

### **Understanding Illness Risk Perceptions and Prevention Motivations: Improving Diabetes Prevention and Management in Malaysia**

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Health threat representations (identity, cause, timeline, consequences and control/cure) suggested by the Common Sense Model of self-regulation elicit emotional arousal. Both representations and emotional arousal guide decisions to engage in protective behavior such as exercise and low-fat diet. The study aims to explore the relationships of Type 2 diabetes risk perceptions with emotional arousal, and motivations of health behavior change in a Malaysian sample. Malaysian individuals ( $N = 120$ ) with elevated risks of Type 2 diabetes will be recruited from local health clinics. A questionnaire with measures of risk perceptions, emotional arousals (worry, anxiety, fear), intentions and lifestyle behaviours will be administered. Physiological measures such as body weight, blood glucose levels and waist circumference will also be assessed at Time 1 and at follow-up. Results will improve the understanding of diabetes risk and guide the development of more effective and targeted prevention programs and health communication messages. Current stage: Participants Recruitment.

### **Motivation for myopia prevention: a preliminary test of the trans-contextual model**

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**Background:** Near-work is one of the major antecedents of myopia. Therefore, this study aims to apply the trans-contextual model to understand how self-determined (SD) motivation of myopia prevention and autonomy support are associated with the SD-motivation and behaviour of reading at an optimal distance. **Methods:** Participants (108 undergraduate students) completed questionnaires of the study variables one month before we assessed their

voluntary reading distance (by an ultrasound-device) at a laboratory setting. We analysed the data by partial-least-square modeling. **Findings:** Consistent with the hypothesis, SD-motivation of myopia prevention was predicted positively by autonomy support from significant others (i.e., parents and optometrists), and it was the significant predictor of the SD-motivation of optimal-distance-reading. Participants who had higher levels of SD-motivation of optimal-distance-reading tended to read further away from the reading material. **Discussion:** The trans-contextual model may be a useful framework to explain the top-down motivational process of myopia prevention.

### Use of theory in interventions to promote medicine adherence in long-term conditions: A systematic review

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**Background:** Reviews of interventions to support adherence to medicine have concluded that evidence for their efficacy is mixed. The use of a theoretical framework has been posited to improve the efficacy and generalisability of interventions. This systematic review assessed the extent to which published reports of adherence interventions indicated that they were theory-based. **Methods:** A systematic search of 7 databases and a hand search of the references of relevant reviews and papers was conducted to identify randomised controlled trials of adherence interventions for patients with long-term conditions. Included studies were coded for theory use using a standardised instrument. **Findings:** The search retrieved 12,871 citations, of which 141 met inclusion criteria. Most reports (74.3%) made no reference to theory, and only 14.0% of interventions were explicitly theory-based. **Discussion:** Few adherence interventions fully operationalised a theoretical framework. Implications for the use of existing intervention techniques and adherence intervention development will be discussed.

### Distinct Patterns of Depression symptoms over the first year of dialysis: associations with illness perceptions

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**Background:** Depression in End-Stage Renal Disease (ESRD) patients is associated with adverse outcomes. The aims of this study were to examine the trajectories of depression symptoms over the first year of dialysis in relation to illness perceptions. **Methods:** A prospective study of incident ESRD patients ( $n = 160$ ) completed Beck Depression Inventory and Revised Illness perception Questionnaire soon after starting dialysis and again at 6 and 12 months. Latent class growth analysis was used to identify distinct trajectories of depression symptoms. **Findings:** Three groups of depression trajectories were identified; "low-reducing" ( $n = 99$ , 62%), "high-reducing" ( $n = 26$ , 16.2%) and "moderate-increasing" ( $n = 35$ , 21.8%). Low levels of distress overtime were associated with lower perceptions of illness identity,

perceived consequences, timeline beliefs and emotional factors related to ESRD. **Discussion:** Distinct patterns of depression symptoms over the first year of dialysis are associated with illness perceptions. Interventions designed to alter illness perceptions may have promise for alleviating psychological distress.

### **Psychological factors and physical activity in the treatment of patients with prostate cancer**

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A common form of treatment for advanced Prostate Cancer (PCa) is Androgen Deprivation Therapy (ADT). Despite its effectiveness, ADT can lead to psychological complications. The aim of this research was to investigate the impact of physical activity (PA) on the psychosocial well being of men with PCa treated with ADT. A questionnaire was administered to English speaking patients, aged between 40 and 80 years, who had received radiotherapy treatment for PCa between 9 and 30 months ago at a number of Australian hospitals, during 2010 and 2011. Patients ( $n=378$ ) were categorised into four treatment groups. Preliminary results ( $n=127$ ) indicated that 80% ( $n=116$ ) appeared to be meeting the National Physical Activity Guidelines of Australia. Although no significant differences were found, PA appeared to decrease and mood symptoms appeared to increase with length of time on ADT. These findings suggest the utility of PA in rehabilitation programs for men undergoing ADT.

### **Hands-off the cookie-jar: Success and failure in the self-regulation of eating behaviour**

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**Background:** In western affluent societies many people restrict their food intake in order to conform to the slender body ideal. Success in food restriction depends on complex self-regulatory processes, and often restriction results in self-regulatory failure and overeating. **Methods:** In 59 male and female university students, indicators of restrained and emotional eating, self-regulatory capacity (resting heart rate variability, HRV) and inhibitory performance in a modified stop-signal task (food cues) were assessed in individual experimental sessions. **Findings:** Multiple regressions with emotional eating as dependent variable showed a significant two-way interaction between restraint and HRV and a significant three-way interaction between restraint, HRV and food-specific stop signal reaction time. **Discussion:** Higher levels of dietary restraint do not lead to overeating per se. Nevertheless, the combination of high restraint scores, low self-regulatory capacity (HRV) and poor inhibitory performance is associated with emotional eating and thus self-regulatory failure.

## Promoting healthy dietary behaviour: the role of message framing and autonomy

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**Background:** Studies have shown that gain-framed (*vs.* loss-framed) messages are more effective when advocating low-risk health promotion behaviours. **Objective:** investigate whether message framing is moderated by autonomy. **Methods:** Study 1 – participants ( $N = 177$ ) completed a measure of autonomy and read either a gain- or loss-framed message about fruit and vegetable consumption and reported their level of consumption 7-days later. **Results:** Gain-framed messages only prompted fruit and vegetable consumption amongst those with high levels of autonomy. Study 2 – participants ( $N = 152$ ) completed autonomy, neutral, or heteronomy primes, and read gain-framed or loss-framed health messages. Snacking intentions and behaviour were recorded over the following 7-days. **Findings:** for autonomy-primed participants, the gain-framed message resulted in greater intentions to avoid high-calorie snacks, and lower self-reported snack consumption. The opposite was true for heteronomy-primed participants. **Discussion:** The research identifies a key role for autonomy in shaping recipients' responses to framed messages about diet.

## Womens' experience of living with endometriosis: an interpretative phenomenological analysis (IPA)

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**Background:** Endometriosis is a common yet relatively unknown chronic gynaecological condition, often characterised by pain, fatigue and infertility. To increase the understanding of what it means to live with the condition, the current study investigated the experiences of 13 women who have the illness. **Methods:** Semi structured interviews were conducted which were transcribed verbatim and analysed using IPA. **Findings:** Analysis revealed three key themes: control; changes in identity; and impact of medical care. Women revealed the condition controlled their lives; however they endeavoured to regain control. Identity and sense of self was challenged through changes to their ability to fulfil expected social roles whilst medical care had both an empowering and disempowering impact. **Discussion:** There is a general lack of knowledge, acceptance and support for women with endometriosis. Improving the quality of life of women with this often debilitating condition requires further understanding of their lived experiences.

## An evaluation of the Zippy's Friends programme in disadvantaged primary schools in Ireland

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This paper reports on the evaluation of Zippy's Friends, an international, evidence-based mental health promotion programme which was implemented in disadvantaged primary schools in Ireland. The aims of this study were to assess the immediate and longer-term impact of the programme and to examine the process of implementation and the relationship between this process and programme outcomes. This study employed a cluster randomised controlled design, with data collected from pupils and teachers before, during, after and at 12 months post-implementation. A total of 766 pupils from 44 disadvantaged schools were randomly assigned to control and intervention groups. Results indicated that the programme had a significant positive impact on the children's emotional literacy, hyperactivity and coping skills. The improvements in the intervention group's emotional literacy scores were maintained at 12 months follow-up. Key findings regarding programme implementation including programme fidelity, quality of programme implementation, factors that facilitated and hindered implementation and key recommendations regarding the role out and sustainability of Zippy's Friends in Ireland will be explored.

### **Goal disengagement predicts psychosocial outcomes following prosthetic rehabilitation**

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**Background:** This prospective cohort study investigated whether goal processes on admission to a prosthetic rehabilitation programme were predictive of psychosocial outcomes six weeks post-discharge. **Methods:** Seventy-five individuals with major lower limb amputations completed the Goal Facilitation Inventory, Goal Adjustment Scale, Beck Depression Inventory-II, and Trinity Amputation and Prosthesis Experience Scales-Revised psychosocial subscales at both timepoints. **Findings:** Hierarchical regression analyses were performed. The addition of goal disturbance, goal disengagement and goal re-engagement in Step 2 contributed significantly to the prediction of depression and adjustment to limitations, after controlling for baseline scores and sociodemographic/clinical variables in Step 1. Goal disengagement was a significant predictor: higher levels were associated with fewer depressive symptoms and greater adjustment to limitations. **Discussion:** Goal disengagement appears to influence psychosocial adjustment following lower limb amputation. Identifying individuals with difficulty disengaging from unattainable goals during rehabilitation and developing interventions to assist in this process may improve long-term psychosocial outcomes.

### **Cytokines: biomarkers or promoters of psychological symptoms in cancer patients**

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**Aims:** To discuss the possible role of cytokines either as biomarkers of psychological symptoms or as factors that may initiate or augment depression or posttraumatic symptoms. **Methods:** Longitudinal studies focusing on the associations of cytokines (pro-inflammatory and regulatory) with psychological symptoms in individuals experiencing negative or traumatic experiences. **Results:** Distress, depression and posttraumatic symptoms relate to

increased secretion of pro-inflammatory cytokines. Yet peripheral inflammation may affect neuro-chemical processes in the central nervous system, either by passing the brain regions lacking a blood-brain barrier or via the vagus. These associations will be addressed by describing studies on fatigue and depression in breast cancer patients. **Conclusions:** The possible use of serum levels of certain cytokines as potential biomarkers of individuals at risk for psychopathology following negative or traumatic experiences should be further assessed.

### Sources of social support, physical activity and sports participation in middle school children

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Social support has been identified as a correlate of physical activity (PA). The present study investigated whether differential sources (parents/guardian, teacher, friend) of social support predict participation in PA and sports participation across ethnicity, gender, and parental language use. Eighth grade students ( $n = 1544$ ) completed the School Physical Activity and Nutrition Questionnaire. Multiple linear regression analyses revealed social support was a significant predictor of PA ( $p < 0.01$ ) and sports participation ( $p < 0.01$ ) and the combination of the social support sources predicted higher levels of PA and sports participation. There were no differences in the relationship between social support sources and PA/sports participation based on gender and ethnicity, however there were differences by parental language use. Hispanic students who spoke Spanish reported lower levels of teacher support for PA and sports participation than Hispanic students who spoke English. Schools should consider targeting teachers to increase role modeling and encouragement for engagement in PA.

### Cognitive Attitudes, Affective Attitudes, Anticipated Affect and Blood Donation

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**Background:** Assessed effect of attitude variables (cognitive attitudes, affective attitude, anticipated negative affective reactions, anticipated positive affective reactions) and Theory of Planned Behavior on blood donation. **Methods:** Experienced blood donors ( $N = 1108$ ) completed questionnaires measuring all variables plus attitudinal ambivalence in relation to giving blood again in the next six months. Records assessed subsequent blood donation at six months. **Findings:** Confirmatory factor analysis supported a distinction between four attitude variables. Regression indicated that several attitude variables predicted intentions and behaviour. Attitudinal ambivalence moderated the effects of cognitive attitudes on intentions and the effects of anticipated negative affective reactions on both intentions and behavior. **Discussion:** The findings point to the value of considering different types of attitudes, and anticipated negative affective reaction in particular, for predicting health behaviors.

### **A question of time: Objective and subjective chronicity measures differentially predict adherence among asthmatics**

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**Background:** Asthma is a prevalent and costly chronic condition. Effective management requires adherence to medication and lifestyle recommendations. Although psychosocial characteristics predict adherence, their differential ability to predict medication *versus* lifestyle adherence and the importance of objective *versus* subjective chronicity measures remain unclear. **Methods:** A community-dwelling sample ( $N=100$ ) of asthmatic adults completed questionnaires assessing demographics, clinical variables (duration of diagnosis/preventive use), illness beliefs and medication perceptions, social desirability, and adherence. **Findings:** Stepwise linear regressions showed that greater preventer adherence was predicted by a longer diagnosis, medication necessity, and understanding, but negatively by subjective chronicity. Conversely, adherence to lifestyle recommendations was predicted by desirability, treatment efficacy and necessity beliefs, and emotional effects, but negatively by symptomology and duration of preventer use. **Discussion:** Psychological factors predict behavior better than clinical or demographic factors. Importantly, subjective and objective time parameters differentially predict adherence and may differentially index adaptation to chronic illness.

### **Determining the effectiveness of public health promotion approaches to the earthquake in Haiti**

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The present study evaluated the effectiveness of hygiene promotions in post-earthquake Haiti and explored which behavioral factors are most important in determining handwashing with soap. Data was collected cross-sectional by means of 811 structured interviews in camps and neighborhoods. Regression analysis proved that attitudes, norms and ability beliefs are most important in determining handwashing behavior. Regression and mediation analysis revealed six promotion activities with positive influence on handwashing behavior and five of the promotion activities were negatively related with handwashing. Further analysis showed that if positive and negative promotion activities were experienced, the effectiveness of the beneficial promotion activities was stronger. Some of the promotion activities which have been applied have a positive influence on behavior, some have a negative influence, while other promotion activities have no effect at all. Accordingly, some of the promotion activities should be seriously revised and others although successful have still the potential to be improved.

### **Eating practices of patients with type 1 diabetes following conversion to flexible intensive insulin therapy**

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**Background:** Do patients feel less restricted in their eating practices following conversion to flexible intensive insulin therapy (FIIT)? **Methods:** Dietary restriction was assessed quantitatively and qualitatively using diabetes-specific quality of life subscale administered four times over one year before and after FIIT ( $n=262$ ) and interviews analysed using an inductive, thematic approach ( $n=30$ ). **Findings:** Participants reported significantly less dietary restriction 3-months after FIIT conversion that was maintained at 6- and 12-months ( $F=26.7$  (3146)  $p < 0.0001$ ). Qualitative analysis showed most reported eating practices that were resistant to change because of habituation, a lack of interest in food and/or new burdens or restraints due to the implementation of FIIT. Some patients experienced a cognitive reconfiguration where they looked at and engaged with foodstuffs differently. **Conclusions:** Use of mixed methods revealed a complex picture of patients' responses to FIIT in terms of dietary practice. Consideration must be given to long-term support of patients on FIIT.

### Examination of self-efficacy beliefs for female exercise initiates involved in an eight-week aerobic program

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Specific types of self-efficacy (SE; task, scheduling, and coping) are differentially related to exercise behavior. Since exercising regularly can lead to physical and psychological health benefits, it is important to assess the impact of SE on long-term exercise engagement. This study examined changes in SE among female exercise initiates who participated in an eight week exercise program. Participants ( $N=57$ ,  $M_{\text{age}}=38.1$  years,  $M_{\text{BMI}}=31$ ) reported their SE at baseline, 5 weeks, post-intervention (8 weeks), and two follow-ups (18, 36 weeks). Analyses indicated an increase in all three types of SE at post intervention, but a subsequent decrease in task and scheduling SE at 36 week follow up. In addition, exercise behaviour at 36 week follow up was only significantly correlated with scheduling SE at post intervention. These results indicate specific time points in which targeting distinct types of SE might aid in the maintenance of exercise behaviour among initiates.

### Beliefs about medicine & illness and fear of recurrence in women with breast cancer

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**Background:** This study examined fear of recurrence (FoR) and its relation to illness and medication beliefs and reported side effects in women taking aromatase inhibitors as adjuvant endocrine therapy for early stage breast cancer. **Methods:** 153 post-menopausal women completed a postal survey. A regression analysis was used to test the strength of relations between FoR and illness and medication beliefs, treatment side effects, demographic factors and anxiety and depression. **Findings:** Only illness and medication beliefs predicted FoR.

Women with higher FoR appear to be balancing a tension between beliefs about the necessity of their medication against a belief that it may not prevent recurrence and are also more likely to report symptoms from breast cancer. **Discussion:** In addition to targeting the FoR that women experience, it may be worthwhile to address their illness and medication beliefs, and to help women differentiate everyday symptoms from those indicative of breast cancer.

### **Smokers' response to the breath-holding test under nicotine withdrawal conditions: preliminary results**

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**Background:** Cigarette smoking and panic seem specifically linked. Our aim was to study if nicotine withdrawal influences the panic-like response induced by the Breath Holding test (BH), thus explaining the relationship between smoking and panic. **Methods:** Cross-over design study on 40 current smokers who received nicotine/placebo and underwent the BH in two test days according to a randomized, double blind order. The response to the challenge was evaluated measuring: blood pressure, heart rate, subjective and objective anxiety. The means of physiological and psychological variables were compared via the *t*-test for dependent samples and the Wilcoxon test. **Results:** At pre-test, subjects under nicotine had significantly higher blood pressure and heart rate than under placebo. No statistically significant results were found for the effects of nicotine on the BH response. **Conclusions:** Nicotine withdrawal cannot be considered a possible factor triggering the onset of anxiety in current smokers.

### **After all, what goes right in marriage? The perspective of those living and those observing**

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This study aims to further the understanding of positive factors and stressors associated with marital life. Data collection relied on a qualitative, multidimensional and multi-informant approach. Nine focus group interviews were performed, with two groups ( $N=48$ ): married people and experts in the conjugality field. The focus groups' discussions were subjected to content analysis, supported by the QSR/NVivo9 software, and respecting the criteria of confidence in view of the credibility and validity of the research. Results show strong differences between the two groups on the more positive aspects of marital life: married people highlighted sharing/communication, while commitment to build a common life project, based on trust, respect and surrender are central topics for the experts. Management of differences/conflicts are the most difficult issue, for all groups; low resilience is the biggest risk factor. The data from this exploratory study are discussed taking into account the construction of a Marriage Education Program.

### Perspectives on the well-being of health professionals: eustress experiences and future oriented goals

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Considering the relevance of positive emotional experiences and life goals for well-being, this work aims to study these variables and their relationships in the workplace. Using a longitudinal design, with two data collection moments, we collected data on health professionals ( $N=362$  and  $N=195$ ) work experiences associated to eustress, professional goals for the future and symptoms of subjective well-being and professional engagement. Data analysis revealed consistency between the situations that generate eustress and the goals for the future, with situations/goals associated to feelings of professional efficiency, team work and service quality being the most frequently referred. Findings on the relationships between these variables and subjective well-being and engagement symptoms are discussed according to a Well-being Promotion perspective, aimed at these professionals.

### Loss experience and bereavement process: the role of a palliative care unit

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**Background:** Understand the influence exerted by experience of loss in life trajectory of an individual; explore factors that can contribute to successful adaptation to Bereavement; comprehend the role of Palliative Care team members in promoting successful adaptation to loss. **Method:** Semi-structured interviews were conducted with 5 bereaved individuals whose relatives died following Palliative Care interventions. The qualitative data analysis was oriented by the principles of grounded theory. **Findings:** Loss experience represented an unexpected change in participant's life's project, resulting in new life perspectives, spiritual development, increased sense of vulnerability, resilience in dealing with threatening situations. Helpfulness and self-efficacy perceptions in the care-giving role and spirituality have emerged as significant coping strategies throughout the loss experience. **Discussion:** Delayed referrals to Palliative Care and the inexistence of psychological interventions, either with relatives with a progressive advanced disease, either with informal caregivers, suggests its restrictive effect in promoting successful adaptation to loss.

### Libertarian paternalism as a way to increase use of Internet-delivered interventions

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**Background:** Internet-delivered interventions can effectively change health risk behaviors and their determinants, but the actual use of these interventions once they are accessed is very low. This study focuses on whether and how user control can help to increase use of a website about Hepatitis. **Methods:** Participants ( $N=668$ , 49.7% women, age:  $M=49$  years) were randomly assigned to a tunneled version of the website with less user control (libertarian paternalism), a version with high user control (freedom of choice to skip pages) or a control group. User perceptions and Hepatitis knowledge were assessed by validated measures and server registrations were used to assess website use (i.e., number of pages visited and time on website). **Findings:** Having less user control had a negative effect on users' perception of efficiency, but a positive effect on website use. **Discussion:** Future intervention websites should carefully guide visitors through the intervention.

### **Perceived stress, coping specificities, and self-appreciation among adolescents related to health behavioral factors**

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Our study identifies individual differences among adolescents as the level of perceived stress, self-esteem, coping modalities related to health behavioral factors as active life style, leisure time, body image, life satisfaction, psychosomatic symptoms. The methods were: Perceived Stress Scale, by Cohen and Williamson; Lazarus and Folkman Ways of Coping; Rosenberg Self-esteem Scale. Participants were 447 students from Romanian high schools, aged between 15–17 (average age 16 years) from X-th degree classes. Results presents significant correlations between level of self-appreciation, perceived stress, ways of coping and health behavioral factors. Lower self-appreciation shows significant relations with passive life style, life satisfaction level and inefficiency of adopted coping modalities. Self-appreciation is related significantly to higher level of stress and increased occurrence of psychosomatic symptoms. Also we obtained significant differences by gender along analyzed variables. We can conclude that level of stress and self-appreciation among adolescents plays a determining role in adopted health behavior.

### **Writing about infertility: exploring emotional narratives of the infertility experience**

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**Background:** The health benefits associated with writing about stressful life events have been widely reported (Frattaroli, 2006). The narratives produced by individuals participating in studies examining the effects of written emotional disclosure (WED) on well-being can provide a unique insight into their experience. This paper presents a qualitative analysis of the narratives produced within this context. **Methods:** Twenty-one women recruited from infertility support forums wrote about their thoughts and feelings relating to the experience of infertility for 15-minutes on three consecutive days. The narratives were analysed using thematic analysis (Braun & Clarke, 2006). **Findings:** Themes that will be discussed include: blame, resentment of others, the need for secrecy and associated isolation of the infertility experience. **Discussion:** The anonymous context of WED provides an opportunity for women

experiencing infertility to disclose their innermost thoughts and feelings without social constraints. An understanding of the infertility experience is vital for the development of psychological interventions in this population.

### **An effective single-session online sexual-health training for youth and their sexual network**

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**Background:** This study presents the development and effect evaluation of a theory-based online intervention to counteract cognitive and behavioural barriers to safe sex and STI screening of youth aged 16 to 24. **Methods:** The intervention – [www.vrijlekker.nl](http://www.vrijlekker.nl) – includes online training modules aimed at counteracting individual barriers and influencing participant's sexual network. The modules were tailored to match each user's own risk profile. An evaluation compared control *versus* intervention at 6 month follow-up. **Findings:** The evaluation included 1553 participants. The intervention group used condoms significantly more often with their most recent casual partner [OR = 1.82 95% CI 1.08–3.04] and/or with their steady partner [OR = 2.17 95% CI 1.48–3.18]. Over 1,70,000 unique persons used the intervention already during its first year, and today more than 200 new users continue to do so every week. **Discussion:** online tailored interventions that address personal and network barriers for sexual health can provide effective and cost-effective counselling to the mass.

### **Affective factors in donor registration choices: comparing an implicit attitude test with self-report measures**

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**Background:** Affective factors such as medical mistrust, anticipated regret and bodily integrity may be play an important role in donor registration choices. The present study combined these affective factors with an implicit attitude measure to understand donor registration attitudes and intentions. **Methods:** A convenience sample of young adults ( $n = 73$ , mean age = 25.8) completed an implicit attitude test (IAT) towards donor registration followed by an online survey regarding the aforementioned affective factors and the current status of their donor registration. Data were analysed with regression analysis and analysis of variance. **Findings:** Those who were registered as donor had significantly higher scores on attitudes, bodily integrity, and medical mistrust than those who were not registered: nonsignificant differences were found for anticipated regret and implicit attitudes towards donor registration. **Discussion:** Results from self-report cognitions towards donor registration do not mirror results from an IAT and anticipated regret. Implications for interventions are discussed.

### **Antecedents of exercise automaticity**

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**Background:** Understanding predictors of behavioural habits can inform habit promotion interventions. This study combined Theory of Planned Behaviour (TPB) concepts and action planning items to understand main and interactive effects of exercise habits. **Methods:** Undergraduate students ( $n=413$ , mean age=21.4, 73.3% females) completed baseline measures of exercise behaviour, TPB, and action planning towards engaging in sufficient exercise. Two weeks later, data on exercise habits were assessed. Data were analysed using regression analysis employing main and interaction effects. **Findings:** Exercise behaviour ( $\beta=0.22$ ), affective attitude ( $\beta=0.14$ ), perceived behavioural control (PBC) ( $\beta=0.43$ ), and planning when ( $\beta=0.18$ ) and where ( $\beta=0.18$ ) were significant predictors of exercise habits. Decomposition of the significant PBC  $\times$  planning when interaction ( $\beta=0.24$ ) showed that planning was a significant predictor of exercise habits at low ( $\beta=0.20$ ) and moderate ( $\beta=0.11$ ) levels of PBC, but not a high levels of PBC ( $\beta=0.06$ ). **Discussion:** Planning becomes less relevant for exercise habits when PBC increases.

### How Intention Drive Behavior: Self-Regulatory Processes Mediate the Intention-Behavior Relation for Adherence and Exercise Behaviors

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**Background:** Understanding the gap between people's intentions and behavior is important for health psychology. This study investigates whether self-regulatory processes mediate the intention-behavior relation for HIV-treatment adherence (Study 1) and vigorous exercise behavior (Study 2). **Methods:** In Study 1, questionnaire and electronically-monitored adherence data were collected at baseline and 3 months later. In Study 2, questionnaire data was collected at 3 time points 6-weeks apart. **Findings:** Complete data were obtained from 51 (Study 1) 499 (Study 2) participants. Intentions were good predictors of behavior ( $R^2=25-30\%$ ). Self-regulatory processes explained an additional 11% (Study 1) and 6% (Study 2) of variance in behavior. Mediation analyses revealed at least partial, and possibly full, mediation of the intention-behavior relation. **Discussion:** Self-regulatory processes may explain how intentions drive behavior. Future tests, using different health behaviors and experimental designs, could firmly establish whether self-regulatory processes complement intention-behavior theories and should become routine targets for interventions.

### Illness perceptions and illness behaviour predict symptom reporting in Chronic Fatigue Syndrome, a follow-up study

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**Objective:** Examine the impact of illness behaviour and illness perceptions at baseline (T1) on fatigue, medically unexplained physical symptoms (MUPS) and depression at one-year follow-up (T2) in Chronic Fatigue Syndrome (CFS). **Methods:** Members of a patient support group filled out questionnaires at T1 ( $n=214$ ) and T2 ( $n=144$ ). Hierarchical regression analyses

were conducted with age, gender, illness duration, illness perceptions (PHQ-brief) and illness behaviour at T1 (BRIQ) as predictors and fatigue (CIS-20), MUPS (PHQ-15) and depression (BSI) at T2 as outcomes. **Results:** Perceived control over CFS ( $p < 0.05$ ) and all-or-nothing behaviour ( $p < 0.01$ ) predicted fatigue. Perceived severity of CFS ( $p < 0.01$ ) and all-or-nothing behaviour ( $p < 0.05$ ) predicted MUPS. Depression was predicted by perceived emotional consequences of CFS ( $p < 0.001$ ) and all-or-nothing behaviour ( $p < 0.05$ ). **Conclusions:** All-or-nothing behaviour at baseline significantly predicts fatigue, somatic symptoms and depression one year later. For illness perceptions, there seems to be a differential pattern of associations depending upon the outcome.

### **It is better to suggest than to dictate behaviour change: following explicit instructions costs self-control**

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**Background:** Explicit behavioural instructions (e.g., you are not allowed to eat chocolate) might increase the attractiveness of the restricted behaviour compared to milder suggestions (e.g., it is better not to eat chocolate), thereby requiring more self-control to resist the 'forbidden' behaviour. Conversely, explicit instructions reduce the choice load from the individual compared to mild restrictions, thereby saving self-control. **Methods:** Two experiments tested these hypotheses in the food choice domain by comparing the effects of explicit and implicit instructions on self-control and actual food intake. **Results:** Study 1 showed that adhering to explicit instructions costs more self-control than following milder behavioural suggestions with the same content. Study 2 indicated that explicit instructions led to more indulgence and compensation than mild suggestions once the restrictions were no longer present. **Discussion:** The results provide evidence that it is better to mildly suggest a desired behaviour change rather than imposing strict rules about it.

### **Action planning and eHealth computer tailored methods**

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**Objective:** Action planning is an important strategy for changing health behaviors. We will discuss how action planning strategies can be used in computer tailored interventions. **Methods:** Study 1 was a RCT with three conditions: control group, the AP program and the AP+ program; respondents were daily smokers ( $N = 1812$ ). Furthermore, additional findings from other RCTs ( $N = 10,000$ ) will be discussed as well. **Findings:** At follow-up, abstinence rates in the control group, the AP program and the AP+ program were 33.6%, 44.4%, and 37.3%, respectively. The AP program ( $p < 0.05$ ), but not the AP+ was significantly more effective than the control group. Finally, the results suggest a dose-response relationship between abstinence and the number of program elements followed by the respondents. **Discussion:** Action planning strategies can be used effectively in CT methods, but more research is needed to assess which delivery methods are most effective.

### **Sexual risk-taking in gay men: response to social opportunities rather than demotivation or intentional risk-seeking**

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**Background:** Commentators often interpret ongoing HIV infections among gay men as a reflection of complacency. This study tests an alternative explanation, derived from the Prototype-Willingness model (PWM), underscoring the importance of risky opportunities and risk social images. **Methods:** A longitudinal study was conducted online among 400 gay men in The Netherlands. Participants completed baseline PWM measures, and reported sexual behaviors at baseline and 6 and 12 months follow-up. **Findings:** Behavioural willingness was significantly related to sexual risk-taking at each follow-up, controlling for intention and past behaviour. Also as expected, risk social images predicted behavioural willingness, but not intention, over and above attitude, subjective norm and self-efficacy. **Discussion:** This study provides strong support for PWM predictions in a test of sexual risk-taking in a sample of mature gay men. Findings in particular suggest that reactive social influence processes play a more important role than the often assumed demotivation or intentional risk-seeking.

### **Resilience as a mediator of the mental health impacts of HIV-related stigma**

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**Background:** People living with HIV (PLHIV) continue to experience stigma. This study documents adverse experiences associated with HIV stigma to strengthen understanding of its psychological effects. The study in particular assesses the role of psychological resilience in the mental health impacts of HIV stigma. **Methods:** An online survey was completed by 697 PLHIV in Australia. The survey used validated scales to measure experienced stigma, psychological resilience, distress, depression, anxiety and self-esteem and included single item measures of health satisfaction and quality of life. **Findings:** Multivariate logistic regression analyses show that all mental health and wellbeing outcomes are negatively associated with HIV stigma and positively associated with resilience. Resilience partly mediates associations between stigma and mental health outcomes. **Conclusion:** Findings underscore the role of psychological resilience in adverse impacts of HIV stigma. At least in part HIV stigma affects the mental health and wellbeing of PLHIV through its depletion of resilience.

### **Cognitive Behavioural Therapy for Functional Dysphonia: Development of a Complex Intervention**

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**Background:** Functional dysphonia, loss or alteration of voice in the absence of physical pathology, is the commonest presentation to speech and language therapists (SLTs). It is associated with increased levels of anxiety and depression and poor general health. Voice therapy delivered by SLTs improves voice but not these associated symptoms. The aim of this research programme was to develop an improved intervention. **Method:** A cognitive behavioural model of medically unexplained symptoms (MUS) was used as the theoretical basis for the intervention development process. Patient interviews and a small consecutive cohort study were used to develop and refine a CBT training intervention. This was then trialled in an external pilot patient randomised trial. Data were collected on professional and patient acceptability, feasibility and initial estimates of efficacy were made. **Results and conclusion:** It was acceptable and feasible for a SLT to deliver CBT and there was preliminary evidence of clinical effectiveness.

### Subjective well-being among women senior managers: A contextualised process involving activity in multiple social realms

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Based on a Critical perspective in Health Psychology, our study aims to analyse how daily activity in multiple social realms contributes under certain conditions to subjective well-being among women senior managers in Switzerland. To do so, we have created a qualitative longitudinal method focused on the description of « daily activity » and its meaning. Findings show that women develop contextualized supports in order to cope with demands and responsibilities stemming from work, family, social and personal realms. These may become either resources or obstacles to subjective well-being depending on their meaning among a global set of practices, unique for each participant. Our study provides interesting implications in order to complexify the concept of « health behaviours » widely used among cognitive and behavioural theories inspired on the biopsychosocial model. Furthermore, we suggest a critical definition of well-being as a subjective and changing process involving embodied, social and psychological dimensions.

### Experiencing infertility-psychological analysis of life crisis

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**Background:** The purpose of the study was a multi-faceted representation of experiences of women coping with infertility. **Methods:** A two-stage study was carried out: 1–qualitative – was based on hermeneutical dialogue complemented with the projective method; 2–quantitative – included 312 women undergoing infertility treatment; the author's Questionnaire of Psychological Costs in Infertility, the author's Scale of Bioethical Views and the Basic Hope Questionnaire (Trzebinski, Zieba) were used. **Findings:** In the first stage,

the crisis associated with experiencing infertility was determined as chronic life crisis and 16 types of psychological costs associated with this crisis were identified. In the second stage, the occurrence of all psychological costs was confirmed and their connections with basic hope, time and treatment methods were verified. No connections with the perception of social support and bioethical views were observed. **Discussion:** The results can be used in creating the strategies of psychological help for women undergoing infertility treatment.

### **Illness perceptions, coping and psychological distress among oesophageal cancer survivors and their carers**

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**Background:** To examine the extent to which illness perceptions and coping strategies explained the variance in psychological distress among oesophageal cancer survivors and their carers. **Methods:** Oesophageal cancer survivors and their carers were mailed a questionnaire booklet containing questions about medical and demographic variables, the Illness Perception Questionnaire – revised, the Cancer Coping Questionnaire, and the Hospital Anxiety and Depression Scale. Complete response were received from 317 dyads at two points in time. **Findings:** regression models indicated that the variables could explain 56% of the variance in anxiety and 54% of the variance in depression among patients. Some of the carers' illness perceptions were found to moderate the relationship between patients' perceptions and distress. **Discussion:** The findings suggest that cognitions-based interventions could be effective in minimising distress among oesophageal cancer survivors and their carers. These interventions could usefully be delivered at the level of the carer-patient dyad.

### **Type D or Not Type D: That's the Question**

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Acceptance by others is a central human concern, and the threat of negative reactions from others is a main source of psychosocial stress. People who are high in social inhibition have a tendency to inhibit emotion and behavior in social situations because of their increased vulnerability to social-evaluative threats. However, surprisingly little is known about this trait in the context of cardiovascular disease. About fifteen years ago, the distressed or Type D personality construct-defined by high scores on social inhibition and negative affectivity- was introduced to study more chronic, covert forms of psychosocial stress. Evidence shows that Type D may have an adverse impact on cardiac prognosis, self-management, adherence to treatment and patient-reported outcomes, but also that its effect may recede in older patients with heart failure and somatic comorbidities. These observations clearly indicate the need to take a more differentiated look at the health effect of Type D and other psychosocial risk factors.

## Does this stigma make me look fat? Weight, stigma and health behaviours

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**Background:** Health promotion campaigns are saturated with claims about the dire health consequences of being overweight, and the need for individuals to take control of, and monitor, their weight. Much less attention has been paid to how anti-fat health promotion campaigns may stigmatise overweight and obese people and in turn promote ill health and social exclusion. **Methods:** This paper will explore the discourse surrounding weight in health promotion campaigns and the mass media, and will review the research on weight stigma and health behaviours. **Findings:** Overweight and obese individuals are frequently depicted as unhealthy, undisciplined and unattractive in health promotion and other media. Experiencing weight stigma has negative consequences for health and health service use. **Discussion:** Without re-orienting health promotion to a Health At Every Size perspective, the current weight-centred approach to health will continue to be ineffective in creating sustained, population improvements in health behaviours, particularly among larger individuals.

## EMDR and self-affirmation prevent defensive processing in persuasion in different ways

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**Background:** Eye movement desensitization and reprocessing (EMDR) and a self-affirmation procedure are studied to understand and prevent defensive reactions with regard to a message advocating fruit and vegetable consumption. **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 stable moving dot on the computer screen. In addition, a self-affirmation procedure was applied in half of the participants. **Findings:** EMDR led to a significant increase in persuasion, when defensive reactions were present; when health value was moderate and when self-esteem was low. **Discussion:** These results support the idea that the defensive reactions with regard to health messages take place in the working memory. The difference in effects of EMDR and self-affirmation further increases our insight into the psychology of defensiveness.

## “What suits one person doesn’t suit another”: clinicians’ treatment beliefs in low back pain

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Clinical guidelines recommend several treatment options for low back pain (LBP), including medication, exercise, manual therapy, and acupuncture. We investigated, using qualitative methods, how clinicians think about these treatments and make clinical decisions in relation to LBP. We conducted semi-structured interviews with 40 clinicians from public and private sector conventional and complementary clinics (24 women, aged 25–63 years, clinical experience 2–40 years). We analysed data inductively to identify themes. For clinicians, treating LBP requires flexibility and individualization. Clinicians discussed a complex process of matching individual patients (perceived in terms of their medical history, clinical presentation, personal preferences, concerns, and psychosocial context) to treatments (viewed in terms of mechanisms of action, efficacy, risks, and counterindications). Treatment decisions were made within the context of clinical practice principles, professional identities and boundaries, and local organisational constraints. Achieving concordance between clinicians' and patients' illness perceptions and treatment preferences would need to consider these processes.

### **Mind the gap: Acceptance and Commitment Therapy for preventing ill-health among future nurses – a RCT**

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**Background:** The prevalence of stress symptoms among nursing students increase across nursing education. This increase predicts poorer student outcomes, subsequent work stress and occupational outcomes. To this background a preventive Acceptance and Commitment Therapy (ACT) group intervention was developed. This study aimed to evaluate its effects. **Methods:** 113 nursing students in a Swedish university were randomized to ACT intervention or mentoring activity (TAU) during their first of six semesters. Self reports including the Perceived Stress Scale (PSS) and the Scale of Work Engagement and Burnout (SWEBO) were conducted at baseline, post treatment and three months later. **Findings:** Analyses on baseline- and post intervention data showed decreased stress and burnout symptoms as well as increased work engagement for treatment completers as compared to controls. All effects were significant and of medium sizes. **Discussion:** Preventing stress among nursing students may enhance health and resilience in future nurses, benefiting both individual and society.

### **Post bariatric surgery eating behaviours: the influence of subjective norming and social context**

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**Background:** Bariatric surgery is an efficient weight reduction strategy, yet not all patients maintain weight loss. This study examines the role of subjective norming and social context in post bariatric surgery eating behaviours. **Methods:** Patients ( $N = 45$ ) who were 8 to 14 months post-surgery completed measures of eating behaviours, perceived social support and attitudes toward bariatric surgery. A patient confidant completed measures of bariatric surgery attitudes/beliefs. Regression analyses were used to examine influences on eating behaviours. **Findings:** The results show that consistently healthy eating behaviours are more likely if PSS is high and more of the social network are aware of the surgery, however this was mediated by

the patients perceptions of social network attitudes. Confidant knowledge about bariatric surgery was also significantly associated with patients eating behaviours. **Discussion:** The results are interpreted with particular reference to subjective norms and the role of social context in post-surgical eating behaviours.

### **The CHARMS Study: Predictors of sexual dysfunction among patients post hospital cardiac rehabilitation**

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**Background:** To document sexual dysfunction among patients who recently completed hospital cardiac rehabilitation and explore which demographic, clinical and psychological variables predict dysfunction. **Method:** Telephone survey with 382 patients who had attended cardiac rehabilitation within previous two-years. Logistic regression analysis identified independent predictors of sexual dysfunction. **Findings:** Among sexually active respondents, 45.5% reported some sexual problem. Logistic regression analysis identified HADS anxiety scale (OR 1.093; CI 1.033–1.158) and gender (male, OR 5.5; CI 2.688–11.631) as independent predictors of sexual dysfunction. Men with erectile dysfunction were more likely than those without erectile dysfunction to report higher levels of anxiety ( $t=3.13$ ,  $p < 0.05$ ) and depression ( $t=2.73$ ,  $p < 0.05$ ). Among women, high levels of sexual inactivity were reported (66% sexually inactive). **Discussion:** Men and women with coronary artery disease are at increased risk of sexual problems and sexual inactivity. Anxiety and depression should be addressed by cardiac reahilitators as part of sexual counselling.

### **Developing and testing an intervention for obese adults based on effective behaviour change techniques**

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**Background:** Multiple weight loss interventions exist, but for most the intervention development process remains unclear and overall effects on weight and behaviour are heterogeneous. **Methods:** Multistudy intervention development programme for obese adults, with additional risk factors for disease, including (a) systematic review to identify behaviour change techniques (BCTs) associated with more successful interventions (b) intervention development based on review evidence (c) open-pilot with ongoing participant feedback to optimise the intervention (d) randomised controlled pilot trial to assess acceptability and feasibility of procedures. **Findings:** An intervention developed based on identified BCTs was optimised using participant feedback and found to be acceptable to participants and facilitator. A randomised pilot trial found intervention procedures to be acceptable and feasible, but attrition rates were unacceptably high due to many participants dropping out prior to the first session. **Discussion:** BCT based intervention development can facilitate the systematic and transparent development of evidence-based behaviour change interventions.

## Depression and Resiliency in “At-Risk” Young People

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**Background:** “At-risk” youth are more vulnerable to experience mental health difficulties such as depression. However, not all young people at-risk will experience depression and there may be certain psycho-social risk and protective factors that buffer a young person from experiencing depression. The present study examined socio-demographic risk factors (e.g., family status, family size, parents’ education, academic position, previously seen a mental health professional) associated with depression and tested the mediating effect of psycho-social factors (e.g., self-esteem, avoidant coping, satisfaction with life, resilience, social support) on depression. **Methods:** A cross-sectional study was conducted with 6085 adolescents in 72 randomly selected post-primary schools in Ireland. Participants ranged in age from 12–19 years ( $M = 14.94$ ,  $SD = 1.63$ ) and 51.0% were female. Participants completed the My World Survey (MWS), which contains a battery of psychometrically reliable instruments. Depression was measured with the DASS-21 (Lovibond & Lovibond, 1995). **Results:** Data were analysed using mediational analyses (Preacher & Hayes, 2008). Using the DASS-21 cut-offs, 30% of the sample were classified as outside of the normal range for depression. Results from chi-square analyses identified demographic risk variables that were significantly associated with depression. A Risk Index was developed from these findings and used to predict depression in the sample. Mediation analysis revealed that the Risk Index has a significant direct effect on depression ( $\beta = 0.99$ ,  $t = 11.02$ ,  $p < 0.001$ ). This effect was reduced when controlling for mediators but remained significant ( $\beta = 0.17$ ,  $t = 2.45$ ,  $p < 0.05$ ). Higher levels of esteem, low avoidant coping, a higher number of people to talk to, higher satisfaction with life, optimism, low acting out and low alcohol risk behaviour buffered against depression. **Discussion:** Esteem, low avoidant coping, satisfaction with life, and a greater number of people to talk to are key resilience factors that need to be incorporated into preventative strategies for depression in at-risk youth.

## Social sharing of sperm donation: the secrecy-disclosure issue for recipient couples

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**Background:** To face with the disclosure issue of sperm donation, parents have to deal with this personal experience of overcoming sterility, and its socially shared images. This French national study aims to grasp this process through the representational components mobilised and their organisation. **Methods:** 470 heterosexual recipient couple members completed a questionnaire matching relevant themes: family and its normative dimension, representation of the donor and donation, parenthood and secrecy. **Findings:** Results were consistent with those from similar international studies in terms of gendered differences in renegotiating the family model, a certain depersonalization of the anonymous donor and the social sharing to others. The high intention to disclose to offspring was though in conflict with international findings where secrecy mostly occurs, whatever the legal framework. **Discussion:** Findings, to be completed by qualitative data, show how the intentional disclosure to offspring anchors in a complex field of positions including secrecy but also anonymity and the ambivalent representation of the donor.

## Anhedonia and feeling slowed predict 8-year mortality in persons with acute coronary syndrome

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**Background:** Both depression and anxiety and been associated with poor prognosis in patients with patients with acute coronary syndrome (ACS). However, certain symptoms, and how they are measured, may be more important than others. We investigated 3 different scales to determine their predictive validity in a national sample. **Methods:** Patients with ACS ( $N = 598$ ) completed either the Hospital Anxiety and Depression Scale or the Beck Depression Inventory-Fast Scale (BDI-FS). Their all-cause mortality status was assessed at 8 years. **Findings:** Mortality rate was 121/598. Cox proportional hazards modelling showed that anhedonia and feeling slowed (HADS depression subscale) was predictive of mortality (Hazard Ratio [HR] = 2.57, 95% CI 1.4–4.6), but depression (BDI-FS depressed cases – HR = 0.8, 95% CI 0.4–1.3) and anxiety (HADS anxiety subscale – HR = 1.07, 95% CI 0.56–2.0) were not. **Discussion:** Anhedonia and feeling slowed predicted all-cause mortality over 8 years in patients with ACS. Other depressive and anxiety symptoms did not.

## A web-based intervention for HIV patients in adjunct to medical treatment: A randomized clinical trial

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**Objective:** Test efficacy of a web-based intervention („Avanti”) on depression and well-being among hiv patients on antiretroviral therapy (ART). **Methods:** A two-armed randomized controlled trial with study-end at three months. Sixty-seven subjects recruited at an outpatient clinic. Outcomes were Center for Epidemiological Studies-Depression Scale, Satisfaction with Life Scale, and Positive and Negative Affect Schedule. **Results:** Responders decreased in depressive symptoms ( $z = -2.55$ ,  $p = 0.01$ ) and negative affect ( $z = -2.53$ ,  $p = 0.01$ ), and increased in life satisfaction ( $z = -2.70$ ,  $p < 0.01$ ) and overall mood ( $z = -2.46$ ,  $p = 0.01$ ), as compared to non-responders. Time since hiv seropositive test moderated the effect on life satisfaction and positive affect, and time since ART start moderated the effect on life satisfaction. Similar analyses were non-significant for the control group. **Discussion:** Results indicate the importance of patient follow-up after medical treatment. Timing appears to be important for efficacy. **Conclusion:** The web-based intervention appears to have effect on psychological health in hiv patients.

## Eating disturbances in childhood and early adolescence: Screening in the general population

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**Objective:** The present study sought to develop and evaluate a brief self-report screening questionnaire for avoidance of food or restricted food intake in middle childhood. **Methods:** Initial items of the Eating Disturbances in Childhood – Questionnaire (EDCh-Q) were generated through a literature review. The screening measure was administered to a total of 558 children aged 8–13 years from the general population. **Results:** The psychometric properties of the EDCh-Q showed moderate to good values. Item characteristics were favourable. The factor structure of the EDCh-Q was partially reproduced. Distribution analyses revealed that disordered eating behaviours occurred more often in girls than in boys, with psychopathology increasing with age. Compared to underweight or normal weight participants, overweight children had a significantly higher risk for eating disturbances. **Discussion:** This study demonstrates demographic variations in symptomatology, and reveals good psychometric properties. A larger study is warranted to validate the EDCh-Q in community and clinical samples.

### **Auditory health persuasion: the influence of intonation as a voice characteristic**

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In the context of auditory health persuasion, information is communicated by voice only. Consequently, characteristics of the voice, such as voice intonation, will become very salient. Two experimental studies addressed the influence of intonation on the intention to eat more fruit and vegetables. Voice intonation is manipulated by low, average and high levels of intonation in collaboration with a professional recording studio. In the first study ( $N = 43$ ), the intention to eat more healthily was significantly lower after listening to the message with a high level of intonation. The second study ( $N = 143$ ) addressed the mechanisms behind this finding by adding self-affirmation. It is found that self-affirmation reduced the defensive response after listening to a high level of intonation. In conclusion, a high level of intonation emphasized the threatening aspects of health information. It is recommended to take into account the auditory mode of communication in health education.

### **Intranasal oxytocin impedes the ability to ignore task-irrelevant facial expressions of sadness in students with depressive symptoms**

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**Background:** Changes in social information processing have been proposed as one potential mechanism of how oxytocin promotes prosocial behavior. **Methods:** In a randomized placebo-controlled study, we examined the influence of intranasal oxytocin and placebo on the interference control component of inhibition (i.e. ability to ignore task-irrelevant information) in 102 participants using a negative affective priming task with sad, angry, and happy faces. **Findings:** Although no main effect of drug administration on inhibition was observed, a robust Drug  $\times$  Depressive symptom interaction predicted the inhibition of sad faces. Relative to placebo, participants with high depression scores who were administered oxytocin were unable to inhibit the processing of sad faces. **Discussion:** The present findings highlight how oxytocin may have negative effects in vulnerable populations. Difficulties inhibiting mood-congruent stimuli following oxytocin administration may represent a premorbid neurobiological vulnerability in young adults at risk for major depression and other psychopathology.

## Salutogenesis and Resilience – two sides of the same coin?

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**Background:** Conceptual clarification of salutogenesis (Antonovsky 1987) and resilience – what is common and different? **Methods:** A systematic research synthesis 1992–2010 based on about 1300 papers on Sense of Coherence. **Findings:** Similarities and differences emerge. Salutogenesis stems from stress research exploring why some people stay healthy despite major life events and adversities while resilience research refer to risk of negative health development. Both concepts emphasize resources: the salutogenic framework talks about Generalized Resistance Resources while resilience uses protective factors. The two concepts differ when it comes to the adjustment process where resilience concept always is connected with risk factors. **Discussion:** The new knowledge derived from the research synthesis on the SOC reveal promising results indicating the usefulness in health promotion research, expanding the knowledge from resilience research on risks to salutogenic research on resources. While salutogenesis has its focus on health promotion resilience is more connected to health protection.

## Two randomized controlled trials: Promoting influenza vaccination behavior in the workplace – Individual and social factors

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**Background:** Two randomized controlled trials were conducted to enhance participation in influenza vaccination at the workplace. Study 1 was based on the Health Action Process Approach; employees received one of two messages: one aiming at motivating employees, the other assisting self-regulation (self-efficacy, planning). In Study 2; social norms were additionally addressed. **Methods:** Participants were surveyed five months apart (Study 1  $N=851$ ; Study 2:  $N=287$ ). Social cognitive variables were assessed (intention, planning, self-efficacy, injunctive and deductive norm, behavior). Multivariate analyses, analyses of variance, mediation analyses were conducted. **Findings:** In Study 1, the intervention group assisting self-regulation yielded an indirect effect only via planning (not self-efficacy) on behavior ( $p \leq 0.001$ ). In Study 2, groups differed regarding injunctive norm and planning which were associated with intention ( $p < 0.05$ ). **Discussion:** Study 1 highlighted the importance of volitional factors for vaccination behavior beyond motivational variables. Study 2 pointed to social influences on vaccination intention.

## Economic evaluation studies in health promotion and public health: accept the challenge

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The final presentation gives an overview of the current state of art of economic evaluation studies in health promotion and public health. Methods for economic evaluation have predominantly been developed for the assessment of well-defined medical technologies in the curative sector. Adopting this framework of economic evaluations to the field of health promotion and public health induces a range of problems. The problems relate, amongst others, to the impracticability of randomization, limitations of the QALY paradigm, specificity of the intervention and comparator, costs and benefits that spill over to other sectors, shared decision making, plural time horizons of stakeholders, the sustainability of the interventions, and equity considerations. As a result, for the field of health promotion and public health, additional methods and knowledge are needed. This contribution will discuss the strengths and weaknesses and the future directions for economic evaluation in the field of health promotion and public health.

### Testing fitness, heart health and calorific expenditure themes to encourage stair climbing at work

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**Background:** Despite consistent success with stair climbing interventions for public access settings, effective interventions for workplaces have proved elusive (Eves, 2010). This study tested three different health promotion themes in workplaces. **Methods:** Following positive endorsement in focus groups, posters encouraging stair climbing for enhanced fitness, heart health and calorific expenditure were tested. Three weeks of baseline was followed by three weeks of each campaign theme in a counter balanced design in six workplaces. Stair and lift choices at the ground floor for ascent ( $n = 2,06,783$ ) and descent ( $n = 1,74,499$ ) from 7am to 6pm were measured with automated counters. **Findings:** While each theme increased stair descent ( $p < 0.001$ ), there were no consistent effects on the target behaviour of stair climbing. **Discussion:** Established pedestrian habits of behavioural choice in the workplace and the uncontrollable factors of building occupancy and minute-by-minute pedestrian traffic are major barriers to success with stair climbing interventions.

### Disruption of escalator habits by coloured and art backgrounds

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**Background:** These studies tested whether art or a coloured background can disrupt escalator habits after pairing with a heart-health promotion message. **Methods:** In interrupted time-series designs, observers coded stairs and escalator choices (total  $n = 2,02,079$ ). Design alone phases, art or coloured background, were compared with design plus heart-health message phases. **Findings:** In Barcelona and Coventry, designs alone had no effect whereas addition of the heart-health message reduced escalator choice. In four subsequent studies, a design plus heart-health message that reduced escalator choice preceded a design alone phase. The background behind the text of the intervention was reintroduced 3–4 weeks after intervention removal. A coloured background was ineffective in Birmingham (shopping-mall) but disrupted escalator habits in Barcelona (station). An art background, however, consistently disrupted escalator choice for stations in Barcelona (twice) and Leiden. **Conclusion:** Habitual

behaviour can be disrupted by environmental cues after the cues have been paired with health promotion messages.

### Health Psychology and Behavioural Economics and Integrative Perspective

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**Background:** Health psychology (HP) explores many of the same problems as behavioural economics. For example (1) altruism (increasing blood/organ donation), (2) free-riding (reduced vaccination uptake) and (3) risk aversion/seeking (medical errors) among others. Statistically, HP would benefit from utilizing econometric models to perform ITT analysis, show causality and deal with zero-inflated data – all common in HP. This paper illustrates how HP can benefit theoretically, analytically and politically from behavioural economics. **Methods:** Five ( $N=960$ ) studies examining economic games in blood donors, incentives on medical decision making errors and free-riding in vaccination uptake are used to illustrate the HP-behavioural economic link. The use of econometric models (e.g., instrumental regression) is illustrated. **Findings:** Blood donors are motivated by warm-glow, incentives reduce medical errors in experts and free-riding predicts vaccination uptake. Statistical errors occur when OLS regression is used for zero-inflated data. **Discussion:** Recommendations for a HP-behavioural economics agenda are presented.

### Pediatric surgery: the relevance of preoperative preparation

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During 2009, about 179.646 outpatient surgeries were performed in Portugal. This project involves the development of some preoperative materials. The main goal is examining the effectiveness of those on cognitive, affective and physiological responses. Our sample is composed by 105 children (8–12 years), scheduled for minor surgery, and their parents. The following instruments were used: CSWQ (Quiles et al., 1999); SAM (Bradley & Lang, 1994); EAS-Temperament (Buss & Plomin, 1984); Wong-Baker Faces (Wong & Baker, 1988); SCSII (Ryan-Wenger, 1990). The participants were randomly assigned to one of the seven conditions and their responses are evaluated in preoperative (prior and after intervention) and postoperative periods. The results show significant and positive effects of preoperative preparation intervention on children's worries about surgery: children in educative groups reported less worries, compared to those in control groups. In sum, giving information about hospital's routines and familiarizing children with them, help to minimize negative effects of surgery.

### Induced temporal context and health communication: From temporal perspective to temporal horizon

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**Background:** Temporal framing of health promotion messages can influence their effectiveness, depending on their congruence with individuals' time perspective. Aim: To examine whether inducing a situationally-induced temporal context would moderate the persuasive impact of the congruency between a temporally framed message and individuals' time perspective. **Method:** Study was designed to (1) collect individuals time orientations (CFC scale); (2) induce experimentally a future (*vs.* present) oriented temporal context by presenting the objectives of the study as long-term (*vs.* short term) focused; (3) present a future-framed health promotion message. Participants were 104 undergraduate psychology students randomly assigned to future, present or non-induction control condition. **Results:** Findings offer evidence for the very powerful impact of the situationally induced temporal context, beyond the simple effect of message framing. Hence, a future-oriented message became highly persuasive for present-oriented individuals in a present-oriented context. Findings also suggest applications through the induction of a temporal context before mass-media health campaigns.

### Are socio-demographic variables determinants of misconceptions about heart disease in healthy individuals? A pilot study

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**Background:** The aim of the present study is to investigate the level of cardiac misconceptions in a community sample of healthy individuals. **Methods:** The 536 participants (both sexes) completed a self-administered questionnaire which included measures about cardiac misconceptions, personality traits (negative and positive affectivity) and demographic information. **Findings:** The results indicated that younger participants had a higher level of cardiac misconceptions than older ones. There were also significant differences in cardiac misconceptions about angina according to the level of education. Also, women had higher levels of cardiac misconceptions about heart disease in general, than men. Personality traits were independent of the level of cardiac misconceptions, as well as of health behaviours such as smoking and exercise. **Discussion:** The results are suggestive of how information about cardiac misconceptions should be addressed across the life-span in order to target population groups where the delivery of correct information is particularly necessary.

### Typology of adolescent psychological functioning based on socio-demographics and psycho-social characteristics

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This study develops a typology of psychological functioning in Irish adolescents, based on sociodemographic and psychosocial characteristics. A cross-sectional study was conducted with 6085 adolescents aged 12–19 years ( $M = 14.94$ ,  $SD = 1.63$ ) in 72 post-primary schools in Ireland. Participants completed a battery of instruments assessing a range of risk and protective factors of mental health (e.g., depression, self-esteem, life satisfaction). A K-means cluster analysis yielded 3 distinct clusters: High Psychological Functioning; Moderate Psychological Functioning; and Poor Psychological Functioning. The clusters differed on

gender, school year, socioeconomic status (SES), having access to an adult, enjoyment of family life, having a parent with a mental health problem, and feeling angry. The cluster 'Poor Psychological Functioning' was more closely associated with females, 6th year in school, low SES, not enjoying family life, not having access to an adult, having a parent with a mental health problem and feeling angry a lot. Interventions targeted to different typologies of adolescent psychological functioning may be needed.

### **Computer-tailored Booster Sessions Help Maintain Self-regulation, Exercise, and Habit Strength**

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**Objective:** After rehabilitation, computer-tailored booster sessions are supposed to help maintain physical exercise, self-regulation, and habit strength. Mechanisms are examined by which behavior and habit strength are maintained. **Methods:** Rehabilitation patients ( $N = 554$ ) were allocated to either a self-regulation intervention or an online questionnaire only. Booster sessions via telephone interviews for the intervention group followed at six weeks and six months. Tailoring was based on characteristics of the patients, such as plans. 12 months after discharge, exercise, self-regulatory resources, and habit were reassessed. **Findings:** The boosters prevented a decline in planning, self-efficacy, behavior, and habit strength. Changes in exercise were mediated by changes in planning and self-efficacy. Changes in habit strength were sequentially mediated by planning and behavior. **Discussion:** After rehabilitation, computer-tailored booster sessions may help maintain intervention effects. Declines in exercise may be prevented by planning and self-efficacy. Habits may develop as a result of planning and frequent behavior enactment.

### **Enduring barriers to HIV testing amongst gay men: Changes between 2000 and 2010**

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**Background:** Developing effective interventions which increase HIV testing amongst gay men is a priority across Europe. Understanding enduring barriers to testing is thus critical. **Methods:** Cross sectional surveys were conducted within the commercial gay scene in Scotland using tried and tested ways of recruiting gay men through time and location sampling ( $n = 1382$ ) in 2000 and 2010. **Results:** Significant changes in a range of HIV testing behaviours were observed between time points (e.g. rates of ever testing and recency of testing). At the community level, some significant changes in perceptions of barriers to testing were found ( $p < 0.001$ ). Multinomial logistic regression showed that fear of a positive test result remained a key enduring barrier to HIV testing when controlling for time and the effects of all other variables ( $p < 0.001$ ). **Discussion:** These findings suggest the potential utility of designing and evaluating interventions which attend to both the biomedical and the psychosocial aspects of HIV testing.

### Can a walking intervention which has previously demonstrated efficacy be successfully delivered in primary care?

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**Background:** An intervention to increase walking based on increasing self-efficacy and planning has produced large effects in two previous studies. The present study tested whether the intervention delivered in primary care was more effective than information provision. **Methods:** Cluster RCT with 21 practice nurses (PNs)/ healthcare assistants (HCAs) delivering either the intervention or information provision to 315 of their own patients. Follow-up for 6 months, using pedometers and Theory of Planned Behaviour measures. Supplemented by interviews with sub-sample of 8 PNs/HCAs and 12 patients. **Results:** No differences found between groups in walking from immediately post-intervention to 6 months later. Qualitative data suggest a lack of fidelity, with PNs/HCAs reporting difficulty fitting in the intervention alongside routine work, and patients reporting lack of understanding of some intervention components. **Conclusion:** This study illuminates problems in translating an intervention with proven efficacy into routine delivery by healthcare staff within the current health service.

### Integrating Motivational Interviewing in online computer tailoring: should we use open or closed questions?

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**Background:** The present study assessed whether the questions in an online computer tailored Motivational Interviewing (MI) based physical activity (PA) intervention should be open or closed, in order to lead to optimal results in terms of regular PA motivation and appreciation. **Methods:** An experiment was conducted among 466 Dutch adults, comparing three interventions based on MI principles, enclosing: (1) only open questions, (2) only closed questions, (3) combined open and closed questions. Measurements included (MI-related determinants of) PA and process variables, measured at baseline, directly following the intervention and 1 month post intervention. **Results:** Directly after the intervention, participants in the combined questions intervention showed significantly more commitment to regular PA than those receiving the closed questions intervention. The combined questions intervention was more appreciated than the other interventions. **Discussion:** When integrating MI in computer tailoring, a combination of open and closed questions seems most promising.

### Risk of myocardial infarction in a population of men with low levels of social support

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**Background:** To study influence social support on the risk myocardial infarction (MI) in population men 25–64 years old. **Methods:** within the program MONICA – MOPSY in 1988, 1994 representative sample of men at the age of 25–64 years has been surveyed. We used test Berkman-Syme. The period of supervision was 20 years. We counted as outcome all cases of MI which have arisen for the first time. **Findings:** risk of myocardial infarction in men with low index social support and index social network was higher in 5 years to 2–2.35 times in 10 years is 2.17–2.6 times in 15 years is 2.6–2.9 times in 20 years from start of screening remained a trend of increasing risk. **Discussion:** The received results show, that in general population's men of 25–64 years old risk is connected by MI with low level of social support.

### **Not only bad is stronger than good: Impact of prior expectancies on health risk feedback**

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**Background:** Negative health risk feedback is typically received more critically than positive feedback. In the present experiment it was tested whether this defensive asymmetry in acceptance is modulated by prior expectancies indicating adaptive rather than self-defensive feedback processing. **Methods:** 95 participants received either positive or negative (fictitious) feedback about their personal risk for developing a Chronic Fatigue Syndrome after their feedback expectancy was assessed. **Findings:** Feedback reactions showed asymmetrical acceptance in dependence of the feedback valence and prior expectancies. The main effect of feedback valence was moderated by prior expectancies showing that good news was sceptically received when it was unexpected ( $F(2, 87) = 3.61, p = 0.031$ ). **Discussion:** A more comprehensive assessment of responses to health feedback suggests a rather adaptive than self-defensive processing.

### **Does intrinsic motivation strengthen physical activity habit? An exploratory study of self-determination and habit strength**

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**Background:** Physical activity (PA) is better maintained when driven by self-determined motivation than external demands. This might reflect a tendency for internally-motivated activity to become more strongly habitual. We hypothesised that internal motivation would be associated with greater habit-formation, as indexed by a stronger interaction with past behaviour. **Methods:** Using a cross-sectional survey, 192 adults completed measures of PA habit strength, intention, and past behaviour, and each of five motivation types (amotivation, external, introjected, identified, and intrinsic motivation). Five regression models were run to model PA habit strength on each motivation type and interactions with past behaviour, controlling for intention. **Findings:** As predicted, past behaviour had a stronger association with habit strength in intrinsically-motivated participants ( $\beta = 0.10, p = 0.03$ ). Interactions with other motivation types were not significant. **Discussion:** Habits may be more likely to develop for behaviours that provide inherent satisfaction than those performed to receive rewards or avoid punishments.

### Effectiveness of a CBT-based self-help program for people with rheumatism and depressive symptoms

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**Background:** An evidence-based low-cost cognitive-behavioral self-help program was developed for people with rheumatism suffering from depressive symptoms. The aim was to examine whether this program was effective in improving depressed mood and other psychological problems in the target group. The effectiveness was tested in a randomized controlled trial. **Methods:** Participants ( $N=82$ ) were recruited from patient organization websites and randomly allocated to either the intervention ( $N=41$ ) or the waiting list control condition (WLC;  $N=41$ ). Participants completed pretest, posttest, and follow-up questionnaires through a secured website. Measures of Depression, Anxiety and Positive growth were included. Repeated measures (group  $\times$  time) MANCOVA's were performed. **Findings:** Participants of the intervention group improved significantly compared to people of the WLC on measures of depression, anxiety, and positive growth. **Discussion:** The results suggest that an evidence-based, low-cost self-help program is effective in improving psychological health in people living with rheumatism.

### The centering of the professional caregiver. Physicians and priests taking the diabetic patients' scene

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The fragmented health, social and psychological care of persons suffering of diabetes in Romania creates an empty space viewed as an opportunity to recruit the voices of the caregivers. This paper presents the voices of 9 physicians, specialists in diabetes and 8 priests directly involved in caring for the suffering person using a focus group format for data collection. The interpretations arise from the interpretative phenomenological analysis (IPA; Smith, 1996) and are related to and contrasted to the Chronic Care Model. Each professional carer – physicians and priests – describes their actions as the most relevant. He centres himself on his own expertise and simultaneously the expertise and practices decentres the patient and limits interactions with other potential participants in the care process.

### Affective and health-related outcome expectancies for physical activity in older adults

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Within social cognitive theory, this study tests the effects of affective and health-related outcome expectancies on physical exercise, assuming stronger direct and indirect (via intention) effects from affective outcome expectancy to physical exercise than from health-related outcome expectancy to exercise. Physical exercise and social cognitive variables were assessed at baseline and 6- and 12-month follow-up in 335 older adults (60–95 years of age). Structural equation modelling was applied. There was a direct effect from affective, but not from health-related outcome expectancy on intentions and behaviour. Also, the indirect effect from self-efficacy on exercise via affective outcome expectancy was significant, whereas the mediation via health-related outcome expectancy was not. These findings emphasise the relative importance of affective *versus* health-related outcome expectancies in predicting intentions and exercise in older adults and highlight the importance to separate these facets at a conceptual level to enhance both theory development and health promotion.

### Job Burnout/Job Engagement and sub-optimal care among healthcare professionals

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**Background:** Burnout reduces the ability of physicians to provide the best quality of care possible and increases the risk that they will make mistakes. Moreover, physicians who deal directly with patients on a daily basis report even higher burnout levels. **Methods:** Quantitative survey was conducted among doctors, nurses and residents in Greece, Portugal, Bulgaria, Romania, Turkey, Croatia and FYROM ( $N=1843$ ). Self-reported data on job burnout, job engagement, affectivity and suboptimal care were collected. **Findings:** Controlling for affectivity, hours worked and work experience, sub-optimal care was significantly associated with depersonalisation, but not emotional exhaustion, vigour or dedication. Residents, in comparison with physicians reported higher levels of both emotional exhaustion and depersonalization, while nurses also reported higher levels of emotional exhaustion in comparison with physicians. **Discussion:** The quality of care delivered to patients is crucial, and the well being of healthcare professionals is symbiotically connected with the care of the patients.

### A randomized controlled trial of the “question-behaviour effect” among inactive blood donors

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**Background:** The aim of this study was to test the question–behaviour effect on return to give blood among inactive donors that is individuals who did not give blood during the past 2 years. **Methods:** At baseline, 7000 inactive donors were randomised to one of six experimental or a control (C) condition. The experimental conditions consisted of being asked to complete a questionnaire (by mail) (6 items) assessing: standard intention (I); interrogative intention (?I);

implementation intentions (II); moral norm (MN); anticipated regret (REG); self-positive image (SPI). Objective measures of behaviour were obtained six months later. **Findings:** Intention-to-treat analysis (GENMOD procedure, Poisson distribution) showed a main effect for the experimental conditions ( $\chi^2(1) = 4.64, p = 0.03$ ) versus C. Contrast analyses indicated that II ( $\chi^2(1) = 6.92, p < 0.01$ ) and SPI ( $\chi^2(1) = 4.02, p < 0.05$ ) showed significant greater donations compared to C. **Discussion:** Measurement of specific cognitions can be used as an intervention to increase adoption of health-related behaviours.

### “I don’t like school!” Factors associated with school (dis)satisfaction in adolescence

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**Background:** School (dis)satisfaction is associated with many aspects of well-being, health and success at school. What can be done to improve attitude regarding school? **Methods:** Analysis of the self-administered questionnaires from secondary school students (aged 12–18,  $n = 7190$ ), from the 2010 Health Behaviour in School Aged Children survey in Belgium (French Community). Factor analysis extracted 4 components (50% of total variance), later introduced in logistic regression, with school dissatisfaction as dependent. **Findings:** Dissatisfaction is associated with a high score on “substance use factor” (OR 2.5; 2.13–2.96 95% CI) and “low well-being factor” (OR 2.08; 1.76–2.46 95% CI). “Problems with familial environment” gives an OR of 1.96 (1.66–2.30 95% CI), “conflicts with peers” a 1.69 OR (1.43–2.00 95% CI). Girls have systematically a more positive attitude towards school than boys. **Discussion:** School dissatisfaction could be the expression of a broader cluster of difficulties and therefore deserves specific attention from adults surrounding adolescents.

### Predictors of positive emotion regulation strategies: attachment and self esteem

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**Background:** Emotion regulation abilities are linked to indices of mental and physical health such as stress reactivity and depression proneness. In particular, the ability to maintain and up-regulate positive emotions is related to well-being (Tugade & Fredrickson, 2007). The present study investigated whether the tendency to up- or down-regulate positive emotion can be linked to attachment-based traits and self-esteem. **Methods:** In this cross-sectional correlational study, 176 participants completed 3 online questionnaires: the Experiences in Close Relationships Revised (ECR-R) Questionnaire, the Rosenberg Self-Esteem scale and the Emotion Regulation Profile- Revised (ERP-R). Multiple regression analysis indicated that attachment anxiety and self esteem predict negative strategies based on down-regulation of positive emotion, while low levels of avoidance predict the use of strategies that maintain and up-regulate positive emotion. **Discussion:** Attachment-based information about the management of positive emotion has implications for treatment of individuals suffering from mood disorders and stress-related physical symptoms.

### Promoting adolescent resilience through supportive close friendships

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This talk examines how close peer relationships may promote resilience in socio-economically vulnerable UK adolescents. A novel mixed-methods research programme explores how supportive close friendships might promote resilience and how these friendships are experienced first-hand. First, we used structural equation modelling to analyse cross-sectional data ( $N=409$ ) exploring how close supportive friendships promote resilience and associated psychological resources. Second, we use thematic, empirical phenomenological methods to examine how adolescents ( $N=13$ ) experience individual close friendships within a context of sometimes-chaotic home lives and shifting social allegiances. Results suggest close friendships foster adolescent resilience through, amongst other mechanisms, effective coping. Experiential accounts detail how adolescents conceptualise their friendships as promoting effective coping and resilience: reliability, trust and promoting protection of others are of special importance. This research brings together key findings to provide a multidimensional view of an important relational factor in resilience-promotion and a key mechanism through which resilience is fostered.

### Mapping type 1 diabetes structured education courses across the UK

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**Background:** This study aimed to identify type 1 diabetes structured education courses in the UK and establish the core components of their curricula in order to develop a measure of self-care. **Methods:** Of 83 courses identified in the Diabetes Research Network; 28 met NICE criteria. All curricula were examined and educators from 5 courses were interviewed. Transcripts were analysed using thematic analysis. Patients and educators attended a consensus meeting, to identify core components. **Findings:** All courses were based on behaviour change theory. Core components included; carbohydrate counting, insulin dose adjustment and managing hypoglycaemia. Differences included location, structure, patient education level and funding. **Discussion:** These core components have been developed into a questionnaire to assess type 1 diabetes self-care behaviours. This is currently being piloted and will be used both in research and clinical practice to help identify areas where patients are struggling with their management, with a view to ultimately improving structured education courses.

### A Qualitative Study Exploring Health Literacy for Child and Adolescent Vaccination in Scotland

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**Background:** Parental decision-making for childhood and adolescent vaccination is complex and health literacy is important. The aim of this study was to explore health literacy for vaccination in relation to previous vaccine scares and newly introduced vaccines. **Methods:** Qualitative interviews and focus group discussions elicited the views and experiences of health staff and service users for the delivery of one previously controversial vaccine, the Measles, Mumps and Rubella (MMR) vaccine and two newly introduced vaccines, the Human Papilloma Virus (HPV) and Influenzae A (H1N1) vaccines. Thematic analysis was used to analyse the data. **Findings:** Three key themes were identified: vaccine anxieties which were carefully negotiated for specific vaccines, limits with public engagement with vaccines and the undermining of trust. **Discussion:** Health literacy and empowerment was compromised for informed decision-making in vaccination. Public health psychological contributions for improving health literacy are suggested through improved consultation, consent and support of frontline staff.

### Relationships of illness severity with depression, health- and life-satisfaction in patients with cardiovascular diseases

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Guidelines for cardiovascular rehabilitation from different countries underline the importance of psychological variables in the achievement of improved clinical conditions and quality of life in patients with cardiovascular disease (CVD). Nevertheless, little research has been done in order to identify the factors that mostly affect patients' well-being. Aim of this study was to investigate the contribution carried by illness-perception (IP) and cardiac-risk-factors-self-efficacy (SE) to the impact exerted by illness-severity on depression, health- and life-satisfaction in patients affected by CVD undergoing rehabilitation. The study had a cross-sectional design and involved 172 patients (131 men; mean-age = 66.43, SD = 9.99). Illness-severity was measured in terms of left-ventricular-ejection-fraction (LVEF) at admission in the cardiovascular rehabilitation department, whereas psychological factors were assessed one week later. Results from path analyses showed that the relationships among LVEF and depression, health- and life-satisfaction were mediated by IP and SE ( $\chi^2(1) = 2.31$ ,  $p = n.s.$ ). Findings underlined the importance of working on IP and SE to improve well-being in patients with CVD.

### Exploring the experience of stress through diary keeping in women with breast cancer

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**Objective:** To explore the appraisal of stress as outlined in the stress-coping model, and its fit with women's written accounts of their breast cancer experience. **Methods:** The diaries of 30 women diagnosed with breast cancer were analysed using thematic analysis. A template of five themes based on elements of the stress-coping model was defined prior to analysis. **Results:** Six top-level and 14 second-level themes were defined in the final template. Following initial

emotional reactions to the diagnosis women viewed breast cancer as a threat or a challenge. Post diagnosis other stressful events identified included illness disclosure and treatment effects. Despite descriptions of negative consequences of breast cancer many women found benefit in the experience. **Conclusion:** The findings highlight the importance of individual differences. Women differed in their appraisal of stressful events and subsequent coping and illustrated the complex relationships between internal and external moderators and stress.

### **“You check, I check”; social influences on decision-making of vulnerable groups regarding a health check**

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**Background:** Cardiometabolic health checks are increasingly implemented in primary care. Vulnerable groups – lower SES, ethnic minorities – are underrepresented in these checks. Aim was to investigate the role of social influences on decision-making regarding a health check in these groups. **Methods:** Twenty-one focus groups were held with non-Western immigrants and lower SES non-immigrants. Data were analysed according to the Framework Approach (I-change model) using Atlas.ti software. **Findings:** People often denied that the opinions of others mattered to them, while it was obvious from their stories that they did. Social influences played a major role, both practically (e.g. translation) but mainly psychologically (e.g. – anticipated – (dis)approval of others). **Discussion:** The importance of others in the decision-making process appears to be strong, although people from vulnerable groups tend to underestimate their influence. This insight could be applied in interventions to promote healthy behavior, such as participation in a health check.

### **Caring, coping and well-being: the role of meaning-focused strategies**

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**Objectives:** To verify whether coping is a mediator between personal values and well-being of caregivers of disabled children and whether discrepancies between personal values and values typical for a given culture moderates this relationship. **Method:** Participants were 163 parents of children with disabilities of a different kind. Personal values (self-oriented and other-oriented), coping strategies (problem-, emotion-, meaning-focused, looking for social support) and well-being (eudajmonic and hedonic aspects) were measured. **Findings:** In multiple mediation models meaning-focused coping revealed to entirely mediate between both self-oriented and other-oriented values and well-being, with stronger effects for eudajmonic aspect. Being culturally untypical moderates this mediation: such relationship remains significant only for the caregivers more self-oriented than the population average. **Discussion:** Meaning-focused coping seems to preserve well-being in hardly controllable chronic conditions. However, its function may depend not only on an individual's values, but also on the discrepancy between those values and values at social level.

### Interplay between post-traumatic growth and traumatic stress in affecting quality of life among cancer patients

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The objective of the study was to examine if finding positive meaning or growth from being diagnosed with prostate cancer might protect the patients from the adverse effects of post-traumatic like stress symptoms on their psychological adjustment. Towards that end 54 newly diagnosed prostate cancer patients completed measures of post-traumatic like stress (PTLS) (e.g., Impact of Events Scale Revised) anxiety and depression s (i.e., HADS scales) at three time-points: At the time of diagnosis, three and six months later. Posttraumatic growth (i.e., PTG Inventory) was assessed at both follow up assessments. As indicated by the significant interaction (PTLS\*PTG-  $p < 0.04$ ) the adverse effects of PTLS on depression at the three month follow up was attenuated among cancer patients with high PTG. Identical findings were observed at the six month follow up as well as for anxiety at both follow-up assessments. Both theoretical and clinical implications will be discussed.

### A qualitative study of community pharmacists' challenges with patients on antidepressant drug treatment

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**Background:** In the province of Quebec, 2/3 of patients with a diagnosis of major depression discontinue prematurely their antidepressant drug treatment. Community pharmacists are in a good position to support those patients experiencing adherence difficulties since they are easily accessible and can therefore take advantage of their regular contacts with patients. This study explored pharmacists' perceptions towards their practice with patients on antidepressant drug treatment. **Methods:** We conducted 6 focus groups involving 43 community pharmacists in four regions of the province of Quebec. Thematic content was analysed using verbatim transcripts of focus groups. **Findings:** In regards of adherence to antidepressant treatment, 4 main challenges were reported: identifying non-adherent patients, intervening with them, and dealing with patient-encountered barriers and organizational barriers. **Discussion:** Pharmacists wishing to help their patients to adequately manage their antidepressant treatment are facing important barriers. These findings will guide the development of an intervention to support pharmacists practice.

## Organizational change in health promotion through the lens of stakeholder theory

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**Background:** Stakeholder theory can guide health promotion practitioners developing strategies to influence an organization to undertake action on a health problem. **Methods:** An overview of this theory focuses on attributes related to stakeholder salience, characteristics of the network of the stakeholder and focal organization, and types of strategies that would be undertaken based on salience and network characteristics. **Findings:** Stakeholder analysis is an important but underutilized tool in community health assessment. A hypothetical case example illustrates the analytic and practical steps in conducting an analysis of stakeholders and their interest and activity in the health promotion action, mapping the relationship between stakeholders in the network, and determining the salience of each to the focal organization. **Discussion:** This information is used by the health promoter to decide whether to use direct or indirect pathways to influence the focal organization and which stakeholders to use as allies or intermediaries.

## Effects of chronic inhibition and ego-depletion on eating behaviour: A test of the limited resource model

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**Background:** The role of self-control resources as a mechanism for eating restraint was tested in individuals with high and low levels of dietary inhibition ascertained by body mass index (BMI). **Methods:** Participants ( $N=92$ ) with elevated ( $\geq 23$ ) or normal ( $< 23$ ) BMI were randomly allocated to receive a challenging math task that depleted self-control resources (ego-depletion condition) or a non-depleting control task (no depletion condition). Participants then engaged in taste-and-rate task for tempting cookies and candies. Amount of food consumed during the taste-and-rate task constituted the dependent measure. **Findings:** Among elevated-BMI participants, those assigned to the ego-depletion condition consumed significantly more cookies ( $\beta=0.51$ ,  $p < 0.001$ ) and candies ( $\beta=0.47$ ,  $p < 0.001$ ) than participants in the control group. There were no differences for normal BMI participants. **Discussion:** Individuals with elevated eating restraint had reduced capacity to regulate eating when ego-depleted. Results implicate self-control in regulating eating behaviour and provide support for the limited resource model of self-control.

## Strategies for implementing a parental physical activity intervention: answers to the what and how

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**Objectives:** We explored strategies for implementing a physical activity (PA) intervention for parents of young children, an under-studied and at-risk group for inactivity. **Methods:** Adopting a qualitative descriptive design, parents ( $N=12$ ) of children younger than 5 years participated in focus group discussions exploring potential intervention design and delivery strategies. **Findings:** Thematic content analysis revealed a range of strategies (e.g., skill-based strategies to generate flexible life/family plans, environmental approaches accessing parents to community-based parent/child programs) as potentially useful techniques to employ. On-line discussions supplemented by brief face-to-face interactions and text messages (SMSs) were strategies revealed for how to best deliver such a program. **Discussion:** Adopting an interactive, multi-component electronic-health and SMS-based intervention may prove useful in increasing parental PA. Future research should continue to adopt a ground up, community-based approach to the development and implementation of interventions for this at-risk group to ensure sustained involvement in regular PA.

### Explaining hand washing intentions and behaviour of young men: Comparison of two models

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**Background:** We compared the Theory of Planned Behaviour and the Integrated Social Cognition Model (ISCM, Fishbein et al., 2001) in the context of young men's hand washing. ISCM hypothesizes that intention is predicted by not only self-efficacy, norms, and attitude, but also by emotional reaction and self-image; and behaviour by intention as well as by environment and skills. **Methods:** Questionnaire data ( $N=141$ ) was collected among Finnish male military conscripts, aged 18–22. **Findings:** The ISCM explained significantly more variance in hand washing intentions than TPB, with the strongest predictors being self-image, emotional reactions, norms, and self-efficacy (all  $p < 0.05$ ). Behaviour was predicted by intention. The effects of norms and emotional reaction (disgust) were not mediated via intention but directly associated with behaviour. **Discussion:** Emotional reaction and self-image are significant determinants of hand washing over and above the TPB determinants, and potentially central targets in interventions to improve hand hygiene.

### Online focus groups to explore factors of decision making of parents who refuse vaccination

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**Background:** Although vaccination coverage is high in the Netherlands, some parents refuse vaccination. Insight in the reasons behind this can contribute to the design of a monitoring system of vaccination acceptance. Therefore, a focus group study was set up through the internet among parents who refused vaccination. **Methods:** In total, 60 parents took part in eight online focus group discussions in December 2011. Parents had 5 days access to an online forum, whereby the moderator posted everyday a new topic. **Findings:** Thematic analysis

showed that low perceived severity and susceptibility towards the disease, high perceived severity of side effects, and the belief that getting the disease is something positive were important reasons for non-vaccination. Parents criticized the government about their one-sided information. **Discussion:** The findings are useful for further research about vaccination decision making and can be used to improve the vaccination education towards parents that are critical of vaccination.

### Are psychological parameters associated with observed tooth brushing behavior?

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**Background:** Several studies showed associations between self-reported oral health behaviors and psychological parameters. This study focuses on those associations with actual behavior rather than self-reports. **Methods:** A representative sample of 18–19 year old adolescents ( $N = 101$ ) was asked to brush their teeth as they are used to in front of a mirror equipped with a video-camera. Tooth brushing related self-efficacy and decisional balance were assessed as predictors of brushing behavior. **Findings:** First analyses show that only self-efficacy contributes significantly ( $p < 0.05$ ) to variance explanation of tooth brushing behavior (full duration and duration per site and sextant) and that only a small portion of variance ( $< 10\%$ ) is explained by that variable. **Discussion:** Psychological parameters usually found to be strongly associated to self-reported health behavior show only a small contribution to variance explanation of observed health behavior. Further analyses are needed to find out whether this reflects a methodological bias in former results.

### Being overweight makes us socially invisible: The relationship between BMI and gossip

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Gossip is an ubiquitous phenomenon. For being part of social networks, it is not only vital to hear about social news but also to be the topic of the news (gossip target). In the present study it was examined whether the discrimination of obese persons is reflected in the gossip activity of other people. Specifically, we examined whether body weight influences the likelihood of being the topic of gossip in a cohort of psychology freshmen ( $N = 67$ ). Each student named those fellow students aboutwhom they would most likely get news. Students with a higher BMI at baseline were less likely to be a gossip target four weeks later ( $r = -0.30$ ). Moreover, also subjectively they perceived themselves as less integrated in their cohort ( $r = -0.39$ ). Thus, individuals with a high BMI seem to be prone to social ‘invisibility’ rather than being in the focus of other’s talk.

### Does risk perception or fear predict surveillance behavior in a Lynch syndrome testing: 7-year follow-up.

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**Background:** Genetic testing for Lynch syndrome identifies family members who have high risk for colorectal cancer. Carriers should attend post-test colonoscopy surveillance every 2nd or 3rd year to prevent cancers. **Methods:** 7-year follow-up study of Lynch syndrome family members including 61 carriers and 147 non-carriers measured before genetic test, one month, one year and seven year after the test. **Findings:** All carriers attended post-test colonoscopy surveillance but 30% had longer interval than recommended but underestimation of risk or higher fear did not predict failure in attendance. Among non-carriers 17% percent reported to have colonoscopy after testing however, risk perception or fear did predict colonoscopy in this group either. **Discussion:** Within this sample of Lynch families risk perceptions based on genetic counseling or fear of cancer did not predict adherence for screening behavior among carriers or non-carriers.

### A meta-analysis of physical activity interventions in the 'retirement window'

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**Background:** The 'retirement window' provides an ideal opportunity for health behaviour interventions. This systematic review synthesises the evidence for the long-term effectiveness of physical activity interventions in this period and identifies intervention features associated with effectiveness. **Methods:** Included studies were randomised controlled trials of healthy or 'at risk' adults (mean/median age 55–70), assessing physical activity behaviour ≥12 months after randomisation. Behaviour change techniques and mode of delivery of interventions were identified. **Findings:** Twenty-three studies were included. When compared with controls at 12 months, interventions had a significant positive effect on stepcount (4 studies; mean difference (MD) 2188, 95% confidence interval (CI) 1031 to 3344) and minutes of activity (7 studies; MD 7.9, 95% CI 2.8 to 13.1) but an inconclusive effect on energy expenditure (9 studies). **Discussion:** Some interventions are effective in promoting sustained physical activity improvement in older adults. More effective interventions used goal setting, barrier identification and self-monitoring.

### The Influence of Physical Affection on Oxytocin and Cardiovascular Risk Factors in Couples

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**Background:** Oxytocin (OT) is linked to social bonding and stress regulation, and may be a key factor understanding the association between social relationships and long-term health. We examined the influence of physical affection on OT and cardiovascular risk factors. **Methods:** Well-adjusted and distressed married couples were recruited from the community and clinic intake ( $n = 116$ ). Self-reported level of physical affection, salivary oxytocin (OT) and markers of cardiovascular risk were obtained. **Findings:** Physical affection was significantly associated with OT for well-adjusted couples but not distressed couples ( $r = -0.29$ ;  $p < 0.05$ ). Among all couples, levels of physical affection was negatively associated with diastolic ABP, HemoglobinA1C, C-reactive protein, and carotid artery IMT ( $p$ 's  $< 0.05$ ). Likewise, OT was significantly related to carotid artery IMT ( $p < 0.05$ ). **Discussion:** Despite trends toward social contact becoming increasingly distant (online), this data suggests that physical contact may be an important when understanding the influence of social relationships and health.

### Momentary Affect and self disclosure – health effects in daily life

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Momentary affect in daily life is an innovative indicator of health and wellbeing. Self-disclosure in close relationships can be seen as an interpersonal emotion regulation strategy that is associated with improved coping success. The aim of this study is to look at associations of daily momentary affect and self disclosure in couples. 102 young-adult couples took part in a computer-based dyadic ambulatory assessment study and were beeped 4 times a day over 7 days asked for momentary affect, situational factors and self-disclosure. Results of multi-level analyses reveal more negative and less positive self disclosure in stressful situations. In general, self-disclosure is associated with less momentary negative affect in daily life not only in the disclosing person but also in the partner. Interpersonal emotion regulation strategies are important to consider not only for individual coping with difficult situations but also as a strategy possibly improving the social context.

### Reducing concerns about medication: a successful online pilot intervention

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**Background:** About 40% of people with Inflammatory Bowel Disease (IBD) are non-adherent and treatment representations (medication concerns) help explain non-adherence. A pilot on-line intervention was undertaken to determine whether selected behaviour-change techniques would reduce medication concerns. **Methods:** The intervention involved interactive components to encourage cognitive restructuring and tailored, persuasive information about cognitive and emotional aspects of concerns. Participants were recruited through IBD support groups. Concerns were rated at baseline, post-intervention, 1 week and 1 month. **Findings:** There was a significant reduction in concerns between baseline ( $n = 84$ , median = 7.5), post-intervention ( $n = 75$ , median = 5.25), 1 week ( $n = 37$ , median = 5.0) and 1 month follow-up ( $n = 27$ , median = 5,  $p < 0.001$ ). Post-hoc tests revealed significant differences between baseline scores and each follow-up. Satisfaction with information provided and time spent on the intervention predicted change scores. **Discussion:** Behavioural change techniques successfully reduced concerns about IBD medications. Results will inform the development of a RCT.

### **Psychometric and Neurobiological Assessment of Resilience in Healthy Adults**

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This study aimed to psychologically assess resilience in a healthy, non-clinical population through questionnaires, and analyse salivary cortisol and dehydroepiandrosterone sulphate in a subsample. An opportunistic sample ( $n = 192$ ) completed a cross-sectional survey assessing resilience, depressive symptoms and anxiety, and possible correlates. A sub-sample ( $n = 32$ ) selected in order to maximise variation of resilience, provided saliva samples for ELISA detection of cortisol and DHEA-S as putative biomarkers of resilience. Resilience correlated negatively with depressive symptoms and anxiety, and positively with self-efficacy, optimism, social support and well-being (all  $r > 0.40$ ; all  $p$ -values  $\leq 0.001$ ). Resilience and DHEA-S concentrations correlated significantly ( $r = 0.35$ ;  $p \leq 0.05$ ); this relationship was moderated by age. Gender differences were observed for DHEA-S and cortisol ( $p < 0.05$ ). Resilience is associated with positive aspects of psychological health and salivary DHEA-S, suggesting the latter can be treated as a biomarker of resilience in a non-clinical sample of adults.

### **When and how a coping planning intervention affects safe water consumption: A moderated mediation analysis**

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This study aimed at identifying mediators and moderators of a coping planning intervention to sustain arsenic-safe water consumption. A field experiment was conducted with households in Bangladesh who had started consuming arsenic-safe water after a first intervention. Participants were randomly assigned to the coping planning condition ( $n = 77$ ) and to the control condition ( $n = 78$ ). Arsenic-safe water consumption and all variables from the Health Action Process Approach were assessed before and after intervention by structured face-to-face interviews. Moderated mediation analyses were computed with Mplus. Contrary to our hypothesis, more participants in the coping planning condition (41.6%) returned to consuming arsenic-contaminated water than in the control condition (14.1%). Path analyses revealed that the negative impact of the intervention on sustained safe water consumption was mediated by decreases in maintenance self-efficacy. This relationship was moderated by prior experience with barriers. Results imply that coping planning may not be suitable as a blanket intervention.

### **Direct and indirect pathways to health behavior: Differences between rational and intuitive probability beliefs**

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Despite the increased recognition of affect in guiding risk estimates, current research is mainly focused on the cognitive dimension of perceived risk. This study aimed to extricate the

influence of rational and intuitive probability beliefs in the behavioral decision making process regarding skin cancer prevention practices. Structural equation modeling was used in two longitudinal surveys ( $N = 436$  and  $N = 277$ ) to examine direct and indirect behavioral effects of affective and cognitive likelihood (i.e. unmediated or mediated by intention), controlled for attitude, social influence, and self efficacy. Affective likelihood was directly related to sun protection in both studies, whereas no direct effects were found for cognitive likelihood. No support was found for the indirect effects of affective and cognitive likelihood through intention. The findings underscore the importance of feelings of (cancer) risk in the decision making process and should therefore be considered in future research and risk communication practices.

### **Changing for good: the role of self-regulation in exercise adherence following cardiac rehabilitation.**

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**Background:** Secondary prevention programs for cardiac patients have been proven effective, but less is known about the psychological mechanisms by which they effectuate change. We investigated whether self-regulation skills might explain the long-term treatment effect of a self-regulation lifestyle program for post-CR patients. Design Randomized-controlled trial. **Methods:** Following completion of CR 210 patients were randomized to receive either the lifestyle program ( $n = 112$ ) or standard care ( $n = 98$ ). Risk factors and health behaviors were assessed at baseline (end of CR), 6 and 15 months thereafter. **Results:** ANCOVAs showed a significant effect of the lifestyle program on exercise behavior after 15 months. Furthermore, the lifestyle group reported improved self-regulation skills and mediation analysis demonstrated that the treatment effect on physical activity could be explained by self-regulation skills. Conclusion This suggests that long-term health behavior change may be facilitated by self-regulation skills, and that such skills can be trained in an intervention setting.

### **Psychosocial adjustment to the use of a prosthesis: Managing perceptions**

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Significant developments in prosthetic technology have occurred over the last decade, including enhanced dynamic functioning and improving realism of the artificial limb. However, relatively little is known about the psychosocial experiences of individuals with amputations that make use of these modern prostheses. Grounded Theory methodology was employed to explore the experiences of 12 participants via in-depth unstructured interviews. Data was also included from internet discussion forums and blogs. One major emerging theme is the social management of prostheses, including issues of control in managing first impressions, how and why individuals choose to maximise or minimise the visibility of the prosthesis, and the impact of peer relations on the individual. This research highlights the benefits and challenges of living with modern prostheses. More specifically it provides an interesting context within which to explore how people integrate or interact with technology which will inform rehabilitation efforts and living well with an amputation.

### Theory-driven brief smoking cessation interventions in general medical practice: reach for implementation into routine care

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**Background:** Our aim was to compare recruitment outcome upon different support in GP practices for brief smoking cessation intervention (BSCI). **Methods:** GPs were encouraged to recruit patients and offer BSCI in daily routine. A personal brief advice (PA) intervention sample ( $n=525$ ) and a tailored letters (TL) intervention sample ( $n=1284$ ) of patients in routine care were compared with a reference sample ( $n=1610$ ), systematically recruited by a study nurse. PA was based on principles of motivational interviewing, TL on the transtheoretical model of behavior change. **Findings:** In routine care samples less smokers who did not intend to quit were recruited than in reference sample (33.9% in PA, 46.3% in TL; relative risk ratios: patients who considered or planned smoking cessation compared to reference sample, PA 2.6, 95% confidence interval 1.8–3.9; TL 1.9, 1.5–2.3). **Discussion:** More extensive support of GPs based on health psychology is needed to reduce recruitment failure.

### Depressive symptoms and diabetes distress in young people with type 1 diabetes (t1d)

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**Aims:** To determine the prevalence of anxiety, depressive symptoms and diabetes-related distress in young people with Type 1 Diabetes (T1D) and their relationship to glycated haemoglobin (HbA1c; primary medical outcome measure). **Methods:** Participants (16–21 years) were recruited from clinics in Sheffield ( $N=99$ ) and completed the Hospital Anxiety and Depression Scale (HADS) and the Diabetes Distress Scale (DDS). **Findings:** 28% of the sample reached levels of diabetes distress worthy of clinical attention, with 27% and 10% above the cut-off for anxiety and depressive symptoms respectively. HbA1c was significantly higher for those above threshold for distress and depression than for those below. There was no difference in hba1c related to anxiety. Females reported more diabetes distress than males. **Discussion:** Psychological distress is prevalent among young people with T1D and can be related to higher HbA1c. We recommend routine clinic screening to identify and treat such distress.

### Community-level inter-racial attitudes and the success of HIV prevention interventions targeting Blacks: Meta-analysis of trials

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**Background:** Intergroup discrimination is known to be highly stressful and may conflict with interventions' efforts to promote health. Prior meta-analyses have yet to examine whether

intergroup relations with Whites might interfere with the success of HIV prevention trials for Blacks (African-Americans). **Methods:** Trials ( $k=78$ ) of interventions were retrieved; intervention efficacy was assessed using condom use at trials' last available assessment. Community-level attitudes were gathered from the American National Election Surveys nearest in time to the intervention. **Findings:** Condom use efficacy was higher to the extent that Whites' attitudes were more positive toward Blacks ( $\beta=0.34$ ). Blacks' attitudes toward Blacks, Blacks' attitudes toward Whites, and Whites' attitudes toward Whites had no bearing on efficacy. **Discussion:** Intervention efficacy appears to depend on social-structural elements present in the larger environment in which the interventions are delivered. Future research should investigate how such elements interact with intervention (e.g., motivational enhancement) and sample features.

### **Examining behavioural processes and theory in health psychology within individuals: an example from nurse stress**

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**Background:** Theories in health psychology apply to individuals but are tested by comparing people. What is found between people need not be true within. **Methods:** Electronic diaries assessing negative affect (NA), demand/effort, control and reward in 254 nurses over 3 shifts. Analysis: multilevel modelling (MLwiN) **Findings:** At individual level, NA was associated as predicted with Demand and Control and their interaction although individuals differed in the strength of these relationships. The same relationships held at the between person level. Reward related to NA as expected but in some people the interaction of Demand and Reward was against prediction, Reward worsening the effects of Demand. **Discussion:** It is possible and necessary to examine the process that determines behaviour within people. In nurses the processes that determine stress related affect are largely the same within and between people but in a few interventions to increase reward may be counterproductive.

### **An analysis of the behaviour change techniques used in Scottish Government supported behaviour change interventions**

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**Background:** Scottish Government departments have developed brief behaviour change interventions to reduce alcohol consumption. The documentation associated with these interventions was analysed to ascertain which BCTs were included and what competencies were required by those delivering the interventions. **Methods:** Documents were coded separately by two coders using the Health Behaviour Change Competency Framework (<http://www.healthscotland.com/documents/4877.aspx>). **Findings:** Overall agreement between coders was 94%. The interventions required 8 of the 12 Foundation competencies and 9 of the 12 Basic Behaviour Change competencies. A total of 16 BCTs were identified and classified according to the theoretical route to behaviour change: increasing motivation (5/21); enabling action in motivated individuals (7/30); and prompting action (6/48). **Discussion:** The intervention documents specified Foundation and Basic competencies well. The BCTs included tended to give better specification of motivational and post-intentional BCTs than

those dealing with associative processes. Thus the analysis identified opportunities for strengthening the interventions.

### What does EMA do best?

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**Background:** Attempts to understand the environmental and psychological predictors of behaviour and well-being using retrospective measurement tools are prone to bias. **Methods:** This paper examines what ecological momentary assessment (EMA) does best. **Findings:** EMA allows collection of longitudinal data from a representative part of the participant's daily experience, in real time and in the participant's natural environment. EMA accounts are gathered more closely in time to the event and are less biased by heuristic, autobiographical memory strategies. Real-time longitudinal data may be combined from a range of devices e.g., self-report linked with physiological data. EMA allows testing of within-person variation in variables in a way that is difficult to achieve using retrospective measures and between-person (group level) designs. **Conclusion:** EMA approaches provide more data, probably better data and certainly different data than previously, allowing the application of more powerful analytic techniques to critical, real life questions than ever before.

### Beyond compensatory health beliefs: development of a healthy-eating compensatory health behaviour scale

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**Background:** Compensatory health beliefs are strategies that an unhealthy behaviour can be compensated for with a volitional healthy one. Present research has raised questions about the predictive validity of compensatory health belief scales and also reported of the need for development of behaviour specific measures along with compensatory health beliefs scales. **Methods:** 415 participants completed the compensatory health beliefs and compensatory health behaviour measures at two time points, with a one-month interval. **Findings:** The healthy-eating specific compensatory health beliefs and compensatory health behaviour scales had good test-retest reliability and acceptable internal reliability, however, predictive validity was low and only the intention to eat healthily was predictive. **Discussion:** Although, better self-report behaviour measures are needed the results indicate that the healthy eating-specific compensatory health behaviours appears to be useful in examining eating behaviours in the same way that the smoking-specific compensatory health beliefs scale does.

### Training nurses in developing self-regulation skills and its benefit on patients' satisfaction

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This was a longitudinal study aimed to examine Self-Regulation skills of nurses ( $N = 338$ ,  $X = 38.8$ ,  $SD = 8.8$ ) in the clinical setting and their relation to (professional) goal accomplishment and patients' satisfaction (control group), to develop a 6-month (72 hours) intervention program in which nurses were taught and exercised self-regulation skills (experimental group) and examine the differences between control group and experimental group on SR skills, professional goal accomplishment and patients' satisfaction. Stepwise Regression Analyses showed that there is significant relation between nurses' emotional control, self-monitoring, coping with problems and patients satisfaction. Furthermore, Structural Equation Analyses showed no significant relation between nurses' self-regulation and patients' satisfaction in TIME I, whereas in Time II 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 the quality of care offered to patients and therefore patient's satisfaction.

### **The influence of autonomous regulation on the association of actual physical activity and affective states**

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Physical activity influences affective states. However, studies have seldom depicted this association in ongoing real life situations, and the impact of autonomous regulation (AR) in situ has hardly been analyzed. We assessed AR, affective states and actual physical activity (aPA) during real life situations in 22 women and 21 men ( $M_{\text{age}} = 61$ ;  $SD = 6.5$ ). Parameters were recorded over three days. The accelerometers gave acoustic signals when predefined intensity thresholds were surpassed. The subjects completed an electronic diary to assess AR and affective states. aPA and AR significantly influenced affective states. The interaction was significant for valence and energetic arousal. The higher the volume of aPA and the more aPA was autonomously regulated, the more our participants felt well ( $t(841) = 2.1$ ,  $p = 0.037$ ) and energized ( $t(841) = 3.5$ ,  $p = 0.001$ ).

### **Community-based participatory research on cancer prevention services and health behaviors of women in Ankara**

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**Background:** This study aimed to assess health promotion services at the cancer prevention centers in Ankara, for community-based service improvement. **Methods:** The study group included 332 women aged 30–70 years, who had attended the centers in Oct/Nov 2010, with a follow-up. After ethical approval, the study used a community-based participatory research methodology. Mixed methods design (surveys and focus groups) was used for data collection. Appropriate statistics and manifest content analysis were used for quantitative and qualitative data, respectively. **Findings:** Participants' knowledge on cancer preventive measures was significantly higher after service delivery ( $p < 0.001$ ). However, follow-up after three months didn't show any improvement in health behaviors, such as tobacco and alcohol use, diet and physical activity ( $p > 0.05$ ), except for an increase in self-breast examination ( $p < 0.001$ ). **Discussion:** Health promotion services in cancer prevention centers need a multidimensional

approach, combining individual risk and behavior assessment, counseling, and evidence-based educational and behavioral interventions with follow-ups.

### **Representations of Control and Psychological Health in Couples Dealing with Cancer: A Dyadic-regulation Approach**

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The aim of this study was to examine the relation between illness representations of control and psychological health in 72 married couples dealing with a recently diagnosed cancer. Patients were first-diagnosed with early-stage (45.83%) or metastatic cancer (54.17%). Dyadic responses were examined with the Actor-Partner Interdependence Model. Patients' symptoms of anxiety and depression were associated with both partners' representations of control. Spouses' symptoms of anxiety and depression were related only to their own representations. Also, spouses' representations of personal control moderated the relation of patients' corresponding representations to depressive symptoms, whereas patients' representations of treatment control moderated the relation of their spouses' corresponding representations to both anxiety and depression. Findings suggest that both partners' representations of control are important for adaptation to illness. Moreover, they indicate that dyadic-regulation may be equally important to self-regulation as far as adaptation to illness is concerned.

### **The role of implicit and explicit motivation across health-behaviours**

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Research on health-related behaviour has typically adopted deliberative models of motivation and explicit measures. However, growing support for implicit processes in motivation and health-related behaviour has caused a shift toward developing models that incorporate implicit and explicit processes. The presentation will focus on the role of implicit motivation and engagement in a range of health-related behaviours, in a large sample ( $N = 162$ ). A dual-systems model was developed to test whether implicit motivation provided unique prediction of behaviour. Analyses, including structural equation models for each behaviour, indicated some support for the role of implicit measures; explicit measures and intention provided consistent, significant prediction across most behaviours. These results provide some support for dual-systems models, and offers an important contribution to understanding why some behaviours may be better predicted by either implicit or explicit measures. Future implications for implicit processes and self-determination theory are outlined.

### **The temporal stability and predictive ability of affect-based and cognition-based intentions**

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Recent research has revealed individual differences in the extent to which people base their intentions on affect and cognition. Two studies are presented that assess whether such differences predict the strengths of individuals' intention-behaviour relationships. Participants completed measures of affect, cognition, intention, and behaviour regarding a wide range of health behaviours. Two studies ( $N = 300$ ;  $N = 343$ ) found that the strength of the intention-behaviour relationship was related to the extent individuals based their intentions on affect, but not to the extent they based them on cognition. In addition, study 2 revealed that the degree individuals base their intentions on affect is related to the stability of their intentions. Individuals who strongly (*vs.* weakly) base their intentions on affect tend to have more stable intentions. These results emphasise the importance of affect as a key variable in the likelihood that intentions are translated into behaviour.

### **Look who is talking: the relationship between help-seeking in young people and mental health outcomes**

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**Background:** This cross-sectional study examined help-seeking and psychological functioning in adolescents. **Methods:** Participants were 15,218 Irish adolescents (59% female), aged 12–25 ( $M = 18.24$ ,  $SD = 3.24$ ). Participants completed the My World Survey which contained a battery of psychometrically sound instruments. **Findings:** Friends, parents and the internet were the most likely sources of support for mental health problems. Younger adolescents (12–18 years) were more likely to use parents whereas older adolescents (18–25 years) were more likely to use the internet and professional sources. Of adolescents who reported serious problems ( $N = 8881$ ), 56% felt they did not need professional help (Stage 1). 25% felt they needed professional help but did not seek it (Stage 2) and 19% had sought professional help (Stage 3). Stage 2 adolescents exhibited higher levels of alcohol misuse, psychological distress and avoidant coping and lower levels of self-esteem, optimism and social support. Stage 3 adolescents displayed similarly negative profiles. **Discussion:** Implications for the evaluation of adolescent mental health services will be explored.

### **Cultural identity and mental health: Australian Aboriginal and Torres Strait Islander health and wellbeing**

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**Background:** Identity has been argued to be a 'pre-requisite' for mental health. The aim of this study was to explore factors affecting mental health and cultural identity of urban Australian Aboriginal and Torres Strait Islander people in North Queensland, Australia. **Methods:** A qualitative research design was conducted with a sample of 19 Australian Aboriginal and Torres Strait Islander participants. Data was collected via individual semi-structured

interviews and focus groups. Qualitative analysis was conducted using a grounded theory method. **Findings:** Four themes emerged as reflecting health and wellbeing – coping skills, knowledge social support, and connectedness. The overarching theme of connectedness – to country, family and kinship, knowledge and social networks, emerged as reflecting a unique contribution to both mental health and cultural identity. **Discussion:** This information has implications for cross-cultural clinical practice, through developing culturally safe health and wellbeing programs that sustain and nurture the cultural identity and mental health of Indigenous people.

### **Patients and providers cognitions regarding genomic risk assessments for prostate cancer susceptibility and cancer prevention**

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**Background:** Direct-to-consumer DNA sequence variation testing for prostate cancer (PC) susceptibility may influence patients' behaviors and allow providers to personalize risk communications and clinical recommendations, but there are uncertainties about the accuracy of this method of risk assessment and optimal clinical implementation. **Method:** In this cross-sectional study, mixed methods (quantitative surveys/focus group analysis guided by grounded theory) were used to assess cognitions and behavioral intentions in 23 relatives of PC patients and 24 physicians. **Findings:** Patients indicated they would not likely make better diet/exercise choices even if their risk was increased, but would likely increase screening practices and consider taking a drug to prevent PC. Physicians were skeptical that genomic PC testing would motivate patients to make healthier diet/exercise decisions, but would offer more intensive screenings to patients at increased genomic risk. **Discussion:** Genetic risk notification may promote some preventive behaviors in patients and may influence physicians' cancer screening recommendations.

### **What kind of leadership behavior is related to sickness presenteeism?**

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The aim of the study was to examine the relationship between leadership behavior and self-reported sickness presenteeism among Finnish employees. Altogether 557 employees (85% female, average age 48 years) working in the public sector took part in this cross-sectional questionnaire study. Leadership behavior was measured using several well-known leadership (transformational, authentic, abusive and fair) scales and sickness presenteeism was asked using one question. Almost a half of the employees reported of having worked while ill at least twice during the previous six months. Sickness presenteeism was less likely among highly educated, under 36 years old, living alone, and among those with a good health status. After controlling for these effects, authentic and abusive leadership were related to sickness presenteeism. Those perceiving their leaders as authentic and not abusive had less

sickness presenteeism. Our results suggest that leadership behavior is relevant for making decisions whether to go to work despite feeling ill.

### **Measuring and predicting problematic experiences related to non-adherence in exercise based rehabilitation**

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**Background:** This study describes the Problematic Experience of Therapy Scale (PETS), and investigates whether it could be predicted by illness characteristics and cognitions measured at baseline. **Methods:** Participants were 227 people receiving rehabilitation for Meniere's disease. Baseline measures included anxiety, depression, illness perceptions, fear-avoidance beliefs, dizziness beliefs, and intolerance of uncertainty. The PETS and adherence were measured at 3 month follow-up. **Findings:** The PETS is a reliable measure that predicts adherence. Predictors of problems due to symptoms included worse symptoms, depression, and fear avoidance beliefs. Problems due to uncertainty were predicted by older age, and problems due to doubts were predicted by poor illness coherence. Those who had milder symptoms were more likely to report practical problems. **Discussion:** Findings suggest that the experiences that can contribute to non-adherence can be predicted before treatment has begun, and that the PETS provides a valid means of measuring and understanding non-adherence to rehabilitation.

### **Which Internal and External Resources at work are associated with which Health indicators?**

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**Background:** To investigate some of the Internal and External resources of individuals supposed to be protective of workers' health. **Methods:** Health indicators (CHI, Depression, Fatigue, SRH, Bullying and Mobbing) from the Belstress III study concerning 2953 working men and women are analyzed cross-sectionally in association with Internal and External resources. **Findings:** Multiple logistic regressions of the resources showed significant associations with the 6 Health indicators after control for socio-professional variables (Age, Sex, Educational level) and work conditions (Job Demands, Job Control, Job Satisfaction and Job Importance). Rewards was negatively linked to them (OR between 0.3 and 0.7) as well as Social Support (OR between 0.4 and 0.9) – with the exception for SRH-, whereas Emotion Oriented Coping (OR between 1.7 and 3.4) was positively associated with them. **Discussion:** Both Internal and External Resources should be taken into account when designing health promotion programs at work.

### Investigating mediation within a self-regulation intervention to increase physical activity among patients with rheumatoid arthritis

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**Background:** This study examines the indirect effects of a combined motivational interviewing and self-regulation coaching intervention upon physical activity (PA). **Methods:** 78 individuals with rheumatoid arthritis were randomly assigned to receive the intervention or a group patient-education session. Multiple-mediation models examined the short- and long-term effects of group allocation on PA through the intermediate intervention targets autonomous motivation, self-efficacy, and use of self-regulation skills at post-treatment. **Findings:** There were significant group  $\times$  time effects upon PA and the intermediate intervention targets. Increases in PA were not mediated by changes in intermediate intervention targets at post-treatment, but were however mediated by autonomous motivation and use of self-regulation skills at 32-weeks follow-up. **Discussion:** Greater autonomous motivation and self-regulation skills appeared to drive maintenance of PA gains after the intervention. In promoting PA among patients with rheumatoid arthritis, healthcare providers should foster patient choice and teach skills which focus attention toward PA goals.

### A Meta-analysis Examining Theories and Intervention Techniques Used within Psychological Treatments for Irritable Bowel Syndrome

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**Background:** Psychological interventions have been shown to alleviate symptoms of irritable bowel syndrome (IBS). This study aimed to identify effective theoretical approaches and techniques used in such treatments. **Methods:** 39 randomized controlled trials testing face-to-face non-pharmacological treatments for IBS were assessed for their use of theory and intervention techniques using existing taxonomies. **Findings:** Overall, interventions had significant cumulative effects upon pain ( $g=0.42$ ), bowel dysfunction ( $g=0.42$ ), composite symptom scores ( $g=0.57$ ), psychological distress ( $g=0.33$ ), visceral sensitivity ( $g=0.65$ ), and quality of life ( $g=0.48$ ). Interventions which targeted theoretical (cognitive) predictors of outcomes, included more treatment sessions, linked symptom monitoring to monitoring of cognitions or stress, or provided tailored feedback or assertiveness training had greater effects upon outcomes than interventions which did not ( $p < 0.05$ ). **Discussion:** These findings provide evidence for the link between cognitive changes and symptom improvement in IBS patients, and can be used to inform development of future interventions targeting IBS symptoms.

### The interplay of autonomy goals and spousal support: A prospective study with couples facing cancer

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**Background:** We investigated changes in cancer patients' autonomy-related goals and spousal support during recovery from postsurgical functional limitations. Patients' autonomy goals were tested as moderators of the association between support and patients' and partners' postoperative emotional adaptation. **Methods:** 209 prostate cancer patients and their partners participated in a correlational study with 5 measurement points spanning 8 months around patients' tumor surgery. Patients' functional limitations, autonomy-related goals, and both partners' enacted support and affect were assessed. **Results:** For patients with strong goals to protect self-reliance, support from partners was not associated with lowered negative affect, whereas the contrary was true for patients not endorsing this goal. Partners of patients with strong goals to protect self-reliance experienced increases in negative affect after providing support to patients. **Conclusions:** Findings suggest that support recipients' autonomy goals moderate the effects of spousal support on well-being not only for recipients, but also for support providers.

### Promoting resilience in migraine patients by focusing on the regulation of negative and positive emotions

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Emotional aspects in pain disorders so far have been investigated primarily in terms of coping with pain-related feelings. The aim of the present study, however, was to focus on the regulation of both negative and positive emotions arising independently of experiencing headache pain. In a case-control study 120 female migraineurs were compared to 120 nonmigraineurs in their habitual use of emotion regulation strategies as assessed by the Emotion Regulation Inventory and the Emotion Regulation Questionnaire. Even after taking into account their higher levels of depression, anxiety, and anger, migraineurs used the adaptive strategy of reappraisal considerably less frequently than nonmigraineurs. Though migraineurs experienced significantly less positive affect, they tended to apply controlled expression of positive emotions more frequently. Enhancing the use of reappraisal, which is associated with indicators of psychological functioning, can likely increase emotional well-being in migraineurs. Their unimpaired regulation of positive emotions can be considered a health-related resource.

### Psychological determinants of sensitivity to 50 Hz magnetic fields

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**Background:** People with Idiopathic Environmental Intolerance attributed to electromagnetic fields (IEI-EMF) experience unpleasant symptoms in the proximity of electric devices. Psychophysiological background of the phenomenon is yet to be understood. **Methods:** In a provocation experiment, 49 individuals with self-reported IEI-EMF and 57 controls completed questionnaires (SSAS, MHW Radiation subscale) and attempted to detect the presence of 50 Hz 0.5 mT magnetic field (MF) in 20 one-minute-sessions. **Findings:** People with IEI-EMF showed a lower criterion level (i.e., higher propensity to suppose the presence of the EMF) than controls. Symptoms reported in the 20 sessions were determined by supposed (but not by actual) presence of the MF, by affiliation to the IEI-EMF-group, and by the interaction of these. In a multiple linear regression analysis, predictors of total symptom score were affiliation to the IEI-EMF group and MHW Radiation score. **Discussion:** Psychogenic symptom generation plays a substantial role in the IEI-MF phenomenon.

### Theory- and evidence-based methods for influencing environmental conditions for health

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**Background:** Theoretical methods (or behavior change techniques) can be directed towards decision makers at higher ecological levels: interpersonal, organizational, community and policy levels. The theoretical process is the same; the application is different. Methods at the individual level are frequently bundled together as part of a change method at a higher ecological level. Moreover, there may be different approaches targeting a level (NGO to management) or being targeted from a level (from management to employees). **Methods:** Thirty international experts were asked to indicate bundling for eight environmental-level methods, as well as 'to' and 'from' scores for 24 individual and environmental methods. **Findings:** The results are presented as tables listing (1) which individual methods are most often chosen per environmental method and (2) different applications of methods in a 'to' or 'from' setting. **Discussion:** Results are discussed in terms of changing decision makers at higher ecological levels applying evidence-based theoretical methods.

### Hormonal underpinnings of the narcissistic personality

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**Background:** We examine the relationship between the personality trait narcissism and two hormones. Progesterone and oxytocin are involved in reproduction, social bonding, and attenuating stress responses. Since narcissism involves difficulties with social bonding and stress regulation, we expected that high narcissists would have low basal concentrations of these hormones. **Methods:** 74 females completed a pre-survey including the Narcissistic Personality Inventory and then came into the lab during the follicular phase of their menstrual cycles. Participants' baseline saliva and blood samples were assayed for progesterone and oxytocin. **Findings:** There was no relationship between healthy narcissism (e.g. leadership) and

either hormone. However, those with high unhealthy narcissism (e.g. entitlement, exploitativeness) had lower progesterone (non-significant) and oxytocin (significant). **Discussion:** Females high in unhealthy narcissism have lower oxytocin, with probable significance for their social bonding abilities and stress regulation. We connect these results to prior results showing higher cortisol and cardiovascular reactivity in narcissism.

### **Planning and preparatory behavior bridge the intention-behavior gap in physical activity**

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Planning has been found to mediate between intention and behavior. This mediation might be related with preparatory behavior, which is stimulated by planning and facilitates behavior initiation. The present study examines, whether intentions are translated into physical activity via planning and preparatory behavior. Over a period of six weeks 192 students took part in a study on physical activity with three measurement points in time. It was tested whether the relation between intention and physical activity can be explained with a sequential path from planning to preparatory behavior. The indirect effect of intentions on physical activity via planning and preparatory behavior was significant ( $p < 0.05$ ), whereas the direct effect of intention on physical activity was no longer significant, when the mediators were entered into the model. Planning and preparatory behavior are sequential mediators between intention and physical activity. Interventions promoting physical activity might foster preparatory behavior as well as planning.

### **‘Smoking is childish’: How social and coping-related warning labels may help fight smoking**

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**Background:** Anti-smoking warning labels are generally designed to frighten people away from smoking. Particularly for young smokers, however, future health consequences might be less important than immediate (positive) reasons for smoking. We created new warning labels that cast such positive social and coping aspects of smoking in a negative light. Two experiments tested their effect on implicit attitudes, explicit attitudes, and behavior. **Methods:** 52 college-age smokers performed an affective priming task (Experiment 1) assessing implicit attitudes or reported their explicit attitudes and smoking behavior (Experiment 2) after seeing the warnings. **Results:** The new warning labels resulted in more negative implicit attitudes; smokers seeing the warnings also showed weaker associations between social/coping aspects and smoking than a control group. Furthermore, after 24 hours they reported smoking fewer cigarettes than the control group. **Discussion:** Presenting contradictions of positive smoking outcome expectancies may be an effective way to discourage smoking.

### **Evaluation of a cognitive behavioral self-help program for people who are definitive involuntarily childless**

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**Background:** The aim of the present study was to evaluate a low-demanding, cost-effective cognitive behavioral self-help program with minimal coaching for people who are definitive involuntarily childless. It was examined how women valued the program and how effective it was in reducing depressive symptoms. **Methods:** Women were recruited through various ways and were randomly allocated to either the program ( $n = 27$ ) or a waiting list condition ( $n = 27$ ). They completed questionnaires at pretest and posttest. **Findings:** Of the group who followed the self-help program 68% reported to be very satisfied with the program, 95% found the program to be useful, 68% had the intention to continue practicing and 84% valued the coaching. **Conclusions:** If the program is effective in reducing depressive symptoms (this is examined by a repeated measures ANCOVA), the self-help program will be a valuable addition to the existing treatment services since women valued the program highly.

### **The cognitive orientation of resilience**

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The objective of the study was to predict resilience in individuals wounded in car accidents. It was done in the framework of the cognitive orientation (CO) theory which enables identifying the motivational components underlying manifest behaviors. The hypothesis was that high scorers on the CO of resilience questionnaire will manifest higher levels of resilience. Participants were 120 individuals who have been wounded in car accidents over 18 months earlier. They were administered questionnaires assessing the CO of resilience, personal growth, PTSD and coping with health problems. The CO questionnaire predicted significantly who of the participants scored high on resilience in the applied measures. Goal beliefs about the relations of self and reality had the highest contribution to the prediction. The conclusions are that resilience is a personality disposition with a variety of manifestations and deep motivational roots, amenable potentially to promotion by means of systematic intervention.

### **Who is afraid of social support?**

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Assuming that social support (SS) is unlikely to benefit all patients equally, the goal was to identify the motivational correlates of readiness to use and benefit from SS. 167 patients of both genders, with different cancer diagnoses and disease stages were administered a SS questionnaire assessing the availability and actual readiness to use different kinds of SS and a cognitive orientation (CO) questionnaire for SS assessing relevant motivational tendencies. Factor analyses supported the conception underlying the SS questionnaire about four SS

kinds. Discriminant and multiple regression analyses showed that CO predicted the use of SS. Main motives orienting toward SS were openness to others, readiness to share weaknesses and willingness to compromise in independence. The conclusions are that using SS as an important resource for coping is not open for all patients equally because it depends on specific motivational tendencies, that may be assessed and changed if necessary.

### **The role of self-control in predicting emotional distress in earthquake survivors: a prospective study**

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**Background:** In 2010/2011 the Canterbury region, New Zealand, was struck by two major earthquakes. In the aftermath of a natural disaster, the ability to regulate one's emotions, thoughts and responses may be crucial when trying to cope with challenges such as aftershocks, house/content damage and disruption. Yet, the role of self-control has not been studied before in this area. **Methods:** Participants ( $N=156$ ) completed questionnaires 20 months (self-control, neuroticism) and 2 months (depression) pre-earthquake. Posttraumatic stress, perceived life threat, and earthquake impact (house/content damage, financial strain etcetera) were measured 1 month post-2010 earthquake and 3 months post-2011 earthquake. **Findings:** After controlling for sex, perceived life threat and sustained damage and independent of risk factors such as neuroticism and pre-trauma depression, participants with higher levels of self-control reported lower levels of emotional distress after both earthquakes. **Discussion:** Self-control may be an important resource when coping with stress after trauma.

### **Are coping planning interventions effective in promoting health behaviour change? A systematic review of RCTs**

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**Background:** Coping plans are prospective contingent plans that link anticipated barriers to specific strategies used to overcome them. This systematic review aimed to evaluate the effectiveness of interventions that prompt participants to form coping plans. **Methods:** Databases and unpublished literature were searched for randomised controlled trials allocating adult participants to conditions with and without prompts to form coping plans and measured health behaviours as outcomes. Due to outcome heterogeneity, a narrative data analysis was conducted. **Findings:** Ten studies of variable methodological quality were included, targeting exercise, eating, mammography, and smoking. Coping planning interventions were only effective when participants were supported by a facilitator or by a volitional help sheet to form coping plans and were more effective when delivered in combination with action plans. **Discussion:** Personalised coping planning interventions with facilitator support or based on volitional help sheets appear effective in facilitating behaviour change.

### Women's experiences of pregnancy termination due to fetal abnormality: a systematic review of qualitative studies

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**Background:** Progress in antenatal screening and delayed maternal age have resulted in the increased detection of fetal abnormalities and terminations for fetal abnormality (TFA). This systematic review synthesised women's experiences of TFA to inform care provision and policy making. **Methods:** A systematic review of qualitative studies of women's experiences of TFA and meta-ethnography synthesis was conducted. Eight databases were searched. **Findings:** Nine articles were selected. Ten themes were identified including: assault on the self, loss, becoming a social outcast, and beyond the ordeal: resilience and growth. Undergoing TFA can trigger an existential crisis involving re-evaluation of existential considerations. Nonetheless, the experience illustrates resilience and can lead to positive growth. Women's experiences were shaped by their cultural environment including social, health, and legal contexts of abortion. **Discussion:** These findings identify the need for health professionals to reconceptualise TFA beyond the abortion paradigm, and to acknowledge the unique nature of TFA.

### Very brief interventions to increase physical activity: a systematic review of reviews

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**Background:** Physical activity (PA) interventions may be easier to integrate into routine primary care if they were very brief. We aim to assess what is understood about the characteristics and effectiveness of very brief interventions (VBIs). **Methods:** Electronic databases were searched for systematic reviews which included VBIs delivered face-to-face, preferably in a single session lasting no more than 10 minutes, in adult populations and which reported a PA outcome. **Findings:** 5803 unique articles were found. 154 were retained for full text screening. Data extraction includes how reviews have defined VBIs as well as their content, duration and (cost-) effectiveness. **Discussion:** Promising approaches to promoting PA for use in brief consultations will be presented. VBIs delivered in routine consultations could reach a substantial part of the adult population, significantly affecting public health. The results will inform a pilot trial of VBIs to be delivered in primary care health checks.

### Oxytocin may shape the content of the social sharing of emotions

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**Background:** Oxytocin is a neuropeptide that has both calming and bonding effects. Some of oxytocin's effects are thought to be direct, but oxytocin may also have indirect effects, mediated by changes in behavior. One potentially relevant behavioral change is an increased propensity for "emotional sharing" as this behavior, like oxytocin, is known to have both calming and bonding effects. **Methods:** Participants received either oxytocin or placebo and then were instructed to retrieve a painful memory. Subsequently, oxytocin and placebo participants' willingness to disclose to another person event-related facts (factual sharing) *versus* event-related emotions (emotional sharing) was evaluated. **Findings:** Whereas both groups were equally willing to disclose event-related facts, oxytocin was found to increase the willingness to share event-related emotions. **Discussion:** These findings suggest that oxytocin may shape the content of social sharing so as to maximize its benefits. This might help explain the calming and bonding effects of oxytocin.

### Emotional experience and D2 receptor occupancy in patients with schizophrenia treated with antipsychotics

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**Background:** Blockade of dopamine D2 receptors mediates the therapeutic effects of antipsychotic medication but may also induce social indifference. The present study investigates the differential effects of relatively tight *versus* looser binding D2-receptor antagonists on the experience of emotions in the realm of daily-life. **Methods:** Positive and negative affect were assessed in the daily-life of 109 medicated patients with schizophrenia by using the Experience Sampling Method. Medication was classified as 'loose' or 'tight' binding, based on the drug's dissociation constants at the D2 receptor. **Findings:** Only for tight-binding agent users, significant associations were found between D2 receptor binding and both positive and negative affect in the flow of daily life, increasing levels of D2 receptor occupancy being associated with decreased feelings of positive affect and increased feelings of negative affect. **Discussion:** These findings add ecological validity to previous laboratory findings showing associations between D2 receptor occupancy and emotional experience.

### Gender and Health Behaviours

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**Background:** While it is well known that women and men differ in health risk behaviours and life expectancy, these differences are not theorised and are often assumed to lie in essential characteristics of women and men. This paper surveys evidence for gendered patterns of health and risk behaviours, and interprets them as part of the social and discursive construction of masculinities and of femininities. **Methods:** National statistics and psychological literature are reviewed to provide evidence for cultural and gender differences in health behaviours and patterning of health risk. **Findings:** Gender differences in health behaviours and life expectancies vary widely across cultures, and are best explained by gendered aspects of

social self-presentation rather than by biological sex differences. **Discussion:** In the absence of an understanding of the discursive meanings of health-related actions, theories of health behaviour are unlikely to provide useful frameworks to empower individuals to change.

### **Assessing a model of psychological resilience and post-deployment well-being in Canadian military personnel**

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**Background:** The relationship between exposure to combat stressors and poorer post-deployment health is well documented. Still, a myriad of personality and psychosocial factors may promote psychological resilience to such outcomes. The aim of the present study was to assess a model of psychological resilience and post-deployment well-being in a group of Canadian Forces (CF) members. **Methods:** Participants were 1584 male CF members who were deployed overseas (almost exclusively Afghanistan) between 2008 and 2010. Data on exposure to combat stressors, psychosocial stressors and well-being collected upon routine post-deployment screening were linked with historical personality data. **Findings:** Analyses revealed a direct rather than moderating role of personality factors. Interestingly, psychosocial stressors emerged as stronger predictors of post-deployment well-being than exposure to combat stressors. **Discussion:** While little evidence of moderation was observed, results emphasize the protective nature of some personality factors and importance of the psychosocial environment as a determinant of post-deployment well-being.

### **Self-regulation in computer tailoring to increase physical activity: what works and how?**

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**Objectives:** Online computer tailoring (CT) provides strong opportunities to systematically integrate self-regulation methods in health behavioural change interventions. However, more insight into experiences, processes and effects is needed. **Methods:** Several strategies to systematically operationalise self-regulation aspects (setting goals, action planning, coping planning, strategic planning) were used. Examples, experiences and effects from two CT interventions to increase physical activity (PA) are presented. **Findings:** The 'Active+'-interventions showed that experiences and usage of the self-regulation modules were mixed among participants and intervention types. The increase in several planning-concepts during the intervention were significant predictors of enhanced PA. In the 'I Move'-intervention the level of structuring of the self-regulation module had little influence on usage, while usage had positive effects on PA commitment and intention. **Discussion:** Self-regulation in CT has strong potential, but results are mixed. Current findings could help to develop self-regulation methods in CT interventions that are both effective and well appreciated.

### History of working-life non-employment spells predicts later cognitive function in middle- and older-aged Europeans

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**Background:** Non-employment may hinder development of cognitive reserve during working life but may also provide time for engaging in cognitively stimulating non-work-related activities. Investigating the effect of the type of non-employment on cognitive function may clarify the sources of cognitive reserve. **Methods:** Cognitive function of 18,419 Survey of Health, Ageing, and Retirement in Europe respondents (age 50–73) from 13 countries was assessed in 2004 and 2006. Non-employment spells were derived from complete work histories reported in 2008 (SHARELIFE). **Results:** Non-employment spells due to sickness, unemployment or homemaking predicted higher odds of cognitive impairment, whereas spells due to training, retirement and maternity leave were associated with lower odds of cognitive impairment. Adjustment for late-life occupation, income, wealth, and health attenuated associations between non-employment spells and cognitive function. **Discussion:** The association between non-employment and later cognitive impairment varies based on the activities during non-employment, suggesting that cognitively demanding activities might prevent cognitive impairment.

### Difficulties In Emotion Regulation and Emotional Distress in Cancer Patients

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**Background:** After a cancer diagnosis, about 25% of patients experience anxiety disorders or major depression. Thus, being faced with cancer is more likely to trigger emotional distress in certain patients than among others. The goal of this study is to test whether certain acquired difficulties in emotion regulation account for some of these variations. **Methods:** A case-control study compared the scores of state-anxiety, depression, and difficulties in emotion regulation among 47 cancer patients and 47 matched healthy controls. **Findings:** Difficulties in emotion regulation are strongly linked to emotional distress in both groups but, among cancer patients, they account for a larger part of the state anxiety and depression scores variances than among healthy people. **Discussion:** Assessing patients' difficulties in emotion regulation should help to adjust their psychological care during the course of a chronic disease, and then prevent emotional distress and its consequences.

### Predicting willingness, intention and behaviour. Does drinker image stability make a change?

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**Background:** Alternative social images aside from a general abstainer and drinker image were assessed: abstainer, moderate drinker, heavy drinker, tipsy and drunk image. Images are subject to change therefore, the moderating effect of image-stability was examined. **Methods:** 382 Dutch adults (aged 18–25) completed three prospective online measurements. Image favourability and similarity (to oneself) were assessed at baseline (T0) and one month follow-up (T1). Drinking behaviour, willingness and intention were assessed at T1 and two months follow-up (T2). Similarity-stability and favourability-stability of T0-1 and T1-2 were entered as moderators in regression analyses. **Findings:** Tipsy and moderate drinker favourability-stability moderated the relationship between image favourability and T1 willingness and intention respectively. Heavy drinker similarity-stability moderated the similarity-behaviour T1 relationship. Gender differences were found (T1, T2). **Discussion:** Image-stability moderated the relationship between images and intentions, willingness, and behaviour, and differentiated among gender. The findings may help develop interventions aimed at reducing drinking behaviour through image alteration.

### Gender difference in message framing effect on physical activity promotion among older adults

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**Background:** Gain-framed, compared with loss-framed, messages promote physical activity (PA) more effectively. Considering the significance of attending to negative cues in social interactions for relationship harmony among women, this study examined whether the framing effect differs across gender. **Methods:** Participants included 114 Chinese older adults (Mean age = 72.25, 69% women). They were randomly assigned to read either gain-framed or loss-framed PA promotion messages, and then wore an accelerometer to objectively monitor their PA for 14 days. **Findings:** Using a regression analysis of the accelerometer data, the gender-by-framing interaction was found significant ( $\beta = -0.38$ ,  $p < 0.05$ ) controlling for demographic factors and baseline self-reported PA. The superior effect of gain-framed message was stronger in men compared with women. **Discussion:** Although older adults are more attentive to information that bring positive affect, the current findings suggested that negative health-related information may be more salient to women than men, which supported the importance of tailor-made promotion strategies.

### Gender as a moderator of the relation between social control and smoking behavior in couples

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**Background:** Social control refers to another person's attempts to regulate and influence health behaviors and is predicted to lead to dual effects, i.e., better health practices while also arousing psychological distress. Previous research on gender differences has shown that men rather than women benefit from social control. The purpose of this study was to analyse whether gender serves as moderator within the dualeffect model of social control. **Methods:** We examined 88 smokers with nonsmoking partners during an ongoing quit attempt, assessing smoking behavior, social control and affect one month apart. **Findings:** For men and women reports of social control was not associated with a reduction in cigarettes smoked. For men but not for women positive social control was positively associated with affect. **Discussion:** Overall, for women results are in line with the dualeffect model in terms of well-being. Further research should clarify the relation between social control and smoking behavior.

### Healthy eating self-efficacy and eating disorders symptoms in adolescence: Findings from non-clinical samples

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**Background:** Two longitudinal studies investigated the protective role played by healthy eating self-efficacy (HESE), effects of affective quality of relationship with parents (Study 1) or HESE and automatic negative thoughts about eating (Study 2) in predicting the development of eating disorders (ED) symptoms. **Method:** In both studies self-reported data and objective measures of body weight were collected three times (the baseline, 2-month follow-up, 14-month follow-up). Participants were early adolescents ( $N=30$ ; Study 1), middle and late adolescents ( $N=66$ ; Study 2). **Findings:** HESE moderated the effects of relationship quality and negative thoughts on ED symptoms' development: adolescents with high HESE presented low or no ED symptoms even if the quality of relationship with parents was low (Study 1) or automatic negative thoughts about eating were present (Study 2). **Discussion:** Beliefs about ability to eat healthy, regular meals may buffer the effects of ED risk factors.

### Social Isolation is associated with pro-metastatic profiles and poorer cellular immune defense in ovarian cancer

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**Background:** This presentation provides an overview of relationships between social isolation and clinically relevant biomarkers among ovarian cancer patients from 10 years of research from our lab. **Methods:** Ovarian cancer patients completed psychological measures and blood samples were taken prior to surgery; tumor samples were taken during surgery and medical records data abstracted. **Findings:** Across several studies, ovarian cancer patients with greater perceived social isolation demonstrated higher levels of tumor norepinephrine, vascular endothelial growth factor, interleukin-6, and matrix metalloproteinase-9, particularly in the tumor micro-environment, along with lower levels of NK cell activity in peripheral blood and in tumor infiltrating lymphocytes. Patients with low social support showed transcriptional changes in tumor suggestive of a pro-inflammatory and pro-metastatic fingerprint. **Discussion:** These findings suggest that social isolation is associated with a negative spectrum

of biomarkers peri-surgically in ovarian cancer and suggest the importance of screening for deficits in the social environment.

### **Stigma, Resilience, and the Physical and Mental Health of Gay and Lesbian Australians**

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**Background:** According to Minority Stress Theory (MST), additional stress that gay and lesbian adults (GL) face from stigma and discrimination leads to poorer health outcomes. Despite evidence that broadly supports MST, the various links between stigma, health, and resilience have yet to be examined in detail. **Methods:** 2793 Australian GL aged 16–89 years participated in a nationwide survey. **Findings.** Experiences of stigma/discrimination significantly predicted poorer physical and mental health, measured using the SF-36. Links between stigma/discrimination and health were substantially moderated by scores on the Brief Resilience Scale, but not for all forms of discrimination. High socioeconomic status and community involvement were among a range of factors for resilience. Interestingly, lesbians were significantly more resilient with age, but not gay men. **Discussion.** Focus will be given to explaining the roles of stigma and resilience in the health of individuals who face minority stress, including how these findings inform MST.

### **Mixing alcohol and social media: Young adults and drinking cultures**

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**Background:** Many young adults regularly engage in heavy drinking episodes, and frequently use social networking technologies. This study explored how these technologies are implicated in young people's drinking cultures. **Methods:** Nineteen friendship group discussions were conducted (7 all-female, 5 all-male, 7 mixed), involving 78 participants (45 female) aged between 18–25 years ( $M=20.67$ ). Content and thematic analyses were undertaken on transcribed video-recordings. **Findings:** Online social networking is routinely embedded within participants' drinking practices. Social media applications are used to organise events, purchase drinks, avoid drunk texting, take/share photos, receive alcohol promotions, and share drunken stories. Alcohol marketing is seamlessly integrated into participants' online socializing. **Discussion:** To enable social change towards healthier and safer drinking practices we need to consider how social networking technologies are facilitating and recreating a normative culture of intoxication. Applying a cultural lens will allow us to understand how young adults make sense of their mediated social worlds.

### **Goal ownership and self-efficacy predict physical exercise and fatigue in rheumatoid arthritis patients**

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**Background and aims:** Self-regulation cognitions are important determinants of self-management in Rheumatoid Arthritis (RA) patients. This study examined (a) if goal ownership and self-efficacy at baseline (T1) predicted physical activity and fatigue at one-year follow-up (T2). **Methods:** Both at T1 and T2 patients ( $N = 129$ ) filled out self-report measures with respect to goal ownership (TSRQ), self-efficacy (SRSB), physical activity (SQUASH), and fatigue (CIS-20). Hierarchical regression analyses and mediator analyses were conducted. Socio-demographic and disease related variables were entered as control variables. **Results:** Goal ownership and self-efficacy at T1 significantly predicted physical activity ( $p < 0.05$ ) and fatigue ( $p < 0.05$ ) at T2 next to disease activity. Physical activity at T2 was significantly associated with lower levels of fatigue at T2 ( $p < 0.05$ ). No mediator effect was found. **Conclusion:** Strengthening patients' goal ownership as well as increasing patients' self-efficacy are important targets of interventions aiming at increasing physical activity and reducing fatigue in RA patients.

### **PTSD is a better predictor of Somatization in high trauma exposed than in community samples**

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**Background:** The relation between PTSD symptoms and health, including health complaints, has been the aim of recent research, but until now no research has compared the relation between these variables in high exposed subjects and community samples. **Methods:** 1573 subjects (790 from community and 774 with trauma exposure, e.g. veterans, ambulance personnel) filled out a PTSD scale and a somatization scale. **Findings:** 21% of the total sample report PTSD. PTSD symptoms explain 22% of somatization variance in the total sample, but this value is 29% in trauma exposed and only 14% in the community sample. PTSD arousal symptoms are the best predictors in both groups. **Discussion:** Trauma exposure is not only related to higher PTSD prevalence, but also – in these subjects – PTSD symptoms explain a higher variance in somatization. Health Care Services should take this data into account. Also, screening for PTSD should be a routine, especially in traumatized subjects.

### **Resilience and health among youths with documented childhood maltreatment**

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**Background:** The aim of this study was to assess the current health among youths who were maltreated as a child and had received one of two different protective interventions (home vs. institutionalization). **Methods:** We assessed the childhood adversity, psychopathology, physical complaints and health risk behaviours of 136 youths who had been identified by Child Protective Services and 80 youth not identified (control). **Findings:** The groups were similar in terms of psychopathology, global index of risk behaviours, and physical complaints. However, some of the risk behaviours were associated with different groups. **Discussion:** The literature has shown that maltreated children have a heightened risk of developing health problems, but our results suggest resilience and the importance of CPS intervention after maltreatment identification. However, CPS professionals, schools and communities need to

focus on the strategies for health promotion and prevention of risk behaviours considering different young populations.

### **Inoculate or not to inoculate? The factors influencing decision about flu inoculation**

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The present research examined how patients' expectations and pre-conceptions of the physician may affect their decision to comply with the physician's recommendation regarding the flu inoculation. The following variables were included into the study: the patient's belief of what is right for him or her to do; the physician's recommendation; the physician's gender, and the treatment setting (private *vs.* public clinic). The results show that in general the participants ( $n = 187$ ) decided against flu inoculation. The positive doctor's recommendation caused that this decision against inoculation became less negative, but his advice was not sufficient enough to change it into positive one. The participant's *a priori* preference towards the inoculation appeared to be much more potent factor for predicting his/her decision to inoculate. The obtained results are discussed in the context of patient – centered medicine and shared – decision making approach.

### **Using financial incentives to increase uptake of the HPV vaccination: a randomised controlled trial**

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**Background:** Financial incentives could improve low uptake of the HPV-vaccinations by 17–18 year-old girls in England. Concerns exist that incentives adversely affect motivation and informed choice. This trial assesses the impact of financial incentives on: (a) completion of the HPV vaccinations (b) informed choice about being vaccinated. **Methods:** Two groups of 16–18 year-old girls, 500 unresponsive to previous invitations (previous-non-attenders) and 500 previously uninvited (first-time-invitees), received either a standard invitation letter or an invitation including the offer of £45 for undergoing three vaccinations. Girls also completed a measure of informed choice about being vaccinated. **Findings:** The intervention increased completion of the vaccinations in both groups (first-time-invitees: OR = 2.152, CI 95% = 1.324–3.496; previous-non-attenders: OR = 4.283, CI 95% = 1.920–9.551). Informed choice about being vaccinated was unaffected by incentives. **Discussion:** Although the intervention increased completion of the HPV-vaccinations, uptake was lower than the NHS target, highlighting the need for caution when assessing an intervention's clinical significance.

### **Effectiveness of a self-regulation based physical activity intervention for patients with unexplained chronic fatigue**

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**Background:** This study aims at analyzing the effectiveness of a brief self-regulation (SR) based physical activity program for patients suffering from unexplained chronic fatigue (CF). **Methods:** A total of 82 adult CF patients (Mean age = 48.43, 97.6% women) were randomly allocated to standard care or standard care plus a SR based physical activity program (4-STEPPS program). Patients were assessed at baseline and after the intervention (3 months). The primary outcome was fatigue severity. Secondary outcomes included physical activity (pedometer), anxiety, depression and (impaired) functioning. **Findings:** The participants in the 4-STEPPS program presented a significant reduction in fatigue severity ( $p < 0.01$ ) and higher levels of daily physical activity ( $p < 0.05$ ) at 3-months. **Discussion:** These findings suggest that a SR intervention increases physical activity and reduces fatigue in patients with CF.

### Disentangling psychopathology and irritable bowel syndrome

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**Background:** Studies have reported mixed evidence as to whether irritable bowel syndrome (IBS) is associated with elevated levels of psychopathology. In particular, it has yet to be established whether some forms of dysfunction are reliably linked to IBS and others are not, impeding progress toward its detailed theoretical understanding. **Methods:** Results from 141 studies were analysed by means of a random-effects model in terms of the odds ratios between IBS and comparison groups for psychological factors indicative of dysfunction (technical aspects resembled those employed for laterality by Martin et al., Psychological Bulletin, 2010). **Findings:** An overall index of psychopathology was significantly higher among the IBS group, even relative to illness comparison groups. Significant elevation was found in nine areas (including anxiety, OCD, and depression) but not in another nine (including eating disorders, schizophrenia, and bipolar disorder). **Discussion:** Models proposing shared neurophysiological and cognitive mechanisms received greatest support.

### The effectiveness and cost-effectiveness of pedometers to increase physical activity: a systematic review and meta-analysis.

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**Background:** Pedometers are a widely used adjunct to interventions to promote physical activity (PA). There is existing evidence of effectiveness, although many studies are observational. This review focuses on trials that isolate the effect of the pedometer. **Methods:** Electronic databases were searched for trials in free-living adults that compared physical activity outcomes between a pedometer treatment group and a non-pedometer control. **Findings:** 4169 unique citations were retrieved, of which 238 were retained for

full-text screening. Data will be extracted on the details of the intervention, resource use, participants and PA outcomes. PA outcomes will be pooled by random effects meta-analysis.

**Discussion:** A stratified analysis will establish the pooled effect size associated with designs that to a greater or lesser extent isolate the effect of the pedometer. A cost-effectiveness analysis will also be presented. The results will inform the development of interventions that impact public health by encouraging physical activity.

### **Acute Exercise Attenuates Negative Affect Following Sad Mood Inductions in Persons Recovered from Depression**

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This experiment tested whether engaging in acute exercise reduces adverse effects of repeated sad mood inductions in individuals recovered from depression. Hypothesis: In individuals recovered from depression, engaging in acute exercise leads to less negative affect in response to adverse experiences (i.e., habituation), whereas not exercising leads to sensitization. 41 women recovered from depression and 40 healthy control women either exercised for 15 minutes or rested quietly. Afterwards, participants were exposed to two sad mood inductions. Recovered depressed participants who had not exercised exhibited higher NA after the second sad mood induction, suggesting sensitization. Both recovered depressed participants who had engaged in acute exercise and healthy control participants showed no increase in NA in response to the repeated sad mood induction. These results suggest that exercise can serve as a protective factor in the face of exposure to repeated sad events, particularly in individuals who have recovered from depression.

### **Coping profiles and profile differences in role engagement and well-being**

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**Background:** Coping strategies are not necessarily mutually exclusive and can be used simultaneously. This study identified coping profiles in healthy adults. We also studied differences in role engagement (e.g. family-work and work-family enrichment, work engagement) and well-being (e.g. life satisfaction, psychological distress) by coping profiles.

**Methods:** The study sampled Finnish health and service employees ( $n = 2756$ ). The data were analyzed through latent profile and covariance analyses. **Findings:** 7 distinct coping profiles were found: 2 active groups, 1 passive group, 1 low group, 2 high groups and one moderate group. In addition, the most differences were found in role engagement: active copers showed higher role engagement than moderate or low copers. **Discussion:** First, coping strategies are not mutually exclusive and people tend to use different strategies simultaneously. Second, the constructs of role engagement deserve more attention in coping research as an indicator of good adjustment.

## Employment correlates of mental and physical health in Northern Ireland

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**Aim:** To establish employment correlates of mental and physical health using the first representative estimates of mental disorders based on validated diagnostic criteria in NI (NISHS). **Methods:** A three stage area sampling design generated 4, 340 over 18, English speaking respondents. Within the CIDI, DSM-IV and ICD-10 were used to make a core diagnostic assessment. Those with a lifetime disorder plus a 25% subsample completed questions relating to risk factors. **Analysis:** Logistic regressions revealed that the unemployed and those on sick leave were between four and five times more likely than the employed to experience 12 month mood and anxiety disorders. Physical disorders are the most common sick leave illnesses. **Discussion:** Sick absences resulting from physical causes may be exacerbated by the subsequent development of mental health conditions if rehabilitation is delayed. This can inform interventions to promote an early return to work following illness.

## Illness representations in diabetes and depression: validation of a new measure

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**Background:** This study describes the development and validation of the Diabetes and Depression Representation and Management Questionnaire (DDRMQ), a measure of cognitive illness representations and management beliefs in people with multimorbid diabetes and depression. **Methods:** Qualitative interviews with 17 people with diabetes and depression informed development of an initial item pool. A cognitive interviewing study was then carried out to assess item clarity and ease of completion. A validation study is ongoing to determine the psychometric properties of the DDRMQ. **Findings:** The DDRMQ consists of 48 items organised into six sub-scales. 165 patients have completed the DDRMQ and additional questionnaires to determine the factor structure and reliability of the DDRMQ and the associations of sub-scales with HbA1c level, depression severity and medication adherence. **Discussion:** Using the DDRMQ may facilitate an understanding of patients' perceptions of multimorbidity and inform the development of interventions for people with diabetes and depression.

## Using Message Framing and the Common Sense Model to predict intentions to vaccinate against influenza

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**Background:** This research aimed to integrate two prominent theories, Message Framing and the Common Sense Model (CSM) to investigate intentions to vaccinate. The interactive effects of frame valence (gain *vs.* loss) and frame focus (frames presented as probabilities *vs.* natural frequencies) on intentions was also explored. **Methods:** Pre-intervention questionnaire ( $N=376$ ) featuring the CSM dimensions and past experience with the vaccine, health-promotion leaflet containing framed messages, and post-intervention measure of attitudes and intentions to vaccinate. **Findings:** HMLR and simple slopes analyses revealed that loss frames presented as natural frequencies were significant predictors of attitudes for those with no prior experience with the vaccine. Attitudes, treatment control and personal control predicted intentions. Dimensions of the CSM did not moderate framing effects. **Discussion:** This study offers the first demonstration that frame valence interacts with frame focus to predict health cognition, which can aid the development of tailored health messages to promote prevention behaviors.

### Physical activity in the retirement window: A theory-based interview study

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**Background:** The retirement transition may provide an important opportunity to deliver interventions to increase physical activity. This study aimed to identify theory-based facilitators and barriers to physical activity behaviour perceived by participants within 18 months pre- or post-retirement. **Methods:** Semi-structured Theory Domain Framework (TDF) interviews with 14 participants were conducted to elicit perceived determinants of physical activity across 12 theoretical domains. **Findings:** Using the TDF to code participant's responses revealed the most frequently reported facilitators for physical activity were in the domains 'belief about consequences', 'motivation & goals' and 'environmental context'. The most frequently reported barriers were in the domains 'beliefs about capabilities' and 'emotions'. Retired and non-retired participants reported actual or anticipated changes in physical activity through the retirement process which were most frequently related to having more time ('beliefs about capabilities') to do physical activity after retirement. **Discussion:** These findings can inform future intervention development.

### A life transformed: the lived experiences of Maori with chronic pain

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**Background:** Currently relatively little research has focussed on the chronic pain experiences of indigenous populations. This study aimed to explore the lived experiences of chronic pain among Maori in Aotearoa/New Zealand. **Methods:** A Kaupapa Maori approach along with Interpretative Phenomenological Analysis was used. Seven in-depth semi-structured interviews were conducted with Maori adults (5 females, 2 males; aged 26 to 52) who were living with chronic pain or a chronic painful health condition. **Findings:** Four superordinate themes were identified: 'A life transformed by the experience of chronic pain', 'Experiences of chronic pain as Maori', 'Evaluating treatment experiences', and 'Negative perceptions, negative experiences'. **Discussion:** There is a clear need to incorporate greater cultural consideration into

consultations and treatment with Maori who have chronic pain. Further in-depth examination of indigenous people's experiences of chronic pain would also be valuable, with the aim of improving how the healthcare system can meet their needs.

### Habit-formation as a novel theoretical framework for dietary change in preschoolers

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**Background:** Habit-formation offers a novel theoretical framework for behaviour change. We report findings from an intervention designed to change parental feeding habits in order to increase child fruit and vegetable (FV) intake. **Methods:** Six Children's Centres were cluster-randomised to offer either the habit-based intervention ( $n = 57$  families) or a no-treatment control conditions ( $n = 68$  families). Intervention families received 4 home-visits over 8 weeks, in which the habit model was described and habit-formation plans were formulated to increase FV feeding. Parents completed measures of child FV and habit strength for FV feeding practices at baseline and post-treatment, and, in the intervention group, at 1 and 2 month follow-ups. **Findings:** Habit strength increased only in the intervention group ( $p = 0.010$ ), and children in the intervention group had a greater increase in vegetable intake ( $p = 0.003$ ). FV intake remained above baseline over follow-up. **Discussion:** Habit-formation provides a novel and promising framework for sustained improvement in preschoolers' diets.

### Doctors Perspectives on their Stress and Working Conditions a Qualitative Study

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**Background:** Doctors face significant challenges in the current healthcare environment including staff shortages, pressure for beds and workforce migration. This paper analyses challenges faced by hospital doctors, providing insight into the experiences of these frontline staff. **Methods:** Semi-structured qualitative interviews with 20 doctors from urban Irish hospitals, recorded via note-taking, were analysed thematically. **Findings:** Dominant themes included: (1) a lack of resources (i.e. desk space or internet access) leaving respondents feeling undervalued with little control over their work, (2) Unrealistic workloads, restricting time for patient-care and professional development, and (3) Insufficient gathering spaces at work, contributing to feelings of isolation and reinforcing poor communication. **Discussion:** Respondents stressed the importance of being valued and receiving recognition. Factors relating to working conditions were more important to respondents than pay-related issues. These insights should inform efforts to improve working conditions and increase the retention of hospital doctors in Ireland.

### Psychological, health and social predictors of emotional and social loneliness in older people

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**Background:** To reduce loneliness in older people, a relatively common aspect of late life, factors associated with loneliness and open to intervention must be identified. **Methods:** Older people (aged 65+,  $N=1255$ ) from the United Kingdom received a questionnaire-based interview covering demographic, psychological, health and social characteristics, and containing the Loneliness Scale (de Jong-Gierveld & Kamphuis, 1985), measuring Emotional and Social Loneliness. **Findings:** Being male, widowed, low well-being, low self-esteem, high activity restriction, and high concern about personal finances were significant predictors of Emotional Loneliness ( $F(17, 976)=25.59$ ,  $R^2=0.31$ ,  $p < 0.001$ ). Being male, widowed, low well-being, low self-esteem, high concern about personal finances, low contact with family, low contact with friends, low engagement, and low perceived community integration were significant predictors of Social Loneliness ( $F(17, 982)=19.63$ ,  $R^2=0.25$ ,  $p < 0.001$ ). **Discussion:** Different targets for intervention are required in order to reduce emotional and social loneliness respectively, although psychological intervention has the potential to reduce both.

### Does Spiritual engagement increase wellbeing? A longitudinal, naturalistic study

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**Background:** The evidence for a positive relationship between spiritual engagement and wellbeing is currently based on weak correlational studies conducted in Western contexts. The current study aimed to explore this relationship through a naturalist, longitudinal study of participants in the Hindu Thaipusam festival in Malaysia. **Methods:** Participants included 226 Malays, Chinese and Indians whose engagement with the festival varied from non-observance, to extreme engagement. Each person completed a measure of subjective wellbeing three months before, two weeks before, two weeks after, and four months after the festival. **Findings:** The subjective wellbeing of those with the most extreme level of engagement was permanently higher than other groups. The wellbeing of those with a strong, but less extreme engagement rose at the time of the festival and remained elevated. **Discussion:** The findings are discussed in relation to homeostatic theory of wellbeing and the potential benefits of spiritual engagement.

### Differences in emotion regulation and positive affect between obese patients and normal weight volunteers

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**Background:** Adaptive emotion regulation and positive affect both have an impact on health and well-being, and may be an explanatory factor in difference in wellbeing between clinical and nonclinical groups. The purpose of this study was to determine whether emotion regulation and positive affect differed between obese patients and normal-weight volunteers. **Methods:** 99 obese patients awaiting a weight-reduction treatment and 217 normal-weight

volunteers completed a set of questionnaires on emotion regulation, affect and eating behavior, **Findings:** Obese patients showed less adaptive emotion regulation competencies and less positive affect. There was no difference in negative affect between groups. Further analysis revealed more eating disturbances and more restraint eating in obese patients. **Conclusions:** Emotion regulation competencies are limited in obese patients and might influence the development of mood disturbances or the psychopathological processes when awaiting a weight-reduction program.

### The predictive value of illness perceptions for time until start of dialysis in pre-dialysis patients

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**Background:** In renal patients, illness perceptions seem associated with well-being, self-management behavior and adherence. However, no data are available about whether illness perceptions are associated with a decline in kidney function over time and the possibility to postpone dialysis. **Methods:** 502 incident pre-dialysis patients participating in a prospective nation-wide cohort (PREPARE-2) completed the Illness Perception Questionnaire (IPQ-R). Cox regression analyses were applied to test the association between IPQ-R (5-point scales) and time until start of dialysis. Adjustments were made for sociodemographics, kidney function, primary cause of kidney disease, co-morbidities, BMI, albumin, creatinine and haemoglobin. **Findings:** Three IPQ-R scales were independently associated with time until dialysis: Dialysis was started earlier among patients who believe their renal disease has negative consequences ( $Hr_{adj}=1.56$ , 95% CI 1.18–2.07), is cyclical in nature ( $Hr_{adj}=1.28$ , 95% CI 1.04–1.57) and causes negative feelings ( $Hr_{adj}=1.29$ , 95% CI 1.05–1.60). **Discussion:** Pre-dialysis patients' illness perceptions are associated with postponement of dialysis.

### Developing a true (hierarchical) taxonomy of behaviour change techniques

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**Background:** The objective was to develop a true (hierarchical) taxonomy of clearly labelled, well defined behaviour change techniques (BCTs). **Methods:** In an open sort task, 18 experts in behaviour change assigned 85 BCTs to groups based on their active ingredients and labelled these groups according to their content. Hierarchical Cluster Analysis with bootstrap resampling was used to identify groups that were strongly supported by the data. **Findings:** Using measures of internal validity and stability, the following 16 clusters were identified as the most suitable solution: Scheduled Consequences, Reward/Threaten, Repetition/Replacement, Antecedents, Associations, Covert Learning, Natural Consequences, Feedback & Monitoring, Goals & Planning, Social Support, Comparison of Behaviour, Self-belief, Comparison of Outcomes, Identity, Shaping Knowledge, Adjunctive.

### **Intention-Behavior Gap: The impact of positive and negative emotions as mediators**

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This study investigates the hypothesis whether the inclusion of positive and negative emotions into the theory of planned behavior contributes to bridge the intention-behavior gap predicting actual physical activity (APA). Study participants were  $N = 144$  members of fitness centers. Exercise behavior was monitored objectively over a 12 months period. Results: 46% of the variance in the intention to exercise regularly was explained by attitudes, subjective norms and perceived behavioral control, 35% of the variance of APA was explained by intention and perceived behavioral control, the inclusion of positive and negative emotions as mediators between intention and behavior resulted in a 10% increase in variance explained in APA, which was accompanied by a reduction in strength of the direct link between intention and behavior ( $-22\%$ ). The results have both implications on a theoretical level as well as practical import for the enhancement of prevention and health programs.

### **Sense of coherence and perceived health in adolescents**

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**Background:** The knowledge about the role of SOC for adolescent health and well-being has been sparse compared to research in adult populations. The present study investigates the association between SOC and perceived health as well as gender and age differences on SOC and perceived health. **Methods:** The cross-sectional sample consists of 1239 adolescents 13–18 years from Mid-Norway. The participants responded on the Orientation to Life Questionnaire (13 items) and one item about how health had been perceived during the last year. **Findings:** The results showed that boys reported higher scores on SOC and perceived health more positively compared to girls across all age groups. SOC was significantly and positively related to perceived health, where a stronger association was found for girls than for boys. **Discussion:** The results from the study support that a strong SOC is an important resource for adolescent health and well-being, especially for girls.

### **The adverse effects of social norms messages in health campaigns**

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**Background:** Using norms-based appeals to promote healthy behaviours is an increasingly popular strategy. Even though these messages are well-intended and aimed at increasing healthy behaviour, messages stressing the high prevalence of unhealthy behaviour (i.e. unhealthy descriptive norm) might be counterproductive. **Methods & Results:** We will present findings from a field experiment that indicates that this adverse effect can indeed occur and

will provide alternatives for the communication of unhealthy descriptive norms. In addition to that we will present findings from an experiment on how framing increases the effectiveness of normative messages. **Discussion:** Those in health promotion should be reticent in the use of unhealthy descriptive norm messages, such as: 'Nine out of ten people eat less than the recommended two hundred grams of vegetables and two pieces of fruit a day' because these messages might adversely affect health behaviour.

### **Dose-response relationship between persistent loneliness and sleep quality: The English Longitudinal Study of Ageing**

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**Background:** We examined whether persistent loneliness is linked to poorer sleep in a dose-response fashion. **Method:** In this prospective cohort study complete data from 5135 participants in the English Longitudinal Study of Ageing (ELSA) was available. Loneliness was measured using the short form of the Revised UCLA scale in Wave 2, 3 and 4 of ELSA and sleep disturbance and duration was collected in Wave 4. **Findings:** Sleep disturbance was associated with loneliness in Wave 4 ( $r=0.23$ ), 3 ( $r=0.23$ ) and 2 ( $r=0.21$ ). Greater exposure to elevated loneliness at Wave 2 and 3 was associated with significantly greater sleep disturbance at Wave 4. Greater exposure to elevated loneliness was linked to shorter sleep duration (0–5 hours, odds ratio: 1.56, 95% CI 1.41, 1.73). **Conclusion:** These data provide evidence that the persistence of loneliness may be linked to sleep quality in a dose-response fashion.

### **Maintaining humanity in a hyper-rationalised NHS: Medical students anticipate meeting their patients' psychosocial needs.**

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Within a burgeoning culture of medicalisation and a rapidly 'evolving' NHS there is increasing pressure on physicians to meet their patients' psychosocial needs. However, there is a lack of qualitative research on physicians' ability to meet these demands. As future physicians, medical students are uniquely positioned to represent fresh perspectives on expectations of integrative medicine. The present study employed photo-elicitation, narratives and thematic analysis to explore seven (4 female, 3 male) medical students' perceptions of addressing patients' psychosocial needs. Three main themes revealed the importance of tensions in (i) constructing the doctor identity (ii) negotiating patient-centred care through emotional connection and disconnection and, (iii) negotiating psychosocial care within a hyper-rationalised health service. The findings suggest that medical students may struggle to achieve a balance between addressing their patients' psychosocial needs and maintaining their own well-being: indicating that health psychologists have an important role in helping physicians manage these competing demands.

### Physical activity and core depressive symptoms in the older Irish adult population

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This study investigated the associations between physical activity and core depressive symptoms in adults aged 50 years or more. The study used data from the Survey of Lifestyle, Attitudes and Nutrition 2007 ( $n=4255$ ) and The Northern Ireland Health and Social Wellbeing Survey 2005–2006 ( $n=1904$ ). Measures of core diagnostic symptoms of major depression were derived. Physical activity patterns were categorised using the International Physical Activity Questionnaire Short Form. Data were analysed controlling for socio-demographic and behavioural factors.

### Understanding safe drinking water and hygiene practices and behavior change in developing countries

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Theories of health psychology have been demonstrated to be very useful in explaining diverse health behaviors. The goal of this presentation is to show how theories of health psychology can be applied successfully in explaining practices of safe drinking water and hygiene in various developing countries. The distinct conditions of conducting research in developing countries will be revealed and the different health psychology theories used will be depicted. As the main result it will be demonstrated that working in many countries (e.g. Bolivia, Nicaragua, Haiti, Zimbabwe, Kenya, Ethiopia, Bangladesh) and with similar theoretical approaches many different behaviors (e.g. drinking raw, boiled, or solar disinfected water; drinking filtered water; changing to safe water sources, washing hands; improving sanitation) can well be explained with regression analysis using factors of health psychology theories as explanatory variables.

### Injury Representations and Behaviours predict the onset of Postconcussional Syndrome following Mild Traumatic Brain Injury

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**Background:** A significant proportion of patients with mild traumatic brain injury (MTBI) are at risk of developing postconcussional syndrome (PCS). The aim of this study was to investigate whether a range of self regulatory responses to the acute MTBI could predict the onset of PCS. **Methods:** A prospective study of 126 MTBI patients completed baseline self-regulation questionnaire assessments within 2 weeks of the injury. 107 completed follow-up assessments at 3 and 6 months. The primary outcome was the ICD-10 diagnosis for PCS. **Findings:** 22% of participants met criteria for PCS at 3 months and 21% at 6 months. Logistic regressions indicated that negative MTBI perceptions, stress, mood and all-or-nothing behaviour predicted onset of PCS. All-or-nothing behaviour and negative representations

were the strongest predictors. **Discussion:** These data suggest that targeting patients' perceptions of their head injury and their behavioural responses may be useful targets for early preventive interventions for PCS.

### Comparison of two instruments for measuring parenting styles in relation with adolescent alcohol consumption

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**Background:** The relations between various parenting scales and adolescents risks behaviours are not compared until now. This study aimed at comparing two scales with respect to the alcohol consumption of adolescents and their best friends. **Methods:** The Parenting Scales (PS) (Lamborn et al., 1991) and Simon and Conger's Typology of Family Parenting Styles (TFPS) (2007) were assessed in a sample of 241 Belgian adolescents aged 13–16 year, as well as their 7 days alcohol consumption, and the perceived alcohol consumption of their best friend. **Results:** Internal consistency of the dimensions ranged between 0.66 and 0.88. Both parenting classifications were related ( $\chi^2(9, N=241)=62.88, p=0.000$ ). The PS showed the expected contrasts between the styles, while the TFPS only showed differences between two styles for adolescent consumption only. **Discussion:** The PS showed more consistent relations between parenting styles and adolescent alcohol consumption, and seems for this group and behaviour the better instrument

### Social skills: a resource to foster social support and functioning in people with disability?

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**Background:** To specify and test a comprehensive model on the role of social skills and social support in the context of functioning following spinal cord injury (SCI). **Methods:** A cross-sectional observational study is conducted. Persons with traumatic and non-traumatic SCI older than 16 years residing in Switzerland are included. Measures used are: the WHOQoL-BREF, USER-Participation, Hospital Anxiety and Depression Scale, Short-Form Social Skills Inventory, Social Support Questionnaire-6, and the Big Five Inventory-21. **Findings:** Structural equation modeling identifies social support as key mediator for functioning outcomes. Social skills and personality factors operate as predictors. **Discussion:** Social skills and social support are psychosocial resources that help a person to adjust to disability. To strengthen these resources is important in health psychology as they can serve as protective factors in a vulnerable population. This study can contribute to the development of targeted and effective interventions at the intersection of health psychology and disability.

## Do determinants of intention to vaccinate against pandemic influenza differ between countries?

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**Introduction:** Vaccination is key to controlling future influenza pandemics. To optimise vaccination rates, it is important to identify determinants that influence decisions to have a vaccination. This study explored intention to have a swine flu vaccination in 5 different countries using an extended Theory of Planned Behaviour (TPB). **Methods:** During the swine flu pandemic, 964 adults from the general population in the UK, China, USA, Hungary and Turkey completed a cross-sectional questionnaire concerning intention to have a vaccination. Variables added to the TPB were past-related behaviour, anticipated regret and knowledge. **Findings:** The main analyses were hierarchical multiple regression. The 2 most consistent determinants of intention which were significant in 4 out of 5 countries were anticipated regret (except China) and injunctive norm (except USA). **Discussion:** Results suggest that interventions combining anticipated regret and injunctive norm would be useful to craft targeted interventions aimed at increasing vaccine uptake in future pandemics.

## Association between perceived parenting styles, socio-economic status (SES) and weight-related behaviors among adolescents

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**Background:** Previous studies documented association between compromising health behaviors (HB) and parenting style and between compromising HB and SES. Present study examined association between weight-related promoting HB, parenting styles and SES. **Methods:** 120 adolescents aged 10–16 from two SES locations in central Israel self reported on weight-related promoting HB's and perceived parenting style. SES and parenting styles were the independent variables, and the dependent variables were HB's. **Findings:** Average physical activity and positive eating habits were higher among adolescents to parents with authoritative style than among authoritarian and permissive styles and among adolescents from high SES than low SES background. Prevalence of authoritative and authoritarian styles did not differ significantly among SES levels, yet permissive style was more prevalent in low SES. Weight-related promoting behaviors were the highest in the combination of authoritative style and high SES. **Discussion:** Weight-related behaviors among adolescents are associated with familial and structural factors.

## An Implementation Intention intervention to increase screening for colorectal cancer (CRC)

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**Background:** Examination of a population-level mailed implementation intention intervention, formulated by researchers, to increase CRC screening. **Methods:** Test kits weremailed to 29833men and women aged 50–74 who performed the test the previous year. Participants were randomly assigned to intervention and control. 1100 were interviewed by phone, tapping possible cognitive and background moderators. Dependent variable of test uptake was measured in a computerized data base. **Findings:** Within six months of kits' mailing, test uptake was 68.0% and 71.3% for control and intervention, respectively ( $\chi^2 = 39.2, p < 0.001$ ). The difference remained significant after controlling for age, gender and marital status. Test uptake was related to cognitive variables (attitudes, self- efficacy, intention, CRC knowledge and self-rated health), and to background variables (age, education and past screening behavior). No interaction was found between cognitive or background variables and the intervention. **Discussion:** Implementation intention intervention is effective for medium-level intentions in an inexpensive mailed form.

### Randomised controlled trial to examine whether yoga in pregnancy reduces maternal anxiety relating to childbirth

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**Background:** High fear of childbirth (FOC) is associated with postnatal depression (Alipour, 2011). The aim of the study was to test whether antenatal yoga reduced FOC compared to treatment-as-usual (TAU). **Method:** Participants (mean gestational week at consent [ $\pm$ SD]=22 $\pm$ 2) were randomised to either an 8-week course of antenatal yoga ( $n=31$ ) or TAU ( $n=28$ ). The Wijma Delivery Expectancy Questionnaire (WDEQ) (measuring FOC) was completed both before and after the intervention programme. **Results:** Unlike the TAU group, the yoga group showed a significant decrease in WDEQ score at follow up compared to at consent (64 [46–75] vs. 75 [64–86] [Median (95% CI)];  $p < 0.0001$ ). Decrease in scores was significantly greater than that observed for TAU (–14 [–22 to –7] vs. –6 [–14 to 3] respectively;  $p=0.019$ ). **Discussion:** These data suggest yoga may prevent the expected increase in FOC as gestation advances (Lee, 2007) and may be useful in preparing women for childbirth.

### The developmental mechanisms of academic burnout: Longitudinal effects of effort-reward imbalance and mental health

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This study deals with academic burnout in relation with effort-reward imbalance (Siegrist, 1996) and mental health. In order to identify students at risk of academic burnout and intervene before it becomes too chronic, it is critical to understand the antecedents of academic burnout (Lee et al., 2011) and relationships between developmental trajectories

of each variable. Thus, the first purpose of this study is to investigate the reciprocal relationships between mental health (i.e., depression and anxiety) and academic burnout from a longitudinal perspective. Using Amos 18.0, autoregressive cross-lagged modeling (ACLM) analysis would be conducted with data comprising total of 405 middle school students (T1:  $N = 367$ , T2:  $N = 382$ , T3:  $N = 375$ ). Then, mediating effects of mental health on the relationship between effort-reward imbalance and academic burnout would be investigated from a latent growth modeling approach. The implications for future research and for prevention of burnout would be discussed.

### **Living up to expectations: Possible selves and binge drinking in university students**

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**Background:** Possible selves refer to images people have of themselves in the future to be approached or avoided. This study examined whether possible selves could predict binge drinking in new university students. **Methods:** One month before starting university, students ( $N = 253$ ) completed questionnaires assessing possible selves, current selves, theory of planned behaviour variables and past behaviour. Binge drinking was assessed one month after starting university. **Findings:** Possible selves predicted binge drinking during the first month at university ( $R^2 = 0.24$ ). Students who, pre-university, expected that they would be “sociable” at university engaged in binge drinking more frequently, whereas students who expected that they would be “reliable” engaged in binge drinking less frequently. These relationship remained after controlling for other pre-university variables. **Discussions:** The findings suggest that interventions to reduce binge drinking at university should highlight alternative ways in which students can be sociable and reinforce students’ images of themselves as reliable.

### **Effects of rumination on daily stress and ambulatory blood pressure levels following written emotional disclosure**

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**Background:** Written emotional disclosure buffers against depression symptoms among those with maladaptive rumination. This study, using a multi-level design, examined whether ruminative style moderated the experience of daily stress and ambulatory blood pressure (ABP) post-disclosure. **Method:** Sixty-five participants wrote about their most stressful life experience(s) or non-emotive topics, for 20 minutes, on 3 consecutive days. Two weeks and 14 weeks later stress levels and ABP were recorded every 30 minutes over a 12 hour working day. Brooding and reflection were measured at baseline. **Findings:** Cross-sectional and lagged analyses found stress levels were significantly associated with ABP throughout the working day at 2 and 14 weeks. Brooding was also found to be associated with ABP at both time points. **Discussion:** These findings demonstrate that the effects of maladaptive rumination extend to cardiovascular outcomes and impact on daily stress. The implications for daily diary designs in stress research will be discussed.

### **A brief psychological intervention to increase walking in patients with intermittent claudication – 1-year follow-up of a randomised controlled trial**

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**Background:** Increased walking is recommended as the primary treatment of intermittent claudication (IC). We assessed the long-term effect on walking and uptake of surgery/angioplasty of a brief psychological intervention designed to increase walking in IC patients.

**Methods:** Fifty-eight patients newly diagnosed with IC were randomised into two groups. The control group ( $n=30$ ) received usual care, and the treatment group ( $n=28$ ) received usual care and a two session psychological intervention to modify illness and walking beliefs and develop a personalised walking action plan. Daily steps were measured by pedometer.

**Findings:** At 1 year, participants in the intervention group walked significantly more steps per day (1374) than participants in the control group, and significantly more participants in the control group (20/30) had received angioplasty/surgery than participants in the intervention group (10/28). **Discussion:** This brief psychological intervention could improve health and provide substantial savings in the management of IC.

### **What buffers suicide attempts? Data from a national study of youth mental health**

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**Background:** This research aimed to explore risk and protective factors for self-harm, suicide attempts and suicidal ideation in young Irish adults. **Methods:** A cross-sectional survey-based study called the My World Survey (MWS) was conducted with 9133 young adults in Ireland aged between 16–25 years ( $M=20.42$ ,  $SD=1.938$ ). Of the sample, 64.8% were female. The MWS assessed risk and protective factors of mental health and contained a number of psychometrically sound instruments. **Findings:** 21.2% ( $N=1720$ ) of participants reported engaging in self-harm. 42.4% ( $N=3443$ ) reported suicidal ideation. 7.3% ( $N=597$ ) had attempted suicide. Results from linear regression analyses indicated that depression, substance abuse, self-esteem, anxiety and alcohol use were significantly associated with self-reported suicide attempts. Self-esteem, depression, substance abuse, alcohol use and stress were significantly associated with suicidal ideation. **Discussion:** Results stress the importance of implementing interventions to raise self-esteem and reduce problem substance use that may lead to suicidal behaviours.

### **Personality, Cognition and Suicide Risk: Predicting a Self-Destructive Health Behaviour**

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**Background:** New theoretical developments have usefully conceptualized suicide attempts as 'health' behaviours (integrated motivational–volitional model). In this context, we aimed to specify when, how and why proximal psychological mechanisms act to increase suicide risk. **Methods:** Across three studies, we investigated the relationship between personality (perfectionism/self-criticism), cognition (future thinking, defeat and entrapment) and suicide risk. **Findings:** Our findings showed that perfectionism and self-criticism interact to predict repetition of self-harm in suicide attempters ( $n=241$ , 15month follow-up). In Study Two ( $n=70$ ) the experience of defeat led to a rapid reduction in positive future thinking among those who also felt trapped by life's circumstances. Finally, defeat and entrapment predicted repetition of self-harm four years following a suicide attempt ( $n=70$ ). **Discussion:** We need to look beyond psychiatric diagnoses to health and clinical psychology to further our understanding the etiology and course of suicidal behavior. The clinical and theoretical implications for health psychology are discussed.

### Received social support and individual self-regulation variables in smoking cessation

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**Background:** The aim of the study was to test the added value of received social support over and above the individual self-regulation variables of the Health Action Process Approach (HAPA) in the context of smoking cessation. Moreover, gender differences of associations with social support were analyzed. **Method:** Overall, 84 smokers completed two questionnaires on HAPA variables, received social support and smoking behavior before and four weeks after a self-set smoking cessation date. All participants were in committed relationships with a non-smoking partner. **Findings:** Received social support from the partner was beneficial for the prediction of intentions over and above the individual self-regulation variables for men only. In terms of the prediction of behavior, for both men and women individual self-regulation variables but not social support predicted smoking cessation. **Discussion:** Social support seems to be beneficial in intention formation for men. Future studies need to examine potential mechanisms on these associations.

### Effect of multiple self-efficacies on intentional and reactive motivations for unhealthy eating

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**Objectives:** This study examined the effect of the three different self-efficacies (i.e. situational, action, coping self-efficacy) on unhealthy eating behaviors within the dual-process perspective (Ohtomo et al., 2011), which includes intentional and reactive motivation. This study hypothesized that these three self-efficacies have different effects on intentional and reactive motivation to eat unhealthy snacks. **Methods:** Participants completed a questionnaire assessing attitude, self-efficacies, intentional and reactive motivation, two weeks before

measurement of high calorie-snacking behaviors. **Results:** Reactive motivations affected the behavior more than intentional motivation. Attitude determined both motivations. Moreover, the situational self-efficacy affected the impulsive motivation and the coping self-efficacy affected the intentional motivation. The action self-efficacy had a direct effect on the behaviors. **Conclusions:** Unhealthy eating behaviors are reactive rather than intentional. Reactive and intentional motivations were determined by the different self-efficacies. This study supports the notion of multi-dimensional concepts of self-efficacy in the dual-process perspective for unhealthy eating behaviors.

### **Efficiency of Mindfulness Based stress Reduction on Mood States of veterans**

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**Background:** Mindfulness Based Stress reduction usually used for emotional regulation and mood states in many psychological and psychosomatic disorders. Efficiency of this therapy on those variables of veterans with Major Depressive Disorder and PTSD is considered in this study. **Methods:** Clinical-experimental study was carried out on 62 patients who randomly selected and met DSM-IV criteria for MDD and PTSD. They were divided into 2 equal groups including MBCT and TAU group. The first group received psychological treatment while the third ones received medications. They have depression episodes and chronic PTSD and evaluated through (SCID) and (BRUMS-32), in two pre and post tests. Data were analyzed by Co-variance analysis. **Findings:** MBCT had significantly decreased on confusion, depression, fatigue, tension, vigor, but have no significant effect on anger. **Discussion:** The present study examined efficacy of (MBSR) on mood state of veterans and demonstrate it will be useful for stress and emotional health.

### **Well-being and mental health of Romanian children: the results of a national screening**

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There are many factors that seem to have a negative impact on Romanian children and adolescents well-being, increasing emotional and behavioral problems: the socio-economic status, the limited access to resources, family structure etc. In the last 10 years there was a great interest in promoting and implementing preventive and curative programs for emotional and behavioral problems, but there was not conducted any national screening in order to identify the specific problems to address for. Taking into account these aspects, we accomplished a national screening, using a sample of 2600 children and adolescents (7–18 years old). Using a psychological battery of tests (focused on different cognitive, emotional, and behavioral aspects), we have identified specific internalisation and externalisation problems in Romanian school population, related to the different socio-demographic dimensions mentioned above. The implications for educational policies and for the specific content and structure of prevention and intervention programs are discussed.

### Who is in control? The development of a model for communicating health information

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**Background:** The aim of this research was to examine variables that influence attention to health information in order to develop a predictive model. **Methods:** Community participants ( $N = 330$ ) were randomly assigned to one of two conditions presenting information about coronary heart disease (CHD) or road accidents. Information was either risk or neutral in valency. Attention to information was measured using a surprise recall task. Other variables measured included perceived risk, optimism, control and coping strategies. **Findings:** Overall, participants in the CHD condition remembered significantly more risk information than participants in the road condition. Participants in the road condition endorsed significantly lower beliefs in personal control perceptions while also endorsing greater beliefs in other's control over their own road outcomes. **Discussion:** While perceived control is usually emphasised as integral in adopting protective behaviours these findings suggest that they are also central in communicating health information.

### Differences in cost-effectiveness in tailored interventions to promote physical activity among the over fifties

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**Background:** Four tailored interventions were developed to stimulate physical activity (PA) among persons aged over fifty and evaluated on cost-effectiveness. Interventions varied in delivery channel (web-based or printed) and the amount of local information. **Methods:** Interventions were evaluated in an RCT, and analysed using linear regression analyses. Main outcomes are (six months) changes in PA, quality of life (QoL) and intervention costs. **Findings:** Response to the web-based intervention was lower (11.8% vs. 18.5%) and dropout was higher (70.7% vs. 49.9%) than in the print-delivered intervention. All interventions were equally effective in increasing PA. Participants' QoL did not improve. Adding local information resulted in a less positive cost-effectiveness, since effects are equal while intervention costs increased. Costs per participant were lower in the web-based condition compared to the print-delivered intervention. **Discussion:** Since effects are equal, cost-effectiveness depends on the number of participants (response and dropout) as well on the sustainability of the effects.

### Modelling adjustment in spinal cord injury: the role of psychological resources

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**Background:** The objective of this study is to test a comprehensive model on the role of psychological resources in relation to adjustment of persons with spinal cord injury (SCI). **Methods:** Cross-sectional data collection within Swiss Spinal Cord Injury Cohort (SwiSCI). Measures used included: General Self-Efficacy Scale, Purpose in Life Scale, Big Five Inventory, Brief COPE, Appraisal of Life Events scale, Hospital Anxiety and Depression Scale, WHO-QOL, Utrecht Scale for Evaluation of Rehabilitation – Participation. Data was analyzed using structural equation modeling. **Findings:** Higher self-efficacy and purpose in life are associated with more participation, better life quality and lower depression. Cognitive appraisals and coping strategies mediate the relationships between psychological resources and adjustment outcomes. **Discussion:** The results underline the significance of resource-oriented therapies. Systematically strengthening psychological resources could contribute to enhance optimal interdisciplinary rehabilitation care for persons with SCI.

### Improving health promotion effectiveness: a behaviour change intervention targeting health educators

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**Background:** Health educators frequently select ineffective methods from the extensive toolbox of behaviour change techniques at their disposal. We developed an intervention that discourages selection of an ineffective method (threatening communication) by presenting up-to-date scientific evidence. **Methods:** Behaviour change professionals were presented with six hypothetical scenarios. For each scenario, they rated the effectiveness of 1–3 possible hypothetical interventions (differing in employed behaviour change methods or techniques). They then received our intervention/manipulation, and again read different scenarios and rated the effectiveness of presented interventions, immediately after the intervention and at a six week follow-up. Of the 153 participants who started the study, 102 completed the follow-up (66%; 75 women, mean age 42). **Findings:** Participants rated threatening interventions as significantly less effective after they received our intervention, both immediately and after six weeks. **Conclusion:** Using interventions that target health behaviour change of professionals is a feasible way of improving health promotion effectiveness.

### Attachment style, attitudes towards HIV and motivation for safer sex in Bulgarian young adults

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The aim of the present research is to investigate the relationship between attachment style, safer sex motivation, and attitudes towards HIV ( $n = 198$ ). The study employs self-report

measures: ECR-R (Fraley, Waller & Brennan, 2000), motivation for safer sexual behaviour (Ingledeu & Ferguson, 2007), fear and maladaptive coping scales (Ho, 2000). The results of the regression analysis suggest that, contrary to secure attachment style, fearful attachment style in men is related to the highest level of autonomous motivation for safer sex and fear of HIV. The anxiety dimension that underlies preoccupied and fearful attachment styles is predictor of controlled motivation for safer sexual behaviour in women. In contrast to women with fearful attachment style, secure women show the greatest level of maladaptive coping strategies about HIV threat. Such individual differences in personality and the ambivalent regulative function of the secure attachment style should be taken in account in health promotion programs.

### Young women's experiences of the HPV vaccine: A Cross-Cultural, Qualitative Study in Scotland, Spain, Serbia and Bulgari

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**Background:** Cervical cancer remains one of the most prevalent cancers in the world. The HPV (Human Papilloma Virus) Vaccine was introduced for prevention against infection against common strands of the HPV virus. The aim of this study was to explore young women's experiences of the vaccine cross-culturally. **Methods:** Qualitative focus group discussions were held with young women aged 18–26 years old in Scotland, Spain, Serbia and Bulgaria about their views and experiences of the vaccine. Thematic analysis was used to analyse the data. **Findings:** Common themes identified barriers to information and knowledge about the HPV vaccine; trust issues and dilemmas about vaccine relevance. There were clear differences in terms of access to wider sexual healthcare. **Discussion:** Despite stark divides with implementation of the HPV vaccine across Europe and differences with vaccine cost and wider health access to screening, findings suggested common barriers for young women accessing preventative sexual health services.

### Are men more resilient than women after a road traffic accident?

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**Background:** Men are involved on road traffic accidents (RTA) more frequently than women, but both genders can show psychological disorders. Our aim was to identify gender differences in psychological responses after a RTA. **Methods:** 101 victims of serious RTA (76 male) were evaluated 5 days, 4 and 12 months after RTA. They were evaluated on Peritraumatic

Dissociation, Acute Stress Disorder, PTSD, neuroticism and global psychopathology. **Findings:** 13 women and 20 men reported symptoms for ASD diagnosis (t1). 17 women and 42 men at t2 and 12 women and 35 men at t3 met PTSD diagnosis. Women reported more ASD and (t1), PTSD symptoms (t2 and t3), global psychopathology (t1 and t2) and neuroticism (t2) than men. There were no gender differences on peritraumatic dissociation. **Discussion:** Overall RTA seems to have more impact on women. Health professionals should take into account this data and screen victims of RTA, especially women.

### The influence of self-efficacy and social support on the relationship between pain and depressed mood

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**Background:** There is evidence that depressed mood and pain are related in patients with chronic illness. However, moderating resources, such as self-efficacy and social support, of this association remain unclear. The aim of this study was to investigate these moderators. **Methods:** A longitudinal study of 274 injured workers with minimum eight weeks of disability (221 male, 53 female). Data was collected on sociodemographics, anxiety and depressed mood (HADS-D), social support, self-efficacy and perceptual characteristics of pain (VAS scale on intensity, frequency and impairment) at three months post-injury and after one year post-injury. **Findings:** Regression analyses revealed that self-efficacy moderates the relationship of pain and depressed mood after one year; but social support did not moderate the association. **Discussion:** Pain measured three months after being injured has a strong impact on depressed mood one year following the injury. Self-efficacy acts as a moderator for depressed mood. Social support has no protective influence.

### Reflective and automatic processes in healthcare professional behaviour: an application of a dual process model

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**Background:** Health professionals' clinical behaviours require deliberate decision-making and planning in complex contexts and may involve both automatic (associative) and reflective (motivational and volitional) processes. Aim: to test a dual process model predicting multiple diabetes-management behaviours in primary care clinicians. **Methods:** Design: Prospective. Postal questionnaires measuring reflective (intention, planning) and automatic (habit) predictors for six behaviours (2 prescribing, 2 advising, educating, examining) were sent to 843 primary care clinicians, 427 of which also returned a self-reported behaviour follow-up twelve-months later (51% cumulative response rate). **Findings:** Constructs from both reflective

and automatic processes predicted 3/6 behaviours (R-square range: 0.11 to 0.55). For 2/6 behaviours only the reflective process was predictive (R-square 0.19 to 0.22) whereby intention was indirectly related to behaviour via planning. For providing weight advice, only the automatic process was predictive (R-square = 0.15). **Discussion:** Both reflective and automatic processes influence clinical behaviour and could be targeted in quality improvement interventions.

### A teacher's job in writing: a diary intervention for young teachers

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It has been shown in numerous studies that teachers' well-being can be severely impaired by the hassles of their job. This study investigates whether a diary intervention can help to improve well-being in young teachers. Additionally, it is examined which role resilience as a personal resource plays for the effects of this intervention. Thirty trainee teachers participated in a one week diary study instructing them to either report about their work-related deepest thoughts and feelings or give a formal report of the working day. Resilience was assessed prior to the intervention. A three month follow up was implemented to assess well-being. Results show that reporting about deepest thoughts and feelings had a positive effect on teachers' health. Furthermore, it was shown that the more resilient the teachers were, the more they benefited from the intervention. The results emphasize the usefulness of a simple, inexpensive intervention to improve teachers' well-being.

### Mastery early after kidney transplantation predicts future health-related quality of life: a prospective study

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**Background:** The first year after kidney transplantation (KT) is associated with significant changes and the adverse effects of immunosuppressants. We explored the predictive value of socioeconomic factors, kidney function (KF) and mastery measured in the first year post-KT on future health-related quality of life (HRQoL). **Methods:** 230 KT recipients (55.7% male, 48 ± 11.7 years) provided sociodemographic and KF data and completed the ESRD Symptom Checklist & the Pearlin Mastery Scale at 3–12 months post-KT(T<sub>1</sub>). At follow-up 2–8 years post-KT(T<sub>2</sub>), patients completed the HRQoL questionnaire (SF-36). GLM analysis was performed. **Findings:** Higher physical HRQoL(T<sub>2</sub>) was predicted by younger age, female gender, higher KF, fewer side-effects and higher mastery. Higher mental HRQoL(T<sub>2</sub>) was predicted by female gender, higher KF, fewer side-effects and higher mastery. The models

explained 41.6% and 36.1% of variance. **Discussion:** Interventions focused on management of side effects and increased mastery post-KT may contribute to higher future HRQoL in KT recipients.

### **The impact of structural dimensions on adolescent HIV prevention intervention efficacy: A meta-analysis**

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**Background:** Behavioural interventions for reducing HIV risk behaviour have been evaluated for adolescents. These trials have had conflicting results, and prior meta-analyses have not examined whether important structural dimensions account for these differences. **Methods:** 139 intervention trials from 22 nations were retrieved; efficacy was assessed using HIV knowledge, condom use, or abstinence at trials' last available assessment. **Findings:** Interventions were more successful increasing knowledge in nations with relatively low health-care expenditures ( $\beta = 0.21$ ), a pattern that remained even when controlling for nations' human development index (HDI) levels, respect for human rights, and contraceptive preferences. Condom use efficacy increased marginally in nations with higher HDI ( $\beta = -0.12$ ). These dimensions were unrelated to efficacy as gauged by abstinence. **Discussion:** Intervention efficacy appears to depend on social-structural elements present in the larger environment in which the interventions are delivered. Future research could investigate how these elements interact with intervention and sample features.

### **Promoting social support and health behaviour: An intervention study to test the enabling hypothesis**

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**Background:** This longitudinal intervention study set out testing the enabling effects of social support on exercise behaviour and on the volitional constructs of the Health Action Process Approach (HAPA): self-efficacy, action control, action planning. **Method:** Participants were randomly assigned to an intervention ( $n = 100$ ; female: 67.0%, age:  $M = 34.1$ ,  $SD = 10.8$ ) and control group ( $n = 82$ ; female: 70.7%, age:  $M = 34.4$ ,  $SD = 11.4$ ). The intervention comprised regularly exercising with an exercise-companion for two months. Exercise behaviour, social support, and volitional constructs were assessed. **Results:** Intervention- and control group were compared via multigroup comparisons. Only in the intervention group, social support predicted the volitional variables of the HAPA. Moreover, social support was indirectly associated with exercise behaviour via all volitional constructs. These associations could not be demonstrated for the control group. **Discussion:** Actively looking for an exercise-companion and exercising together seems beneficial for both, promotion of social support as well as for volitional resources and exercise behaviour.

**Body image and social support: a study with breast cancer surviving women**C. Ramos<sup>1</sup>, M. Sousa<sup>2</sup>, I. Alvarez<sup>1</sup>, I. Leal<sup>1</sup><sup>1</sup>University Institute of Applied Psychology – ISPA, Psychology and Health Research Unit, Lisboa, Portugal<sup>2</sup>University Institute of Applied Psychology – ISPA, Lisboa, Portugal

Previous research has focused on negative outcomes of breast cancer in several dimensions of women's lives, especially in body image. Satisfaction with social support is a crucial factor in psychosocial adjustment. There is still a shortage of empirical studies concerning these two variables on survivors. Therefore, the present study aims to address social support and body image in breast cancer surviving women. This cross-sectional study encompasses a sample of 50 breast cancer survivors ( $M = 54.82$ ;  $SD = 12.323$ ). Social support was assessed with Social Support Satisfaction Scale (SSSS) and body image was measured with Hopwood's Body Image Scale (BIS). The sampled women are satisfied with the received social support ( $M = 56.48$ ;  $SD = 11.158$ ) and reported no problems regarding their body image ( $M = 25.70$ ;  $SD = 6.504$ ). No significant correlation was found between social support and body image ( $r = 0.174$ ;  $p = 0.226$ ). Limitations of the present research and directions for further studies are discussed. Keywords: social support; body image; breast cancer survivors.

**Can a sexual health DVD change the cognitive predictors of condom use in school students?**A. Rich<sup>1</sup>, A. Kuczmierczyk<sup>1</sup><sup>1</sup>City University, Psychology, London, United Kingdom

**Background:** An experimental evaluation of a music-based DVD featuring peers to assess its capacity to change cognitive antecedents of condom use. **Methods:** Four London schools were randomised to either no intervention or DVD followed by group discussion. Participants were 147 multiethnic urban school students aged 16–18. Measures were 13 cognitive antecedents previously identified as strong predictors of condom use, which included those from the Theory of Planned Behaviour. **Findings:** Analysis of covariance showed there were no differences in the cognitive antecedents between the conditions at baseline and four week follow-up. The DVD was very popular, with 94% responding that they would recommend it to others. Qualitative feedback revealed featuring peers was particularly appealing to students. **Discussion:** The research provides insights into the acceptability of a music-based sexual health DVD. The lack of efficacy is discussed in light of similar interventions and the wider context of sexual health promotion.

**Different functional types of effective caregiver support are differentially associated with people's cancer treatment-related concerns**C. Rini<sup>1</sup>, D. Emmerling<sup>1</sup>, J. Simons<sup>1</sup>, J. Austin<sup>2</sup>, L. Wu<sup>3</sup>, M. Green<sup>1</sup>, R. Woodruff<sup>1</sup>, C. Akiba<sup>1</sup>, W. Redd<sup>3</sup>, H. Valdimarsdottir<sup>4</sup><sup>1</sup>University of North Carolina, Chapel Hill, USA<sup>2</sup>William Paterson University, Wayne, USA<sup>3</sup>Mount Sinai School of Medicine, New York, USA

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Features of social support—its functional type and effectiveness—should influence how people manage challenges of cancer treatment. We examined theoretically-based hypotheses among cancer survivors treated with hematopoietic stem cell transplant ( $n=118$ ). They reported the general effectiveness of emotional, instrumental, and informational support from their caregiver, then over 3 weeks completed three brief writing exercises describing their experiences before, during, and after transplant. Linguistic text analyses examined selected categories of words in their narratives, averaged across writing sessions. Participants who received more effective emotional support from their caregiver described their transplant using fewer anxiety-related words ( $r=-0.20$ ,  $p=0.03$ ). More effective instrumental support was associated with fewer words indicating money concerns ( $r=-0.18$ ,  $p=0.049$ ). More effective informational support was associated with fewer words indicating search for causality ( $r=-0.24$ ,  $p=0.01$ ). Thus, different functional types of caregiver support, when effective, appeared to reduce survivors' transplant-related emotional, practical, and existential concerns. Implications for interventions are discussed.

### Change in motivational regulation and relationship to exercise intentions over 6 months

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**Background:** Superior psychological and behavioural outcomes of exercise are accrued with more self-determined forms of regulation such as identified and intrinsic. Change in self-determined forms of regulation, including integrated, and their relationships to behavioural intentions were examined over 6 months in a sample of sedentary adults initiating an exercise program for health. **Methods:** Motivational regulations were assessed with the BREQ in 50 adults (18 men; 32 women) who completed 6 months of exercise. **Findings:** Simultaneous then prospective regressions showed baseline intentions were significantly predicted by intrinsic regulation, but mid-point and end-point intentions were significantly predicted by introjected (negative) and identified (positive) regulations (prospective  $R^2$  at end point = 0.58). ANOVA revealed a decline in introjected and increase in identified over time assisting with interpretation. **Discussion:** The results reveal dynamic development of motivational regulations as well as their relationships to behavioural intentions that is consistent with self-determination theory.

### Does answering questions about a health-related behaviour change that behaviour?

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**Background:** Simply answering questions about a specific behaviour may change that behaviour. This systematic review synthesises the evidence that such measurement affects health-related behaviours. **Methods:** Included studies were randomised controlled trials which

assessed the effect of interviews or questionnaires about cognitions or behaviour on health-related behaviours relative to a control condition which was not allocated to the same measurement procedures (e.g. no measurement *vs.* measurement). **Findings:** 32 studies were included reporting on a range of health behaviours (the most common were drinking  $n = 8$  and safe sex  $n = 6$ ). Meta-analyses showed a small effect (SMD: 0.06, 95% CI: 0.01, 0.11) for continuous outcomes (favouring measurement conditions) and no difference between conditions for dichotomous outcomes (OR: 1.14, 95% CI: 0.83, 1.56). **Discussion:** The effect of answering questions about health-related behaviour on subsequent behaviour is small and inconsistent. To better understand these effects, reasons will be discussed in the light of moderator analyses.

### Exploring quality of life of lung cancer patients and their partners by smoking history

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**Background:** Lung cancer patients who have smoked may feel pessimistic about outcomes or blamed for causing their disease, potentially compromising adherence with medical advice and affecting relationships. **Methods:** Patients with advanced lung cancer and their partners ( $n = 13$ ) were interviewed using a semi-structured interview schedule. Transcripts were analysed using Interpretive Phenomenological Analysis. **Findings:** Families play essential role in managing disease and facilitating quality of life. Attempts to “protect” each other from negative information can compromise relationships and communication. Participants acknowledge links between lung cancer and smoking but when staff are careful to avoid being seen as ‘blaming’ anti-smoking messages can be lost. **Discussion:** Family support is invaluable but the current emphasis is on patient care. Clinicians must consider how partners are coping and the effects of changing relationships. Patients need clearer information regarding the implications of continued smoking and quality of life. Findings have implications for smoking-cessation advice.

### Varieties of Resilience and Their Biological Underpinnings

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Resilience will be defined as the maintenance of effective functioning in the face of adversity. Multiple types of adversity will be considered (e.g., low socioeconomic standing, parenting a child with disabilities, losses of aging, chronic health problems) and evidence presented that some do well despite such difficulties. Factors that serve as protective influences in promoting resilience will be highlighted (well-being, sense of control, social support). Examples will be drawn primarily from the MIDUS (Midlife in the U.S.) study, which has unique depth in assessing individuals’ psychological and social strengths. Growing evidence that links these psychosocial resources to better regulation of multiple physiological systems as well as to brain function will be briefly noted. A final segment will address intervention efforts to promote psychosocial strengths, given their prominence in understanding the resilience of some when confronted with significant life challenge.

### Social influence or self-regulation? Predicting eating behavior among young people

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Prevalence of overweight among children and adolescents provokes questions about its determinants. Former works indicate meso environmental factors (present in the closest surrounding). Testing role of 'social influence' variables (in wider range of meanings, e.g. active influence of parents or peers, norms, food accessibility) for eating habits became an aim of presented project. Additionally authors introduced self-regulation skills as possible mediators of analyzed relations. Data collected in a correlational study in 4 European countries ( $N=2764$ ) show that effects of verified variables partly depend on participants' age. Direct effects of food accessibility are present in whole youth, but power and source (home/out-of-home) are various for age groups. Self-regulation strategies play more important role for older participants (also as mediators of important others' influence) and their content seem to be connected with development. Results are discussed in theoretical and practical (overweight prevention or intervention) context as well.

### Social-cognitive and psychological predictors of gluten free diet adherence in coeliac disease

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**Introduction:** Coeliac disease (CD) is a chronic autoimmune disorder, treated solely with a lifelong strict gluten free diet (GFD). The theory of planned behaviour (TPB) and measures of psychopathology were used to elucidate the factors contributing to poor dietary adherence and quality of life (QOL) in this population. **Method:** 390 CD participants completed measures of GFD adherence, QOL, psychopathology, and a purpose-designed TPB questionnaire. The data was examined using regression and mediation analyses. **Results:** The TPB explained significant variance in GFD adherence, with the presence of depression and eating pathology adding significantly to the model ( $R^2=0.325$ ,  $F_{8,330}=19.9$ ,  $p < 0.001$ ). Psychopathology impacted negatively on both adherence and QOL, although the lack of mediation indicated that the relationship between these factors was independent of psychopathology. **Conclusions:** Interventions in CD should include both validated behaviour change techniques to target the social-cognitive predictors of adherence, and strategies to improve depression and psychological coping.

### Psychological factors associated with indices of risky driving in a sample of drivers in Ireland

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**Background:** This study sought to further understand the psychological factors associated with a range of driving behaviours in the Republic of Ireland. **Method:** 1638 respondents completed a questionnaire battery comprised of personality, attitudinal, locus of control and social influence measures. The driving behaviours examined were drawn from the Driving Behaviour Scale (Iversen, 2004). **Findings:** Males engaged in more risky and less cautious driving behaviours than females, and younger participants under the age of 25 were more risky and less cautious than those 25 years or older. The best model fit was for Speeding and Rule Violation, which was predicted by a model including positive attitudes towards speeding, greater normative influences of friends and higher perceived behavioural control, extraversion and driving anger. **Discussion:** These findings offer important insights into the correlates of different driving behaviours in Ireland and can help inform the work of road safety practitioners.

### Identifying factors influencing the sex education of people with Intellectual Disabilities by paid care staff

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**Aim:** In the Netherlands, sex education programs for people with ID have been developed with paid care staff as sex educators. However, no information is available about whether or not this is effective. The aim of this study is to investigate the implementation of sex education in an institutional setting for people with ID. **Methods:** An online questionnaire was constructed to assess what factors influence sex educating behaviour of paid care staff ( $N = 630$ , response rate = 43%). **Results:** Only 25% of the paid care staff provide sex education. The main reason they give for providing sex education, is as a response to problems, instead of preventing problems. The main determinant of teaching sex education is social norm. **Discussion:** If an institution wants to increase the number of people that receive sex education, interventions should focus on changing the social norms of paid care staff and improving their skill for preventive sex education.

### Providers' attitudes towards communication with chronically ill patients – Instrument development and first results

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**Background:** We aim at developing a questionnaire that measures providers' attitudes towards communication with chronically ill patients (chronic back pain or chronic ischemic heart disease). Further we describe providers' attitudes towards communication with these patients. **Methods:** Using an existing questionnaire for the assessment of patients' communication preferences (KOPRA), a questionnaire concerning providers' attitudes (KOMBEIN questionnaire) was developed with identical contents.  $N = 238$  providers were surveyed (49 physicians, 153 therapists, 36 nurses). **Findings:** Rate of missing values is below 2% for all items. There are no ceiling/floor effects, Cronbach's  $\alpha = 0.70-0.90$  for all scales. We find

significant differences in attitudes between the three groups: e.g. compared with other providers do nurses think they have a minor responsibility for patient oriented communication. **Discussion:** Combined utilization of the instruments developed can be used for communication studies of patients and providers in the field of chronic conditions. Clinical use of KOMBEIN appears useful to determine providers' attitudes towards communication.

### Use of a proactive dissemination strategy to optimize reach of an Internet-delivered computer tailored lifestyle program

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**Objectives:** The current study aimed at increasing reach of a combined online computer tailored (CT) lifestyle intervention by dissemination through a national monitoring tool: The Adult Health Monitor. **Methods:** This study investigated level of adoption of the intervention by focusing on medium of participation, levels of interest and actual participation in the program. Furthermore, overall level of adoption was linked to specific user characteristics. **Results:** In total 41.210 people participated in the Adult Health Monitor, of which 41% filled out the online version. Of these online participants, 54% indicated to be interested in the CT intervention. 56% of all participants indicating to be interested actually participated in the CT intervention. Specific user characteristics could be linked to participation. **Conclusions:** Integrating of the CT program within the Adult Health Monitor environment served as an important access point for reaching a substantial proportion of the target population with a CT lifestyle intervention.

### Reach of an Internet-delivered computer tailored lifestyle program: a study on predictors of first, prolonged and sustained use

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**Objectives:** The Internet has the potential to offer interventions to the public. Actual exposure rates to these interventions remain suboptimal. Since public health impact is determined by exposure, we investigated exposure to an online computer-tailored lifestyle program. **Methods:** An RCT-design was used to assess predictors of first, prolonged and sustained use. Demographics were included in the model as predictors. **Findings:** Male, older and employed participants, participants with a lower income, a higher body mass index and a relatively unhealthy lifestyle were significantly more likely to initiate the program, whereas older participants, participants with a higher income and a relatively healthier lifestyle were significantly more likely to complete the program. **Conclusions:** The program succeeded in reaching people that benefit most from lifestyle interventions. However, these people tended to disengage from the program. This underlines the importance of additional research into program adjustment and strategies that can be used to stimulate prolonged program use.

### Associations between daily reports of social control and indicators of smoking behaviour in couples

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**Background:** Social control, that is influence and regulation from another person, seems to be associated with smoking cessation. This study examined the associations between received social control and indicators of smoking behaviour on a daily basis around a self-set quit date.

**Methods:** Overall, 99 couples with one smoking and one non-smoking partner (smokers = 28.4% women, mean age = 40.55, SD = 9.46) completed 32 daily diaries on social control and indicators of smoking around a self-set quit date. **Findings:** Negative social control was associated with more smoking behaviour. Moreover, the more positive and negative control was received, the more reactant the smoking partners were and the more they hid their smoking. **Discussion:** Daily receipt of social control from a non-smoking partner seems to be rather ineffective for smokers trying to quit smoking. Future studies should examine potential factors that might enhance the effectiveness of everyday effects of social control.

### Explaining men's health: a review of concepts and evidence

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Epidemiological data consistently show that men's life expectancy is shorter, mortality rates are higher, and prevalence rates in severe diseases are higher. How this high vulnerability of men's health could be explained? This paper reviews health psychological concepts and evidence in their contributions to men's health: risk factors, risk behaviors, stressors, coping, help-seeking, preventive health behavior, social and personal resources. Results show that men are generally more prone to risk, have higher rates in many risk behaviors, show less effective coping styles, avoid seeking social support; their preventive health behaviors are underdeveloped, and although they have health resources they do not use them well. To understand these trends they are related to male gender role and men's identities in the context of men's life worlds. An integrative model of men's health is developed. Open questions, changes of gender roles, and the need for gender specific health promotion are discussed.

### Health Salience and Physical Activity Self-regulation in Older Adults

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**Background:** Various theories suggest that health behaviour change follows motivational and volitional phases. Often, strength of behavioural intentions is assumed to indicate motivation. However, this ignores subjective reasons for behaviour such as health salience. This study therefore examined the role of health salience in physical activity self-regulation. **Methods:** Longitudinal study with two measurements (6 months interval) in 309 multimorbid older adults; moderated mediation analyses. Health salience was assessed by contrasting ratings for health with all other domains on the Personal Life Investment Schedule. **Findings:** Health salience ( $B=0.08, p < 0.05$ ), but not intentions ( $B=0.04, n.s.$ ) moderated the degree to which intention effects on behaviour are mediated by planning. Neither direct planning nor intention effects were moderated by health salience. **Discussion:** Intentions are better translated into behavioural plans if furnished by health salience. This suggests that the 'health' in health behaviour change motivation merits more investigation.

### **Adding perspective: The role of health-related time perspective in the prediction of adolescent sunscreen use**

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**Background:** Diseases such as skin cancer often have a long latency period. Especially for adolescents, it may be difficult to grasp that current risk behaviour is related to future health outcomes. This study examines the role of health-related time perspective (in how far short-term outcomes are discounted over long-time health benefits) within the Health Action Process Approach. More specifically, it is tested whether time perspective interacts with self-efficacy, the central variable in this approach. **Methods:** A longitudinal study with three measurement points across one year assessed 156 high school students. Data were analysed using structural equation models. **Findings:** While time perspective had no direct influence on sunscreen use intentions, there was an interaction effect with self-efficacy; the shorter the time perspective, the smaller the impact of self-efficacy on intention. **Discussion:** In order to maximise the impact of self-efficacy interventions for adolescents, time perspective should be taken into account.

### **Can intensive 1-day EMA monitoring be used to assess traits?: a comparison with traditional questionnaires**

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**Background:** EMA is advocated as a strategy for generating ecologically valid assessments of individuals' emotions, cognitions, behaviors, and physical states. The extent to which these assessments provide reliable, reproducible and valid measures of individual differences is unknown. Their relationship to traditional trait questionnaires is also not known. **Methods:** Electronic diary assessments of affect (depression, anxiety), control, and demands for two 24h periods, several months apart, and traditional questionnaires. Analysis: Multilevel model treating 24h subject-level EMA means as a latent variable and estimating its correlation with

questionnaire scale scores. **Findings:** Some EMA measures are more “trait-like” than others, but all exhibit a substantial trait component. This trait component is impressively stable over several months. However, it correlates only modestly with traditional questionnaire assessments of the same construct. **Discussion:** Strengths and limitations of EMA-based measures of traits will be discussed, as will possible explanations for their modest correspondence with traditional trait measures.

### Online intervention engagement predicts smoking cessation

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**Background:** To predict smoking abstinence in internet users. **Methods:** Users of a non-commercial web-based smoking cessation coach in Germany made data available for an evaluation study ( $N=13,174$ ), including abstinence rates as well as automatically recorded online activities such as a) posting a bulletin board entry after the first smoke-free day, b) offering a donation, and c) posting messages throughout their course. **Findings:** Survival analyses for 70 days of non-smoking documented higher success rates for those who made use of one or more of the virtual community activities. The effect of making an initial bulletin board entry on 10-week abstinence was mediated by offering a donation and posting messages throughout the course ( $R^2=0.125$ ). The indirect effect via donation was 0.10 (95%CI 0.06–0.14), and the indirect effect via message posting was 0.31 (95%CI 0.25–0.38). **Discussion:** Virtual community activities predict smoking cessation. Shift the research focus from personality characteristics towards behavioral process variables.

### Workplace stress and eating behaviour

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**Background:** Stress is associated with changes in eating behaviour. Certain stressors may be associated with increased consumption of high-calorie foods, contributing to weight-gain and obesity. This study assessed the effect of workplace stress on eating behaviour. **Methods:** 300 public sector workers completed measures of stress (hourly VAS, DASS-21, Daily Hassles Scale (recording type, time and level of stress)) and food intake (7-day weighed-intake food-diary). **Results:** Stress was associated with reduced caloric and fat intake ( $r=-0.153, p < 0.05$ ;  $r=-0.230, p < 0.001$ ) but higher sugar intake ( $r=0.160, p < 0.05$ ). Type of stress revealed environmental (i.e. traffic jams, queuing) and physical (i.e. illness, anxiety) stressors were associated with increased sugar intake ( $r=0.136, p < 0.05$ ;  $r=0.192, p < 0.01$ ) and work-related stressors associated with reduced fat intake ( $r=-0.214, p < 0.01$ ). **Discussion:** Higher stress ratings are associated with reduced overall caloric intake but increased sugar intake. Type of stressor appears key to understanding which stressors may be associated with unhealthy eating behaviours and risk of weight-gain.

### The acute effects of yogic breathing exercises on craving and withdrawal symptoms in abstaining smokers

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**Background:** Breathing exercises (BE) have been proposed to aid smoking cessation. This study sought to evaluate the impact of BE on withdrawal symptoms in abstaining smokers. **Methods:** CO-verified abstinent smokers ( $N=96$ ) visited the laboratory twice, 24h apart, and were randomly allocated to a BE or video control (VC) condition. The BE group was instructed in and practised BE for 10min and asked to use these until the second visit. The VC group was shown a BE video and asked to concentrate on breathing. 'Craving', 'urge to smoke' and withdrawal symptoms were assessed at both visits. **Findings:** Relative to the VC group, craving ( $F(1, 94)=11.1, p < 0.001$ ) and urge to smoke ( $F(1, 94)=15.8, p < 0.001$ ) were reduced in the BE group following the 10min practice session and hunger ( $F(1, 92)=4.3, p=0.04$ ) at 24h follow-up. No other effects were present. **Discussion:** Results suggest an acute effect of BE on cravings and urges to smoke but further research is needed to determine whether and how this can be extended beyond laboratory conditions.

### Automatic risk behavior: Direct effects of binge drinker stereotypes on drinking behavior

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**Objective:** Four studies tested whether evaluations of the binge drinker stereotype have a direct and automatic effect on binge drinking behavior, and whether a self-regulation intervention can overcome stereotype effects on drinking behavior. **Methods:** Studies 1a and 1b ( $Ns=226$  and  $72$ ) were prospective surveys. Study 2 ( $N=255$ ) was a field experiment, and Study 3 ( $N=202$ ) was an exploratory RCT that tested whether implementation intentions can override binge drinker stereotype effects on behavior. **Results:** Correlational (Studies 1a and 1b) and experimental (Study 2) evidence indicated that favorable binge drinker stereotypes had direct effects on binge drinking among experienced drinkers. These effects were automatic in the sense that participants were neither aware of, nor intended, this influence. Study 3 showed that implementation intentions geared at increasing self-focused attention overcame stereotype effects on binge drinking behavior. **Conclusion:** These findings suggest that stereotype priming research can offer valuable insights into binge drinking behavior.

### Integrating attitudes about multiple diseases to reach a decision about multiplex genetic testing

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**Background:** The study's aim was to learn how people integrate attitudes about multiple conditions to make a decision to undergo genetic testing. **Methods:** As part of the Multiplex Initiative conducted in a large health care system in USA, 294 healthy young adults were offered a multiplex genetic test that assessed risk for eight conditions: type II diabetes, osteoporosis, hypertension, coronary heart disease, hypercholesterolemia, skin cancer, lung cancer and colorectal cancer. Data were collected from a baseline survey, a web-based survey, and at the time of testing. **Findings:** Averaging attitudes across diseases predicted test uptake, but did not contribute beyond "peak" attitudes – the highest attitude toward testing for a single disease in the set. **Discussion:** These findings support theories suggesting that people use representative evaluations in attitude formation and choice. Identifying the highest attitude towards any of the conditions included in a multiplex test is enough to predict test uptake.

### **The Effort-Reward Imbalance model as predictor of Portuguese Nurses' Stress Responses and Sexual Health**

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This study examines the Effort-Reward Imbalance model (ERI) variables as predictors of stress responses, sexual desire and sexual satisfaction among Portuguese nurses. Participants were 310 female hospital nurses (Age:  $M = 33.83$ ;  $SD = 8.70$ ). Measures included the Effort Reward Imbalance Inventory, to assess effort, reward, ERI-ratio and overcommitment; the General Health Questionnaire-12 and the Brief Personal Survey-Revised, to measure stress responses; the Hurlbert Index of Sexual Desire and the Index of Sexual Satisfaction, to evaluate sexual health. Results showed that the ERI variables are independent predictors of nurses' stress responses (pressure, psychological distress). The percentage of explained variance ranged from 2.3% to 24.6%. ERI variables also predicted nurses' sexual desire and sexual satisfaction. Overcommitment moderated the impact of occupational stress on stress responses (pressure overload) and sexual health (sexual desire). The relevance of ERI variables for understanding the relationship between occupational and sexual health outcomes, is also discussed.

### **Physical activity level, health and well-being of older European adults: the Zenith Study**

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**Background:** It is important to understand factors that impinge on the health of older adults and how these can be manipulated to improve functional capacity, quality of life and independence. **Objectives:** To determine if level of physical activity impacts on psychological well-being in healthy older European adults. **Methods:** Community dwelling older adults ( $n=387$ ), aged 55–87 years, were recruited from groups and organisations serving the elderly, from centres in France, Italy and Northern Ireland (UK). They completed a self-report questionnaire comprising of socio-demographic and lifestyle variables, physical activity in the home, work and recreation, cognitive function (MMSE), depression (GDS), stress (PSS) and coping (Brief COPE). **Findings:** Physical activity levels declined with age. Reduced psychological well-being was found in adults with lower levels of physical activity. **Discussion:** Appropriate interventions are needed to promote physical activity in older adults as a way to boost their mental and physical health.

### Is quality of life poorer for older adults with HIV/AIDS? International WHOQOL-HIV evidence

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**Background:** As older adults are increasingly diagnosed with HIV/AIDS, UNAIDS (2002) implies that 13 quality of life (QoL) dimensions are poorer. However, sparse international evidence is available. **Methods:** This statement was investigated by administering the WHOQOL-HIV (30 facets) to 2089 HIV-positive and well adults living in nine cultures; 403 over 40 years. **Findings:** Only sleep, fatigue, sex-life and medication dependence proved poorer for older participants. In contrast, older HIV adults reported better QoL than younger on 11 facets: negative feelings, social inclusion, environmental and spiritual QoL. Although not good, the QoL balance was positive. Health and QoL was explained overall by 8 facets (61.3% variance); predominantly the social domain (41%) (personal relationships, support, sex) but also energy, negative feelings, cognitions, finance and HIV symptoms. **Discussion:** Older HIV adults show greater QoL resilience than young. Social interventions would improve wellbeing. New evidence for global ageing and HIV policies is provided.

### The role of social support and coping in the psychological well-being of Canadian Forces members

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**Background:** Individual characteristics may serve as resilience factors protecting military personnel against psychopathology development. It was hypothesized that social support and coping styles would play important roles in depression symptomatology among Canadian Forces (CF) members. **Method:** Hierarchical regressions were conducted to examine the unique roles of social support and coping in depression, over and above the impact of stress,

among randomly selected CF members ( $N=606$ ). Bootstrapping analyses were conducted to examine the mediating role of coping in the path between social support and depression. **Findings:** Social support (–), emotional (+), and problem-solving (–) coping served as unique predictors of depression, when stress was statistically controlled. Partial evidence for the mediating roles of both emotional and problem-solving coping was found. **Discussion:** Coping styles and social support have significant and independent contributions to the well-being of military personnel and should be taken into account when developing resilience training in the military context.

### Computer-tailoring for smoking cessation

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**Objectives:** To investigate the effect of Internet-based computer-tailoring for smoking cessation among Dutch adult smokers. **Methods:** We present data of two RCT's. The first assessed the effects of a smoking cessation intervention on smoking cessation rates after six weeks and six months. The second tested the effect of a relapse prevention program on smoking abstinence rates after twelve months. In both RCT's, logistic regression analyses were conducted. **Findings:** In the first RCT, an Internet-based computer-tailoring program significantly increased smoking cessation rates assessed after six weeks, but not after six months. The second RCT showed that two Internet-based computer-tailored programs were significantly more effective than a control group in preventing smoking relapse assessed after twelve months. **Conclusions:** Internet-based computer-tailoring seems promising for smoking cessation, but both RCT's had high attrition rates. We present a novel approach to increase attention and prevent attrition for similar interventions, especially among low SES smokers.

### Cost-effectiveness and cost-utility of Internet-based computer-tailoring for smoking cessation

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**Background:** Information about the cost-effectiveness and cost-utility of smoking cessation interventions is limited. The present study assessed the cost-effectiveness and cost-utility of Internet-based computer-tailoring for smoking cessation with (MTC) and without (MT) tailored counseling by practice nurses compared with usual care (UC). **Methods:** A trial-based economic evaluation was conducted among Dutch adult smokers ( $N=414$ ). Cost and quality of life were assessed during twelve months. Smoking abstinence was assessed twelve months after baseline. **Findings:** Cost-effectiveness analysis, using prolonged abstinence as outcome, showed that MT was most likely to be cost-effective. Compared with UC, in this group 5100 was required for each additional respondent being abstinent. With regard to cost-utility analyses, using quality of life as outcome, UC was probably most efficient. **Discussion:** For implementation, the multiple computer tailored program would be the most optimal treatment

for achieving smoking abstinence, usual care would be preferred when considering quality of life most relevant.

### Psychological, health-related, social and environmental predictors of physical activity in the over 65s

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We investigated the role of the theory of planned behaviour (TPB) alongside other health-related, social and environmental determinants in predicting physical activity in older adults.  $N=547$  community-dwelling adults aged 65–100 were randomly sampled from general practices in Scotland. Primary outcome was physical activity (accelerometry); predictive measures included TPB, health-related measures, physical environment, health, wellbeing and demographic variables. Regression analysis showed that lower age, higher PBC, the SF-36 physical function subscale, and having someone nearby to turn to were all independently associated with higher physical activity levels ( $R^2=0.32$ ). TPB measures partially mediated many health-related, social and environmental measures, but were found insufficient to fully account for the effects of these external variables. Moreover, PBC moderated the predictive effect of some health-related measures on physical activity. This study identified modifiable predictors of activity in older adulthood and enhances our understanding of physical activity in the over 65s.

### Personality characteristics related to resilience in a Czech university students sample

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**Background:** Resilience is studied and defined variously by different approaches and authors and to date, no widely acceptable consensus definition of resilience is available. **Methods:** Our study focused on personality characteristics related to resilience in a sample of 168 Czech university undergraduates aged between 22 – 58 (34% males, 66% females). Participants completed a set of following methods: Personal Views Survey (Kobasa, 1985), Sense of Coherence Scale (Antonovsky, 1987), Locus of Control Scale (Rotter, 1966), General Perceived Self-Efficacy Scale (Jerusalem and Schwarzer, 1992) and Maslach Burnout Inventory – General Survey (Leiter and Schaufeli, 1996). **Findings:** Two factors were extracted by principal components method: 1. Competence/Control, that is represented by control over one's individual life, and 2. Vitality/Well-Being that seems to be represented by energy, involvement, dedication, and commitment. **Discussion:** The orthogonal structure of these two

factors should distinguish between resilient (high competence/control, high vitality/well-being) and non-resilient behavior (low competence/control, low vitality/well-being).

### **Job Demands and Quality of Care: Burnout as a Mediator**

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**Background:** We aimed at investigating the mediating effect of burnout among health professionals (HPs) in the relationship between job demands (JD) and quality of care (QoC). **Methods:** Self-reported data on burnout, suboptimal care and JD were collected from a sample of 1511 HPs from Romania, Greece, Bulgaria, FYROM, Croatia and Turkey. SEM with bootstrapping analysis was used to test for the mediating path. **Findings:** Data showed support for the hypothesized model ( $\chi^2(7) = 90.827$ , CFI = 0.972, RMSEA = 0.089). Evidence for partial mediation was found for both males and females. Comparison among staff position revealed a partial mediation effect for physicians and nurses, and complete mediation for residents. The model is consistent in all six countries. **Discussion:** Previous research has shown impact of JD and burnout on HPs' quality of life. Our results provide evidence that interventions aiming at improving QoC should also start with improving the quality of the work of HPs.

### **Acknowledgement and analysis of errors in hospitals: the role of psychological safety and leadership behavior**

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**Aim:** We investigated the impact of leadership behavior on developing a climate of psychological safety in which medical personnel feels comfortable acknowledging and discussing errors. **Methods:** Data were collected from a sample of 207 health professionals (physicians, nurses and residents), working in emergency medicine, and obstetrics and neurosurgery departments, in Romania. SEM was used to test the mediating role of psychological safety climate in the relationship between empowering leadership and communication and analysis of errors, controlling for workload and task interdependence. Bootstrap analysis was used to test the mediated path. **Results:** The hypothesized model was confirmed ( $\chi^2(24) = 52.864$ , CFI = 0.982, RMSEA = 0.076). Leadership behavior was found to have both a direct and a mediated effect on error communication and analysis. **Conclusions:** We found that capitalizing on errors in the medical field depends on the willingness to report and analyze them, which is influenced by the interpersonal skills of people occupying management positions.

### **Why we eat what we eat: Eating motives and their interrelations**

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Understanding why people eat what they eat in everyday life is crucial for the creation of interventions to promote normal eating and to prevent the development of obesity and eating disorders. The Eating Motivation Survey (TEMS) was developed within a frame of three different studies. In Study 1, a total of 331 motives for eating and food choice were generated on the basis of different data sources (previous research, nutritionist interviews, and expert discussions). In Study 2, 1250 respondents were provided with a set of 87 motives based on the responses from Study 1, yielding thirteen factors in exploratory factor analysis. In Study 3, 1040 participants responded to a pool of 78 items revised and generated on the basis of Study 2. Confirmatory factor analysis yielded fifteen factors with a satisfactory model fit with RMSEA = 0.048 (CI 0.047–0.049). Implications of the fifteen motives and their interrelations are discussed.

### **Positive Couple Interactions and Health in Daily Life: Intimacy Predicts Reduced Subsequent Symptoms in Couples**

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**Background:** The pathways that link close relationships and health are still not fully understood. This talk proposes that positive relationship interactions including physical intimacy may be one such pathway. We present data from a study that tested the concurrent and prospective links between intimacy and physical symptoms. **Methods:** In this study, 164 participants in 82 committed couples reported relationship intimacy and somatic symptoms each day for 33 days. **Results:** Within-person change in intimacy predicted subsequent change in somatic symptoms. Specifically, more intimacy predicted fewer symptoms, subsequently as well as concurrently. Prior intimacy increase and decrease showed asymmetrical effects on symptoms. **Discussion:** Close relationships exert influences on health and well-being on a daily level, and part of that influence is due to intimacy. We will discuss these findings within a theoretical framework highlighting the role of within-person change for understanding the links between close relationships and health.

### **Patient's perception of physician's epistemic authority – the role of the recommendation**

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This research examines factors affecting patients' perception of their physician's epistemic authority (PEA). Epistemic authority (EA) is defined as the source that exerts determinative influence on the formation of knowledge (Kruglanski, 1989). EA is particularly important in medicine—the higher the PEA, the more willing is the patient to fulfill the physician's recommendation. Three quasi experimental studies ( $n=626$ ) were conducted to examine factors that may affect patients' perception of physician's EA: patient's preference and physician's recommendation, physician's formal expertise and gender, treatment setting. The results show that patients expect physician to prescribe an active mode of treatment (inoculation, prenatal exams, etc.). This kind of recommendation is probably part of the

general schema of physician's role and therefore can cause that physician who recommends action is perceived as higher EA. However, it acts in the interaction with several factors that were measured in studies (Bar – Tal, Stasiuk & Maksymiuk, in press).

### **Applying a Goal-Based Resilience Model to Breast Cancer: A Preliminary Study**

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**Background:** A better understanding of resilience is integral to optimising the psychosocial care of cancer patients. The purpose of this research is to test a goal-based model of resilience in the cancer context, and more specifically, provide preliminary support for its application to breast cancer patients. **Methods:** A cross-sectional quantitative design was used to measure personal goals, psychological distress, and subjective well-being in 29 early-stage breast cancer patients approximately one month following surgery. **Findings:** Goal importance was positively related to positive affect. Furthermore, goal interference was significantly associated with higher anxiety. These findings indicate that high goal importance is associated with high well-being, while high cancer-related goal interference is associated with high distress. **Discussion:** The findings provide preliminary empirical and theoretical support for the application of this model to breast cancer patients. Further investigation in this area has the potential to enhance the psychosocial care of cancer patients.

### **Older adults' pursuit of health: Betrayed by health promotion?**

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**Background:** Health promotion discourse emphasises risks and responsibility for health. This study examined the use of this discourse among older adults in New Zealand. **Methods:** Sixty adults (55–70 years at first interview) participated in longitudinal interviews. Discourse analysis was used to describe how participants constructed health and ageing. **Findings:** Engaging in 'health promotion' behaviours provided a sense of control of the ageing body and demonstrated a virtuous citizen. Although the ideals of health promotion were resisted, the discourse dominated talk about health. One problem for the participants was a sense of betrayal when the promises of health promotion did not fit the actual experiences of the ageing body. **Discussion:** A danger for ageing people is a moral landscape in which to become unhealthy is a sign of individual irresponsibility. There are other moral imperatives associated with ageing, such as the right to rest, and care for elders, that we may be losing sight of.

### **Homosexuality among people with a mild intellectual disability**

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**Background:** Empirical research on homosexuality among people with an intellectual disability (ID) is limited and, to date, very little is known regarding the personal experiences of gay and lesbian people with an ID. This study set out to answer the question: What are the lived experiences of a specific cohort of homosexual people with an intellectual disability living in the Netherlands? **Methods:** To answer this question, a qualitative study was performed in which 21 people with a mild ID were interviewed via semi-structured interviews. In this study, 19 participants were men and two were women (average age = 40, 5 years). **Results:** Participants reported positive and negative experiences, and talked about gay or lesbian identity. **Conclusion:** Specific problems impacts the lives of homosexual people with an ID, namely the high prevalence of negative sexual experiences, the lack of support, training and sex education, and their search of a suitable partner.

### Development of an Exercise Motives and Gains Inventory

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**Background:** There are existing measures of exercise motives (what people want from exercise) but corresponding measures of gains (what people actually get from exercise) are needed. We developed such a measure. **Methods:** An Exercise Motives and Gains Inventory (EMGI) was created by adding gain scales to an existing exercise motives inventory. It was completed by 196 young adults. It was subjected to confirmatory factor analysis. Paired-sample *t*-tests were used to compare means of motives and corresponding gains. **Findings:** Motive and gain items represented their intended constructs, and motive and gain constructs were discriminated. On average, people gained less than they sought for some motives (ill-health avoidance, positive health), and more than they sought for others (e.g., affiliation, challenge). **Discussion:** The EMGI is a factorially valid measure. Some motives are easier to fulfil than others. Future use of the EMGI will include examining the interplay between motives and gains over time.

### Self-assessed Communication Skills of Nurses Working in State and Private Hospitals

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Quality of health services depends mainly on the communication skills of nurses. Rapid privatization of health services in Turkey has encouraged the promotion of communication skills of nurses due to competence between hospitals. This descriptive study was conducted to define and compare self-assessed communication skills of nurses in state and private hospitals in Kastamonu. Study group consisted of 180 nurses. The Oslo Inventory of Self-reported Communication Skills (OSISCS) developed by Gude et al. (2005) was used as the instrument. Results show that the nurses are not highly 'convinced' with their communication skills. Even though the nurses in private hospitals have a higher satisfaction level ( $M = 4.16 \pm 0.57$ ) than of

those in the state hospital ( $M=4.09\pm 0.50$ ). The difference was not found statistically significant. Remarkable differences were estimated by items, genders, and hospitals. In conclusion, our study underlined the need for further trainings in improvement of nurses' communication skills both in public and private hospitals.

### Conscientiousness mediates the relation between perceived parental socialization and self-rated health

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**Background:** Prior research has paid little attention to the indirect effects of personality in the path between parenting behaviors and better health. The purpose of this study was to explore the mediational effects of conscientiousness on the relationships between parental socialization and health, and to examine age differences in this mediational pathway. **Methods:** 736 female and 749 male members across Japan participated in this study. They were divided into three groups by age category: younger-, middle-aged and older-aged. Conscientiousness and health were concurrently rated, while parental socialization was retrospectively assessed. **Findings:** Our analyses revealed that conscientiousness fully mediated the effect of parental socialization on health. The mediational links were consistent across three cohorts. **Discussion:** Our findings suggest greater parental socialization relates to higher conscientiousness, and consequently healthier adults. These findings imply that parental behaviors could be a plausible target for intervention to foster the development of conscientiousness and better health.

### “One size doesn’t fit all”: Goal versus temptation-focused self-regulation strategies in managing adolescents’ eating habits

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**Background:** Research suggests that self-regulation strategies (SRS) are either targeted for the achievement of long-term goals (goal-focused) or to help the individual manage immediate temptations (temptation-focused). This study investigates whether children/adolescents use goal-focused and temptation-focused SRS differently, when engaging in healthy eating habits or when dealing with unhealthy food temptations. **Methods:** Data regarding eating habits (fruits and vegetables intake, having breakfast, unhealthy snacks and fizzy drinks intake) were collected from 1498 children and adolescents, aged 9–19 years old ( $M=13.6$ ,  $SD=2.1$ ). The use of different SRS was assessed with the Tempest Questionnaire for Self-regulation of Eating in adolescents (TESQ-E). **Results:** show that goal-focused strategies (goal setting and goal deliberation) are more related to healthy eating habits, while temptation-focused strategies (avoidance, controlling temptations) are related to managing unhealthy temptations. **Discussion:** Differentiating between goal-focused versus temptation-focused SRS might prove informative for interventions aimed to increase eating SR in children and adolescents.

### Mothers' and fathers' self esteem and parenting styles: importance for family primary health prevention

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Parenting styles (PS), inferred family climate and its relation to child's development, have been associated with contextual and individual variables, but only recently family studies included several members. Study's main objective is to analyse PS couple's concordance and the influence of self-esteem on PS mainly adopted. For 95 Portuguese couples conveniently selected, no differences were found between mothers' and fathers' PS and Self-esteem. Correlations were found for both parents, between permissiveness, authoritarian and negative self-esteem, but only fathers' authoritarianism correlates to negative self-esteem ( $r = -0.21$ ,  $p = 0.05$ ). Results showed that gender and education level predicts authoritative style [ $F_{(2,170)} = 6.75$ ,  $p = 0.002$ ]. Results showed that parents' resources such as negative self-esteem and lower academic level exerts an effect on authoritarian and permissive PS, stressing the importance of primary prevention health level to work on parents' wellbeing and parenting skills such as responsiveness and monitoring availability in rearing their children in a balanced way.

### Supporting NHS organisations to implement patient safety guidelines: a behaviour change approach

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**Background:** The aim of this research was to develop behaviour-change interventions to support NHS organisations to implement patient safety guidance. **Methods:** Three NHS organisations received support for implementing guidance to 'reduce the risk of feeding through misplaced nasogastric feeding tubes'. Across all organisations, 214 multidisciplinary healthcare-professionals completed a questionnaire – designed based on the Michie et al. (2005) Theoretical Domains Framework – to assess the barriers to checking the position of nasogastric tubes. Focus groups were held in each organisation for staff to discuss strategies to overcome the main barriers. **Findings:** The top barrier for each hospital was reported as 'social influences'. There were differences across each site for other reported barriers. Thematic analysis of focus group data produced intervention strategies which have been coded according to intervention mapping guidance. **Discussion:** This study demonstrates an innovative approach for moving from diagnosing implementation difficulties to designing interventions in dynamic hospital settings.

### Long term health outcomes and cost-effectiveness of two dietary school-based interventions among 11-year-old children

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**Background:** The aim was to estimate long-term health effects and cost-effectiveness of two school-based fruit and vegetable interventions among 10-year-olds in the Netherlands. **Methods:** Epidemiological modeling, based on the intervention effects, estimated the number of health-adjusted life years gained over the lifetime of all 10-year-olds in the Netherlands. Incremental cost effectiveness ratios (ICER) and net monetary benefits (NMB) were estimated and sensitivity analyses were conducted. **Findings:** The ICER for PC and for SG in comparison with no intervention was estimated at 5728/DALY and then at 10,674/DALY. The probability that PC and SG were cost-effective in comparison with no intervention was 80% and 68%. The PC had a 70% chance of being dominant over the SG intervention in terms of cost-effectiveness. **Discussion:** This study shows that epidemiological modelling can provide insight in the long-term outcomes of two school-based interventions targeting availability, taste preferences, liking, attitudes and knowledge.

### Peer norms and peer modelling associations with energy balance behaviours among European schoolchildren – the ENERGY-study

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**Aim:** To investigate the association of perceived peer norms and modelling with energy balance-behaviours among schoolchildren across Europe. **Methods:** Physical activities, TV and computer time, dietary behaviours, personal and social environmental correlates of these behaviours were assessed among 7782 schoolchildren in 8 countries in Europe, informed by the EnRG model. Multilevel regression analyses estimated the associations of peer norms and modelling with the energy balance-behaviours, and estimated moderating effects of family rules. **Findings:** Children reported positive peer norms and modelling for all behaviours. Peer norms and peer modelling were significantly positively associated with soft drink intake, breakfast consumption, PA and TV time. These associations were weaker when parental rules were in place, indicated by significant interactions terms. **Discussion:** Peer influences appear to be important correlates of schoolchildren's energy balance-behaviours, however having family rules in place reduced this association.

### PTSD, hardiness and general well-being among military personnel

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**Background:** Research demonstrates that hardiness predicts reduced distress and health impairment and increased general well-being among military personnel (Bartone, 2006). The current study's aim was to explore relationships between the subcomponents of hardiness (control, commitment and challenge), PTSD symptoms and general well-being among a UK

and US sample of military personnel. **Methods:** Questionnaires were completed by 107 soldiers, marines or paratroopers who had served at least one conflict zone tour of duty. Multiple regression analyses identified relationships between variables. **Results:** Hardiness predicted both PTSD ( $R^2=0.44$ ;  $p < 0.001$ ) and well-being ( $R^2=0.35$ ;  $p < 0.001$ ) with commitment explaining the largest proportion of variance. **Conclusion:** The study supported previous research (e.g. Bartone et al. 2008) linking hardiness to PTSD and general well-being, and suggests future research to enhance commitment amongst military personnel could be valuable.

### Embedding implementation intentions in social anxiety self-help for vitiligo

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**Background:** The feasibility of using self-help information to assist in reducing anxiety associated with the skin condition vitiligo was assessed. The study also examined whether forming implementation intentions (imps) designed to promote practice, enhanced self-help. **Methods:** Participants were randomised to one of three groups: self-help with imps; self-help alone; no intervention. Seventy-five adults were recruited via the Vitiligo Society website. Measures of social anxiety (Brief FNE), anxiety, depression (HADS), coping (Brief COPE), appearance concern (DAS-24), and quality of life (DLQI), and demographic factors were taken. Information on intervention use was recorded. **Findings:** Statistical significance was not found however there was a clear trend and clinically significant improvements were demonstrated using Jacobson's Reliable Change Index. The self-help augmented with imps group demonstrated most change. **Discussion:** The findings are promising in demonstrating that self-help administered online and incorporating implementation intentions can lead to a significant clinical reduction in distress associated with vitiligo.

### Healthcare professionals' discourses regarding the HPV vaccine and parental responsibility

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**Background:** New preventive technologies offer insight into psychological, social and cultural landscapes. Our objective is to understand how the HPV vaccine elicits multiple meanings and discourses, in particular providers' constructions. **Methods:** We conducted interviews with 16 health care professionals in Bulgaria about their attitudes and practices related to HPV vaccination, and their recommendations for policies. The verbatim transcribed interviews were analysed through thematic and discourse analysis. **Findings:** We illustrate providers' contradictory constructions of the vaccine. These include a normalization of risk of medical innovations, acclaim of potential for eliminating disease, and uncertainty about its gendered dimensions. We identify judgmental discourses regarding parents' decisions, health professionals' responsibilities and vaccine commercialization. Providers attribute existing fear to parents' lack of information, and historical avoidance and mistrust of the health system.

**Discussion:** Professionals' constructions of the vaccine are relevant to acceptance of the vaccine by the population and to development of vaccination policies.

### **Exploring patients' views of a self-management CBT-based website for the management of IBS**

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CBT has been shown to have positive effects on the management of Irritable Bowel Syndrome (IBS). A randomised controlled trial ('MIBS') tested the effectiveness of a CBT-based website alongside two medications and a placebo. We conducted a qualitative study nested within this trial, to explore patients' views of the CBT-based website as a treatment for IBS. 31 semi-structured interviews were carried out with patients who had used the website in the MIBS trial. An inductive thematic analysis was conducted. We identified three types of engagement with the website; limited or no engagement, engagement with content on practical lifestyle changes and engagement with content on psychological aspects related to IBS. Similarities and differences between types of engagement are explored. Results suggest it is feasible to deliver a CBT-based website which patients report as being beneficial in managing IBS. Barriers to engaging with the website offer suggestions for designing future web-based interventions.

### **Photos on Facebook: Their Role in Drinking Cultures and Friendship for New Zealand Young Adults**

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**Background:** Facebook has become increasingly popular among adolescents and young adults, many of whom also engage in regular binge drinking episodes which are subsequently displayed in Facebook photos. This study aimed to examine young adults' use of photos on Facebook. **Methods:** Nine university students (all aged 19; 5 female, 4 male) engaged in individual exploratory interviews with a researcher and an internet-enabled laptop, discussing online practices around drinking, friendships and socialising. Discursive and multimodal techniques were used to analyse visual data and participants' talk. **Findings:** Facebook photos, particularly those displaying social events involving alcohol, play an important role in reinforcing friendships as young adults visually share and relive their shared drinking experiences within their online worlds. **Discussion:** Photos on Facebook appear to reinforce binge drinking as a normative behaviour among young adults. Health promotion attempts at reducing harmful drinking practices might usefully employ social media to target contemporary drinking cultures.

### The influence of depression on rehabilitation results in rheumatoid arthritis patients

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Depression accompanies many chronic diseases and often is considered the cause of unsuccessful outcome of treatment. In patients with rheumatoid arthritis, who suffer from chronic pain, depression often occurs. These patients must be subjected to rehabilitation in order to keep joints flexible. To date, no studies have been conducted on the effects of depression on the process of rehabilitation. The study included 60 patients suffering from rheumatoid arthritis of which 30 suffered depression (score 12 or above in Beck Depression Inventory). Before and after 4 weeks of rehabilitation patients completed the Acceptance of Illness Scale and assessed their own physical status, the severity of pain and the degree of stiffness of joints. Both groups benefited from physical rehabilitation, but non-depressed patients improved significantly more than the depressed. They also achieved a higher score in AIS. These results indicate the need for psychological intervention in rheumatoid arthritis patients.

### Psychotherapy of anxious disorders; the way from resourcefulness to resilience

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**Background:** Effectiveness of psychotherapy may be caused by intrapsychic mechanisms. **Methods:** research of psychotherapy outcomes (full and partial recovery) with comparison of MMPI basic scales before and after psychotherapy of: (1) anxious disorders ( $N=157$ ), anxious disorder due to cerebrovascular disorder ( $N=39$ ); (2) anxious disorders ( $N=65$ ) supplemented with the use of Resourcefulness for Recovery Inventory. **Findings:** two basic mechanisms of psychotherapy effectiveness were identified: reactivation and formation. Fool recovery is accompanied by transformation from Resourcefulness to Resilience. **Discussion:** The identification of psychotherapy reactivation and formation mechanisms let to elaborate the model of Personal System of Psychological Adaptation (PSPA) – a homeostatic structure which forms ontogenetically creating a hierarchy of adaptive mechanisms from the earliest to mature (coping). Mechanisms of reactivation and formation and PSPA model support the theoretical constructs of Resilience and Resourcefulness underlying the processes of recovery. The fool recovery is accompanied by transformation from Resourcefulness to Resilience.

### The mediating role of marital quality in the stress–well-being relationship. Are there gender differences?

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The aim of the present study was to evaluate a model of mediation for explaining the relationship between family stress and spouses' psychological well-being. We hypothesized that marital quality (marital satisfaction and dyadic coping) mediates the association between family stress and well-being. Self-report measures were administered to a sample of 215

married couples from Romania. Using structural equation modeling, the results supported our hypothesis. The paths indicate that family stress is negatively related to marital quality, while marital quality is positively related to well-being. The mediator model of marital quality fit the data and contains significant path coefficients for both husbands and wives, but there are not significant gender differences. However, marital quality is a better predictor of well-being for women than for men. The findings indicate the importance of family stress on the marital quality, which in turn has a significant influence on spouses' well-being.

### **Applying the common-sense model to Irritable Bowel Syndrome: the role of illness and treatment representations**

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**Background:** Theorised pathways in an 'extended' common-sense model of illness representations (CSM) in those affected by Irritable Bowel Syndrome (IBS) were examined. Analysis contrasted between those using complementary medicines (CAM-users) and those not using CAM (non-users). **Methods:** A web-based cross-sectional survey. Participants ( $n=653$ ) were recruited from an IBS self-help network and other online illness discussion forums and assessed on the IPQ-R, the BMQ-General, the Brief-COPE and IBS-QOL. **Findings:** CAM-users reported poorer quality of life compared to non-users. Stronger perceptions of illness consequences and emotional representations were strongly correlated with reduced quality of life and poorer emotional outcomes in both groups. Self-blame and behavioural disengagement partially mediated the pathway from perception to outcome. **Discussion:** Findings suggest consistency with CSM theory. The influence of representations on quality of life (via coping strategies) suggests health psychologists could address components of illness perceptions to improve quality of life in those affected by IBS.

### **Work-family conflict and subjective health complaints: the role of rumination and work-family facilitation**

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**Background:** Work-family conflict (WFC) has been associated with higher levels of subjective health complaints (SHC). Perseverative cognition has been put forward as a mediator between stressors and health. This study examined whether (a) rumination mediates the WFC-SHC relationship, and (b) work-family facilitation (WFF; the experience that the work role provides gains which enhance functioning in family life) buffers the impact of WFC on rumination and SHC. **Methods:** Survey completed by 286 working parents. **Findings:** Controlling for socio-demographics and negative affectivity, WFC was positively associated with SHC. This association was partially mediated by rumination. WFF buffered the effect of WFC on rumination, but not on SHC. **Discussion:** Work-family conflict appears to affect subjective health partially through perseverative cognition. Experiencing work-family facilitation may limit the impact of work-family conflict on rumination. Interventions to stimulate the experience of work-family facilitation and to reduce rumination are suggested to enhance working parents' subjective health.

### Patients' experiences with an internet-based Disease Management System to self-monitor kidney function after transplantation

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**Introduction:** An internet-based Disease Management System (DMS) was developed to enable transplanted kidney patients to self-monitor their kidney function by measuring levels of creatinine. Patients' appreciation of the DMS was assessed. **Methods:** Thirty patients used the DMS and completed questionnaires (e.g. experiences, worries, perceived benefits) at baseline and after 6 and 12 weeks. Additionally, 10 patients were invited for an in-depth interview. **Results:** Patients highly valued self-monitoring, and appreciated the automatic warning when kidney function decreased. Although several patients expressed doubts regarding the reliability of the self-measured values, no association was found between those doubts and actual variation in values ( $p=0.21$ ). A need to improve involvement of physicians was emphasized, as some of them paid little attention to patients' self-recorded values. **Conclusion:** Patients were satisfied about self-monitoring kidney function by using an internet-based DMS. However, attention should be paid to integrating self-monitoring in the regular care process.

### Evaluation of Sound Effects, a hearing loss prevention program targeting young people in music venues

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**Background:** Hearing loss is an important risk factor for young people who regularly visit music venues. In the present study we evaluated the effects of Sound Effects, an intervention that aimed to increase the use of ear plugs, via motivational and environmental strategies. **Methods:** A quasi experimental pre-post within group ( $N=215$ ) and between group ( $N=1705-2039$ ) design was used examining intervention effects via offline observation and online self-report surveys. Measurements were based on the Precaution Adoption Process Model. **Findings:** The between group analyses suggested positive changes in perceived vulnerability, attitudes, self-efficacy, intentions, and action plans towards ear plug use for people in the intervention region. In addition, the within participant analyses suggests positive trends for the intervention group. **Conclusion:** 'Sound Effects' may increase hearing loss protection among young people.

### Determinants of HPV-vaccination intentions among Dutch girls and their mothers: a cross-sectional study

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**Background:** This study examined social demographic and social-psychological determinants of the HPV-vaccination intention of Dutch girls (aged 13 and 14) and their mothers. **Methods:** Participants were recruited via the Dutch vaccination register ( $n=5998$  mothers and daughters) and via an online panel ( $n=650$  mothers;  $n=350$  daughters). The study used a cross-sectional design and was performed with a web-based questionnaire. **Findings:** The questionnaire was completed by 952 mothers (14%) and 642 daughters (10%). Social-psychological determinants largely contributed to the explained variance of HPV-vaccination intention of mothers ( $\Delta R^2=0.80$ ;  $p < 0.001$ ) and daughters ( $\Delta R^2=0.69$ ;  $p < 0.001$ ), in addition to social demographical variables (mothers:  $R^2=0.03$ ;  $p=0.005$ ; daughters:  $R^2=0.03$ ;  $p=0.12$ ). Significant determinants were attitude, beliefs, subjective norms and habit strength. **Discussion:** Future HPV-vaccination communication should address significant social-psychological determinants of the HPV-vaccination intention.

### Long-term effectiveness and mediators of a physical activity intervention for primary schoolchildren from disadvantaged neighbourhoods

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**Background:** This study presents the long-term effectiveness and mediators of a school-based multicomponent physical activity promotion intervention –JUMPIn– in Dutch primary schoolchildren from disadvantaged neighbourhoods. **Methods:** Data from 600 schoolchildren (aged  $9.8 \pm 0.7$  years, 51% girls, 35% overweight) from 9 intervention and 10 control schools were available. JUMPIn was developed using Intervention Mapping, and targeted psychological and environmental determinants of physical activity. **Findings:** JUMPIn significantly improved sport participation at 20 months, but was ineffective in changing outdoor play and screen behaviours. No mediated effects were identified due to the lack of intervention effect on potential mediators. However, significant associations were observed between changes in psychological and environmental constructs (social support, self-efficacy, habit strength, enjoyment, parental rules, availability en environmental barriers) and physical activity. **Discussion:** Several relevant psychological and environmental constructs were identified, confirming their importance in changing physical activity. Effective strategies targeting these constructs are needed to improve future interventions.

### The many faces of stress

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Psychological stress is ubiquitous. This presentation will examine the diverse ways in which stress, and related psychological processes, can influence health and disease outcomes. I will examine evidence suggesting that these psychological factors can down-regulate the immune system and so increase vulnerability to disease; as well as the potential role of psychological interventions in enhancing immunity, and therefore reducing disease vulnerability. I will also discuss findings suggesting a role for psychological factors influencing the healing of chronic wounds (i.e., diabetic foot ulcers) and again the prospects for psychological interventions to improve outcomes in this patient group. Finally, the presentation will consider evidence regarding the developmental origins of adult disease and, in particular, whether adverse exposures experienced in the womb and in the first few years of life (i.e., maternal anxiety and depression) can programme our biological responses to challenges later in life.

### **A Tailored Training Increases General Practitioners' Smoking Cessation Care and Related Behavioral Attributes**

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A tailored training that aims to influence general practitioners' (GPs) barriers towards smoking cessation care (SCC) needs valid evaluation. Our training was based on behavior change techniques also used to counsel smokers to quit, such as identifying GPs' barriers towards SCC, informing GPs about the effectiveness of SCC, identifying GPs' motivation towards SCC and using motivational interviewing techniques, such as discussing ambivalence to increase GPs' motivation. In a randomized trial with 25 GPs in both the intervention and control condition, the effect of the training was assessed. The training significantly increased the frequency at which patients' smoking status was identified (39.5% vs. 35.7%;  $p < 0.000$ ) and advised to quit (1.61 vs. 1.05 advices per day;  $p = 0.012$ ). It also increased GPs' perceived self-efficacy in and intention to routinely implement SCC. We found no effects on the provision of pharmacological and behavioral support. A tailored training improves GPs' offering of SCC and related behavioral attributes.

### **Less is more: The effect of multiple implementation intentions targeting unhealthy snacking habits**

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**Background:** Implementation intentions (if-then-plans) effectively change unhealthy snacking habits. Most people encounter various snacking situations, for each of which implementation intentions could be appropriate. We examined whether implementation intentions are still effective when multiple plans are formulated, testing behavioral effects (Study 1) and hypothesized underlying cognitive mechanisms (Study 2). **Methods:** Participants formulated one, three or zero plans. Study 1 examined unhealthy snack consumption. Study 2 assessed cognitive accessibility of habitual snacks and healthy alternatives with a lexical decision task.

**Results:** Snack consumption reduced significantly when formulating one if-then-plan ( $p=0.01$ ) but not with three or zero plans ( $p$ 's  $> 0.13$ ). Additionally, after being primed with snacking situations, alternatives were recognized faster than snacks when participants formed one ( $p=0.01$ ) rather than three or zero plans ( $p$ 's  $> 0.30$ ). **Discussion:** Forming single implementation intentions is more effective than multiple plans, because if-then associations are stronger for single plans, showing important implications for research and health interventions using (multiple) if-then-plans.

### I feel great, I'll have that cookie!

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**Background:** Research has emphasized the influence of negative mood on food consumption. This study examined the impact of both negative and positive emotion on food choice. **Methods:** Undergraduate students ( $N=137$ , 74% women) who had just finished an exam could choose between an apple or a cookie as reward for survey participation. After their choice, they completed questions on the exam, emotion (18-items), restrained eating (10-items), and satiety (2-items). **Findings:** Half (53%) of the participants chose the cookie. Variables significantly associated with this choice were perceived effort and success in taking the exam, positive hedonic emotions, and (inversely) negative hedonic emotions. No significant association was found for satiety, restrained eating, nor gender. **Discussion:** Whereas studies have emphasized the impact of negative emotion on eating behaviour, this study shows that food choice can be strongly influenced by positive emotion. This influence may be direct or mediated by reward cognitions.

### Ex-smokers are unstoppable – An online smoking cessation program with 40% quit rate

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**Background:** Online interventions can reach large groups with little investment. We describe the effects of a European-wide online stop smoking campaign. **Methods:** The “Ex-smokers are unstoppable” campaign emphasised the benefits of quitting smoking. The campaign was supported by a freely accessible online stop smoking coach in 26 EU languages. The coach provided participants with information, advice and tips that were tailored to their individual smoking behaviour and their willingness and motivation to quit. The coach was designed according to the stages of change, ‘pushing’ smokers from one stage to the next. **Findings:** Within 6 months after the launch of the campaign, more than 150.000 individuals registered on the coach. The typical registrant was a 33-year old male, employed smoker with at least secondary education. After three months, the coach achieved a 41% quit rate. **Discussion:** The sample for the effectiveness analyses was rather small, although representative of the full sample.

## Personal Control as Predictor of Psychological Distress in Multiple Sclerosis Patients: Intercultural Comparison

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Multiple Sclerosis is a chronic demyelinating disorder of central nervous system. The main feature of the illness is unpredictability, represented by variety of symptoms, types, responds to treatment and uncertain prognosis. The study focuses on distress experienced by MS patients and represented by symptoms of depression and anxiety as well as life satisfaction. After exploring the degree and character of distress, it deals with self – efficacy and uncertainty as potential psychosocial predictors. Extending previous research it establishes the role of control variables in the sample of 356 MS patients from USA, Slovakia and Czech Republic. While no differences in the level of distress were confirmed, according to cross – cultural analysis control variables were significant predictors of distress only in American group. Based on the previous research findings intercultural differences in the subjective need of control and as well as related limitations of culturally biased therapeutic interventions are being discussed.

## Exploring the relationship between work stressors, health behaviour and organizational outcomes. The health impairment process

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**Background:** The association between work stress and health has long been established, as has the association between work stress and productivity. We explored the relations between all three factors in one model. **Methods:** A sample of 2000 employees from various Belgium companies completed an extensive health risk assessment covering eight health domains (food, weight, exercise, mood, stress, sleep, alcohol and smoking). Using a cross-sectional design, we assessed the relations between work stressors, participants' self-reported health and health behaviour, and productivity. **Findings:** Whereas only physical complaints predicted absenteeism, presenteeism was predicted by emotional, cognitive and physical complaints. The negative relation between work stressors and productivity was fully mediated by emotional, cognitive and physical health complaints. **Discussion:** Although the cross-sectional design limits the scope of our conclusions, we believe these results provide new insights into health and health behaviour as resilience factors for work stress.

## A computer-tailored program to improve self-management of COPD patients in primary care: a pilot study

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**Background:** A computer-tailored program may improve COPD patient self-management, including smoking cessation, physical activity and medication adherence. In this study we

assess the feasibility of integrating this program in primary care. **Methods:** This study has a mixed method design exploring perceived benefits for self-management and organization of care, appreciation of the program, program use and behaviour change. Eleven patients of three general practices participated. Descriptive statistics on program use and web-based questionnaires were computed. Interviews with seven patients and three nurses were analysed using content analysis. **Findings:** Patients used the program 3.8 times on average ( $SD = 1.9$ ). Five of seven interviewees thought it supported behaviour change. The program was easy to use, but patients' interest diminished after multiple uses. Nurses found the program useful, but found it difficult to recruit patients. **Discussion:** Integrating a computer-tailored program for COPD patients in primary care seems feasible. However, improvements should be made to enhance recruitment and reduce attrition.

### Impact of coping style on the effectiveness of two home-based interventions in chronic pain patients

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**Background:** The study examines the moderating effect of matching a patient's cognitive coping style (monitor or blunter) with a style-consistent intervention (pain-focused or distraction) on pain levels using a home-based intervention with chronic pain patients. **Methods:** Pain patients ( $N = 100$ ) were classified as blunters/monitors and randomly assigned to either pain focus or distraction conditions involving listening to audio intervention CDs for fourteen consecutive days. Diary records assessed perceived pain levels before and after use. **Findings:** Results indicate that the pain-focused condition was more effective in reducing self-reported pain, regardless of coping style with a consistent decrease in pain observed over the two-week period ( $F(1, 44) = 8.82, p < 0.05$ ). A significant interaction was observed in the expected direction between coping style and cognitive strategy ( $F(1, 46) = 4.14, p = 0.04$ ). **Discussion:** It appears that pain-focused home-based interventions may be more effective in reducing pain irrespective of coping style preference.

### Building up self-efficacy for exercise – Are there more than 4 sources?

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**Background:** Bandura suggests 4 sources of self-efficacy, but so far there is little empirical evidence in the domain of physical exercise. This study aims at validating measures for the sources of exercise-specific self-efficacy. **Method:** Participants completed 55 items addressing the sources of exercise-specific self-efficacy in a longitudinal online questionnaire ( $N = 1406$ ) with two points in time (two weeks). **Findings:** Factor analyses revealed the six subscales mastery experience, vicarious experience, persuasion by others, self-persuasion, negative and positive affect. Internal consistencies ranged from 0.72–0.88, re-test reliabilities from

0.66–0.79, convergent validity with exercise-specific self-efficacy from 0.10–0.65 ( $p$ 's < 0.05). Regression analyses showed that mastery experience and self-persuasion were relevant across gender. Positive affect was more salient in men, and persuasion by others and negative affect in women. **Discussion:** Measuring and comparing the sources of self-efficacy for exercise helps to understand how self-efficacy can be targeted in future intervention studies.

### **Can illness representations predict psychological morbidity in non-cardiac chest pain patients attending an emergency department?**

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**Background:** Around half emergency hospital admissions for chest pain are diagnosed as non-cardiac chest pain (NCCP). These patients have poor psychological outcomes, despite excellent long-term cardiac survival. This study applies the Common Sense Model (CSM) of illness representations to this issue. **Methods:** 138 NCCP patients attending an emergency department completed measures of illness representations (IPQ-R), anxiety and depression (HADS), and Quality of Life (QoL, SF-12), at diagnosis and 1 month later. **Findings:** Baseline illness representations explained significant amounts of variance in anxiety (27%), depression (17%) and physical (11%) and mental QoL (17%) at one month. Perceived psychological causes and timeline were the most important predictors. Continued chest pain at follow-up was predicted by baseline perceptions of identity and psychological distress. **Discussion:** The CSM provides some utility for understanding outcomes in NCCP patients. The results suggest the use of anxiety and stress reduction interventions to help patients manage their pain.

### **Are we enacting our plans? Conditional and unconditional effects of an action planning intervention**

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Laboratory-based studies show that forming if-then plans enhances the conditional probability of enacting the planned response when the planned cue is encountered. Similar planning interventions are effective for health behaviour change, but it is not known if these effects are due to conditional (i.e. specific responses to planned cues) or unconditional behaviour (i.e. changes in response-likelihood across cues).  $N = 311$  employees of the retail industry completed measures of fruit and vegetable intake (FVI) and were randomly allocated to form if-then plans for FVI or a control condition and followed up over one month. Short-term behaviour changes were explained by conditional enactment of plans in the planned situations. While behaviour change was maintained at 1-month, these effects were explained by the enactment of intervention plans and generalization effects. Though short-term intervention effects may result from conditional behaviour, sustainable effects additionally rely on the generalization of the behaviour to other situations/responses.

**Think positive about aging and you will live longer?!**M. Wiest<sup>1</sup>, S. Wurm<sup>1</sup><sup>1</sup>German Centre of Gerontology, Berlin, Germany

**Background:** Previous studies have shown that longevity is increased by positive self-perceptions of aging (SPA). Based on domain-specific SPA, the present study examines whether the perception of aging as associated with both physical losses and developmental gains has an impact on longevity. **Methods:** Data comes from the German Ageing Survey ( $N=3.191$ , 40–85 years). 14-year survival was predicted by domain-specific SPA, and the effect of age was explored. **Findings:** Perceiving aging as associated with gains predicted higher longevity ( $Hr=0.80$ , 95%  $CI=0.70-0.92$ ,  $p=0.001$ ; controlling for socio-demographics and health indicators); however, expecting physical losses was not associated with longevity. Positive SPA were more important among older adults (65+ years) as compared to middle-aged adults (40–64 years). **Discussion:** Findings support that positive SPA are beneficial for longevity. Once age-related changes become more salient, the view that aging is still associated with gains becomes more important.

**Stress, fatigue and burnout – the differences between psychiatric and surgical nurses**E. Wilczek-Ruzyczka<sup>1</sup>, B. Basinska<sup>2</sup><sup>1</sup>Jagiellonian University, Cracow, Poland<sup>2</sup>Gdansk University of Technology, Gdansk, Poland

**Background:** Nursing is an accountable profession due to the concern with patient safety (Aiken et al., 2002). Recently imbalance between requirements and rewards has been observed (Basinska & Wilczek-Ruzyczka, 2011). Demands also depend on the specialization in the profession. The aim of study was to evaluate differences in the level of stress, fatigue and burnout among surgical and psychiatric nurses working in hospital. **Methods:** Correlational design was used. The study consisted of 213 nurses from psychiatric and surgery department. Effort – Reward Imbalance Questionnaire, Index of Fatigue and Maslach Burnout Inventory were applied. **Findings:** Level of stress, depersonalization and personal achievement did not differ between groups. Surgical nurses were more exhausted and tired than psychiatric nurses. Work on the extended shifts intensified this problem. **Conclusion:** Physical demands and extended shifts are the cause of drain of strength. This issue is more important in medical than psychiatric hospitals (Schultz et al., 2009).

**Understanding smokers' motivations to use evidence-based smoking cessation aids**R.A. Willems<sup>1</sup>, M.C. Willemsen<sup>2</sup>, G.E. Nagelhout<sup>2</sup>, H. de Vries<sup>2</sup><sup>1</sup>Open University, School of Psychology, Heerlen, Netherlands<sup>2</sup>Maastricht University, Department of Health Promotion School for Public Health and Primary Care (CAPHRI), Maastricht, Netherlands

**Background:** Although use of evidence-based smoking cessation aids (SCA) increases smoking-cessation success rates, only a small percentage of smokers wanting to quit use these aids. This study explored motivations for (not) using SCA. **Methods:** A cross-sectional

population survey was used. Respondents were smokers ( $n=594$ ) categorized as evidence-based SCA users, non-evidence-based SCA users, and non-users. Respondents were asked about SCA use, motivational determinants regarding smoking cessation and SCA use, and intention to use SCA. **Findings:** Evidence-based and non-evidence-based users reported stronger attitudes and perceived social norm as well as lower self-efficacy expectations regarding smoking cessation and SCA use than non-users. Having low self-efficacy expectation regarding smoking cessation, and positive outcome expectations and perceived social norm regarding SCA use were strong predictors of intention to use SCA. **Discussion:** Non-users, non-evidence-based users and evidence-based users have different motivations for using SCA and should be treated differently in smoking cessation programs.

### Why doesn't Crohn's Disease DNA-based risk information motivate quitting? A qualitative study

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**Background:** Despite strong expectations that DNA-based risk information can motivate behaviour change, a recent trial found DNA-based risk assessments did not increase quitting in smokers with familial risks of Crohn's Disease(CD). Aims: To use qualitative methods to explore trial participants' understandings of CD risk and reasons for (not) quitting. **Methods:** Thirty-two participants, purposively sampled from the DNA and control groups, were interviewed, with transcripts analysed using framework analysis. **Findings:** Most participants felt their CD risk was low. Several had difficulty applying population-based risk estimates or adopted deterministic views of their risk. Some viewed the smoking-CD link sceptically, particularly if affected relatives were non-smokers. Others saw CD as just another smoking-related risk, which would not motivate quitting. **Discussion:** DNA-based risk information regarding common disorders, such as CD, may not motivate quitting due to low magnitude risk estimates, biased risk perceptions, and assimilation of DNA-based information with prior knowledge of smoking-related risks.

### On the meaning of health and context factors for a positive view on aging

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**Background:** Whether or not people have positive views on aging (PVA) depends considerably on health. We examined whether the structural density of health supply (DHS) plays a role in the extent to which chronic disease (CD) influences PVA. **Methods:** Data come from the German Ageing Survey (age range: 40–85,  $N=6.151$ ). The DHS by general practitioners (GPs) was considered as indicator for opportunity structures of medical care on the county level ( $N=211$ ). Using hierarchical multi level modeling, we examined whether DHS at the county level had an impact on the relationship between CD and PVA. **Results:** The findings support the hypothesis of a cross-level interaction between CD and DHS

( $B=0.001$ ;  $p < 0.05$ ). **Conclusion:** Findings suggest that the negative relationship between CD and PVA can be buffered: In counties with a higher DHS, CD are of lower importance for PVA than in counties with fewer GPs per inhabitant.

### **Eating Disorders in Adolescents with Type 1 Diabetes: A systematic review with meta-analysis**

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**Background:** Evidence suggests that in adolescents with type 1 diabetes, eating disorders are more common than in peers, but studies are limited by small samples and use of generic measures. We aimed to determine prevalence of eating disorders (compared with peers) and association with glycaemic control. **Method:** A systematic literature search via electronic databases identified 13 studies (that met inclusion criteria) for meta-analyses. **Findings:** Diabetes-adapted measures (generic measures excluded) showed that eating disorders were not significantly more common in adolescents with type 1 diabetes compared with peers ( $n=4$ ; 6.4% and 3.0%;  $d=0.43$ ,  $CI=-0.06$  to 0.91), but importantly were associated with poorer glycaemic control ( $n=4$ ;  $d=0.54$ ,  $CI=0.32$  to 0.76). Generic measures inflated prevalence of eating disorders in adolescents with type 1 diabetes. **Discussion:** Since eating disorders are associated with suboptimal glycaemic control (typical of adolescents with type 1 diabetes), future work should establish predictors of eating disorders and develop diabetes-specific measures.

### **The beneficial role of goal adjustment for cancer patients' functioning: within an intervention setting**

L. Zhu<sup>1</sup>, A.V. Ranchor<sup>1</sup>, M. van der Lee<sup>2</sup>, B. Garssen<sup>2</sup>, R. Sanderman<sup>1</sup>, M.J. Schroevers<sup>1</sup>

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**Background:** To explore one possible mechanism of psychological intervention for cancer patients, we examined the changes in goal adjustment tendencies (disengagement and reengagement) and how such changes were predictive of changes in functioning during the intervention. **Methods:** Using a non-experimental longitudinal design with 2 time points: T1 (before the start of intervention) and T2 (9 months after T1), we included 241 cancer patients who received intervention at 7 Dutch psycho-oncology institutions. Pearson correlation and hierarchical regression analysis were used. **Findings:** During the intervention, patients did not show improvements in disengagement or reengagement at group level. At individual level, differences were found on disengagement and reengagement. Increases in reengagement were associated with decreases in depressive and anxiety symptoms (but not fatigue). Interactions between changes in disengagement and reengagement were associated with decreases in

anxiety symptoms. **Discussion:** Increases in goal reengagement seem to be beneficial for changes in psychological functioning during interventions.

### **Manipulating the social image of binge drinking and potentially detrimental effects – An experimental study**

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**Background:** Existing campaigns focus on conveying the message of drinking responsibly to reduce young people's alcohol consumption. Some campaigns additionally display drinking in sociable situations, which may counteract the intended effect. This study explored effects of manipulating the drinker prototype. **Methods:** Male university students ( $N=60$ ) were randomly assigned to a sociable-prototype condition, unsociable-prototype condition, or control group, and completed questionnaires afterwards. **Findings:** Regression analyses controlling for habit to binge drink in sociable situations showed that the sociable condition resulted in higher willingness and—among those with lower habit strength—in higher intentions to binge drink the next weekend. This might be due to increased similarity to the prototype, whereas there was no effect on prototype evaluation, attitude, subjective norm, and perceived behavioral control. **Discussion:** Presentations of unsociable binge drinker prototypes may not contribute to reduce alcohol consumption; the sociable component of existing prototype interventions, however, might even exacerbate binge drinking.

### **Type D & Temperament and Character Personality Profiles: Association with Emotional, Mental, and Physical Health**

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**Background:** This study examines the association of resilience & risk factors grouped by personality profile. **Methods:** A two-phase approach, in which a sample of volunteer adults ( $N=1102$ ) allowed the selection of 285 individuals in the second phase, in five demographically-matched-groups: (1) Type D, (2) high Harm Avoidance and low Reward Dependence (i.e. TCI risk), (3) both Type D and TCI risk (i.e. Double Risk), (4) high Self Directedness and Cooperativeness and low Harm Avoidance (i.e. TCI resilience), (5) none of the above, i.e. Non D. The participants were cognitively tested, psychiatrically interviewed, and underwent a medical examination. **Findings:** Discriminant analysis revealed the groups were different for all the domains of variables considered. The most dramatic group differences were between the Double Risk group and the TCI resilient group. **Discussion:** The TCI provides excellent definition of resilience; however, for risk the combination of more than one personality model is more effective.

## Poster presentations

### The impact of positive self-care on members of the supporting professions

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**Background:** This pilot study tries to establish if the self-help method of increasing the focus on positive self-care has a positive impact on the quality of life of employees working in a supportive capacity (social workers, teachers, etc.). **Methods:** In the pilot study 41 participants working in supporting professions in the Czech Republic have been observed. This group included 28 women and 13 men with an average age of 34 years. The self-help method was applied for two months. Measuring the quality of life was based on the SEIQoL method. **Findings:** The results of the test were assessed from a qualitative as well as a quantitative point of view. They show a positive impact on the quality of life in the examined group. **Discussion:** The study assesses self-help support, which is not complicated and not expensive to give.

### Effectiveness of a cognitive-behavioral intervention for chronic patients: preliminary results of a French pilot study

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**Background:** The benefits of the cognitive-behavioral approach to the treatment of chronic pain patients are now fully established (Morley et al., 1999). We have developed a cognitive-behavioral program to help these patients to develop their ability to cope with pain and to manage their emotional distress. According to literature, we hypothesized this program will increase both pain self-efficacy and wellbeing. **Methods:** Our program's benefits were tested in a French hospital (CHU Bretonneau, Tours, France) with twenty patients suffering from various physical pains. Pain intensity (VAS), pain self-efficacy (PSEQ), pain beliefs (PBPI), coping skills (CSQ) and emotional distress (HAD) were evaluated before and after intervention. **Findings:** Our analyses showed significant decreases in pain intensity ( $p < 0.01$ ), mysteriousness ( $p < 0.05$ ), catastrophizing ( $p < 0.05$ ), diverting attention ( $p < 0.05$ ), anxiety ( $p < 0.01$ ) and depression ( $p < 0.05$ ), and an increase of pain self-efficacy ( $p < 0.01$ ). **Discussion:** Health psychology may have interesting clinical applications for the cognitive-behavioral treatment of chronic pain.

### Portuguese nurses' professional satisfaction

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**Introduction:** The study had as objectives: to know the level of professional satisfaction of nurses Portuguese, and identify the key dimensions that contribute to this (dis) satisfaction.

**Method:** Cross sectional study of a quantitative nature, in which 118 rehabilitation nurses took part, mostly female (72.6%) with a mean age of 38.85 years. To measure the satisfaction the Work Description Index was used. **Results:** The majority of nurses (79.70%) indicates a good professional satisfaction. The dimensions that contribute most satisfaction are the “recognition of clients/family” and “work itself”, the highest contributors to dissatisfaction are “low remunerations” and “lack of recognition of the institution.” The age, sex and type of employment status did not exert a significant effect on level of professional satisfaction of nurses. **Conclusions:** The Portuguese nurses require a greater appreciation and recognition by the employing institution.

### Exercise in the prevention of falls in elderly: A systematic literature review

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**Introduction:** The main goal of this systematic review was to identify, describe and analyze the effect of exercise on reducing the risk of falls in the elderly. **Method:** We conducted a careful search in the Medline/Pubmed and B-on, with the following descriptors: “accidental falls”, “aged”, “exercise”. We found 97 articles and after application of inclusion criteria left nine articles that took part in the final analysis. **Results:** The results suggest that exercise is one effective strategy for reducing the risk of falls. Relate to the main components of each program, there was a predominance of muscle strengthening exercises, training for static and dynamic balance and coordination exercises and flexibility. The studies did not present sufficient clarification regarding the frequency, duration and intensity of exercise sessions. **Conclusion:** Physical exercise can be crucial in the prevention of falls in the elderly, however, more research is needed in the area.

### Activity Perception and Fear of Movement in Chronic Illness

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**Background:** The study investigates whether distorted perception of activity and fear of movement may exacerbate the severity of symptoms in Chronic Fatigue Syndrome (CFS) and Asthma. **Methods:** CFS, asthma, and control individuals will have completed questionnaires exploring illness beliefs; current, desired, and expected level of physical/mental/social activity; fear of movement; and coping styles. Expected results: CFS individuals will demonstrate the greatest discrepancy between their actual, desired and expected activity levels. Greater discrepancy will be related to higher fear of movement, symptom severity, psychological distress, avoidant coping strategies and general maladjustment. Current stage of work: participant testing. **Discussion:** Distorted perception of activity and related fear of movement may underlie the choice of avoidant coping strategies, and lead to increased symptom severity. Understanding such negative illness cognitions and the mechanisms of their influence may have implications for the cognitive-behavioural treatment of CFS, and control and reduction of asthma symptoms.

### Measurement of abusive and encouraging parenting styles and their relationship to well-being in Saudi Arabia

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**Background:** To validate a seven-item questionnaire designed to assess Abuse (frequency of being beaten and insulted) and Encouragement in Saudi Arabia. **Methods:** The seven-item Arabic Parenting Style Questionnaire (APSQ) was developed from earlier qualitative and psychometric. **Findings:** The two Abuse and Encouragement subscales of the APSQ showed good factorial discrimination and acceptable internal consistency. Encouragement was positively correlated with the Authoritative subscale of the PAQ. Subscales from the PAQ and APSQ both predicted independent variance of GQOL. Correlations between the APSQ and BFI were low. Abuse and Encouragement both independently predicted GQOL and SWLS, but only Abuse independently predicted negative affect, and only Encouragement predicted positive affect. **Discussion:** The APSQ is a valid and reliable measure of abusive and encouraging parenting styles, and both subscales independently predict well-being in a population of Saudi adults.

### Academic Adjustment and Mental Health in College Freshman

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**Background:** Attending a university for the first time can be a stressful experience for many students. The purpose of this study was to identify the existence of psychopathological symptoms and its relations with academic adjustment. **Methods:** Correlational design with 190 students. The instruments are: Brief Symptom Inventory (BSI, Derogatis, 1993; Canavarro, 1995); Questionnaire of Academic Adjustment – short version (Almeida et al., 2001), portuguese instrument. **Findings:** The results showed no statistically significant differences between genders in relation to the academic adjustment. The adjustment to higher education was satisfactory, with exception at the institutional dimension. The psychopathological symptoms found at the sample are normative. However, we found negative significant correlations between the personal and career dimensions and all the psychopathological symptoms. The strongest correlation was with the depressive dimension. **Discussion:** It is important that the institutions improve strategies that promote a good adaptation and consequently contribute to mental health promotion.

### How do College Athletes Adjust to College Athletic Club with Social Skills?

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**Background:** College athletes' maladjustment to and dropout from athletic clubs has become one of the critical issues in Japanese universities. The purpose of this study was to investigate

the relationship between athletes' social skills and their adjustment to athletic clubs. **Methods:** From October to December 2010, the sample of 287 college athletes (males = 118, females = 169, mean age = 19.8, SD = 1.1) were given a questionnaire composed of socio-demographic questions and questions derived from Social Skills Scale for College Athletes (S-4) and Adjustments Scale to College Athletes (ASCA). **Findings:** The results of multiple regression analysis showed that 5 subscales of S-4 had significantly positive association with those of ASCA. **Discussion:** The findings of this study support our hypothesis that athletes with high social skills make the better adjustment to their athletic clubs. This implies that social skills training for athletes can be effective in improving their human relationships and possibly their performance in athletic clubs.

### **A study of parenting stress and mental health among parents of mental disabled children**

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**Aims:** This study aimed at investigating the relationship between familial functioning, child characteristics, demographic variables and parenting stress and mental health among parents of children with mental disabilities. **Method:** 200 parents (130 mothers and 70 fathers) were studied; they completed the Parenting Stress Index, General Health Questionnaire, Family Assessment Device and demographic questionnaires for parents and children. Data were analyzed using correlation and regression analysis. **Findings:** Among child characteristics, child age had a negative relationship with parenting stress and GHQ. Severity of child's mental disability had negative relationship with GHQ. The correlation between familial income with parental stress and mental health was negative. Among familial functioning, the correlations between variables of role, problem solving, and affective responsiveness and mental health and parental stress were negative. Regression analysis showed that child characteristics, familial functioning and parents demographic factors could predict 8, 4 and 17 percent of variance in parental stress and 3.6, 16 and 10 percent of variance in mental health, respectively.

### **Colleagues support, emotions suppression and burnout: The moderating role of organizational climate**

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**Objectives:** Research questions:(1) Is a lack of colleagues support linked to emotions suppression? (2) Is emotions suppression mediating the link between social support and burnout? (3) Does the organizational climate (unambiguity job role and job security) moderate the impact of this emotions suppression on burnout? **Methods:** 98 commercial executives completed a questionnaire containing:- MBI-GS (Schaufeli et al., 1996)- ERQ (Christophe

et al., 2009) to assess emotions suppression- Organizational climate and colleagues support were assessed by a contextualized survey constructed for this study. **Results:** Hierarchical regression analyses indicated (1) a link between lack of support and emotions suppression. (b) The link between lack of colleagues support and burnout is mediated by emotions suppression. (c) Organizational climate moderates the effects of suppression on burnout. **Discussion:** Although emotions suppression toward customers is well documented, emotions suppression outcomes toward colleagues is rarely analyzed and should be more considered in future researches.

### Work Culture among Health Care Personnel in a Palliative Medicine Unit

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**Background:** Understanding and assessing personnel's work culture in palliative care is important since a conflict between "high tech" and "high touch" is present. The aim of this study was to explore the work culture at a Palliative Medicine Unit (PMU). **Methods:** Personnel ( $N=26$ ) at a PMU in Norway comprising physicians, nurses and physiotherapists filled in a questionnaire about their perception of their work culture. The method we used seeks to explore what aspects dominate the particular work culture identifying challenges, limitations and opportunities. **Results:** We found differences in how the respondent perceived their work culture compared to the "norm" in eleven of twelve vectors. **Conclusion:** Personnel at the PMU have significant different perception of their work culture than the "norm" in several dimensions. The low score in two of the dimensions indicate lack of engagement and constructive goal-orientation behavior and not being in a position to change their behavior.

### The role of willpower in successful maintenance of weight loss

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Willpower – the ability to resist temptation – is an important key to successful functioning and willpower failure may lead to various health problems including obesity. The present qualitative study examined the role of willpower in successful maintenance of weight loss and in-depth interviews were carried out with 13 men and women who were classified as successful weight loss maintainers. The data were analyzed using Interpretative Phenomenological Analysis (IPA). The participants described their experiences in terms of six broad themes: their weight histories; the use of willpower to maintain weight loss; the factors that deplete willpower; the factors that increase willpower; how willpower had been strengthened over the maintenance period; the differences when employing willpower during weight loss and maintenance. The results suggest that willpower has a major role to play in maintenance of

weight loss and health professionals could increase the effectiveness of weight management interventions through willpower enhancement.

### Spirituality and resilience in affectees of bomb blast in Lahore city

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**Background:** Relationship between spirituality and resilience, health status, and posttraumatic symptoms was investigated in bomb blast affectees in Lahore, Pakistan. **Method:** Participants were 50 direct exposure witnesses (25 early adulthood and 25 late adulthood) suffering from trauma and 50 indirect exposure affectees (25 early and 25 late adulthood) who had watched bomb blast activities through electronic media. Measures of resilience, spirituality, and trauma, i.e Impact of Event scale, Religious Orientation Scale and State-Trait Resilience scale were administered. These measures evaluated trauma-related distress, and posttraumatic symptom severity, religious orientation and resilience. **Findings:** Findings indicate significant gender and age differences in experiencing trauma and coping strategies, with females experiencing more trauma than males and using more coping strategies. Findings also indicate females and older adults significantly higher on religious orientation. **Discussion:** Gender and age, and spirituality appear to be related to resilience in those exposed to bomb blast trauma.

### Systematic review of behavioural interventions to promote shift to more sustainable modes of transport

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**Background:** Travel behaviour shows resistance to change, but change is needed to reduce emissions and increase physical activity. This review aims to identify the behaviour change strategies successful in changing transport behaviours. **Methods:** A systematic review of the peer-reviewed literature will be conducted. Data from eligible controlled studies will be extracted in accordance with the Cochrane guidelines. Behaviour Change techniques (BCT) will be classified using an adaptation of the CALO-RE Taxonomy (Michie, et al., 2011) to transport. Study quality will be assessed using the Cochrane Risk of Bias Tool. A conceptual narrative will be informed by the PRISMA statement and a meta-analysis will be performed if possible. **Expected Results:** Which BCT's are effective in promoting mode shift. Current Stage of work: Database searching. **Discussion:** Results will be discussed in terms of the specific behavior change techniques that can successfully promote mode shift to more sustainable transport choices, including active travel.

### **Designing and testing a model of important precedents of mental and physical health in nurses**

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The purpose of this study was to investigate the important precedents of mental and physical health by designing and testing a model consisting variables such as personality traits, job characteristics, work-family conflict, and job satisfaction. The sample consisted of 311 nurses from 3 hospitals in Ahwaz, Iran who were selected by simple random sampling method. Data analysis conducted by structural equation modeling (SEM). The indirect effects were tested by bootstrap procedure. The results indicated that proposed model had good fit indices. Better fit were obtained by using AMOS 18 modification indices. The results also showed that work-family conflict and job satisfaction mediate the relationship of job characteristics and personality traits with mental and physical health.

### **The effect of workplace characteristics and perceived social support at work on turnover intention**

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The purpose of this study was to investigate the effect of workplace characteristics and perceived social support on turnover intention, with mediating role of job satisfaction and emotional exhaustion. Survey respondents include 309 employees from the National Iranian Drilling Company (NIDC) in Iran that were selected by simple random sampling method. The research instruments include perceived job security, trust in senior management, perceived distributive justice, information sharing, perceived social support, job satisfaction scale, emotional exhaustion and turnover intention scales. Fitness of the proposed model was examined through structural equation modeling (SEM), using SPSS-16 and AMOS-16 software packages. The indirect effects were tested by using bootstrap procedure in Preacher and Hayse (2008) Macro program. Findings indicated that the proposed model fit the data. Better fit and more meaningful results obtained by omitting 5 paths and using AMOS modification indices. Results revealed that job satisfaction and emotional exhaustion mediate relationships between workplace characteristics and perceived social support with turnover intention.

### **Are resilience factors protective for self-rated health of adolescents with unemployed father?**

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**Background:** The aim is to study the effect of paternal unemployment, financial strain, fathers' parenting practices and several factors of adolescent's resilience on their self rated health. **Methods:** Questionnaire obtained data from 2799 adolescents (mean age 14.3; 50%

males) were analyzed using logistic regression. **Findings:** Paternal unemployment increased the risk of worse self-rated health. Including financial strain and fathers' parenting practices into model decreased this effect only slightly, while factors of adolescents' resilience reduced the negative effect of paternal unemployment on self-rated health. When all studied variables were included in one regression model, this effect became nonsignificant. **Discussion:** Although mainly worse parenting practices of unemployed fathers were hypothesised to explain the relationship between paternal unemployment and adolescents' self-rated health, yet factors of adolescents' resilience (perception of self, perception of future, family cohesion) seem to be more important when dealing with adverse effects of paternal unemployment.

### **Social support intervention for smoking cessation among low-income smokers in a French hospital-based cessation service**

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**Background:** Low-income smokers often consider smoking their only pleasure to cope with daily hardships. **Objectives:** (1) evaluate the effectiveness of a group intervention based on social support, compared with usual care; (2) assess how this intervention affects smoking motives among continued smokers. **Methods:** The intervention includes instrumental, informational and emotional support: free nicotine replacement therapy, counseling and education during 6 weekly structured group sessions and mutual peer support. Abstinence is biochemically verified. A smoking motives questionnaire is completed at baseline and at 6-month follow-up. 75 participants to be recruited *versus* 75 in usual care. **Preliminary results:** Minimal drop-out, gradual quitting and several successful quit attempts have been noted. Participants share their experiences and coping strategies which promote willingness to quit. Current stage of work: 27 recruited in the support intervention *versus* 22 in usual care. **Discussion:** Social support interventions may empower low-income smokers to implement healthy behavior change.

### **Perceived exposure to electromagnetic fields, psychological components and report of non-specific physical symptoms**

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**Background:** A broad range of physical symptoms is often attributed to low-level environmental exposures such as electromagnetic fields (EMF) without a clear pathological basis. The subjective belief of the magnitude of being exposed to EMF could constitute an important part of the mechanism that leads to the report of these non-specific physical symptoms (NSPS). **Methods:** Data ( $N=6051$ ) were analyzed from a nationwide cross-sectional study conducted in 2011 in the Netherlands. Multiple regression analyses were performed to test the relative contribution of perceived exposure to EMF and psychological variables to the report of NSPS, based on both self-reported and General Practice data.

**Findings:** Perceived exposure and psychological components such as mental distress, environmental sensitivity, coping strategies and worries related to the environment are associated with NSPS. **Conclusions:** The investigation of the contribution of these determinants of symptomatology can elucidate the pathways that lead to physiological responses in relation to environmental exposures.

### **Environment pollution factors influencing children emotional and behavioral problems: a literature review**

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**Background:** Despite many theories and scientist working at children's mental health, it is still getting worse every year. This current hypothesis is that there are other factors that influence child's emotional and behavioral problems (EBP). There is some evidence that one of these factors could be exposure to environmental pollutants. The main research question was what are the main factors of environment pollution which influence child's EBP. The aim of this paper is to highlight the main environment pollution factors influencing children EBP.

**Methods:** Papers published from 2002 onwards were reviewed with regard to scientific context.

**Findings:** The main environment pollution factors, influencing child's EPB, are heavy metals, air pollution, noise and prenatal ETS exposure. **Discussion:** There are many preventive programs regarding social and psychological child's environment. This paper suggests that public health policies have to be pointed to systematical programs regulating environment pollution impact on child's mental health.

### **Perceived Competence, Physical Exercise and Well-Being, in Portuguese population**

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The research indicates physical exercise as one of the key factors in health protection. According to Self-Determination Theory the development of a sense of competence is vital to achieve greater self-regulation and maintain behaviors that promote health and well-being. The aim of the study was to study the association between perceived competence, physical exercise and wellbeing, among healthy adults. Participants were 523 individuals, aged between 19 and 64, (59.7% female and 40.3% male). Three instruments were used: the Perceived Competence Scale (exercising regularly), Baecke Questionnaire (modified) and The Personal Wellbeing Index. The results indicate that competence is a motivational factor which relates positively to physical exercise ( $r=0.66$ ,  $p < 0.01$ ), and that individuals engaged in exercise present a higher level of wellbeing compared to individuals who don't ( $t(521)=3.35$ ,  $p=0.001$ ). These results support the relevance of perceived competence on exercise practice, and reinforce the positive association between exercise and wellbeing.

### **The relationship between positive emotions, resilience and well – being in cardiovascular patients: a literature review**

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Resilience seems to facilitate people's successful adaptation in response to major life stressors and it is associated with efficient regulation of emotional resources. Similarly, positive emotions seem to be essential factors in the process of resilience following adverse events and contribute to recovery from stress – related negative events. Accumulating evidences suggest that positive emotions are associated with advantageous physical and psychological health outcomes, considering faster cardiovascular recovery from negative emotional arousal and adherence of coping strategies which predicts buffer effects against stress and depressed mood. Moreover, through the enhancement of coping strategies, positive emotions seem to broaden both patients' arrays of subsequent thoughts and actions and patients' capacity to build psychological resources. Our aim is to highlight the underlying mechanisms which may occur between positive emotions, resilience and coping in the context of cardiovascular diseases, altering the excessive focus on negative emotions and delineating the already existed bibliography.

### **Healthy and qualified ageing in the automotive industry through a holistic age management**

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As the proportion of older workers will continue to grow in the next decades, it will be crucial to develop appropriate corporate policies. Work organization, qualification, health promotion, human resource development and career planning should be conceptualized accordingly. A number of measures have been developed, but only few scientific findings are available regarding their impact. The project will analyse and compare current age management in the automotive industry in Germany. Our study will encompass interviews with health and age management and the evaluation of company data. A tailored questionnaire has been developed. We will identify successful concepts and develop a practical and transferrable model. The project offers a great opportunity to support preservation of health and to strengthen ability to work of industry employees.

### **An explanatory study about chronic disease in the workplace**

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The aim of this study was to explore the strategies of workers when affected by a chronic disease and for his colleagues. 993 workers were interrogated. 10.8% of the participants declared they had a chronic disease during their professional life and 58.6% of them already have worked with someone with a chronic disease. We asked the participants to tell how they would react if they were sick or if they have a sick colleague. Women, employee, and workers under 35 tend to use more emotionnal coping strategies. Workers who have a high sense of belonging to their work team have more communication coping strategies. The categories of worker who are at risk to be discriminate do not want to communicate about their disease in the workplace. The results indicate the importance of communication about chronic disease to favors well being of sick workers and their colleagues.

### Associations of socioeconomic factors with mental health problems in urban citizens in Slovakia

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**Background:** Cities are known for their higher prevalence of mental health problems (MHP). The aim of the study was to examine the associations of socioeconomic indicators (SEI) with MHP in urban citizens. **Methods:** Data on MHP, annual household income (low, medium, high) and educational attainment (low, secondary, university) were collected within the EU-FP7 project EURO-URHIS-2 in Bratislava and Kosice (response rate 43.2%,  $N = 1248$ , males 48.3%, mean age  $59.7 \pm 16.3$  years). MHP were assessed by means of the 12-item General Health Questionnaire (GHQ-12). We used logistic regression to explore the relationships between SEI and MHP. **Findings:** The occurrence of MHP ( $\text{GHQ-12} \geq 2$ ) was significantly associated with lower educational level ( $\text{OR} = 1.45$ ; 95%  $\text{CI} = 1.13\text{--}1.87$ ) and with low household income ( $\text{OR} = 1.53$ ; 95%  $\text{CI} = 1.07\text{--}2.17$ ) after adjustment for age and gender. **Discussion:** Residents with low SE status are more vulnerable to MHP. Interventions should be tailored at low SE groups when aiming to promote mental health in city residents.

### The role of executive function, treatment beliefs and memory in adherence to back pain exercises

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Executive function (EF) (i.e. styles of learning, memory and planning) predicted engagement in exercise in a healthy population (Hall et al, 2008). This study investigates whether EF, treatment beliefs and memory explain the variation in adherence to exercise in chronic low back pain (cLBP). Twenty-six adults with cLBP completed five measures examining executive function, and five questionnaires assessing mood, disability, health beliefs and illness perceptions. At follow-up, disability was re-assessed, and adherence to exercise was assessed using the modified

Medication Adherence Report Scale. Linear regression revealed that together, EF and treatment beliefs accounted for over 50% of the variance in treatment adherence. This is the first study to show that individual differences in EF predict the self-regulatory abilities necessary to maintain exercise over time in patients with cLBP. The findings are now being replicated within a larger study. Preliminary results from the larger study will be presented.

### **Diabetes related distress: Preliminary validation of the Spanish version of the PAID scale**

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The aim of this study was to assess the preliminary psychometric properties of the Spanish version of the Problem Areas in Diabetes (PAID) scale, an instrument to measure diabetes specific emotional distress. Data were collected from 113 patients with type 1 and type 2 diabetes (aged 18–76 years, 65% females). Participants completed the PAID scale, the WHO-Five Well-Being Index, the Fear of Hypoglycaemia Survey (FHS), and the State-Trait Anxiety Inventory (STAI), Trait Subscale. PAID scale had adequate internal consistency ( $\alpha = 0.91$ ). Significant relationships were found between PAID scores with well-being index ( $r = -0.32$ ,  $p < 0.01$ ), fear of hypoglycaemia ( $r = 0.40$ ,  $p < 0.001$ ) and STAI scores ( $r = 0.48$ ,  $p < 0.001$ ). The findings offered preliminary support for the validity of the Spanish version of the PAID scale.

### **Coping profiles in mothers of children and adolescents with diabetes: Emotional correlates**

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The objectives of this study were to identify specific coping profiles among mothers of children with diabetes and to examine the relationships of these coping profiles to mothers' emotional outcomes. 144 mothers completed questionnaires on their coping strategies, well-being and affective reactions to their children's glucose results. Four clusters were identified: high use of coping strategies I ( $n = 46$ ), endorsing high levels of expression of negative emotions, support seeking, active control, and wishful thinking; high use of coping strategies II ( $n = 53$ ), endorsing high levels of emotional expression, active control, wishful thinking, but low levels of support seeking; passive copers ( $n = 21$ ), endorsing low use of coping strategies; active copers ( $n = 24$ ), endorsing high levels of active control and support seeking. Tests examining differences in emotional variables were significant for cluster group membership ( $p < 0.001$ ). Results have implications for developing interventions to parents' particular profiles.

### **The effect of gender on strength training in older people: a Swedish population study**

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**Background:** Physical exercise contributes to healthy ageing, and strength training has been shown to improve independence in older people. **Method:** Six hundred older people were randomly selected from the Swedish population, and sent a self-completion questionnaire (57% response rate,  $n=343$ ) examining exercise history, current strength training, and perceived benefits and barriers to strength training. **Results:** Gender was associated with a perceived positive effect of strength training on quality of life (Women 42% vs. Men 27%). The most commonly reported benefits of strength training were better mobility (71%), energy (70%), and muscle strength (69%), with most benefits endorsed more commonly by women than men. The most commonly reported barriers to strength training were believing other forms of exercise more suitable (49%) and cost (20%; Women 31% vs. Men 13%). **Discussion:** To better promote healthy ageing, interventions should be embedded in an understanding of the effect of gender on exercise behaviour.

### Stress vulnerability and coping strategies among academic students

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**Background:** Vulnerability to stress could explain how a person acts/reacts with daily and stressful situations; however, inadequate coping strategies can contribute to increase individual stress. This study aims to analyze the association between stress vulnerability and coping strategies. **Methods:** Cross study with a sample of 60 individuals that completed the Vulnerability to Stress Questionnaire and the Problem Solving Inventory. **Findings:** Global results showed that individuals with higher stress vulnerability scores reported worst problem solving responses ( $p < 0.05$ ). Concerning to specific domains of problem solving responses, external/internal problem control and emotional control strategies are not related to stress vulnerability score. A predictor model reported that a lack of social support is the main dimension to explain variability on solving problems responses. **Discussion:** These results highlight the importance to identify patterns of vulnerability and to promote social support on students in order to face possible stress and crisis moments (eg. evaluation periods).

### Trait resilience, positive and negative affect, and psycho-social adjustment among colorectal cancer patients in Israel

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**Background:** The study aimed to investigate the contribution of trait resilience and affect to the adjustment of colorectal cancer patients in Israel. **Methods:** A sample of 200 participants, 57.5% men and 42.5% women (age range 46–70 years), were approached 1–4 years following diagnosis, and completed an inventory assessing demographic and medical variables, trait resilience, current positive and negative affect, and psycho-social adjustment. **Findings:** Adjustment was correlated with level of education, working status, functional status, stage, and treatment side effects ( $p < 0.01$ ). Adjustment was also positively correlated with high level of trait resilience and positive affect, and negatively correlated with negative affect ( $p < 0.001$ ). Hierarchical regression analysis showed that trait resilience contributed to adjustment, but its

effect disappeared when positive and negative affect were entered, suggesting that affect mediates resilience effects on adjustment. **Discussion:** The data underlie the importance of resilience and affect in the adjustment of colorectal cancer patients.

### Is autonomy holding us back when we crave a drink? A study among university students

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**Background:** Based on Self-determination Theory and Motivation Theory of Alcohol Use, the aim of this study was to explore relationship between factors of motivation to drink and risky alcohol use with respect to individual differences in autonomy. Methods 102 university students (mean age = 21.4; SD = 2.5; 85% female) provided data on alcohol use (AUDIT), motivation to drink (DMQ) and autonomy (SDS). Linear regression model was built and interactions were tested for detecting moderation. Findings Analysis revealed that mood enhancement ( $\beta = 0.41$ ;  $p \leq 0.001$ ) and autonomy ( $\beta = -0.18$ ;  $p \leq 0.05$ ) were most closely associated with risky alcohol use and evidence for moderating effect of autonomy ( $\beta = -0.34$ ;  $p \leq 0.001$ ) was detected. **Discussion:** While mood enhancement was most strongly associated with risky alcohol use this study shows that autonomy might serve as a protective factor in student alcohol use.

### Predicting health behaviors in post-Acute Coronary Syndrome patients

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**Background:** Depression has been linked to a number of behavioral outcomes following an acute cardiac episode, but the influence of anxiety and post-traumatic symptoms have been less explored as has the influence of illness beliefs and social support. **Purpose:** to identify the impact of mood, post-traumatic symptoms, illness beliefs and social support on health-related behavior following an acute coronary event. **Method:** cohort study, with measures in hospital, one and six months following admission for acute coronary syndrome. **Results:** 150 participants participated in the study. Frequency of moderate exercise at both follow-up times was influenced by wide range of mood states, illness beliefs, and social support. Depression also had a wide ranging impact on behaviors including diet, smoking, exercise, alcohol consumption, and medication adherence. **Conclusions:** cardiac rehabilitation programs need be aware of the impact of a number of psychosocial variables on key rehabilitation outcomes, and address these to ensure maximal benefit.

### Placebo effects of sodium bicarbonate on 15-minute maximum effort cycling performance

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**Background:** The aim of the present inquiry was to measure the placebo effects of sodium bicarbonate in cycling performance while defining the mediating psychological variables. **Methods:** The repeated measures single-blind experiment included 23 athletes (mean age = 30.2 yrs, 82.6% male). Participants were quasi-randomly assigned to either a no-treatment or a placebo group. Objective and psychological measures were assessed. **Findings:** Nine out of twelve participants showed a mean increase of 7.28% ( $t=6153$ ,  $df=8$ ,  $p < 0.01$ ) in power after placebo treatment. In contrast to non responders, these placebo responders, showed higher optimism ( $MD=0.93$ ,  $p < 0.10$ ) and higher focus on self ( $MD=3.78$ ,  $p < 0.10$ ). A negative correlation between somatic anxiety and the magnitude of performance improvement ( $r = -0.67$ ,  $p < 0.05$ ) was also observed in these subjects. **Discussion:** From a practical perspective notable placebo responses may help promote healthy, drug-free sport. Personality factors appear to play significant role in the placebo response.

### **The Adaptation of Problem Solving Training: an efficient form of therapy in Suicide Prevention**

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**Background:** Evidence-based problem solving training (PST) is a form of therapy for the improvement of problem solving skills in suicide patients. The Hungarian adaptation and initial results of PST are presented in this poster. **Methods:** Thirty-four participants between age 18 and 60 with previous suicide attempt, major or recurrent depression in their psychiatric history were assigned to out-patient PST groups. PST lasted for eight weeks, one session per week. Participant's level of depression, anxiety, hopelessness, coping styles and problem solving skills were assessed at the beginning and at the end of the training. **Findings:** Significant decrease of level of depression and hopelessness ( $t = 3029$ ,  $p < 0.001$  and  $t = 2291$   $p < 0.05$ ), an increase of problem analysing and goal orientation scores ( $p < 0.05$ ) were found, while emotion centered coping scores indicated significant decrease ( $p < 0.001$ ). **Discussion:** PST can be an efficient, user friendly method in suicide prevention. In future researches control group studies, and the follow-up of the participants will be needed.

### **Occupational health of university staff: psychological well-being and coping**

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**Background:** This study examines the level of psychological well-being among university staff. It is hypothesized that proactive coping can predict positive outcomes important to health promotion. **Methods:** The sample consisted of 67 individuals. The investigation was presented as a research on personality and attitudes related to work and health. Participation was voluntary and anonymous. Well-being was measured using Ryff's Psychological Well-Being Scale (PWB); coping was measured using Coping Orientation of Problem Experience (COPE) and Proactive Coping Index (PCI). **Findings:** Regression analysis was used to predict the value of well-being (dependent variable) given the values of coping (independent variables).

We received three predictors of well-being ( $r=0.869$ ): proactive coping ( $\beta=0.711$ ); positive reinterpretation ( $\beta=-0.407$ ) and seeking of emotional social support ( $\beta=0.363$ ). **Discussion:** The synergistic relationship between proactive coping and social support is examined here in relation to psychological well-being. The significance of focus on positive coping for health prevention will be discussed.

### Factors influencing health behaviour change in patients with ischemic heart disease after their rehabilitation

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**Background:** Our aim is to examine three health behaviours (exercise, relaxation, and smoking cessation) in cardiac patients. Three theories are tested: Theory of Planned Behaviour, Implementation Intentions, and Temporal Self-Regulation Theory. **Methods:** Longitudinal design (follow-up: 6 months). Participants: patients younger than 65 years treated in a cardiac rehabilitation centre after a cardiac event. All patients meeting the inclusion criteria are asked to participate in two rehabilitation centres in Hungary.  $N=354$  at present. **Analyses:** assessment of fit of the three models for each behaviour using SEM. **Expected results:** The three models show a different fit in the three health behaviours. Current stage of work: T1 data collection finishes in February 2012; T2 data collection from January to July 2012. Some preliminary results will be available by the conference. **Discussion:** Differences between factors influencing the three health behaviours in cardiac patients may be revealed. Suggestions for more effective interventions are offered.

### Validity of the Hungarian version of Cardiac Depression Scale

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**Background:** Depression is common in cardiac patients, and is associated with worse prognosis; therefore screening for depression is important. However, symptoms of depression may be different in cardiac patients, so Hare and Davies (1996) developed Cardiac Depression Scale (CDS). The aim of these studies is to validate the scale in Hungarian. **Methods:** Study 1: Design: cross-sectional; participants: hospitalized cardiac patients,  $n=169$ . Measures: CDS, BDI, STAI, SOC-13. Study 2: Design: longitudinal, 6 months follow-up; participants: cardiac rehabilitation patients,  $n=354$ . Measures: CDS, CES-D, STAI, SOC-13. **Findings:** Study 1: Cronbach's  $\alpha=0.90$ . Correlations: BDI:  $r=0.748$ , STAI-S:  $r=0.753$ , STAI-T:  $r=0.712$ , SOC-13:  $r=-0.698$ . Study 2: ongoing, results available by the conference. **Discussion:** Reliability of the CDS is adequate. All correlations are in the expected direction. Correlation between CDS and BDI is appropriate; correlations with anxiety are too high. Results of Study 2 may help clear relationship between CDS and anxiety, provide test-retest reliability, and CFA.

### Compensatory Health Beliefs in adolescents: Predicting physical activity within the Health Action Process Approach

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**Background:** The Health Action Process Approach (HAPA) is a well-established model for the prediction of health behaviour in adults. This study examined its applicability in predicting physical activity in adolescents. Moreover, it was tested whether Compensatory Health Beliefs (CHBs), beliefs that healthy behaviours can compensate for unhealthy behaviours, contribute to the prediction of physical activity over and above HAPA-specific variables. **Method:** Questionnaire data on physical activity, all HAPA variables and CHBs were obtained twice from 403 Swiss adolescents from different schools. **Findings:** Both motivational and volitional variables contributed significantly to the explained variance in intention and physical activity at follow-up. CHBs added significantly to the prediction of intention formation in that higher CHBs were associated with lower intentions. No effect of CHBs emerged for the prediction of behaviour. **Discussion:** Compensatory Health Beliefs should receive further attention within health behaviour change models, especially when it comes to intention formation.

### Six months effectiveness of two intensive smoking cessation counselling methods for cardiac inpatients

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**Background:** Effective smoking cessation interventions for cardiac patients are scarce. This study examines the effectiveness of two smoking cessation counselling methods for cardiac inpatients; i.e. face-to-face (FC) and telephone counselling (TC) both combined with nicotine replacement therapy (NRT). **Methods:** In eight Dutch hospital cardiac wards, 625 cardiac patients who smoked prior to admission were recruited. An experimental cross-over controlled design with a baseline and follow-up measurements after six and twelve months is used. The primary outcome measure is patients' reported 7-day smoking abstinence. **Findings:** 157 patients were included in FC, 223 in TC and 245 patients in the control group. Six months after admission significantly more patients were abstinent in the counselling groups (55%) compared to the control group (41%) ( $\chi^2 = 9.1$ ;  $p = 0.011$ ). **Discussion:** FC and TC combined with NRT are effective to help patients to quit smoking after hospitalization for a cardiac event and should be implemented on large scale.

### Experiential avoidance and coping styles in the development of psychological distress in patients with cancer

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**Background:** The aim of this study is to test the mediational role of Experiential Avoidance (EA) to explain the relation of coping styles with anxiety and depression symptomatology in patients with cancer. **Methods:** 50 patients with cancer (82% females; Mean age=50.7, SD=10.7, range=24–70) participated in the study. Patients completed: the Acceptance-and-Action-Questionnaire, the Mini-Mental-Adjustment-to-Cancer, and the Hospital-Anxiety-Depression-Scale. Hierarchical regression analyses were performed. **Findings:** EA completely mediates the effect of Cognitive Avoidance (CA) on anxiety scores. The results do not however support the mediational model for the Anxious Preoccupation (AP) style. Secondary analyses suggest that AP mediates the effect of EA on both anxiety and depression scores. **Conclusion:** Findings suggest that interventions to prevent psychological distress might be oriented to prevent CA as having adverse effects, such as the development of a more generalized class of avoidance (EA), which in turn might elicit AP.

### The acceptance and action questionnaire: validity to identify subjects at risk of emotional distress

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**Background:** The objective of this study is to explore whether scores on the Acceptance and Action Questionnaire (AAQ) dimensions – Action and Willingness – may be useful to identify patients with cancer at risk of developing anxiety and depression symptoms. **Method:** Participants: 85 patients with cancer and 133 subjects from general population participated in the study. Measures: participants completed the AAQ, the Hospital Anxiety and Depression Scale and the Psychological Well-Being (PWB) questionnaire. Statistical Analyses: exploratory cluster analyses, crosstabs analyses, and *t*-test comparison for independent samples were conducted. **Results:** Cluster analyses yielded two significant subgroups in both samples: high-Action and low-Willingness subgroup, and high-Action and high-Willingness subgroup. Most participants in the first subgroup showed clinical levels of depression and anxiety and low levels of PWB. **Discussion:** This study provides evidence of the validity of the AAQ to identify subjects at risk of developing anxiety and depression symptoms.

### Source attribution and credibility of health and appearance exercise advertisements: relationship with attitudes and intentions

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**Background:** The relationship of attributed source and spokesperson credibility of health and appearance related exercise advertisements explicit and implicit exercise-related attitudes and exercise intentions was examined. **Methods:** Participants ( $N = 227$ ) were randomly assigned to watch a health or appearance advertisement then completed a Go/No Go Association Task and questionnaires measuring source attribution, credibility, believability, attitudes, and intentions. **Findings:** Health advertisements and those attributed to a non-profie source were rated more credible. Credibility was higher among those in the appearance condition who

cited a non-profit source compared to those who cited a commercial enterprise. Regardless of type of advertisement, participants who attributed the source to a commercial company with a credible spokesperson, had significantly higher implicit instrumental attitudes than other participants. **Discussion:** The results can help those wanting to promote exercise increase the likelihood of persuasion – by having credible sources who discuss health rather than appearance.

### **Burnout and depression differential diagnosis: Back to basics**

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**Background:** The overlap of burnout and depression is important. In this study, a symptom-based analysis of burnout was carried out in reference to the Major Depressive Episode (MDE) diagnosis criteria of the DSM-IV-TR. **Methods:** MDE symptoms occurrence and severity were compared in burned out workers (BOW;  $n = 10$ ), clinically depressed outpatients (DEP;  $n = 11$ ), and healthy individuals (HEA;  $n = 12$ ) using the Beck Depression Inventory-II (BDI-II). One-way (multivariate) ANOVAs and Newman-Keuls tests were run. **Findings:** Without exception, MDE symptoms were more pronounced in BOW and DEP than in HEA. BOW and DEP exhibited severe depressive symptomatology and undifferentiated BDI-II total scores. Depressed mood, anhedonia, suicidal ideation, vegetative-somatic disturbance, and negative cognition reached similar levels in BOW and DEP. **Discussion:** Disentangling burnout from depression is difficult both qualitatively and quantitatively. Between-syndrome isomorphism should be further questioned through larger-scale investigation implementing systematic depression subtype specification and in-depth anamnesis.

### **Work engagement is associated with increased focusing on positive information**

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**Background:** Work engagement is a positive, fulfilling, job-related state of mind, characterized by vigor, dedication, and absorption. In this study, emotional information processing was examined in highly engaged individuals (HEI) and lowly engaged individuals (LEI) by coupling self-report to experimentation. **Methods:** Participants ( $n = 54$ ) were eye-tracked as they viewed 4-picture slides depicting happy, sad, threatening, and neutral scenes. Work engagement was measured using the Utrecht Work Engagement Scale. A two-way ANOVA was computed. **Findings:** HEI spent more time attending to happy pictures than LEI. Moreover, fixation duration was higher on happy pictures than on sad, threatening, and neutral pictures in HEI whereas all emotional categories were viewed equally by LEI. **Discussion:** Work engagement is associated with increased focusing on positive information. This tendency might play a mood-protective role by reducing adverse experience likelihood. This study exemplifies the usefulness of combining declarative and behavioral measures in work engagement investigation.

### Nutritional problems such as excess weight is associated with dental caries in adolescents

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**Background:** To characterize adolescent BMI; evaluate the rate of missing teeth, decayed and filled teeth (DMFT) assess the association between overweight and dental caries. **Methods:** An observational and transversal. Random sample of 661 adolescents (56.3% girls and 43.7% boys) with mean age of 13.2 years (SD = 1139) of the central region of Portugal. Note the mouth for evaluation of the DMFT index. Assessment of anthropometric data (BMI). **Findings:** The DMFT index is 2.23 (SD = 2.48), girl have higher values than boys (= 2.38 vs. = 2.03,  $U = 49205$ ,  $Z = -1914$ ,  $p = 0.049$ ). Mass Index (BMI) has an average value of 21:23 (Dp = 3543). The girl have a higher value than boys, with very significant differences ( $U = 47615.5$ ,  $Z = -2521$ ,  $p = 0.012$ ). **Discussion:** The value of the DMFT index and BMI are higher in females. It is essential to intervene early in girls.

### Understanding patients' perceptions of asthma control: Implications for challenging low expectations and supporting self-management

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**Background:** Asthma control is suboptimal for many sufferers despite the existence of achievable management guidelines. Furthermore, patients' understanding of asthma control is often incongruent with medical definitions. This study explored sufferers' perceptions of asthma control and the influence on self-management behaviours. **Method:** Forty-two people with asthma underwent qualitative interviews which explored perceptions and experiences of asthma control. Purposive sampling ensured variation in disease severity, degree of asthma control, age and socioeconomic status. Grounded theory was employed in the thematic analysis of transcribed interviews. **Findings:** Five themes relating to perceptions of asthma control and self-management were identified; personal meaning of control, monitoring of medication to evaluate control, compromising control to avoid medication, pharmacological agents overemphasized in control and the role of asthma review in control. **Discussion:** The findings provide new insights into 'asthma control' from the patient perspective. Identification of barriers and drivers to self-management behaviour highlight potential targets for future strategies aimed at optimising asthma management.

### Protective and risk factors of early sexual initiation in youth subcultures

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**Background:** Evidence on adolescents' sexual behaviour in youth subcultures fully lacks. This study aimed to assess the association between subculture affiliation (Hip-hop, Technoscene, Metal, Punk, Skinheads) and early sexual initiation considering possible confounders. **Methods:** We collected data on 15-year-old elementary school pupils ( $N=1605$ ; mean age = 15.47) who participated in the Health Behaviour in School aged Children 2009/2010 study. The association of subculture affiliation with early sexual initiation was adjusted for gender, family affluence, peers' influence, lack of parental bonding, and parental monitoring. **Findings:** Adolescents with subculture affiliation (50%) were twice more likely than other adolescents to have an experience with sexual intercourse. After all adjustments which together explained 90% of this association, it remained statistically significant. **Discussion:** Sexual education in context of other risky and deviant behaviours accumulated in youth subcultures is necessary and should be adapted and targeted on youth subcultures to secure their future sexual health and healthy behaviour.

### **Predicting (intentional) smoking behaviour after a quit-attempt: an experience sampling study**

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**Background:** Relapse after quitting smoking is an evident problem. Although predictors of relapse are often studied in retrospect and in function of between-subject differences, intra-individual variability is assumed to be important. Based on the Relapse Prevention theory we examined the role of individual daily fluctuations in stress, negative affect (NA), self-efficacy (SE), craving, positive outcome expectations toward smoking (POE) in the week after quitting. **Methods:** In an Experience Sampling Method study 50 quitters filled in a questionnaire on stress, NA, SE, POE, craving, intention not to smoke and smoking behaviour 10 random times daily for 7 days. **Findings:** Almost two thirds smoked. Univariate GLM analyses showed that intention not to smoke was independently associated with all factors. Multivariate GLM showed that only POE was associated with intention. POE moderated the relationship between SE and the intention not to smoke. **Discussion:** Quitters need to learn to cope with POE's during quitting.

### **Psychoeducational intervention to promotion self-care among elderly men**

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**Background:** This study aimed to evaluate the effects of a psychoeducational intervention implemented to strengthen self-care among elderly men. **Methods:** Quasi-experimental design. Thirteen men aged 62–78 years old, married, literate, retirees and chronically ill participated.

The interventions took place during nine thematic weekly meetings. Data were collected using individual interviews and WHOQOL old and brief before, right after and four months after intervention. Individual targets were arranged into three areas: search and use of health services, healthy habits and psychosocial skills. **Findings:** In the follow up the results showed contemplation as to a rising number of medical appointments, increasing assertive behaviors, practice of physical exercises and healthy eating and strengthening beliefs related to health-promotion. There was a significant difference ( $p < 0.05$ ) for the social participation domain from WHOQOL old. **Discussion:** The interventions were useful to maximize self-care behaviors, although it has larger effects to sensitize and maintain than to change behaviors.

### Perceptions of health care among elderly men

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**Background:** Gender is an important determinant of health. This descriptive study investigated the perception of elderly men in relation to health care in old age. **Methods:** Thirteen men aged 62–78 years old (mean = 69.5), married, literate, retirees and chronically ill participated, selected from a Social Center for the Elderly. They were interviewed and content of their responses was subjected to qualitative data analysis. **Findings:** The results showed that participants kept active lifestyles and had positive self-assessments of their health status. They conceived healthy aging in a biopsychosocial perspective, including the categories of care “search of health services”, “medication use”, “maintenance of healthy habits”, “absence of habits harmful to health”, “affective and cognitive self-regulation” and “control of the finances”. **Discussion:** This study reinforces the interrelationship between gender, aging and health and highlights the relevance of psychoeducational strategies to strengthen healthier daily practices on the part of men.

### Organ donation coordinators' perceptions of their practices: a focus group study

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**Background:** Among caregivers, organ donation coordinators have the highest burnout rates. Several quantitative studies suggest that is mainly due to poor organization and communication within the teams in charge of the donor and the receivers. **Purpose and methods:** In this study we used focus groups to interview local ICU physicians and nurses involved in the organ donation process in order to explore their perceptions. **Results:** The qualitative analysis shows that people involved in the organ procurement process feel a lack of acknowledgement. Despite the fact that they are crucial stakeholders, this feeling could be due to the fact that, in the social perceptions, it is thanks to the organ donors and to the surgeons that life is restored to receivers. **Conclusion:** By highlighting determinants of organ donation coordinators' dissatisfaction at work, we assume that this study give course of action to decrease the burnout rates of this category of caregivers.

### Disposition of neuroticism of the patients, who underwent coronary heart disease

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This research explored neurotic disposition in patients who had suffered from cardiological disease and were in recovery. The study examined the personal history and socio-demographic characteristics of two groups of men; one from the Faculty Hospital Pilsen ( $n=130$ ) and the other from the Hohenklinik Bischofsgrun in Germany ( $n=84$ ). The establishments differ significantly in their approach to sequential therapy which can in turn affect the psychological state of the patient. We used the 48-question Middlesex Hospital Questionnaire (MHQ) to determine neurotic disposition as a whole as well as disposition to specific categories of illness (anxiety, phobia, obsession, somatization, depression and dissociative disorder). Statistical analysis showed there was no significant difference between the two groups of patients with regards to overall neurotic disposition. We did, however, find significant differences in the disposition of patients to the specific categories of depression, somatic projection and obsessive behaviour.

### The use of empowerment strategies in health promotion focusing on nutrition: A descriptive systematic review

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**Background:** Empowerment is a common strategy in health promotion, particularly for socially marginalized groups. It is postulated that empowerment has a positive impact on people's health and that empowered people engage in creating healthier environments. However, the application of the empowerment concept within the field of healthy nutrition has not been studied comprehensively. Thus, a systematic review is being conducted. **Methods:** Database searching to identify original articles reporting implementation and/or outcomes of intervention studies; assessment of inclusion, coding, categorization by two independent reviewers. **Expected Results:** (1) Overview of empowerment strategies used to promote healthy nutrition. (2) Conceptualization of empowerment across settings, samples, nutritional goals. Current Stage of Work: Search strategy defined; studies identified and assessed for inclusion; schemata for coding and categorization will be prepared. **Discussion:** This systematic review enlightens the current stage of research on empowerment and nutrition and demonstrates areas where further research is warranted.

### Psychological distress and risk management intentions in breast cancer women tested for BRCA1/2 mutation

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**Background:** Little is known about the psychological reactions to the communication of an uninformative or unclassified-variant compared to a pathogenic-mutation BRCA1/2 test result in high risk breast cancer (BC) women. **Methods:** Among 289 BC probands recruited, 243 (85%) completed questionnaires at study entry and 180 (62%) also post BRCA1/2 test result communication assessing general and specific distress, risk perception, perceived personal control and risk management intentions. Most women were either undergoing primary BC treatment (44%) or in remission (47%). 74% women received a non informative, 11% a pathogenic-mutation, and 15% an unclassified variant BRCA test result. **Expected results:** Data will be provided on psychological distress and perceived personal control change, and risk management intentions according to BRCA1/2 test result, with medical, family history, and psychological variables, as predictors. Current stage of the work: Multivariate statistical analyses are underway. **Discussion:** Information from this study should guide psycho-oncology services planning.

### **Breast cancer women supportive care needs: can they be inferred from quality of life data?**

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**Background:** The use of quality of life questionnaires in clinical practice has been advocated in order to monitor patients' perceived difficulties so as to improve the quality of their care. However this information does not necessarily translate into patients' needs for and solicitation of care, either because of psychological factors or health care service inadequacy. **Methods:** 384 (73% response rate) breast cancer (BC) patients recruited in ambulatory chemotherapy, radiotherapy, or surgery hospital services, completed the EORTC Quality of life and Supportive Care Needs Survey French versions. **Expected results:** Data will be provided on BC patients' socio-demographic and clinical predictors of divergence between quality of life and supportive care needs assessment. Current stage of the work: Multivariate statistical analyses are underway. **Discussion:** This study should highlight subgroup of BC patients whose care needs differ from their reported symptoms or difficulties and provide indication for better care targeting.

### **Effects of an EMDR protocol for the treatment of chronic pain**

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The complex part of cognitive, behavioral and emotional in chronic pain make treatment complicated. Many authors have argued on a traumatic symptomatology who be responsible of chronic pain (reactional symptom of ESPT), or that chronic pain may induce a trauma. The effectiveness of EMDR in the treatment of PTSD has been shown in 16 randomized control tests. The results show that EMDR is more effective than the absence of treatment and than pharmacology alone. EMDR is as effective as behavioral or cognitive-behavioral treatment methods. These data are corroborated by the results of five meta-analyses. This research aims to test the effectiveness of treatment of chronic pain. We have elaborated a protocol, who focus on specificities on chronic pain problematic. Ten patients were treated. After every session, and at the end of the treatment, the effects of this protocol on chronic pain and traumatic symptomatology were evaluated and show significant improvement.

### **Repercussions of stress and social support on health/wellbeing in parents of children with cancer**

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Several studies confirm how the characteristics of childhood cancer generate stress in parents of affected children. In the same way, perceived social support has a positive impact on health in illness situations. The present study aims to analyze repercussions of dealing with stressful situations related to childhood illnesses and the importance of knowing the role of social support on health and wellness. Participants were 51 parents who belong to an affected association, they completed a questionnaire. Tests show that stress ( $F=14.12$ ;  $p=0.001$ ), couple support ( $F=13.08$ ;  $p=0.000$ ) and children ( $F=14.57$ ;  $p=0.000$ ) have an impact on symptoms experienced by them. Moreover, this happens with stress ( $F=4.99$ ;  $p=0.035$ ) and couple support ( $F=5.97$ ;  $p=0.008$ ) on wellbeing. This study reveals the positive role of social support on health and wellness, and stress as a threat.

### **Ovarian cancer symptom awareness and anticipated presentation in a population sample**

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**Background:** Ovarian cancer has early identifiable symptoms, yet theoretically based studies of symptom awareness and anticipated presentation behaviour are lacking. **Methods:** A representative population sample of 1043 women aged 50+ completed a computer-assisted telephone survey covering symptom recognition, anticipated presentation behaviour, health beliefs and worry. **Results:** The most recognised symptoms were post-menopausal bleeding and persistent pelvic/abdominal pain. Eating difficulties and changes in bladder/bowel habits

were recognised by less than half the sample. Lower awareness was associated with lower confidence in symptom appraisal ( $p \leq 0.001$ ), older age ( $p \leq 0.01$ ) and low worry ( $p \leq 0.01$ ). Longer anticipated time to presentation was associated with higher education ( $p \leq 0.001$ ), more practical ( $p \leq 0.001$ ) and emotional barriers ( $p \leq 0.001$ ), and less confidence ( $p \leq 0.001$ ). The association between awareness and anticipated presentation was non-significant. **Conclusions:** Many ovarian symptoms are not well recognised by women in the general population. Theory based interventions are needed to improve confidence in both appraising and acting on symptoms.

### Psychological barriers and facilitators of colorectal cancer screening by hemocult-ii® : a french focus group study

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**Background:** The aim of this qualitative study was to explore the psychological barriers to and facilitators of undergoing the Hemocult-II® colorectal cancer screening test in France. **Methods:** 69 people were divided into seven focus groups. Three issues were discussed: Knowledge and Beliefs about Colorectal Cancer Screening; Facilitators of Colorectal Cancer Screening; Barriers to Colorectal Cancer Screening. All the discussions were transcribed verbatim and analyzed using qualitative data analysis software. **Findings:** Correspondence factor analyses identified dimensions for each topic. The main psychological facilitators of colorectal cancer screening were: Information about colorectal cancer screening, and Perception of risk. Uncertainty about the reliability of Hemocult-II®, Health anxiety, and Embarrassment emerged as the main barriers to colorectal cancer screening. Women appeared more embarrassed about Hemocult-II® and men seemed to be more worried about colorectal cancer in cross-sectional analyses. **Discussion:** These findings may help health organizations to conceive better awareness campaigns to promote colorectal cancer screening by taking into account psychological determinants.

### A validation study of the French form of the health anxiety questionnaire

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**Background:** The Health Anxiety Questionnaire (HAQ) is a 21-item self-reported measure designed to assess hypochondriacal fears, physiological arousal, illness worries and their behavioural consequences. This study aimed to explore the factor structure, the internal consistency, and the construct validity of our French version of the HAQ. **Methods:** 1165 people aged 18 to 74 years completed the HAQ as well as measures of health worries (Why do people Worry about Health, WW-H) and trait anxiety (State and Trait Anxiety Inventory, STAI). **Findings:** Principal components and confirmatory factor analyses suggested that the French version of the HAQ had 4 subscales: (1) fear of illness; (2) interference in functioning; (3) health preoccupation; and (4) reassurance seeking. This version of the HAQ had a good

internal consistency ( $\alpha=0.92$ ) and scores correlated significantly with scores in WW-H ( $r=0.53$ ;  $p < 0.001$ ) but not with STAI ( $r=0.15$ ), as expected. **Discussion:** Results have implications for assessment of health anxiety which should facilitate studies and healthcare with francophone population.

### Subjective illness representations of overweight adolescents and their parents

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**Background:** One year after completion of obesity prevention programmes, about half of the participating adolescents profit in terms of weight reduction. Potential factors influencing treatment outcomes are subjective illness concepts as described in the Common Sense Model of Illness (CSM). This study aimed at describing the relationship between illness representations and disease management. **Methods:** 16 treatment-seeking obese adolescents and their parents were studied with semi-structured interviews concentrated on subjective illness theories and disease management. Interviews were recorded, transcribed and analysed according to qualitative content analysis. **Findings:** This study shows a complex understanding of overweight adolescents and their parents of being obese. Parents were more concerned and reported more symptoms than adolescents. Three subgroups were defined which differed according to their illness representation and treatment beliefs. **Discussion:** Research on illness concepts of obese adolescents and their parents could offer the opportunity to gain important insights in the determinants of health-promoting behaviour.

### Which caregiving esteem for which gender?

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**Background:** Two years after stroke, are the factors of the esteem of caregiving the same by gender? **Methods:** Face-to-face questionnaires administered to 92 Luxembourgish and Portuguese stroke patients and their 67 men and 25 women caregivers. For each sex, a multiple regression entering:- Neurological impairments,- Patients' and caregivers' life satisfaction [1;10],- Reactions towards caregiving: esteem (dependent variable), lack of family support, impacts on finances, schedule and health (Caregiver Reaction Assessment subscales),- Confidence in information subscale from the Carer Satisfaction Community Services. **Results:** Caregivers with a high caregiving esteem are, in women: those who trust information from community services ( $\beta = 0.412^{***}$ ) and care for patients keeping few sensory impairments ( $\beta = 0.300^{**}$ ;  $R^2_{adj.} = 0.257$ ); in men : those who are low impacted on their health ( $\beta = 0.471^*$ ) and care for patients satisfied with life ( $\beta = 0.371$ ;  $R^2_{adj.} = 0.447$ ). **Discussion:** Home-based rehabilitation can be sustained by developing men and women caregivers' specific health capabilities.

### Children's perceptions of dental behaviour management techniques: an exploratory study

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**Background:** Dentists often employ communication strategies and behaviour management techniques (BMTs) in order to lower anxiety and help facilitate treatment. The aim of this study was to explore children's acceptability and perceptions of these strategies and techniques. **Methods:** This was a mixed-methods design. Sixty-two 9–11 year-old children rated their dental anxiety and acceptability of BMTs using two quantitative measures. Semi-structured interviews explored their experiences and perceptions. **Findings:** Analyses showed no effect of age, gender, or dental anxiety upon BMT acceptability. Children perceived all BMTs as acceptable or neutral; voice control was the least acceptable and stop signals the most acceptable. **Discussion:** There is a paucity of health psychology research exploring children's views of BMTs in the dental context. These preliminary findings showed that children appear to be treated in a patient-centred and age-appropriate manner by their dentists. Future research should explore children's coping styles in relation to effectiveness of BMTs.

### Children's concepts of oral health

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**Background:** The aims of this study were to explore children's concepts of oral health and investigate the sources of children's oral health knowledge. **Methods:** Twenty-one 6–7 year-olds, 22 9–10 year-olds and 17 adults were presented with pictures of healthy and unhealthy teeth and asked about their knowledge and understanding of behaviours that contribute to oral health. The data were coded using content analysis. **Findings:** Children have good knowledge and understanding of oral health. Participants generated more sophisticated explanations for unhealthy teeth than for healthy teeth. However, adults were more likely than children to mention 'unobservable' factors with respect to unhealthy teeth. Family members were the main source of oral health knowledge. **Discussion:** Children may be able to understand information on causation and prevention at a young age, which has implications for the promotion of age-appropriate oral health education. Furthermore, there is scope for targeting parents with oral health information.

### Empowerment beliefs and intention to uptake cervical cancer screening: three psychological mediating mechanisms

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**Background:** Three studies tested if the associations between women's empowerment beliefs and intentions to attend cervical cancer screening (CCS) could be explained by mediating psychological mechanisms: control-related beliefs, wellbeing-related beliefs, social functioning evaluations and social support. **Methods:** Three cross-sectional studies (Study 1:  $N=386$ ; Study 2:  $N=527$ ; Study 3:  $N=424$ ) were conducted. **Findings:** Results indicated that women with strong empowerment harbored stronger self-efficacy and beliefs that screening participation would make them feel in control of their own health and body, which in turn promoted CCS intentions (Study 1). Further mediators between empowerment beliefs and CCS intentions included: wellbeing-related pros, appearance satisfaction, discomfort and shame-related barriers for screening (Study 2), social support for screening and social barriers for CCS. **Discussion:** Empowerment indirectly affects CCS intentions. Across the studies similar shares of intention variance were explained, thus the hypothesized mediating mechanisms may have similar explanatory power.

### University student's risky behaviour: experience and attitudes

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Risky behaviour can influence academic performance, future career and long-term health of students. The results of different research showed, that the majority of students participate in at least one form of risky behaviour. Analysis of social and psychological variables of risky behaviour revealed, that young people view risky behaviour as a form of developmentally appropriate experimentation and believe, that participation in risky behaviours often accompanies positive developmental outcomes. The aim of this study – to analyse students risky behaviour and attitudes towards risky behaviour. Students of social sciences participated in this study. Specially designed questionnaires intended to reveal peculiarities of students risky behaviour and attitudes towards risky behaviour were used in the research. The results indicate that students do engage in different forms of risky behaviours and have different attitudes towards risky behaviour – from strongly positive, to strongly negative. Correlations between attitudes and involvement in risky behaviour was detected.

### The connections of the inner health picture with the theory of planned behavior

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We compared the inner health picture (IHP) with the parameters of the theory of planned behavior (TPB) in 100 students. It was shown, that the level of IHP is connected with the number of colds during a year. IHP level lightly correlates with an individual's attitude towards the specific behavior (i.e., a positive or negative evaluation of the behavior). The wish for health support is negatively connected with the person's behavior control (the person's own perception of how easy or difficult it is to execute the behavior) and positively with IHP level. It was not shown the connection between the subjective norms which refer to an individual's perception of how important others in his or her social environment wish or expect him or her to behave in a certain way with the IHP level. Describing the possibilities of

student behaviors changing into health side it is useful to take into account both parameters of TPB and IHP.

### **An Experimental Investigation of the Effect of Variety on Fruit Consumption Over Time**

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**Background:** Variety generally increases consumption (Remick, Polivy & Pliner, 2009); however, experimental investigations have not examined the temporal properties of this effect. We address this gap by experimentally determining if offering a variety of fruit over time increases consumption. **Methods:** Two hundred participants report to the laboratory twice a day. Participants are given a banana in the morning and choose between a second piece of fruit and candy in the afternoon. In the variety condition participants choose between an apple and jellybeans; participants in the same condition choose between a second banana and jellybeans. **Expected results:** A chi-square analysis is expected to reveal that choosing a second piece of fruit is more likely in the variety condition. Current stage of work: Data has been collected from 170 participants. **Discussion:** It is important to experimentally study food choice over time. Results may also have implications for cafeteria menus and other eating environments.

### **Perceived classmate acceptance and body image**

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Adolescents' body image is strongly influenced by peer evaluations and social models. In order to obtain the ideal body adolescents engage in various behaviors that pose immediate and long term health risks. The aim of this study is to investigate the predictive impact of perceived classmate acceptance upon body image according to current weight status and gender. Participants aged 11 to 15 years took part in the national cross-sectional HBSC 2010 survey ( $N = 5404$ ) and measures were obtained through self-report (e.g. Body mass index, perceived weight and body image, attractiveness and gender were studied in relation to perceived acceptance by classmates). As results are discussed in relation to the school context, our findings have a significant importance when considering the development of educational programs that target lifestyle optimization and the prevention of eating disorders and unhealthy dietary practices in children and adolescents.

### **School functioning predicts psychosocial wellbeing in young people with type 1 diabetes**

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**Introduction:** This study explored the relationship between psychosocial factors and school functioning in young people with type 1 diabetes. **Methods:** Eighty children and adolescents were recruited from a paediatric diabetes clinic in Melbourne, Australia. Participants had been diagnosed with type 1 diabetes for at least twelve months, and were aged 7–15 years. Depression (CDI) and anxiety (RCMAS-2) screening was undertaken. Family support, self-efficacy, coping and knowledge were assessed. **Results:** Discriminant function analysis identified a significant difference in the characteristics of participants who has missed  $\geq 2$  days of school in the previous term, compared to those who had not, Wilk's lambda = 0.731,  $\chi^2(8) = 20.021$ ,  $p < 0.01$ . The group who missed school reported higher levels of anxiety and greater difficulty coping with diabetes-related issues that upset. 85.7% of participants were correctly classified using this model. **Conclusions:** School days missed is a useful indicator of diabetes-related and psychosocial functioning, with meaningful differences identified between groups.

### **SELF KIT- a step forward in preventing emotional problems of primary school children**

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In Romanian school settings, the emotional and behavioural problems are becoming very frequent. Although there are many intervention programs trying to change students' misbehaviour, only few of them are focused on the causes of these problems. Our research assesses the efficiency of SELF KIT program, the first rational-emotive curriculum created and adapted to Romanian culture and educational specificity. SELF KIT is a REBT based program that teaches children rational thinking. One hundred two children (age 10–11 years old) completed the Child Behavior Checklist (CBCL) and then they were randomly included in the experimental or control group. Following an 8 weeks intervention, the results showed a significant difference between the 2 groups ( $p < 0.05$ ). The outcomes confirm our hypothesis that SELF KIT can be used as a preventive and curative program in reducing emotional problems of primary school children. The impact of our program on different emotional problems is discussed.

### **Social emotional competencies and school readiness: testing SELF KIT program in a bilingual kindergarten setting**

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The Romanian educational system is focused mostly on cognitive based achievements (reflected by math, reading, writing abilities). Therefore, kindergarten teachers are less motivated to develop socio-emotional competencies of the children they take care of. Moreover, by reviewing the literature, it seems that the studies from the field often showed qualitatively different outcomes regarding school readiness in relationship with social-emotional development. In the present study, we have tried to prove that a social-emotional curriculum based program has a significant impact on school readiness. One hundred twenty children participated in this research (aged 5 to 7 years old, 36 of which have Hungarian as mother tongue and are enrolled in a Hungarian language education stream). Using a  $2 \times 3$  research design (teaching language vs. type of intervention) we succeeded to show that,

regardless of the mother tongue, our social-emotional program (SELF KIT) could help children develop the abilities needed for school readiness.

### **The resilience as a competence of emotional intelligence of special education teacher of viseu**

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Optimum Performance, Life Satisfaction and Relationship Quotient. **Introduction:** The main objective is assess the emotional intelligence as their multiple skills in Special Education Teacher working with children and youth with disabilities. **Objective:** Identify the most influential powers in the Emotional Intelligence of Special Education teachers – Understand what level resilience have the Special Education Teachers – Identify the factors predictive of greater weight on Emotional Intelligence. **Results:** We found that the ability tact deliberately, teachers are aged between 36 and 45 years, those who obtained higher scores – Male Teachers have higher Resilience in the Emocional Competence – Married people have an Emotional Awareness – Emotional Intelligence scale r indicate that the majority is in levels of vulnerability and need attention. – Emotional Intelligence has high association with quality of life – Reveals a negative association with health in general – Quality of life is the factor with the highest predictive value.

### **Health needs of the deaf community in the French-speaking part of Switzerland**

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**Background:** According to many authors, deafness influences health representations and medical encounters between physicians and deaf patients. Bad memories, lack of autonomy, misunderstandings, and misdiagnoses are common and consequences may be important. **Methods:** Semistructured interviews and focus groups (deaf people and physicians) recorded, transcribed and analysed following qualitative content analysis. **Expected results:** Deaf patients have a sociocultural representation of deafness and health, while physicians have a more medical representation of deafness that leads to a goal of efficiency with these patients. This could lead to consultations without an interpreter (writing, presence of a family member, . . .) producing dissatisfaction among deaf people with the health care system. Current Stage: Work in progress. **Discussion:** Results may help to give a first picture of the specific health needs of this deaf community. Another more practical aim of this study, based on Community Health Psychology, consists in providing ways to fulfil these needs.

### **Social sharing and non-sharing of emotions among HIV/AIDS patients in the Dominican Republic**

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Research has shown that chronic illness patients experience difficulties in the Social Sharing of Emotions (SSE). Preceding research revealed that when compared to diabetes and cancer, HIV/AIDS patients significantly presented less SSE and greater inhibition of illness-related emotions. Why this heightened non-sharing of illness related emotions in HIV/AIDS? 101 HIV/AIDS patients responded to a questionnaire (likert-scales) assessing: shame, guilt, sharing and non-sharing of illness-related emotions, perception of the quality of SSE, reasons for non-disclosure and stigma perception. A positive significant correlation was found between the non-sharing of illness-related emotions and: shame, guilt, reasons for non-disclosure and stigma perception. Significant negative correlations were found between the perception of the quality of SSE and: shame, guilt, reasons for non-disclosure and stigma perception. Findings suggest the importance of the perception of the quality of SSE. Results could lead to research and interventions concerning the emotional expression of guilt and shame specific to HIV/AIDS.

### **Work-home interaction and its effects over health and burnout of worker women in the University**

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The purpose of this survey is based on determining the relationship between working and family life and its effects over burnout, health, working satisfaction and general well-being in worker women's group from Andalusian Public Universities. The study consists of a sample of 376 women of two different working groups universities: teaching-researcher and administration-services personnel. It was used a questionnaire composed of various scales in which are collected several variables: demographic, work-home interaction, burnout, job satisfaction, health, wellbeing and social support. Analysis shows that there are significant positive correlations between work-home interaction and health problems ( $r=0.336$ ,  $p=0.000$ ) and between work-home interaction and burnout ( $r=0.505$ ,  $p=0.000$ ). However, there is a negative relationship between work-home interaction and subjective health ( $r=-0.179$ ,  $p=0.002$ ). Knowledge of factors related to work-home interaction and its relationship to health and burnout may encourage action plan to improve the job conditions for these women.

### **Look at the future: a descriptive overview of life goals set by the elderly**

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In this study, we intend to further knowledge on life goals set by the elderly, and examine their perception in two dimensions of personal goals- commitment and attainability, based on the perspective that not all the goals have an equal impact on well-being. Focus Group Interviews were conducted to identify descriptive categories of life goals. We also asked participants to identify a goal for the next three months and to rate these goals according to a number of variables: commitment (determination, urgency and willingness) and attainability (support, opportunity and control). The focus group analysis identified the following as main themes: family support, maintaining ability to perform activities and being a contribution to subsequent generations. Preliminary results suggest high levels of commitment and

attainability. The ongoing analysis will explore whether there are differences in well-being depending on the type of goals, level of commitment and attainability.

### **The impact of culture and gender on psychopathology in irritable bowel syndrome: A meta-analysis**

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**Background:** Culture and gender have been implicated in both irritable bowel syndrome (IBS) and psychopathology. Few studies have addressed whether psychopathological comorbidity in IBS varies based on the gender of the participants and culture of the country of recruitment. **Methods:** A systematic search for studies containing data on rates of psychopathology in IBS was conducted, resulting in data from 141 trials totaling 121549 IBS and 204946 comparison participants. Using meta-regression we tested for moderating effects of gender (percentage of men in the IBS sample) and culture (masculinity, collectivism, uncertainty avoidance, power distance) on psychopathology odds ratios in IBS relative to comparison participants. **Findings:** Higher IBS psychopathology ORs were associated with: samples containing higher proportions of men; and cultures possessing lower gender differentiation, individualism and uncertainty avoidance, and higher power distance. **Discussion:** Psychopathology rates in IBS vary systematically with sample gender and culture, in a way not predicted by current theories.

### **The parental role in preventing childhood obesity: A Theory of Planned Behaviour perspective**

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The study utilises the Theory of Planned Behavior (TPB), as a theoretical framework, in order to investigate the behavioral intention of parents to promote their pre-school children with healthy foods. Moreover, the effect of Perceived Social Support (PSS) and Parental Eating Behaviour (PEB) was considered. The sample consisted of 106 mothers of children aged 2–5 years old, recruited from three randomly selected paediatric outpatient clinics in Athens. TPB variables accounted for 25.8% and 10.7% of the variance in intention and behaviour respectively, while PSS did not added significantly to these predictions. On the contrary, PEB added a further 6.1% to the prediction of behavior and was shown to be its stronger predictor. TPB provided a sound theoretical framework for the prediction of the behavior in question. Continued research and validation of the TPB model is needed to further understand parental influence in terms of promoting healthy eating patterns.

### **Development of a questionnaire measuring spiritual coping**

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**Background:** The study aims at developing the Spiritual Coping Questionnaire. The main idea of the questionnaire emphasizes the distinction between spirituality and religiosity. No research tool for measuring spiritual coping, not treated as equivalent to religious coping, has been developed so far. **Methods:** The reliability of the tool will be calculated by internal consistency and test-retest method. The validity will be assessed with factor analysis (construct validity) and correlation coefficients (convergent validity). **Expected results:** Providing both reliable and valid measure of spiritual coping. Current stage of work: Two experimental forms of the Spiritual Coping Questionnaire have been constructed – spiritual coping as a trait and as a state. Both forms, consisting of 120 items, will have been validated in at least 500 participants by June 2012. **Discussion:** The Spiritual Coping Questionnaire will be made available to scholars from Poland and abroad to conduct further research on the spirituality-health relationship.

### Which sex role type is nowadays the (un)healthiest for young women?

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**Background:** The aim of the study was to assess the health behaviours among young women who differ in sex role types. **Methods:** 334 young women took part in the study. Two measures were used: the Psychological Gender Inventory by Kuczynska (1992; Polish version of BSRI by Bem (1974)) and the Health Behaviours Inventory by Juczynski (2001). Regression analysis and the Pearson's correlations were conducted. **Findings:** Generally, sex-typed and androgynous women showed more healthy behaviours than cross-sex typed and undifferentiated women. Masculinity correlated positively only with eating habits ( $r=0.2$ ), whereas femininity was positively associated with: prophylaxis ( $r=0.25$ ), health practices ( $r=0.17$ ), positive mental attitude ( $r=0.21$ ) and health behaviours in general ( $r=0.28$ ). **Discussion:** Congruence and androgyny models were confirmed in the study. The results might encourage physicians, teachers and parents to pay attention on health behaviours of cross-sex typed and undifferentiated girls.

### Crisis postcards in case management: 6-month outcomes of a randomized controlled trial for suicide attempters

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**Background:** Suicide attempts can constitute a serious clinical problem. The aim of the present study is to evaluate crisis postcard's effectiveness for suicide attempt over a six-month follow-up period. **Methods:** Prevention of further suicide attempts was to be compared between 356 participants who received the case management service with crisis postcard and 363 participants who received the case management service alone. Survival analysis was used to test the effectiveness of crisis postcard. **Findings:** Survival analysis showed that crisis postcard

could reduce suicide reattempt (hazard ratio = 2.60; 95%CI = 1.39–4.83). It was more effective for female subjects (hazard ratio = 2.61; 95%CI = 1.27–5.35) and participants with previous suicide history (hazard ratio = 1.90; 95%CI = 1.12–3.22). **Discussion:** Postcard appeared to be effective in preventing suicide reattempts in suicide attempter and to be more beneficial in female subjects and those with previous history of suicide

### The predictors of suicidality after the case management

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**Background:** Suicide attempts constituted a serious clinical problem. People who attempted suicide were at high risk for further repetition. Limited evidence existed could predict suicidality. The aim of the present study was to examine the predictors of suicidality after the case management. **Methods:** 1056 subjects with a recent suicide attempt were recruited from January 2011 to June 2012. The Suicide Prevention Center provided case management and followed up suicide-attempt cases for six months. Salient factors for suicide reattempts were estimated by logistic regression analysis. **Findings:** The result showed that the factors of history of mental illness, supportive system, history of suicide and willingness to receive others' help at crisis contributed to suicide reattempts with hazard ratio (3.13, 1.99, 1.80, 2.18) and 95% CI (2.12 – 4.60, 1.35 – 2.92, 1.27 – 2.57, 1.52 – 3.14) respectively. **Discussion:** The four factors mentioned above were the most potent predictors of subsequent suicidality for mental health service.

### The relationship between well-being and body image in women

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**Background:** This study explored the relationships between different aspects of body image and psychological well-being in adult women. **Method:** Using a cross-sectional design, 482 women aged 18 – 59 completed an Internet survey that assessed age, body mass index, body image (body satisfaction, health/fitness-orientation, appearance-orientation, body comparison, body improvement), and well-being (autonomy, self-acceptance, purpose in life, personal growth, positive relations with others, environmental mastery). **Findings:** Results indicated group differences in body image for women within different BMI categories (on body satisfaction, body improvement, appearance- and health/fitness- orientation), and age brackets (on appearance orientation). No group differences emerged on aspects of well-being. After controlling for age and BMI, regression analyses indicated that body satisfaction, body comparison, appearance- and health/fitness- orientation predicted different aspects of well-being. **Discussion:** For adult women, the findings suggest that body image is related to multiple aspects of well-being and so how women function in their day-to-day lives.

### Memory for trauma film and neuropsychological function in posttraumatic stress disorder

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**Backgrounds:** To examine whether the memory problems associated with posttraumatic stress disorder (PTSD) could be explained by the notion of tunnel memory and whether neuropsychological functions were sensitive to the PTSD diagnosis. **Methods:** All participants filled out several self-report instruments, underwent neuropsychological tests and an unexpected memory task (emotional memory questionnaire, EMQ) after watching a film depicting domestic violence. The questionnaire evaluated the participants' memory of the central aspects of the film (EMQ-C) and the peripheral aspects of the film (EMQ-P). **Results:** The PTSD group had lower scores on the EMQ-C, whereas modified card sorting test, category fluency, verbal paired associates and EMQ-C predicted the PTSD symptoms. **Conclusions:** The notion of tunnel memory did not explain the memory features of PTSD. Furthermore, executive dysfunction and verbal memory deficits predicted the severity of self-reported PTSD symptoms but were not sensitive to the PTSD diagnosis.

### Rethinking the emotional Stroop interference effect in posttraumatic stress disorder

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**Backgrounds:** Although literature has provided evidence of a robust relationship between PTSD and emotional Stroop effect, a review of dissertation abstracts has showed that the majority of studies found no group differences between PTSD and non-PTSD participants, implicating a publication bias. **Methods:** Forty-five victims were classified as PTSD or non-PTSD. We also recruited 24 healthy volunteers, matched on age and education, as normal controls (NC). All subjects filled out several self-report instruments and underwent the emotional Stroop tasks. **Results:** Data analysis revealed that after controlling for the influences of depression and anxiety symptoms, the interaction of word condition and group was not significant, whereas regardless of word condition, the PTSD group took significantly longer color-name words relative to non-PTSD group. **Conclusions:** Results suggest that the emotional Stroop effect in PTSD was mainly due to current anxiety and depression symptoms, rather than specific to PTSD.

### Autonomy primes can bolster the effectiveness of planning for those high in impulsivity

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**Background:** Research has shown that that implementation intention formation has the capacity to facilitate goal-directed behaviour amongst those with low or moderate levels of impulsivity, but not amongst those reporting high levels of impulsivity. **Aim:** to investigate whether an autonomy priming procedure alongside an implementation intention prompt is effective for those high in impulsivity. Current stage of work: data collection is in progress. Time 1, participants completed the UPPS-Impulsivity scale. Time 2, participants completed an autonomy prime, heteronomy or neutral task, and either did or did not form a plan to exercise. Participants reported their exercise behaviour 7 days later. Preliminary finding ( $N = 52$ ): suggest an implementation intention/autonomy prime combination may facilitate goal directed behaviour regardless of participants' level of impulsivity. **Discussion:** This research has the potential to contribute to our understanding of the dispositional characteristics that may influence the effectiveness of implementation intentions formed to promote health-directed behaviour.

### **Marital satisfaction as an expression of adjustment to couple life**

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The purpose of this study was to investigate the relationship between marital satisfaction and adjustment to couple life, dominance and adaptation in dyads. The participants were 33 couples aged between 23 and 56 years having a relationship longer than two years. The partners were investigated with Dyadic Adjustment Scale, Dominance-Accommodation Scale, Competitiveness Scale, Marital Happiness Scale, and Index of Marital Satisfaction. The analysis of internal consistency of all these on the sample showed values close to the original ones. The data were processed according to age, gender, relationship length, level of education and number of children, distinguishing significant relations with the used questionnaires variables. The study points out a non-linear relation between marital satisfaction and relationship length, satisfaction being higher during the first years, then declining, satisfaction coming back during ulterior periods. The research variables are grouped uniformly on a bipolar continuum, rendering a positive pole and a negative one.

### **University stress in post-Bologna system**

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The pilot study had in view to achieve a multidimensional profile of the professors' occupational stress consecutively to Bologna system implementation. The study searched the identification of the stress determinants related to factors of gender, age, number of working years in didactic activity, the way of particularisation according to science and humanities fields. Participants were 60 members of the teaching staff from Transilvania University, aged between 26 and 60 years, from technical faculties (28) and humanities faculties (32). I used questionnaires of physiological reactions to stress, burnout, social support, self-efficacy and a social self-esteem inventory. The study pointed out significant differences of stress connected to the factors of number of working years, gender and science-humanities field. Although the

stress level is more linked to feminine gender, younger ages and lower didactic grades, their proneness of implementing the changes brought about by Bologna system are significantly higher than the opposed categories.

### **Correlates of eating disorders with defensive strategies, self-esteem and self differentiation in adolescence**

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The purpose of study was to determine internal consistency and validation of Eating Disorders Questionnaire (EDQ), created by the author, against the dimensions resulted from Defense Style Questionnaire (DSQ-40), Self Differentiation (SD), Self-Esteem Questionnaire (SEQ) and Corporal Self-Perception (CSP). Participants, of feminine gender in majority, aged between 14 and 24 years, were 320 students in secondary and high school, and university students. EDQ has a high internal consistency ( $\alpha$  Cronbach 0.92), pointed out for each of its factors: Self-dissatisfaction (0.92), Anorexic Propension (0.76) and Bulimic Propension (0.72). Eating disorders correlate significantly with neurotic (0.25) and immature (0.44) defence mechanisms, self-esteem (-0.54) and corporal self-perception (-0.57). The anticipated relationship between the factors of eating disorders and self differentiation does not find a clear support. The study renders a significant association of eating disorders with the factors of physical and mental self-esteem, mediated through the defence mechanisms of neurotic and immature Self.

### **Anxiety and coping strategies in patients with acute myocardial attack**

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**Background:** Previous investigations pointed out that disadattive coping strategies increase in correspondence of the stait anxiety, negative illness perception and stressors presence in the daily life of patients with acute myocardial attack. Moreover, coping strategieq are predictive both for the recovery time and the relapse risk. The present study aims at analyzing the relationship between coping strategies and stait and trait anxiety. **Methods:** The Questionnaire for the evaluation of Quality of Life and Risk Factors, the Brief Cope and the Stait-Trait Anxiety Inventory were administered to 30 inpatients of Cardiovascular Disease Unit of Pisa Hospital, to evaluate the stressful events, the coping strategies and the stait and trait anxiety, respectively. **Findings:** Patients with acute myocardial attack presented a high vulnerability to stress. A positive correlation between disadaptive coping strategies and stait anxiety was found. **Discussion:** Psychological well-being appears to be promoted by problem-centred coping strategies.

### **The tip of the iceberg? Unconscious anxiety and prostate screening in diverse older men**

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**Background:** Cancer and screening anxieties predict prostate screening and are higher among minority men. To date, however, this work remains predicated on self-reported anxiety. This report examined the “accuracy” of anxiety reporting and the possibility that anxiety might impact prostate screening through both conscious and non-conscious channels. **Methods:** 180 African American, European American, and immigrant Jamaican men from Brooklyn were recruited to a laboratory study. Men self-reported trait and prostate-related anxiety and completed an emotional Stroop task. **Findings:** ANOVAs showed that while African Americans had few discrepancies between self-report and Stroop anxiety, Jamaicans reported greater PC anxiety than indicated by Stroop while the opposite was true among European Americans. As expected, self-reported (but not Stroop-ascertained) prostate anxiety predicted screening in multivariate analyses. **Discussion:** Although men from different ethnic groups varied in the discrepancy between self-reported and Stroop-ascertained prostate anxiety, the influence of avoidance-producing emotions appears to operate through conscious channels.

### **Using prospect theory in communication with parents relating to non-prescription cough medicine-use in children**

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This study will assess Prospect Theory when communicating about OTC medications, by using an intervention to educate Irish parents about recommendations given by the IMB. A 3 × 3 mixed ANOVA RCT design will be used. Intentions to use medicines and medication behaviour will be measured. 120 parents of children aged between 3–6 years will be assessed at baseline, after an intervention and two weeks later. The between groups measure will be the presentation frame of the information given with 3 levels; loss, gain or control frame. This online intervention will be developed using Lifeguide software. Parents are expected to report different intentions to engage in the advised behaviours depending on the frame of the message presented. The goal is to increase awareness relating to the current stance of the IMB regarding medication use in children, and prevent adverse effects. It will enhance Health Psychology literature regarding communication of health messages to parents.

### **Posttraumatic Stress Disorders in Peace Operations**

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The military participants in Peace Operations are exposed to adverse and potentially traumatic situations that can have consequences on mental health. With the Iraq and Afghanistan wars,

have taken place several studies in order to assess the military returning from these conflicts. This research aimed to assess the prevalence of PostTraumatic Stress Disorder and associated pathology in a sample of 241 portuguese militaries engaged in Peace Operations in 2011 (Kosovo and Afghanistan) and to understand the relation between psychosocial variables and PTSD. The evaluation methods used in this study were the traumatic event (PCL-M), emotional adjustment (SCL-90-R), self-esteem (SERTHUAL), coping (ETC) and social support (MDSS). The results showed that 34% of the militaries were exposed to traumatic events, 5% were in the PTSD criteria and 15% revealed significant PTSD symptomatology. Furthermore, this study intends to contribute to the implementation of preventive programmes and monitoring military intervention of referenced with PTSD.

### Negative affectivity and nicotine withdrawal during smoking cessation

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**Background:** We studied if negative affectivity (sub-threshold depression/anxiety) and nicotine withdrawal, experienced while quitting, might influence the outcome. **Methods:** longitudinal naturalistic study on smokers. During the first visit, socio-demographic and clinical data (including level of nicotine dependence) were collected. Negative affectivity and nicotine withdrawal were assessed via hetero- and self-administered scales at baseline, week 1, 3, 6, 9, 12, 26 after cessation. **Findings:** 78 smokers were evaluated. Comparing abstainers (15.4%) with non-abstainers (84.6%) at week 26, the first had significantly lower baseline nicotine dependence, anxiety, and confusion than the second. The multivariate analyses, run at baseline and at each follow-up visit, showed a higher risk to fail in quitting when anxiety was low at week 6, 9, or 12; the longitudinal analyses showed a higher risk to fail in case of overtime low anxiety, high cognitive depressive symptoms, and craving. **Discussion:** Anxiety, cognitive depression, craving influence the possibility to quit.

### Associations between school context, close friendship and bullying behavior in a Romanian adolescents sample

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School bullying is an acute problem that has severe long term implications on children development. In Romania, 21% to 31% of 11 to 15 years old adolescents report that have been bullying others two times in the last two months and 14% to 20% report that they have been bullied. By using a representative national sample from HBSC 2010 survey ( $N=5504$ ), this study aims to examine predictors of bullying involvement (bully, victim and bully/victim) by looking at school context factors (school satisfaction, school perception, stress level) and close friendship. Separate analyses were conducted for bully, victim and bully/victim controlling for sex and age. Stress level was a significant predictor for bullying involvement for bullying and for victims. Also, close friendship (the lack of close friends) has been a significant predictor to victimization. Sex and gender differences are discussed. Our findings impact further intervention strategies for children involved in school bullying.

### **Bullying victimization, emotional problems and cognitive emotion regulation in adolescence**

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Bullying in school context represents one important problem worldwide and, especially in our country where its prevalence has increased in the last years. The negative consequences on children's mental health involved are very well documented. One important connection is that between victimization and emotional problems. This study aims to analyze cognitive emotional regulations strategies as possible mechanisms that could explain this relationship for adolescents ( $N=204$ ). The results showed that there is a strong positive correlation between victim status and emotional problems (affective problems and anxiety problems). Even though we found a significant positive correlation between being a victim and cognitive emotion regulation strategies (rumination, catastrophizing and other blaming), not all of these strategies mediate the relationship between being a victim and emotional problems. Only one significant mediation model emerged: catastrophizing mediates the relationship between being a victim and emotional problems. Finally, we present several implications for future studies and interventions.

### **Associations between victimization and physical health and mental health problems in a Romanian adolescents sample**

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School bullying has an increased prevalence worldwide and its effects on children physical and mental health are very well documented. Children who are bullied tend to report more somatic complaints (headache, nausea), and are presenting more mental health problems than bullies or non/involved children (especially, emotional problems). The aim of this study was to assess the effect of the bullying involvement status (victim, bully/victim and non-involved children) on the physical (headache, nausea) and mental health (sadness, depression, sleepless) problems reported by a Romanian adolescent sample. Participants aged 11–15 years took part in the national HBSC 2010 survey ( $N=5504$ ). The results indicate that bully/victims tend to experience more physical and mental health problems than the other two bullying involvement categories. Also, the sex and age difference are discussed. As results delineate the main health problems that these children experience, a series of practical suggestions are offered for further bullying intervention.

### **Implications of the type of birth over the level of anxiety of future mothers**

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Recent studies show the major psychological impact of the type on birth over the human being. In our days, the c-section is a real fashion, overcoming in numbers the natural birth. This study wants to establish some possible differences between women who choose a natural birth, *versus* the ones who want a c-section, regarding some personality features (anxiety, extraversion, intuition, feeling, judging). Sample: 60 adult females ( $m = 27.5$  years old), divided in a target group (30 women choosing c-section) and a witness group (30 women who want a natural birth). As instruments we used Anxiety Inventory STAI and Myers-Briggs Personality Test. After statistic processing (T test was used) both hypotheses were confirmed, showing that the anxiety is significant higher for the women who plan a natural birth. Natural birth is frequently substituted with c-section because keeps anxiety at lower levels, but even so, a natural birth is healthier for both, mother and child.

### The complexity of maternity as an immigrant

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**Background:** Research question – What meaning does the immigrant mother attribute to the maternity process? **Objectives:** Understand the meanings that emerge from the transition process, in maternity; Understand how the immigrant mother sees care in relation to their expectations in maternity; Uncover beliefs and values inherent to the immigrant mother in a going through a life transition. **Methods:** A qualitative, exploratory descriptive study. A non-probabilistic intentional sample (51 immigrant mothers). Used a semi-structured interview after having obtained informed consent. Content analysis with the aid of NVivo 9 software. **Findings:** Emerging categories: constraints for being illegal; ignorance of their rights, difficulties communicating; existence of differences in the care giving process; divergent beliefs and myths; diverging cultural practices; inadequate information; discrimination; difficulty accessing consultations; gratuitousness of the health system. **Discussion:** The greatest barrier that these immigrants faced was communication. How to overcome these cultural constraints and ethnocentric behaviour? **Key-words:** immigrant mother; maternity (motherhood); cultural diversity; immigration.

### Father acceptance-rejection's perception during the parenthood transition and its influence concerning a postpartum depression's worry

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**Background:** Transition to fatherhood rises as a promising research-line, with implications for co-parenting understanding. It seems that perceived father acceptance-rejection differed by gender. Also, there is a difference between women among the awareness of the implications of motherhood concerning a postpartum depression's worry. **Methods:** Cross study with a sample

of 100 individuals assessed with the Parental Acceptance-Rejection Questionnaire: Father – Short Form and a Questionnaire to survey Pregnancy Involvement (Men/Women). **Findings:** Results showed that men have a higher perceived father acceptance-rejection ( $U=4,58,00$ ;  $p < 0.01$ ). Concerning a postpartum depression's worry, women who have this preoccupation reveal most perceived father's rejection ( $U=4,53,50$ ;  $p < 0.01$ ). **Discussion:** Thus, an early intervention with parents seems necessary in order to maximize the awareness of the future child among their life, avoiding the negative situation of a postpartum depression and reduce the impact of perceived parental rejection in parent-child relationship.

### **Aging and social capital in Romanian older people: insights from qualitative research**

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**Background:** The present study explores how Romanian elderly experience different dimensions and types (bonding, bridging, linking) of social capital. **Method:** Semi-structured interviews were conducted with 8 men and 6 women (aged 60–69). Data were analyzed using thematic analysis. **Findings:** The main social structure is the family, which provides emotional and financial support in exchange for the fulfillment of grandparent duties. Lack of trust came out as the main theme, emerging in relations to institutions, authorities, community and neighbours. Older people avoid community involvement, considering it to be “for the young”. Urban living areas lack engagement opportunities and the desired peacefulness. **Discussions:** The life partner, family and friends can provide older adults with the necessary social resources for enjoying life as a retiree. In addition, opportunities can be offered in the community for older adults to feel engaged, to create new bonds and develop trust outside the family.

### **Acute coronary syndrome patients: resilience and psychological growth**

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**Background:** Resilient individuals may experience life-threatening events differently compared to others. This study investigates the characteristics of resilient individuals, and those reporting posttraumatic growth (PTG), following acute coronary syndrome (ACS). Factors being explored: perceived severity of event, anxiety, depression, personal control, coping style and efficacy. **Methods:** ACS patients ( $n=426$ ) contacted in hospital and baseline data collected; postal questionnaire follow up at 12 and 24 months. **Expected results:** Resilience: negative association with perceived severity of event, anxiety and depression; positive association with personal control and efficacy; task-oriented coping. Psychological growth: positive association with anxiety, depression and perceived severity of event; no predictions made regarding personal control, efficacy and coping. Current stage of work: Twelve month data collection complete ( $n=313$ ); 24 month data collection underway (estimated  $n=215$ ). **Discussion:** Findings will increase understanding of differing ACS patient psychological profiles, and potentially assist in modification of cardiac rehabilitation programs to improve and maintain the psychological well-being of cardiac patients.

### Does personal resilience predict higher quality of life of dialysis patients across cultures?

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Cross-cultural study with haemodialysis patients from collectivist and individualistic cultures examining role of personal psychological resilience, social support, hopefulness and perceived loss of control to a doctor on QOL. Hypotheses: Resilience will be the overarching principle determining QOL; social support will have greater importance in collectivist sample; loss of control will fulfil this role in individualistic sample. 312 dialysis patients in each culture fill in questionnaire. Predictor variables: degree of biculturalism; satisfaction with social support; health-related locus of control; hope; psychological resilience measured by a composite scale: perceived control, optimism and self-esteem. Outcome measures: KDQOL-36, SF-36v2<sup>®</sup>. Correlational analysis will be performed, followed by multiple regression analyses to determine contribution of various predictor variables on QOL. Data collection ending by March, data analysis by May 2012. Results will create direct advice how to treat patients depending on their culture, thereby fostering resilience and QOL.

### Changes in drinking motives, behaviour and related consequences over time: a full cross-lagged panel study

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**Background:** According to the motivational model of alcohol use, drinking motives are among the most proximal factors to drinking behaviour. It is less clear whether drinking motives are precursors of drinking, shaped by previous drinking experiences, or both. Moreover, it remains unclear whether drinking motives, usually shaped in adolescence, are still changing among adults. **Methods:** Longitudinal study ( $N=2440$ , 47% women, age:  $M=53$  years) assessing drinking motives, behaviour and related consequences at two time points, separated by three months. **Findings:** Full cross-lagged models revealed that drinking motives predict changes in drinking behaviour and related consequences over time and the number of drinking days shape drinking motives (i.e., reversed causality). Furthermore, coping motives and enhancement motives as well as social motives and conformity motives positively reinforced each other. **Discussion:** Drinking motives change even over a relatively short time period and they have predictive value, making them important candidates for prevention efforts.

### Interventions used by nurses in adult or elderly person with rheumatoid arthritis a systematic review

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Using the methodology based on the principles of systematic review (Sampaio, R.F. & Mancini, M.C., 2007) were selected quantitative studies, qualitative and literature review that led to the synthesis of results. Our question was “What nursing interventions are used in adult or elderly person with rheumatoid arthritis?” Studies published and indexed the databases of electronic search (ELSEVIER – Scencedirect) and we identified 15 studies. The results suggest some guidelines to be considered in nursing interventions from the person with rheumatoid arthritis: a multidisciplinary master information; provide information about the disease and its evolution; make a systematic and holistic assessment of people with RA; mobilize relational and communication skills throughout the process, performing cognitive interventions, perform physical and instrumental assistance, to support and monitor the prescribed medication; empower people with RA, promote and develop family relationships and interpersonal adaptive healthy and supportive, interdisciplinary teams to coordinate the treatment.

### **Students adaptation to higher education, contribution of social support and individual features towards anxiety**

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In order to understand the contribution of Social Support towards Anxiety, as well as which individual features tend to decrease anxiety thus contributing towards students adaptation to higher education, an empirical study was carried out with the students of the Porto Nursing School, involving 239 students from the 1st and 2nd years of the Nursing Degree. A socio-demographic questionnaire, the Zung Anxiety Self-Assessment Scale and the Vaux Social Support Appraisal Scale (SSA) was used. A statistic analysis was performed by resorting to the mean differences and to the multiple linear regression analysis (stepwise method). The results obtained show the relevance of social support from friends upon one's levels of anxiety. Furthermore, the results show the importance of personal and context variables, for lesser levels of anxiety. The higher education institutions should organize themselves in order to provide environments which promote the development and adaptation of students through social support networks.

### **Quality of Sleep in the people of Fibromyalgia**

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**Background:** The non-restorative sleep plays a key role in all of the manifestations of fibromyalgia, because this complex disease is characterized by musculoskeletal pain, which is, somehow, sleep disorders, fatigue and morning stiffness. This study aimed to examine the relationship between pain and fibromyalgia impact affects the sleep. **Methods:** In a cross-sectional study, we have worked with a sample of 77 people with fibromyalgia, with an average age of 49 years. **Expected results:** We found that poor sleep quality in the 97.4% of respondents. The intensity of pain and the morning fatigue proved to be predictive of sleep

quality, explaining 32% and 13.7% of its variability, respectively. Current stage of work: The results indicate that the intensity of pain and morning fatigue are, in fact, predictive of poor quality of sleep. **Discussion:** Evidence presented here based guidelines to implement preventive and therapeutic care in the pain and the negative impact of fibromyalgia.

### Resilient Coping in the Surgical Patient

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**Background:** The experience of a surgical intervention is an experience generating stress requiring the mobilization of coping to minimize potential damage arising from it. In this context, this paper evaluated the presence of resilient coping. **Methods:** In a cross-sectional study, we have worked with a sample of 180 patients, with an average age of 57 years. **Expected results:** We infer that 87.8% have low resilience, being dominant at this level of resilience both women and men. Only 12.2% of surgical patients scored moderate resilience. Current stage of work: We infer that 54% had nursing preoperative visit, 64.4% have had surgical experiments, and good experience with anesthesia 73.3%. **Discussion:** The results suggest that the nursing preoperative visit the nurses should promote resilient coping through the implementation of systematic nursing visits preoperative inform the patient about the events in the preoperative period in order to calm down the fears and anxieties.

### Temperament and Character Personality Traits: Association with Objective Measures of Health

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**Background:** This study examines the association of temperament and character traits (as measured by the TCI-140R) on objective health as measured by a medical examination including a general blood test, DHEAS to cortisol ratio, and a stress test. **Methods:** 271 community volunteers completed the TCI and then underwent the medical examination. **Findings:** Regression analyses controlling for age found significant protective influence for low self-transcendence, and low harm avoidance, explaining 5–10% of the variance. There was a suggestion in some of the measures of a protective advantage for higher self-directedness. **Discussion:** The health advantage of low harm avoidance is in keeping with previous work. The novel finding of the current study, i.e. that low self-transcendence confers resilience, may be due to the individual's awareness of his own separate self, and a realistic approach to health behavior.

### The relationship between stress reaction and physiological index of the new employees

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**Introduction:** Mental health problems have increased among young employees in Japan. The purpose of this research was to find the relationship between the psychological stress indicators and physiological index of the new employees. **Methods:** Health check questionnaire (including psychological stress reactions, frequent physical complaints and physiological index) was used. The subjects were 340 new employees (282 males and 58 females) of one electric company in Japan from 2006 to 2009. **Results and Discussion:** The results indicated that the new employees who were thin by BMI had more psychological stress reactions than the normal weight and obesity group. Also the new employees who answered more frequent physical complaints had high Triglyceride and high Aspartate aminotransferase. And the new employees who drink alcohol few times a week had less psychological stress response than others. These results of this research might give the idea for the following effective intervention to prevent psychological illness.

### **Body Mass Index (BMI): Are we using an informative measure in health-related studies?**

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**Background:** This study aims at characterizing a sample of man and women, with different body mass index (BMI) categories, in relation to their fat, muscle mass, and basal metabolic rate (BMR). **Method:** This cross-sectional research encompasses a sample of 75 adults, assessed in a pre-treatment nutrition consultation. A bio-impedance analysis was used. **Findings:** Concerning BMI, 34 participants had healthy weight ( $18.5 \text{ kg m}^{-2}$ – $24.9 \text{ kg m}^{-2}$ ), 35 overweight ( $25 \text{ kg m}^{-2}$ – $29.9 \text{ kg m}^{-2}$ ) and 6 presented obesity ( $\geq 30 \text{ kg m}^{-2}$ ). Regarding fat percentage, 9% of normal weight participants presented an overfat level; on the other hand, 66% of overweight individuals had a healthy fat percentage. All overweight participants had a healthy visceral fat level, and an average or good muscle mass percentage. Overweight and obese participants presented levels of BMR between negative and average. **Discussion:** BMI seems to be a weak anthropometric measure given it might categorize as having an unhealthy weight people who might have a healthy fat percentage.

### **Ex-smokers are unstoppable – A positively framed, free, online European smoking cessation program**

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**Background:** Online smoking cessation programs have potentially large target groups and – as such – high cost-effectiveness. Traditionally, however, interventions have focused on negative motives, e.g., reducing health risks. **Methods:** With support of the European Commission, the “Ex-smokers are unstoppable” campaign, emphasizing the benefits of quitting smoking was launched in 26 EU-countries. One ambassador per country was chosen via social media (Facebook) to spread the positive message of the campaign – how quitting made them

'unstoppable'. The campaign was supported by a freely accessible online stop smoking coach in 26 languages. The coach provided participants with information, advice and tips that were tailored to their individual smoking behaviour and their willingness and motivation to quit. **Findings:** Within 6 months after the launch of the campaign, more than 150.000 smokers registered on the coach. **Discussion:** We will describe the most prominent features of the campaign and the design of the online stop smoking coach.

### Reliability and validity of the Diabetes Receiving and Providing Support Scale (DRAPSS)

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**Background:** Peer support interventions are unique in combining health benefits of receiving and providing support. Because no questionnaire existed to measure both received and provided support, our aim is to develop and validate the DRAPSS. **Method:** Based upon the social support model, eight items from the Diabetes Support Scale aimed at measuring received support, were combined with four items of providing support. Translations were made both ways and a committee of clinimetrics, diabetologists and persons with diabetes tested the questionnaire on face validity. In 180 respondents with diabetes the DRAPSS will be set out twice to measure test-retest reliability and conduct a confirmatory factor analysis. **Expected results:** a validated questionnaire to measure both received and provided social support. Current stage of work: recruitment of respondents. **Discussion:** DRAPSS will provide a way to evaluate existing social interventions and will be used in our own peer support intervention research starting soon.

### Psychological aspects of oral health behavior improvement – less can be more

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**Background:** Past research focused motivational strategies to improve oral health behavior. Only little research is available assessing strategies to improve oral hygiene skills. **Methods:** The local ethics committee approved the study.  $N=67$  students were randomly assigned to computer assisted trainings for basics of oral hygiene alone (control) or basics plus one of two tooth-brushing techniques (Fones vs. modified Bass). Hygiene skills, oral health and psychological parameters were assessed prior to and 6, 12, and 28 weeks after training. **Results:** Training of Fones lead to significantly ( $p < 0.05$ ) improved skills and oral health while Bass did not differ from control and showed least improvement. Adherence was least in the Bass group as was decisional balance ( $p < 0.05$ ). **Discussion:** Training of a difficult technique (Bass) can lead to unfavorable results in terms of clinical and psychological

parameters. Skills training is an important feature of health education. More research is needed in that field.

### **Illness beliefs about hypertension among normotensive Spanish health professionals and health sciences students**

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**Background:** Personal beliefs about illnesses help to explain and predict behavioral and emotional responses to illness in patients, caregivers and health professionals. We explored the illness representations of hypertension among health professionals who differed in their profession and seniority. **Methods:** Hypertension representations were explored in a convenience sample of 159 Spanish normotensive health professionals (19 to 61 yr.;  $M = 33.60$ ; 61% women) using an adapted Revised Illness Perception Questionnaire. **Findings:** The participants' beliefs were based in biomedical accurate knowledge but surprisingly also included folk knowledge. While seniority had little impact on participants' beliefs, profession showed some influence: physicians perceived hypertension as a less severe and cyclic but more chronic disease than nurses and students, while students perceived greater treatment control possibilities than professionals. **Discussion:** Knowing health professionals' illness beliefs is useful because these representations have an important role in the experts' actions for diagnosis and treatment hypertension prevention and integrative attention of patients and in the relationship between health professionals and patients.

### **A comparison of hypertension causes between Spanish physicians, nurses, health sciences students and the general population**

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**Background:** Personal beliefs about illnesses help to explain and predict behavioral and emotional responses to illness in patients, caregivers and health professionals. We compared the perceived causes of hypertension among normotensive adults and health professionals. **Methods:** Hypertension causes were explored in a convenience sample of 159 health professionals and health sciences students and 130 normotensive adults using an adapted IPQR. **Findings:** Although behavioural causes were stressed by all the groups, participants in the general population demonstrated greater perceived influence of behavioural and psychological factors such as eating habits, stress, smoking or alcohol intake, while health professionals demonstrated greater perceived influence of uncontrollable causes such as heredity or ageing. **Discussion:** People in general population considered psychosocial and preventable aspects as more important in the genesis of hypertension. Our findings are useful for designing preventive and therapeutic interventions for patients, as well as for health

professionals as agents of care delivering, with whom modifiable behavioural factors should be stressed.

### **A comparison of illness beliefs about hypertension between Spanish health professionals and the general population**

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**Background:** Personal beliefs about illnesses help to explain and predict behavioral and emotional responses to illness in patients, caregivers and health professionals. This study was conducted to compare the illness representations about hypertension between Spanish normotensive health professionals and healthy adults, both with a different family experience with the disease. **Methods:** Hypertension representations were explored in a sample of 159 normotensive health professionals between 19 and 61 years old ( $M = 33.60$ ;  $SD = 12.64$ ; 61% women) and 130 normotensive adults between 18 and 66 years old ( $M = 39.97$ ;  $SD = 13.81$ ; 50% women) using an adapted Illness Perception Questionnaire-R. **Findings:** Participants' representations were significantly stronger and more accurate among health professionals. Participants in the general population demonstrated greater perceived severity and identity of hypertension, longer perceived evolution and stronger emotional representation. Health professionals demonstrated greater perceived duration, consequences, treatment control and coherence. **Discussion:** These results are useful for designing interventions for patients aimed at hypertension prevention and treatment, as well as for health professionals as agents of care delivering.

### **All negative affects are not equal: anxiety but not depression predicts risk-taking in behavioral tasks**

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**Background:** Using two behavioral risk tasks (Balloon Analogue Risk Task BART; Lejuez et al. 2002 and Columbia Card Task, CCT; Figner et al. 2009) that mimic important features of real-world risk taking behaviors, we investigated the effects of different types of negative affect on risk taking. **Methods:** Participants ( $N = 50$ ) were first administered the Hospital Anxiety and Depression Scale (HADS; Zigmond et al. 1983). One month later, they completed the BART and the cold CCT, in counterbalanced order. State mood was assessed before participants played the CCT and BART. **Findings:** Higher levels of anxiety were associated with less risk taking in both tasks; depression was unrelated to risk taking. Hierarchical regression analysis showed that these findings were robust to mood effects. **Discussion:** Findings from the current study indicated that healthy subjects' risk taking tendencies vary between anxiety and depression. Implications for prevention of health risks are discussed.

### Perceived stress, coping styles and depression at medical students

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The study aimed to assess the relationship between stress, coping styles and depression at undergraduate medical students. **Method:** 87 students (61 women, 26 men; mean age = 19.43) were administered Perceived Stress Scale, COPE inventory and Center for Epidemiologic Studies Depression Scale (CES-D). **Results:** There were similar levels of perceived stress (PS) at both gender, but higher scores for depression at women (19.20 vs. 14.69;  $F = 0.108$ ;  $p = 0.025$ ). The most frequent coping strategies were: at both gender planning, positive reinterpretation, active coping; in women: use of emotional social support (11.59 vs. 8.58,  $p = 0.001$ ), venting of emotions (10.23 vs. 8.46,  $p = 0.001$ ); in men: substance use (6.12 vs. 4.89,  $p = 0.045$ ). PS positively correlated with depression ( $r = 0.499$ ;  $p < 0.01$ ), denial ( $r = 0.311$ ) and negatively with active coping ( $r = -0.354$ ). Depression positively correlated with denial ( $r = 0.319$ ,  $p < 0.01$ ), behavioral disengagement ( $r = 0.474$ ), use of emotional support ( $r = 0.350$ ) and negatively with active coping ( $r = -0.535$ ). **Discussions:** Improving active coping strategies may lead to decrease perceived stress and depression symptoms.

### Burnout, depression and social support at doctors and nurses from a surgery department

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This study aimed to emphasize the relationship between burnout syndrome and depression at medical professionals from a surgery department and the role of social support in adjustment to work-related stress. **Method:** 53 participants (21 doctors and 32 nurses, mean age = 38.92) from a surgery department were administered Maslach Burnout Inventory, Duke-UNC Functional Social Support Questionnaire and Center for Epidemiologic Studies Depression Scale. **Results:** Doctors had higher levels of emotional exhaustion (ns) and depersonalization (13.95 vs. 11.59;  $p = 0.09$ ), while nurses had higher levels of social support (37.91 vs. 33.95;  $p = 0.04$ ). Men had higher scores at social support (38.93 vs. 35.32,  $p = 0.08$ ), while women had higher scores at personal accomplishment scale (17.26 vs. 14.60,  $p = 0.08$ ). Depression correlated with emotional exhaustion ( $r = 0.469$ ;  $p < 0.01$ ). Social support negatively correlated with emotional exhaustion ( $r = -0.297$ ;  $p < 0.05$ ) and depression ( $r = -0.389$ ;  $p < 0.01$ ). **Discussions:** Medical professionals, especially from surgery department, have high risk of burnout and depression. Increasing social support may decrease emotional exhaustion and depressive symptoms.

### Personality Type, Emotional Intelligence and Academic Achievement in Kashan University of Medical Sciences

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**Background:** The purpose of this study was to investigate the relationship between personality types, emotional intelligence and academic achievement of Kashan University of Medical Sciences students. **Method:** All of 221 participants were included from students. The NEO FFI personality test, Bar-On EQ questionnaire were administered. Also, mean of final grade exams was attend as academic achievement and data were analysed by Pearson correlation coefficient, ANOVA and *t*-test. **Findings:** Neuroticism, extraversion and consciousness were significant correlated with academic interest. Also self-actualization, problem-solving, optimism, self-respect, flexibility were correlated significantly with academic achievement. There were significant differences between academic disciplines according to some of EQ sub-tests (Happiness, social responsibility, self actualization and flexibility). **Discussion:** There are some association between personality type, EQ sub-scores and academic performance and interest, specially moderate academic performance students have higher score in EQ. So in curriculum planning must be attend to psychological aspects of students beside academic performance.

### **On animal assisted therapy: a preliminary instrument for observing dog-dog owner attachment**

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The dog-dog owner attachment is particularly important due to the psychological aspects involved; it correlates positively with physical and mental health, as well as with the person well-being. Drawing from the concept of attachment, our study aims at gauging dimensions of the long standing inter-species dog-dog owner relationship. An exploratory study was put forward where an original questionnaire was applied to a sample of 143 dog-dog owner relational pairs. Results show that this dual relationship is rooted on strong affective ties and that dog-master 'emotional understanding' is highly valued: dogs are seen as friends, as full members of the family even, to whom feelings and the ability to ask for and to express love are ascribed. This study acknowledges the important role of pets in a relational perspective (as mediators and adjuvants in the therapy process), and its eventual contribution to the analysis of health intervention potentiality and effectiveness.

### **“My tooth is ill”: An oral health education project**

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Tooth decay is a public health issue, affecting 60 to 90% of school-age children. Drawing is the first form of cognitive-emotional expression children resort to, constituting a universal form of language. The current descriptive and exploratory study aims at determining the mental representation of “healthy tooth” *versus* “unhealthy tooth” associated with the concept of ‘tooth decay’. Five-hundred children aged between 4 and 12 years old, participated

in the study and draw a “healthy tooth” and an “unhealthy tooth”. A content analysis grid was used in analysing the drawings and the written answers to three questions. Participants were divided in two groups: group 1 included those children who had dentist appointments; group 2 included those who had not. Content analysis on the drawings indicates significant discrepancies, inherent to the pictorial profiles. This finding has implications as to oral health prevention, and points towards the need of designing oral health education instruments. Keywords: Drawing; concept of tooth decay; oral health education; school-age children.

### **Non-verbal communication in the paediatric dentistry appointment setting**

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The outcome of any treatment performed in a dental medicine appointment setting is invariably contingent on the quality of the relationship established by the relational pair dentist – patient. In paediatric dentistry, it is nowadays well-known that some disruptive behaviour expressed by children during appointments result from dentists’ ill-suited communication acts. The current study draws on strategies inherent to non-verbal communication and accesses how non-verbal signs, sent by both dentists and patients during paediatric dentistry appointments, are perceived. The methodological procedure followed consisted in the application of two questionnaires per group/sample: 30 children aged 6–10 years (G1); 30 dental care practitioners (G2) – dentists and dental medicine students undergoing clinical internship. Those questionnaires provide an instrument for analysing non-verbal, subliminal signs sent by children and doctors, allowing thus for an eventual adjustment of paediatric dentistry intervention strategies used in the context of dentist – child relationship. Keywords: Nonverbal communication; Dentist – Patient relationship; Facial Expression; Gestures and postures.

### **“Anything that would actually work, I’ll try it”: patients’ beliefs on low back pain treatments”**

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Many different treatments are available for low back pain (LBP), including conventional (medication, exercise) and complementary (manual therapy, acupuncture) therapies. We aimed to explore patients’ views of LBP treatments because treatment perceptions in general are known to influence health behaviours and outcomes. We conducted 13 focus groups with a maximum variation sample of 75 adults with LBP (48 women, aged 29–85 years, pain duration 0.5–54 years). We analysed the data inductively to identify themes. Patients considered a clear diagnosis essential to selecting appropriate treatments. When experiencing uncertainty

regarding diagnosis, patients sought professional and lay advice and information to help them assess potential treatments on four dimensions: credibility, effectiveness, risks, and suitability to their individual case. Viewed through the theoretical framework of the common-sense model, patients were iteratively refining illness and treatment perceptions based on personal and vicarious treatment experiences. Addressing these issues in clinical practice may improve shared decision-making.

### **Stepping Up: integrating a new web-based self-management support intervention into primary care**

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Stepping Up is a web-based intervention aiming to: a) effectively support consumers manage their chronic condition; and b) offer health services an efficient method of providing self-management support. **Methods:** 22 clinicians from four services will be trained to provide Stepping Up to 300 consumers. Service delivery models will be co-developed with each service. Consumer evaluation involves questionnaires, website data, and qualitative interview. Evaluation of clinician experience involves survey and qualitative interview. **Expected results:** A high degree of acceptance of web-based service delivery has been observed. It is expected: a) consumers will experience reduction in distress, symptom improvement, and behavioural change; and b) clinicians will integrate Stepping Up within usual care and find it an efficient and rewarding means of providing self-management support. Current stage of work: Training in February. Implementation will commence in April 2012. **Discussion:** Web-based delivery of self-management support is viable where tailored to the delivery context.

### **Individually-tailored telephone intervention aiming at behaviour modification in type 2 diabetics following inpatient rehabilitation**

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Lifestyle changes aiming at modifiable risk factors like smoking or sedentariness are an integral part in the treatment of diabetes type 2. Based on Health Action Process Approach (Schwarzer, 2008; 2004) we designed a telephone intervention for type 2 diabetics assisting lifestyle modification after inpatient rehabilitation. The computerized and modular designed manual allows for individually-tailored interventions. Main focus is on physical activity, smoking, adherence, nutrition. We also screen for emotional problems. Evaluation data are collected during rehabilitation and after 12 months. Analysis will be done intention-to-treat by hierarchical linear modeling. We expect improvements in exercise, smoking, nutrition, emotional well-being, weight, and glycemic control (HbA1c). We randomly assigned 249 patients to usual care (126) or telephone intervention (123). Patients received 8 calls

each (median). 42 patients have already finished the intervention. Follow-up is still going on. Individually-tailored telephone interventions may assist life style changes after inpatient rehabilitation.

### **Posttraumatic growth, resilience and posttraumatic stress symptoms in train drivers exposed to workplace trauma**

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Because of exposure to person-under-train accidents, train drivers are at risk of developing PTSD symptoms. They may also report posttraumatic growth. We aimed to evaluate the relationship between post-traumatic symptoms, growth reports and factors that enhance resilience. 129 train drivers completed the Impact of Event Scale-Revised, the Posttraumatic Growth Inventory and the Resilience Scale for Adults. Results show that exposure to accidents leads to significant PTSD symptoms and PTG reports and the relationship between the two is influenced by resilient factors like social support or perceived personal strength and by frequency of accident exposure. Interestingly, train drivers who experienced more PUT accidents reported lower symptom levels and less growth. Our findings provide empirical support for the habituation hypothesis, highlighting resilient factors that influence the ability to adapt to trauma. Interventions need to be tailored based on factors that place train drivers in different traumatic risk categories.

### **Stress, social support and psychosomatic symptoms in a deprived neighbourhood**

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From a transactional perspective on stress, the study aimed to examine if the relationships of social support with perceived stress and psychosomatic symptoms are equivalent in deprived and wealthier neighbourhoods. Cross-sectional data were randomly collected from 2906 inhabitants in a deprived neighbourhood (851) and wealthier communities (2055), in Esbjerg, Denmark. A model that included psychosomatic symptoms as outcome, and daily worries, economic deprivation, perceived stress and social support as predictors was tested with structural equation modelling in two-group analyses. The findings showed significant differences ( $\Delta\chi^2_{(6)}=16.66$ ,  $p=0.011$ ) between neighbourhoods, and the fit statistics (CFI=0.930, RMSEA=0.034,  $R^2=0.48$ ) showed good fit. Under an increased perceived stress' effect, the social support's impact on psychosomatic symptoms decreased in the deprived neighbourhood compared with the other group. The results suggest that when individual and environmental characteristics interact, they affect stronger the health protective factors such as social support.

### **The psychosocial adjustment of young people involved in road traffic accidents**

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The road traffic accidents causes around the world a large number of victims. The main aim of this study was to analyse the psychosocial adjustment of young people involved in road traffic accidents. This is a quantitative and longitudinal study conducted in Portugal with a sample of 302 young people aged between 16 to 24 years old. It was applied a questionnaire to access background variables, road traffic accidents variables (e.g. type of injuries) and psychosocial adjustment variables (e.g. stress). The finding suggest that, over time, young people involved in road traffic accidents have poor psychosocial adjustment when compared with the reference group. Moreover, it was found that being a boy, having older ages, being the driver in the moment of the accident, being guilt by the insurance and especially having a high degree of physical disability predict a poor psychosocial adjustment six months after the road traffic accident.

### **Religious adaptive coping strategies: the case of Romanian prisoners under the communist regime**

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Research on religious coping has helped our understanding of religion as a method individuals use to rely on to gain control over their life. Religious coping may or may not be adaptive, depending on its positive or negative form. In Romania, many people who were imprisoned for their religious beliefs have reported using religion to cope with this situation. Despite their proved utility, there are no systematic Romanian studies focusing on psychological benefits related with religious coping. Using a qualitative methodology (thematic analysis), this study explores the religious coping strategies used by 20 persons who were imprisoned during the communist regime. Semi-structured interviews were used to collect data from participants. The data revealed positive patterns of religious coping which led to better adjustment, moderated the effect of stress associated with prison condition and helped participants to be hopeful about the future. Implications for supportive interventions with religious people are discussed.

### **Exploring meanings of care in nursing care homes for older people**

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The experience of living in older adult's nursing homes in the UK has received little attention in health psychology. Therefore the present research is being conducted in three UK nursing homes and aims to explore the use of space; what 'care' means to residents and staff; the psychosocial dynamics of the carer-resident relationship; and barriers to the delivery of quality care. It adopts a critical health psychology perspective and employs diverse qualitative data

collection methods, including photovoice and object elicitation interviews and focus groups. Work-a-long interviews with staff and participatory diagramming with managers have yet to be conducted. Preliminary findings of ethnographic observations suggest that care in nursing homes is socially and historically constructed, medically driven, and imbued with inherent power structures that disempower residents. The research aims to develop recommendations that challenge dominant discourses about care delivery in nursing homes with the aim of improving care quality provision.

### **The prevalence of Type D personality in Slovakia – preliminary findings**

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The Type D personality (the joint tendency toward negative affectivity and social inhibition) was associated with poor physical and mental health status and with poor cardiac prognosis. The study aims to determine the prevalence of Type D personality among the 615 Slovak participants (141 primary school pupils, 77 primary school teachers, 102 university students and 295 adults). Respondents filled out the Type D Scale-14. The obtained data were statistically analysed using SPSS 18 for Windows. The results showed the lowest prevalence of type D personality among the university students (23.5%) and highest prevalence in the group of adults (36.6%). Our research was focused on healthy respondents. Next step will be to focus on the patients with different diagnoses (cardiovascular diseases, depression, and others). This work is in progress.

### **Occupational Injury Surveillance System in Romania – The changing dynamics of work-related accidents between 2001–2010**

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**Background:** The assessment of occupational injuries is often problematic in middle-income countries due to a lack of proper surveillance system. The study describes the trend of work injuries in Romania and the dynamic of changes between 2001–2010. **Methods:** Data was collected from the National Institute of Statistics and the European Agency for Safety and Health at Work. Comparisons between years were calculated following the frequency index of accidents, main industries, age groups and gender. **Findings:** The total number of non-fatal occupational injuries had decreased, whereas frequency index of accidents for every 1000 workers didn't show a significant difference (2001–1.06%, 2010–0.91%). Each year, male workers, older workers (40–50 age category), and those working in construction and manufacturing were exposed to higher risk. **Discussion:** Statistical data is necessary for injury prevention and it represents a starting point for safety work conditions and for the development of health related problems.

### **Does the transtheoretical model predict attendance and outcomes following an online intervention for chronic headache?**

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**Background:** This study will investigate the utility of the TTM of Behaviour Change in predicting session attendance & treatment outcomes in response to an online mindfulness-based stress reduction intervention for individuals with chronic headache; Headache being the Cinderella of the pain research community. **Design:** Prospective study of 200 participants. Stage progression evaluated via compliance and completion of pre and post intervention questionnaires on Survey Monkey<sup>TM</sup>: Pain Stages of Change Questionnaire (Kerns et al., 1997); HADS (Zigmond & Snaith, 1983) and the Headache Impact Test (Kosinski et al., 2002). **Expected results:** Stage of change will predict interest in and level of participation as well as treatment effect size. Current stage of work: Website going live 22nd of February, 2012. Invites sent to Migraine Association of Ireland. **Benefits:** Study will increase understanding of how catastrophic thinking, stage of change, stress and pain co-vary over time and affect treatment intention and adherence.

### **Perception makes the difference: Associations of actual and perceived weight with self-reported and parent-reported resources**

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The study analyzed associations between actual weight status and weight perceptions with personal resources (i.e., self-efficacy, optimism, self-esteem), health and physical performance among adolescents ( $N = 6813$ ; age: 11–17 years). Analyses are based on data from the German Health Interview and Examination Survey for Children and Adolescents (KiGGS). Self-report measures, parental reports and objective test data were considered. Results indicate that weight perceptions rather than actual weight status were associated with self-reported as well as parent-reported personal resources (e.g., self-esteem), health and perceived physical performance. Adolescents who felt they had ‘just the right weight’ achieved better results than those who perceived themselves as ‘too fat’, regardless of their actual weight status. However, actual physical performance was predicted better by actual weight status. Findings provide further evidence that within weight groups there are subgroups which differ significantly with regard to risks and resources. Implications for practice are discussed.

### **The Problematic Drinking Group’s Smoking and Using Drugs Experiences in Junior High School Students**

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**Background:** To elucidate alcohol-related problems with smoking and using drugs experiences in the problematic drinking group in which alcohol is likely to cause health hazards in the future. **Methods:** A questionnaire survey consisting of 6 items related to alcohol use, smoking, and using drugs was conducted in 1030 students from 4 Junior high school. The QF Scale was used to divide students into the normal group, the drinking group, and the problematic drinking group for investigation. **Findings:** The problematic drinking group accounted for 1.0% (9 students) of Junior high school students, 1.2% (6 students) of males, and 0.7% (3 students) of females. In this group, 1 student each smokes several times a week or every day, and 1 student has experience to use organic solvent and stimulant. **Discussion:** The problematic drinking group may have relevance to smoking and drug abuse.

### Spontaneous and prompted expression of illness representations in urgent healthcare consultations

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**Background:** This paper examines patients' expression of Illness Representations (IRs) as proposed by Leventhal's Commonsense Self-Regulation Model (CS-SRM) during urgent consultations and explores the degree to which clinicians' prompts facilitate their expression. **Methods:** A CS-SRM guided content analysis of a random sample of 56 calls to the telephone advice service NHS 24, the gateway to out-of-hours healthcare in Scotland. A coding schedule was developed using Leventhal's definitions of 6 IRs. Meaning units were coded independently by 2 researchers. **Findings:** On average participants presented 4 components of IR, 3 spontaneously plus one prompted. Participants spontaneously presented identity (100%), timeline (50%), consequences (44%), cause (61%), cure/control (59%) and emotion (25%). Including prompted responses, this increased to identity (100%), timeline (100%), consequences (55%), cause (75%), cure/control (95%) and emotion (27%). **Discussion:** Participants' spontaneously expressed most IR components. Prompts relating to consequences and emotion might provide a more complete picture of patients' IRs.

### Professional risks: Nurses' communication about prevention and protection

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In a complex and overloaded work context, nurses face an occupational health paradox: they must be healthy in order to give care, but caring makes them sick. To understand 'Nurses' Health Practices and Experiences at work', a qualitative methodology was chosen and semi-structured interviews completed with 16 nurses to explore the links between job activities, health perceptions and skills, individual and collective resources about health protection. A thematic content analysis was performed using grounded theory method. Three main themes have been identified: (1) Changes in the forms of dangers (sources of contamination, stress); (2) Risk-taking in a time-consuming context (use of protection means or not); (3) Formal and

informal team discussions that allow expression of emotion (fear) and lack of training. In conclusion, the results highlight the importance of team communication as a powerful support about prevention and protection of professional risks.

### **Who are blood donors? The reluctant altruist, the impure altruist and the warm glow giver**

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**Background:** A supply of blood, provided by volunteer donors, is crucial for all health services. Recent epidemiological data suggest that experienced blood donors are motivated by warm-glow (it makes me feel good) and novice donors by a newly identified motivation of reluctant altruism (RA: donating because no-one else will), rather than pure altruism. These new and surprising findings require further investigation. A series of behavioural economic (BE) games to assess warm-glow and psychometric analyses were used to examine the validity of these findings. **Methods:** Data were gathered from a psychometric experimental study ( $N = 450$ ) and four lab based economic games ( $N = 210$ ). **Findings:** The BE games confirm blood donors are warm-glow givers. Reluctant altruism emerges as a clear factor and the strongest predictor of intentions to donate in non-donors, current and relapsed donors. **Discussion:** Implications for theories of altruism, blood donation and recruitment of blood donors are discussed.

### **The impact of Child Eating Style and Parental Body Mass Index on child's weight status**

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This study aimed to explore the role of children's eating style and parental body mass index (BMI) on children's weight. 59 children aged 5–8 years ( $M_{\text{age}} = 6.43$ ;  $SD_{\text{age}} = 0.89$ ) were classified by weight status (36 obese and 23 non-obese) via BMI-percentile. Parents completed the Child Eating Behaviour Questionnaire (Wardle et al., 2001) assessing eight subscales: (1)enjoyment of food; (2)emotional over-eating; (3)satiety responsiveness; (4)slowness in eating; (5)desire to drink; (6)food fussiness; (7)emotional under-eating and (8)food responsiveness. Parents BMI was assessed. Results show that child weight status was correlated with parental BMI ( $r = 0.39$ ), enjoyment of food ( $r = 0.60$ ), emotional over-eating ( $r = 0.48$ ), slowness in eating ( $r = 0.23$ ), desire to drink ( $r = 0.38$ ) and food responsiveness ( $r = 0.65$ ). High food responsiveness (OR, 4.30; 95%CI, 1.16–15.90) and high parental BMI (OR, 1.34; 95%CI, 1.04–1.72) predicted children obesity. Results show that parents can be a relevant role model. Their inclusion in childhood obesity interventions is recommended. Healthy food responsiveness (interest in food/sensitivity to environmental food cues) emerges as a potential target due to its impact on the child's weight status. Results should be interpreted with caution given sample size.

### **Developing a videogame to prepare Portuguese children for surgery**

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Surgery and hospitalization are negative events, which involve emotional and distress overload for children. According to the literature, gaming is one of the most popular activities among people of all and countries. The use of gaming as an educational tool can be conceptualized according to The Social Cognitive Theory. This project includes the development of a computer-game about the surgery, combining a filmed modeling and entertaining activities. The main purpose is to prepare to evaluate the effectiveness of videogame's use on children's cognitive, affective and psychological responses. Children at school age (and parents) will participate in the study and following instruments will be used: CSWQ (Quiles, 1999); SAM (Bradley & Lang, 1994); EAS-Temperament (Buss & Plomin, 1984); Wong-Baker Faces (Wong & Baker, 1988); SCSI (Ryan-Wenger, 1990). Preliminary results will be presented: we expect that children in the videogame-group report higher positive responses compared to those in the control groups.

### **Attitudes of pregnant women facing the termination of pregnancy due to fetal malformation**

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The possibility of a genetic disease or fetal malformation is similar in all developed countries, but access to health care that enable the diagnosis and legal framework that allows the termination of pregnancy are quite different. We conducted a cross-sectional study, quantitative, correlational, with 145 pregnant women. We intend to verify whether a relationship exists between the sociodemographic and psychological context and the attitudes of pregnant women facing the possibility of termination of pregnancy for fetal malformation. The mean age is 29.22 years, 97.9% are Portuguese and 78.6% are employed; 77.9% planned the pregnancy, and Psychological maturity, the Family APGAR and the lack of social support are predictors of the attitudes of pregnant women facing termination of pregnancy associated with personal and social reasons; Health professionals should consider the variables referred in order to improve quality of care facing such a significant life event, a decision that affects the family and future generations.

### **Sense of coherence and mastery as predictors of quality of life in an oncological sample**

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**Background:** We evaluated the role of sense of coherence and sense of mastery as predictors of quality of life (QoL) in a female tumor sample, considering the different site-disease (i.e. breast, endometrial and ovary). **Methods:** Short Form Health Survey (SF-36, Ware & Sherbourne, 1992), EORTC-Quality of Life Questionnaire Breast Module (EORTC-QLQ BR23, Aaronson et al., 1993), Sense of Coherence Scale (SOC, Antonovsky, 1979) and Sense of Mastery Scale (SOM, Pearlin & Schooler 1978) were administered to 61 women with endometrial cancer, 131 with breast cancer and 44 with ovary cancer. Hierarchical regression analyses with age, prognosis, SOC and SOM as predictors and QoL as dependent variable were performed. **Findings:** SOC meaningfulness, SOC manageability and SOM were significant predictors of QoL in all the subgroups with the exception of ovary cancer. The explained variance was about 30%. **Discussion:** Positive psychological characteristics of cancer patients seem to be important predictors of QoL.

### **Make your position clear (MYPC): impact of a mass media campaign targeting sexual health behaviours**

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**Background:** Mass media campaigns and social marketing present a staple of HIV prevention and sexual health. **Methods:** We assessed the reach of MYPC within the gay community and devised a measure of exposure/engagement with the campaign. Using observational research methods we assessed the correlation of exposure to MYPC with a range of sexual health variables. **Results:** A sample of 784 HIV negative or untested men (62% response rate) was obtained. No significant associations were found between exposure/engagement with MYPC and measures of sexual risk. However, there were significant associations between exposure to/engagement with MYPC and ever having had an HIV test, recency of HIV testing, having had an STI within the last year, and having had an STI test within the previous 6 months. **Conclusion:** The findings suggest the campaign had broad reach within the bar-going population of gay and bisexual men in Glasgow. We discuss the correlations in relation to theory.

### **Weakening of safer sex community norms amongst Scottish gay men**

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**Background:** Despite widespread changes in patterns of condom use, the contemporary determinants of UAI amongst gay men remain unknown. **Methods:** Cross-sectional surveys were conducted in 1996, 1999 and 2010 in gay bars in the West of Scotland. Respondents completed self-report measures including norms for safer sex and numbers of UAI partners in the year prior to data collection ( $N = 3222$ ). **Findings:** Scores on the measure of norms for safer sex were significantly lower (i.e., weaker) in 2010 than they had been in either 1996 or 1999

( $p < 0.001$ ). Those with  $\geq 2$  UAI partners in the previous year consistently had significantly lower scores on the safer sex norm scale and this difference remained when adjusted for age and year ( $p < 0.001$ ). **Discussion:** These findings are suggestive of the utility of using normative influence in designing interventions to promote sexual health amongst gay men.

### **Resilience and daily need satisfaction**

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Resilience encompasses coping resources and positive emotions. Resilience has been claimed to be especially important for teachers, as they face high work-related stress. But how does resilience in teachers relate to their daily emotions and need satisfaction and will daily emotions and need satisfaction affect teachers' well-being? To test this question, daily emotions and need satisfaction were assessed for one week in a sample of thirty trainee teachers. Trait resilience and well-being were measured at the beginning and end of the week. Both daily positive emotions and need satisfaction were positively related to baseline resilience. Positive emotions mediated the relation between daily need satisfaction and final well-being. The increase in daily need satisfaction also mediated the relation between baseline resilience and final well-being. Thus, it could be that the daily need satisfaction constitutes a resource for teachers to cope with their work-related stress and for staying healthy.

### **“Always two of us and then Anorexia”: Co-habiting couples’ accounts of living with eating disturbance**

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Theorising around the development and maintenance of disordered eating has included a focus on interpersonal relationships including those with long-term romantic/sexual partners. However qualitative research in this area is limited and previous research has focused on one partner's perspective; typically the individual with the eating disorder. It is important to explore the experience from both perspectives in order to devise effective interventions. In this presentation we explore both partners' accounts of the lived experience of being in a long-term romantic relationship where the female partner has an eating disorder. Three cohabiting heterosexual couples participated in semi-structured individual interviews, which were analysed using interpretative phenomenological analysis. Three themes are presented here: 'Personifying the eating disorder as a destructive member of the family' 'Identifying and managing the ways that the eating disorder threatens the relationship' and 'Using the eating disorder as a scapegoat for interpersonal conflict'. Suggestions for therapeutic interventions are presented.

### **BIOGRAPHIE – a project to maintain and promote health in older adults**

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**Background:** Older adults have a strong need for biographical narration. Autobiographical writing approaches propose a positive outcome for participants, but are hardly scientifically examined in aged adults. This study investigates the effects of biographical writing and narration in order to maintain and promote health in older adults. **Methods:** This randomized controlled study will include  $n=160$  people ( $>70$ years). The intervention contains 4 conditions: structured *versus* unstructured biographical writing, group talk, control group. Outcomes are psychological resources (quality of life, social support, resilience) and clinical variables (depression, PTSD, anxiety). **Expected results:** An increase in psychological resources and decreased symptoms of psychological disorders are expected. Current stage of work. The intervention is implemented and the post-assessment will be conducted. Preliminary results of the pre-/post-measurements and experiences with the intervention are presented. **Discussion:** Effects of the biography-based intervention will be discussed in terms of acceptance, feasibility and working mechanisms of expressive writing/narration.

### **Integrating Motivational Interviewing in online computer tailoring: should an embodied virtual coach be included?**

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**Background:** The aim of this study is to evaluate whether the use of an embodied virtual coach in an online computer tailored Motivational Interviewing (MI) based physical activity (PA) intervention provides additional effectiveness and appreciation. **Methods:** An RCT will be conducted (estimated  $n=300$ ), comparing (1) a text-based MI intervention, (2) the same MI intervention with an embodied virtual coach and (3) a control condition. Measurements include (MI-related determinants of) PA and process variables, measured at baseline, directly following the intervention and 1 month post intervention. **Expected results:** It is expected that the addition of an embodied virtual coach will lead to more perceived relatedness, increased intervention effects, and more positive appreciation. Current stage of work: Data collection will take place during in April and May 2012. **Discussion:** The findings of this study will reveal whether using an embodied virtual coach in an online MI intervention is beneficial.

### **Apple or chocolate – Predicting food choice behavior among adolescents**

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**Background:** The Prototype/Willingness-Model explains adolescents' health behavior as a reaction to social circumstances (Gibbons et al., 2003). It suggests that much behavior is unplanned and thus influenced by behavioural willingness rather than intentions. Among others, this assumption has been confirmed with regard to alcohol and tobacco consumption (Andrews et al., 2008). To date, it has not been applied to eating behavior. Food choice situations, however, are shifting increasingly to the peer context from childhood to adolescence (Hill, 2002). Thus, two studies examined the predictive power of behavioral willingness to explain food choice over and above intentions in a cross-sectional and longitudinal design. **Methods:** Intentions and willingness regarding eating behavior was assessed in 660 adolescents. Food choice was observed in two different situations.

**Results:** Willingness explained behavior over and above intentions. Effects were found for older adolescents only. **Discussion:** Implications for health promotion and future research are discussed.

### **Risk of development stroke and social support (epidemiological research who “MONICA-psychosocial”)**

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**Background:** To study influence social support of the risk stroke in population men 25–64 years. **Methods:** Within the program MONICA – MOPSY in 1988, 1994 representative sample of men at the age of 25–64 years has been surveyed. We used test Berkman-Syme. The period of supervision was 20 years. We counted as outcome all cases of stroke for the first time. **Findings:** The risk of stroke was higher in men with low index of close contacts and social connections after 5 years in 3.9–4.2 times in 10 years – in 2.5–3.4 times in 15 years 15 years – 2.6–3.4 times within 20 years from the start of the study continued the trend of risk. **Discussion:** In the population of men of 25–64 years old risk stroke is connected to low level of social support.

### **Personal anxiety and 16-years risk of an arterial hypertension in female population in Russia**

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**Background:** The aim is determine the influence of personal anxiety on risk of an arterial hypertension (AH) in female population of 25–64 years in Russia. **Methods:** Under the third screening of the WHO “MONICA-psychosocial” program random representative sample of women aged 25–64 years ( $n=870$ ) were surveyed in Novosibirsk. Levels of personal anxiety were measured at the baseline examination by means of Spilberger’s test. From 1995 to 2010 women were followed for 16 years for the incidence of AH. Cox proportional regression was used for relative risk (HR) assessment. **Findings:** HR of development of AH in women with high level of anxiety (HLA) during the first 5 years of study was higher in 2.38 time (95.0% CI: 1.137–4.993;  $p < 0.05$ ) compared those with lower anxiety levels, within 10 years it was 1.85 (95.0%CI:1.075–3.194;  $p < 0.05$ ) and HR was 1.46 (95.0%CI:1.023–2.079;  $p < 0.05$ ) after 16 years of follow up. **Discussion:** Women with HLA had higher risk of AH.

### **Brief psycho-social training, personality factors and alcohol consumption among Slovak University Students**

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**Background:** To explore the associations between the participation in brief psycho-social training, personality factors and alcohol consumption among university students in longitudinal research design. **Methods:** The associations between the participation in brief psycho-social training, personality factors (Big five, Sense of Coherence, Self-Competence, Self-liking, Self-efficacy, Self-regulation, Resilience) and alcohol consumption (AUDIT-C) were explored among 106 students (88.7% women, 22.8 mean age) in experimental group (EG, 44.3%) and control group (CG) in baseline (T1) before and after (T2) training comparison (2 months follow up). **Findings:** The association between the participation in brief psycho-social training and alcohol consumption was not confirmed. The lower level of Conscientiousness, the higher levels of Openness, as well as Self-competence were associated with risky alcohol consumption among university students in after training comparison (T2). **Conclusion:** The implementation of the findings that higher levels of Self-competence and Openness can support risky alcohol consumption in prevention programs is important.

### **Cognitive Behavioral Stress Management and quality of life with chronic pain patients**

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**Objective:** Patients with chronic pain could have lot of stress, depression, and reduced quality of life. Many research studies showed that CBSM (cognitive behavioral stress management) reduce stress, enhance medication adherence (HIV, cancer) and also quality of life. This research developps CBSM technique for chronic pain patients. **Method:** A 10-week group cognitive-behavioral stress management intervention will be tested among 30 patients with chronic pain, following them for one year after recruitment. This group will be compared to a control group. Quality of life will be evaluated with SF-12 questionnaire and we'll also assess change in health since trial enrollment, level of pain, rumination and coping. **Results:** CBSM intervention learns to patients what is stress, coping, cognitive distortions and rational thought replacement, social support and assertiveness. **Conclusion:** This intervention should reduce stress, pain and enhance quality of life for chronic pain patients. We would like to developp this technique in France to other patients.

### **The role of resilience among young adults vulnerable to depression**

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The main research question in this study was whether resilience had a moderating effect in the relations between cognitive and affective vulnerabilities to depression and symptoms of depression. The sample consisted of 1335 undergraduate students from the University of Novi Sad. Average age was 19.65. The participants completed measures of negative affect as a trait (Serbian Inventory of Affect based on the PANAS-X), dysfunctional attitudes (Dysfunctional Attitude Scale), depression (Depression subscale of the Depression, Anxiety and Stress Scale)

and resilience (Brief Resilience Scale). Moderation analysis suggested moderating effect of resilience. Individuals with different levels of cognitive and affective vulnerabilities did not differ in the symptoms of depression under conditions of high resilience: even vulnerable persons did not report depressive complaints. Differences emerged under conditions of low resilience: vulnerable persons reported significantly more depressive complaints. The current research showed that resilience was an important protective factor for depression-prone individuals.

### **The role of emotional regulation in the relationship between negative affectivity and emotional distress**

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The objective of this study was to examine whether emotional regulation styles mediate relationship between negative affect and emotional distress. The sample consisted of 1346 undergraduate students of the University of Novi Sad. Average age was 20 (SD = 1.86). The participants completed measures of negative affect (Serbian Inventory of Affect based on the PANAS-X), affective style (The Affective Style Questionnaire) and emotional distress (Subscale of Stress of Depression, Anxiety, Stress Scale). Hierarchical regression analysis indicated that adjusting one's affective style to the situational demands was potential partial mediator ( $\beta = -0.235$ ,  $p < 0.01$ ). The Sobel test was significant ( $z = 7.204$ ,  $p < 0.01$ ). A greater level of negative affect was associated with a reduction in the use of adjusting, which in turn, led to upper subjective distress. According to the results, decreased use of adjusting as an adaptive affective style diminishes resources for coping with negative affect and for prevention of emotional distress.

### **Psychological and behavioral effects of the public smoking ban on current smokers**

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**Background & Method:** An online-survey study with 1000+ smokers investigated perceived effects of the Dutch public smoking ban, installed in July 2008. **Findings:** 15% reported to smoke less and 80% reported one or more quit attempts since the ban. 16% had become more and 13% less motivated to quit. Few respondents thought that future smoking-restrictions would affect their smoking behavior. The difference in abstainer identity and self-awareness were strong correlates of a change in motivation to quit, and to a lesser extent of the reduction in the number of cigarettes smoked. **Discussion:** Among continuing smokers salient differences exist regarding how the ban has affected self-conceptions, motivation to change and acceptance of future policies. About 1/5 of smokers is more motivated to quit and has changed their self-conceptions accordingly, while about a similar number is less motivated and is more robust in their views and behavior.

### Testing an online intervention to reduce ambivalence related to smoking and quitting

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**Background:** Meta-cognitive model of attitude (Petty, Brinol & DeMarree, 2007) poses that ambivalence can be reduced by making people “doubt one’s doubt”. Objectives: To test whether an ambivalence-reducing-intervention (ARC) affects the intention to change and actual smoking behavior among smokers. **Methods:** Smokers in the ARC ( $n = 31$ ) challenged self-generated advantages of smoking and affirmed advantages of quitting smoking. In an ambivalence increasing condition ( $n = 34$ ), smokers affirmed both the advantages of smoking and of quitting smoking, while smokers in a neutral comparison condition ( $N = 27$ ) evaluated (dis)advantages of car-free Sundays. **Results:** At one-month follow-up, participants in ARC had higher intentions to quit smoking in the near future than those in the two other groups, particularly among those who were highly ambivalent at baseline. No differences were found for smoking behavior or quit attempts. **Conclusions:** Installing meta-cognitions leading to doubting one’s doubt may lead to a durable increase in motivation to quit smoking.

### Physical and Emotional Quality of life in late pregnancy

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Pregnancy is a sensible period and an important issue for health psychology. The aim of our study is to investigate explanation of better quality of life between women in late pregnancy. 360 women completed demographic information, SF36 and Brief Cope. Mean age was 29.1 (SD  $\pm$  4.6 years). Most of them were primipares (83%), lived with their child’s father (92%) and had programmed pregnancy (78%). Our results show a better quality of physical health ( $R^2 = 7$ ) for women without complications during pregnancy ( $\beta = 0.15$ ), satisfaction with their financial situation ( $\beta = -0.13$ ), using distraction ( $\beta = 0.15$ ) and less research of emotional support ( $\beta = -0.11$ ) as coping strategies. Emotional quality of life ( $R^2 = 14$ ) was better for younger ( $\beta = -0.13$ ) women who planned their pregnancy ( $\beta = -0.17$ ), without financial problems ( $\beta = -0.14$ ), using more positive reinterpretation ( $\beta = 0.15$ ), but less religion ( $\beta = -0.16$ ) and emotional support ( $\beta = -0.18$ ). Our findings offer supplementary understanding of quality of life of pregnant women.

### Stereotype threat, body shape concern, and weight control in overweight women

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This study investigated the influence of stereotype threat on body shape concern and use of weight control methods in Romanian overweight women. **Methods:** An experimental study was conducted in which the stereotype threat was manipulated through written vignettes.

100 overweight women (19–60 years-old, BMI range 25.00–40.00) filled in scales for assessing diet and exercise self-efficacy, body shape concern, and weight control methods. **Findings:** Structural equation modeling revealed a direct and indirect effect of stereotype threat on body shape concern. In the presence of stereotype threat, women reported higher diet self-efficacy and higher body shape concern. Women with higher body shape concern reported using more weight control methods. Body shape concern mediated the influence of stereotype threat on weight control methods. **Discussion:** The identified model emphasizes the impact of negative stereotype on body shape concern and implicitly on the use of weight control methods in overweight women.

### **The role of attributional style and surgery-related worry on behavioral distress in hospitalized children**

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This study aimed to explore the role of attributional style and surgery-related worry on pre- and post-surgery behavioral distress in young children undergoing appendectomy. **Methods:** A short term longitudinal study was conducted on 86 children (43 boys) aged 6–10 years. The attributional style, surgery-related worry, and pre- and post-surgery behavioral distress were assessed. **Findings:** A GLM with repeated measures revealed significant effects of attributional style and surgery-related worry on post-surgery behavioral distress, but not on pre-surgery behavioral distress. Post-surgery children showed higher behavioral distress than before the surgery. Pre-surgery behavioral distress  $\times$  attributional style and pre-surgery behavioral distress  $\times$  surgery-related worry interactions were identified. Children with maladaptive attributional style or high worry level showed higher post-surgery behavioral distress than those with adaptive attributional style or low worry level. **Discussion:** The understandings of intra-individual factors which influence post-surgery behavioral distress has a practical importance in improving hospitalized children recovery.

### **Developing Resilience using Rational Emotional Behavioral Trainings**

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Research postulates that resilience is a metacompetence used by youths for overcoming adversity. This study aims to demonstrate the utility of a Rational Emotional Behavioral Trainings in developing resilience for young. For testing the program, quantitative (mean comparison) and qualitative methodology (narrative and discourse analyses) were applied. Three hundred fifty-four students (19–24 years) participated in the study. Using an 2X2 factorial design (type of program, social support). Fifty four students were implied in a face-to-face program, and three hundred in an online training. The computed data revealed a significant effect for face-to-face group on the following dimensions: self-trust, other-trust, self-acceptance, proactive attitude, social support. Also, for online version the results showed a significant effect for: self-knowledge, self-trust and social support. Taking together, the results demonstrated the utility of our program in developing resilience for youth. Further implications of our outcomes for well-being and public health in youth are discussed.

### Intervention Engagement Promotes Smoking Cessation: Effect of Posting Messages and Comments in an Online Program

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Many studies have shown that programs on smoking cessation are effective in the short-term, but the behavioral change is rarely maintained over time. The aim of the present study was to investigate whether engaging in a cessation program by posting messages and comments has a positive effect on long-term success of smoking cessation. Participants ( $N=13,174$ ) of a longitudinal online program had the possibility to communicate in a forum. Self-reported abstinence rates were assessed at 8 points in time over 10 weeks and were compared between participants with no posts, few posts and many posts. Participants who sent more comments were more likely to refrain from smoking at each measurement point in time ( $p < 0.001$ ). High intervention engagement, such as online activities, might explain why smokers succeed in changing their behavior in the long run. Thus, future research may investigate how to prompt intervention engagement.

### Social Support, Psychological Well-being and Health: A survey on a group of African immigrants

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**Background:** The present investigation aims to identify possible relationships between perceived social support, psychological well-being and physical and mental health that may play a role as risk or protective factors for the quality of life of immigrants in the host country. **Methods:** The Multidimensional Scale of Perceived Social Support (MSPSS-M), the Psychological Well-being Scale – the Italian 18 item version and the Short Form Health Survey (Sf-36) were administered to a sample of 79 African immigrants (68 males, 11 females) which were recruited through a non-probability sample. After Bivariate Correlations and Linear Regression Model were conducted. **Findings:** Results suggest a positive correlation between MSPSS and PWB ( $r=0.338$ ;  $p < 0.01$ ) and physical health ( $r=0.203$ ;  $p < 0.01$ ) and mental health ( $r=0.358$ ;  $p < 0.01$ ). MSPSS would seem to have some predictive influence towards well-being ( $t=3131$ ), physical health ( $t=1774$ ;  $p < 0.05$ ) and mental health ( $t=3365$ ;  $p < 0.05$ ). **Discussion:** Exploring social resources as possible protective factors of health could be useful to understand immigrants' needs facilitating their integration into the host country.

### Psychological Well-being and Health: A survey on a group of African immigrants

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**Background:** The Present investigation aims to identify possible relationships between psychological well-being and perceived physical and mental health that may play a role as risk or protective factors for the quality of life of immigrants in the host country. **Methods:** The Psychological Well-being Scale – the Italian 18 item version and the Short Form Health Survey (Sf-36) were administered to a sample of 79 African immigrants (68 males, 11 females) that were recruited through a non-probability sample. After Bivariate Correlations and Linear regression Model were conducted. **Findings:** Results suggest a positive correlation between PWB and physical health ( $r=0.305$ ;  $p < 0.01$ ) and mental health ( $r=0.416$ ;  $p < 0.01$ ). PWB would seem to have some predictive influence towards physical health ( $t=2740$ ;  $p < 0.05$ ) and mental health ( $t=3991$ ;  $p < 0.05$ ). **Discussion:** Exploring personal resources as possible protective factors of health could be useful to understand immigrants' needs facilitating their integration into the host country.

### **Predictors of distress in women with breast cancer: The important of illness perceptions**

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**Background:** The present study assessed the impact of illness perceptions and coping on distress in women diagnosed with breast cancer. **Methods:** Women with breast cancer ( $N=100$ ) completed measures of illness perceptions (IPQ-R), anxiety (STAI), perceived stress (PSS), coping (MAC), and positive and negative affect (PANAS). **Findings:** Controlling for disease and demographic variables, illness perceptions accounted for 30% of depression, 15% of perceived stress, and 15% of state anxiety. Higher personal control beliefs ( $p < 0.05$ ), and a stronger illness identity ( $p < 0.01$ ), predicted higher levels of depression. Reporting more serious consequences predicted more perceived stress, whilst having a better understanding of the illness predicted lower anxiety ( $p < 0.05$ ). Higher levels of fighting spirit ( $p < 0.001$ ), and low levels of fatalistic coping ( $p < 0.05$ ) predicted higher positive affect. **Discussion:** Both illness perceptions and coping should be considered when developing future interventions to reduce distress.

### **Beautiful or healthy? The media exposure influence on women's body image and pro-health attitudes**

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The purpose of the study was to examine the media exposure influence on the cognitive-emotional, behavioural and social aspects of body image *versus* creating, intensifying and maintaining pro-health attitudes among middle-and older aged women. Aging is a process of biological, physical and social changes unaccepted in our culture. Youthfulness, good health and physical attractiveness are values playing an important role in the way women think of themselves. The psychological mechanism of describing phenomenon are analysed according to the social-cultural theory (ideal beauty, media influence) and stereotypes (ageing stigma). TV programs under the title 10 years younger was used in the experimental manipulation. Each of them showed efforts of cosmetic and dental surgeons, hairdressers, beauticians, stylists improving ageing women's appearance. Two hundred female participants, assigned to

an experimental and a control groups, completed body image and health attitudes questionnaires. Results indicated specific, unexpected effects depended on age and body dissatisfaction.

### **Targeting health messages to stages of change of the HAPA model: A complete match-mismatch design**

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This study aims to verify whether stage-matched interventions according to the HAPA model are more effective than mismatched ones. The design is between-subjects with 2 stages of change  $\times$  2 types of intervention and a control condition. We have just started to collect data, and will have a total of approximately 150 participants. Stage of change will be measured one week before the intervention. Measures of all determinants of the HAPA model will also be measured one week before, immediately after and one week after the intervention. Intervention consists of two health messages, one targeted at non-intenders (enhancing risk perception, positive outcome expectancies, self-efficacy) and the other targeted at intenders (promoting action planning, coping planning, self-efficacy). We expect health messages matched to the participants' stage of change to be more effective in promoting fruit and vegetable consumption, attesting the usefulness of the stage of change construct for health message targeting.

### **Predictors of changes in exercise levels among post-menopausal women**

D. Godoy-Izquierdo<sup>1</sup>, A. Padial<sup>1</sup>, M. Velez<sup>1</sup>, R. Lara<sup>1</sup>, I. Lopez-Chicheri<sup>1</sup>, N. Mendoza<sup>1</sup>, A. Salamanca<sup>1</sup>, C. De Teresa<sup>1</sup>, J.F. Godoy<sup>1</sup>

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**Background:** The study aimed to test the HAPA constructs in relation to changes in exercise levels among postmenopausal women who adhered (adherers) to a supervised exercise program and who did not (non-adherers). **Methods:** Two hundred and forty three postmenopausal women completed a self-report on physical exercise and HAPA's protocol to evaluate psychological variables related to exercise behavior at baseline, during and after a supervised exercise program in which the experimental group (adhered plus non-adhered women) was enrolled. Follow up was conducted 12 months after finishing the program. **Findings:** Stepwise multiple linear regression analyses according to the HAPA model were conducted. Action self-efficacy at baseline and outcome perceptions at post-program stage significantly predicted a positive change in exercise levels from baseline to post-program measurement phase. A positive change in exercise at 12-months follow-up was predicted by coping planning at follow-up. **Discussion:** Our findings support the predictive power of outcomes perceptions, action self-efficacy and coping planning with regards to exercise among middle-age women.

### Are active women happier than sedentary women in postmenopause?

D. Godoy-Izquierdo<sup>1</sup>, R. Lara<sup>1</sup>, A. Padial<sup>1</sup>, M. Velez<sup>1</sup>, I. Lopez-Chicheri<sup>1</sup>, N. Mendoza<sup>1</sup>, A. Salamanca<sup>1</sup>, C. De Teresa<sup>1</sup>, J.F. Godoy<sup>1</sup>

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**Background:** Research on subjective well-being has demonstrated that practicing exercise is related to short-term and maintained better emotional states and enhanced happiness. We explored whether postmenopausal women who exercised were happier than sedentary women. **Methods:** Participants were 243 postmenopausal women, from who 157 adhered to exercise and 86 were sedentary women. All of the participants completed self-reports on exercise and happiness. **Findings:** Mean comparisons revealed that exercisers were significantly happier than sedentary women at short-, medium- (3-months follow up) and long-term (12-months follow up). **Discussion:** Designing interventions aimed at promoting regular exercise among postmenopausal women are promising actions given that our findings strongly support that exercise is beneficial for postmenopausal women's happiness.

### Adolescent Men. Role of sport in the relationship between personality traits and eating disorders

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**Background:** Sport prevents disease and increases resilience (self-control, self-esteem), reducing risk of eating disorders. **Objective:** A structural model of sport in the relationship personality factors – risk of eating disorders (PF-ED<sub>R</sub>). **Participants:** A non random sample of male athletes (MA = 150, *M* = 14.8, *SD* = 1.9) and non athletes (NAM = 150, *M* = 15.2, *SD* = 1.6) responded to reliable instruments. **Results:** NAM compared to MA showed higher  $\beta$ s of weight concern – restricted diet ( $\beta$  0.70 vs.  $\beta$  0.57); weight concern – binge eating ( $\beta$  0.47 vs.  $\beta$  0.35); higher *R*<sup>2</sup>s in: restricted diet (0.49 vs. 0.32) and binge eating (0.28 vs. 0.20). **Discussion:** Useful information is provided for ED prevention: 1). Sport decreases the PF (anxiety, depression, hostility) influencing the ED (weight concern, restricted diet, binge eating) and 2). The PF «social activity» is a protective factor ( $\geq$  social activity  $\Delta$ ED<sub>R</sub>).

### Medical encounters with “unexplained” chronic pain patients: exploring ways to preserve doctor's satisfaction at work

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The follow-up of patients suffering from chronic pain without objective findings (CPWOF) is challenging for family doctors (FDs). Due to patients' and doctors' divergent views on the origin and management of pain, misunderstanding can occur, that weakens the doctor-patient relationship and FDs' satisfaction at work. The study aims at highlighting FDs' competencies that could contribute to maintain a good doctor-patient relationship and FD's work

fulfillment. 15 semi-structured interviews were conducted with FDs to explore their reported practices and representations about consultations with CPWOF-patients. The interviews' transcripts were analyzed with computer-assisted thematic analysis (NVivo-8). Two kinds of competencies were identified: first the use of varied sources of knowledge to formulate explanations likely to be accepted by patients, second the support from colleagues or supervision groups ensuring emotional disclosure and reflexivity. These findings open ways to increase FD's satisfaction at work by improving communication and collaborative skills with CPOWOF-patients.

### Changes in self-rated health and depressive symptoms in schizophrenia patients during hospital treatment

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**Background:** Treatment of schizophrenia patients seeks to alleviate specific symptoms of psychosis. The aim was to examine changes in self-rated health status (SRH) and mood indicators in schizophrenia patients during hospital treatment. **Methods:** Eighty patients (39 were men) were investigated at the beginning and at the end of hospital treatment by using SRH questionnaire arranged in accordance with health concept proposed by WHO, (Cronbach  $\alpha$  – 0.95) and to scaled items for evaluation sadness and lack of energy (Cronbach  $\alpha$  – 0.98). **Findings:** Indications of social support, physical and psychological aspects of health, including sadness and lack of energy, improved during hospital treatment. Improving in SRH was related to mood improving, though stronger in females. **Discussion:** Positive SRH and mood changes during hospital treatment in schizophrenia patients provides an opportunity to health psychologist to focus on early psychological rehabilitation targeted to health improvement.

### Gender differences in drug usage among schoolchildren

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**Background:** Consumption of alcohol, tobacco and other substances (ATS) in adults is higher in males than in females and causes many health problems. This investigation is aimed to check whether these ATS consumption differences start in middle school years. **Methods:** 10 items questionnaire was used to evaluate the frequencies and amount of ATS, in 4679 girls and 4640 boys within the Health project supported by Kaunas regional municipality. Cronbach's  $\alpha$  0.78. **Findings:** Consumption of ATS is higher among boys ( $p < 0.05$ ). Boys consume higher amounts of liquor and tobacco than girls only in 9th grade and amount of light drinks usage differ by gender in all grades. Frequencies and amount of consumption increase in boys and girls from 6th to 9th grade ( $p < 0.05$ ). **Discussion:** Consumption of ATS is spread in middle school age students although it is illegal. The topic may be of interest for health psychologist.

### **Sadness, Lack of Energy and Health-related Quality of Life in Patients with Type 2 Diabetes**

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**Background:** Emotional problems and lower quality of life (QoL) are common in patients with type 2 diabetes mellitus (2DM). Aim of the study was to disclose relationship between sadness, lack of energy and QoL. **Methods:** 68 female and 44 male 2DM patients were investigated by WHO QoL-100 questionnaire (Cr.  $\alpha = 0.7-0.9$ ) and two scaled items for lack of energy. The study was approved by Kaunas Regional Ethics Committee of Biomedical Researches. **Findings:** Indicators of lack of energy in females correlated with environmental and social domains of QoL ( $p < 0.05$ ). Lack of energy was related to psychological domain ( $p < 0.05$ ); sadness was related to spirituality ( $p < 0.05$ ). No relations were found between lack of energy and QoL domains in males. **Discussion:** Characteristics of mood in relation to QoL in 2DM patients may be used by health psychologist in the department of endocrinology.

### **Self-rated health (SRH) differences among schoolchildren from 6 to 9 grades**

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**Background:** It is well known that adult females evaluate health worse than males. These differences may be related to social inequalities in health. The aim of this investigation is to examine possible differences of SRH among boys and girls from 6 to 9 grades and SRH changes during this period. **Method:** It is cross-sectional study. Factorized 6 items scale for the evaluation of SRH (Cronbach  $\alpha = 0.736$ ) was used for 4933 boys and 4827 girls within the Health Project supported by Kaunas Regional Municipality. **Findings:** The higher percentage of girls evaluated their health worse than boys ( $p < 0.05$ ) in 6 items. These differences were observed in each grade. The clear changes of self health evaluation among boys and girls from 6 to 9 grades were not observed. **Discussion:** It is possible, that coherent changes in SRH among boys and girls get stronger later.

### **Validation of the Portuguese version of the Spiritual Health and Life Orientation Measure (SHALOM)**

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**Background:** Spiritual well-being (SWB) can be defined as a dynamic state of being reflecting the quality of the relations each person establishes with themselves (personal domain of SWB), other people (communal), nature (environmental) and the transcendent other (transcendental) (Fisher, 1999, 2010). SHALOM is a self-report measure that assesses the ideal (Life Orientation Measure) and the lived experience (Spiritual Health Measure) of SWB for each individual allowing within-subject comparisons of congruence. This poster

presents the preliminary psychometric results of the Portuguese version of SHALOM. **Methods:** A total of 439 participants, (Mean age = 36), 62% women, filled out the 20 × 2 SHALOM items. **Findings:** The hierarchical structural models of ideal and experienced SWB were similar to the original version. It presents good internal consistency and reliability scores. **Discussion:** The Portuguese version of SHALOM is a valid and reliable measure for research use.

### **Intergenerational communication and cancer-related beliefs within family: a resilience factor after BRCA mutation disclosure?**

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Women with BRCA1/2 mutations have a 95% risk of developing breast or ovarian cancer. However, literature shows inconsistent results about their adjustment to mutation disclosure. This research objective is to explore how cancer-related familial history influences psychological reactions and adherence to medical supervision. 30 BRCA1/2 carriers are expected in a mixed design. Thematic content analysis (TCA) of semi-structured interviews and illness genograms explore intergenerational communication and familial cancer beliefs. Results are crossed with psychological indicators (stress, coping, distress) and adherence to medical supervision or the choice of prophylactic surgery. TCA should allow family patterns identification. Besides, data triangulation with psychological variables should underline their impact for adjustment. To date, eight women were recruited. Analysis suggests “transparent”, “protective” or “inhibited” family pattern. The crossing data suggests that resilience appears in “transparent” families. Considering family health history into health psychology’s model could promote better adjustment for people affected by this hereditary predisposition.

### **An investigation of coping strategies associated with teachers stress in Polish reality**

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Teaching is regarded as a stressful occupation, but the perception of the job as stressful may be influenced by coping responses and social support. **Aims:** To assess the associations between teacher stress, psychological coping responses and health. In this study, two measures were used to obtain data on how teachers react to stress and how they cope with the pressures involved in teaching. **Results:** The major predictor of low job satisfaction in teachers profession is high pressure from ‘management – structure of the school’. **Conclusions:** Multiple regression analysis was performed on the total sample and various subgroups, and it was discovered that the ‘job pressure factors’ of ‘management – structure of the school’ were the major predictors of job dissatisfaction. Mental ill-health was predicted by a variety of job pressure and personal factors. Overall, the mental ill health of teachers is linked to a combination of work pressures, behaviour and coping mechanisms.

### **Impact of a Theory Based Health Education Program on Womens' Health Knowledge and Behaviours**

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Educational interventions only count when they are based on at least one behaviour change theory. Pender's Health Promotion Model (HPM) focuses especially behaviour specific cognition and affect which can be influenced by environment. Main aim of this interventional study is to evaluate the impact of an education program based on Pender's Health Promotion Model on women's health knowledge and behaviours. Study group consisted of 23 women over 15 years visiting a course in Public Training Centre in Kutahya province, Turkey. Data collection tool is 25-item scale developed by researches, and applied to participants before and after the 20-day training program on woman health. Results of tests and observations showed significant changes on women's both health knowledge and behavioural intentions ( $p < 0.01$ ). As conclusion, our study indicated that interventions to increase personal perceptions and cognitions of health behaviours can both improve the awareness and facilitate the behaviour adoption as stated in HPM.

### **The Impact of Physical Activity on Executive Functioning in Adolescents with and without ADHD**

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**Background:** Adolescents with ADHD often show impaired executive functioning. Based on previous studies that report a positive relationship between physical activity and executive functioning, the present study investigates whether this holds also true for adolescents with ADHD (i.e. with executive function deficits). **Methods:** On nine consecutive days, eighty adolescents (age 10–18 years) with and without ADHD will wear accelerometers and fill out daily diaries on mood, physical activity and ADHD symptoms. Executive functioning (planning, inhibition, shifting) will be assessed on the last day of the study. **Expected Results:** In both groups, we expect that more physical active participants show better executive functioning. However, these associations might differ among ADHD subtypes. Current stage of work: Data collection will start in March 2012. **Discussion:** Results will be discussed with regard to the question if increasing physical activity might be an effective strategy to promote executive function deficits in children with ADHD.

### **Illness perceptions and medication adherence in higher education asthmatic students**

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**Background:** This study aims to characterize patients' perceptions of asthma and assess its associations with medication adherence. **Methods:** In this transversal observational-exploratory study participate 33 asthmatic students, 60.6% female, 18–29 years ( $M = 20.33$ ;  $DP = 2.04$ ). 75.8% were prescribed preventative medication, 68% of which report taking it only during episodes of worsening. Students completed Revised Illness Perception Questionnaire and a 7-item medication adherence measure. **Findings:** Most students saw asthma as a chronic, cyclical condition that can be controlled by patient's behaviour and medication. Although presenting low frequency of non-adherent behaviours, 45.2% refer stop taking medication when feeling better. We found significant correlations between adherence and asthma timeline (cyclical) ( $r(30) = -0.38$ ;  $p < 0.05$ ) and emotional representations ( $r(30) = -0.48$ ;  $p < 0.01$ ). **Discussion:** These findings suggest an association between illness perceptions and non-adherence behaviours, strengthening the importance of patient-centred interventions that allow correcting inadequate beliefs and enhance patients' active engagement in asthma control.

### Resilience and protective factors of personality

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**Background:** The present study is a part of a complex clinical and health psychological research. We translated the Connor–Davidson's Resilience Scale into Hungarian and started the adaptation of the inventory. Besides it our aim was to find relations between resilience and the protective factors of personality. **Methods:** The subjects come from a general sample, patients with systemic autoimmune disorders, and a chronic non-autoimmune locomotor disordered sample ( $N = 200$ ). **Measures:** Cloninger's Temperament and Character Inventory (TCI, 1993), CD-RISC 25-item-version (2003), CES-D (Radloff, 1977). **Findings:** CD-RISC could be well-used in Hungarian samples as well. We got significantly positive relations between Resilience and Reward Dependence, Persistence, Self-Directedness, Cooperativeness, Self-Transcendence and a number of protective personality subscales. **Discussion:** The inventories help the experts in health psychology to estimate the risk and protective factors of personality. (OTKA grant K 71754).

### Effect of Work-family Conflict on Job satisfaction and Mental Health: Mediating Role of Job Stress

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**Background:** Work-family conflict is an important issue in the field of work and family research. It seems that, this specific kind of role conflict increase in some special occupation, such as tour workers. The research was designed to investigate the effect of work-family conflict on mental health and job satisfaction regarding the mediating role of job stress, in Tours employees of Iranian National Drilling Company (INDC). **Method:** Data collected from 288 tours employees of Iranian National Drilling Company. Structural equation modeling (SEM) through AMOS 18 was used for data analysis. **Findings:** The results indicated that, there was a significant relationship between work-family conflict and mental health and

job satisfaction with full mediating role of job stress. **Discussion:** Findings based on employees mental health theories are discussed. **Keywords:** work-family conflict, job satisfaction, mental health, job stress.

### **Relationship of Person-job Resources with Task Performance and Turnover Intention: Mediating Role of Job Engagement**

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**Background:** The aim of this research was to test a model of the relationship of psychological climate and core self-evaluations with task performance and turnover intention with mediating role of job engagement in Iranian employees. **Method:** Data collected from 267 Iranian employees. Structural equation modeling was used for data analysis. The indirect effects were tested using Bootstrap procedure. **Findings:** Results indicate that psychological climate affects turnover intention directly and indirectly with mediating role of job engagement and affects task performance with complete mediating role of job engagement. Also core self-evaluations affect task performance directly and indirectly with mediating role of job engagement and affects turnover intention with complete mediating role of job engagement. **Discussion:** In sum, job engagement as a positive psychological state is important to be considered by organizations because of its full and partial mediating role in the relationship between some organizational and personality factors with organizational outcomes.

### **Physical activity as a lifestyle on the personality of seniors aged 60 to 95 years**

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**Objectives:** We investigated the the personality of seniors aged 60 to 95 years who performed throughout the life of regular physical activity as part of the lifestyle. **Methods:** NEOFive-Factor Inventory ((NEO-FFI), Costa, P.T. and McCraee, R.R.: 1992; Czech version Hrebickova 2001. Men: A sample of 118 members of the Czech sport organization Sokol (40 men, 78 women, mean age 70.09, SD=6.56) and control group of 54 members seniors outside exercise (24 men, 31 women, mean age 70.46, SD=6.16) participated in study. **Results:** For all the actively exercising men and women groups it was possible to register increased tendency towards psychic instability, are more introvert in their life, trend towards reduced openness for new stimulations, tendency towards an increase in conscientiousness. This trends was more strong registered for the all groups of males and females and groups outside exercise.

### **Greek physicians' representations regarding the health care services provided to migrants**

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The aim of the study is to investigate the extent to which social representations of health, held by health professionals will influence their professional knowledge and their practices towards migrants in Greece. For this purpose, semi-structured interviews were conducted with 35 health professionals working in a) public hospitals, b) private hospitals c) various non governmental health organizations and d) jail. During the interviews questions referring to concepts of health and work related concepts of providing health to migrants were asked. Interviews were analyzed using the method of thematic content analysis. Results indicate representations of health that vary, from a representation of health as a human right, to a representation of a health as a product. Migrants as recipients of health are represented as patients with limited rights to health provision. This research hopes to contribute to the field of social representations and offer suggestions for improving health care towards migrants.

### Social wellbeing in retirement transition

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**Background:** Retirement may bring lifestyle changes which impact on health and wellbeing, but also presents opportunities for intervention. Little is known about retirement transition experiencevis-?-vis lifestyle choices. We address three questions: how are retirement transitions reported by people before, during and after retirement? How do retirees perceive 'later life'? How are health and wellbeing defined in this context? **Methods:** Qualitative semi-structured interviews ( $n=15$ ) and focus groups ( $n=6$ ) with older people (55–70 years,  $n=45$ ), using constant comparative method. **Expected results:** Complex transitions may be classified into typologies with outcomes shaped by factors including continuity of identityand social roles. Perceptions of later life include an uncertain 'fate'. We explore inter-relationships with lifestyle choices. Current stage of work: Data-collection continues within low-income, rural and ethnic minority communities. **Discussion:** Understanding mechanisms between the retirement transition, social relationships, and conceptualisation of later life may help tailor health interventions for an ageing population.

### DiAlert: lifestyle education aimed at overweight first degree relatives of type 2 diabetes patients

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**Background:** DiAlert is a targeted group-based intervention aimed to promote intrinsic motivation to change lifestyle and weight loss in first degree relatives of Type 2 Diabetes (T2D) patients. Aim of the pilot was to assess feasibility, process of delivering the intervention, participants' appreciation and impact of the programme on participants' cognitions and

behaviours following the HAPA framework. **Methods:** Twenty-one 1st degree relatives of T2D patients participated in two groups in two sessions. Questionnaires and observations were administered pre and post to test feasibility, fidelity, appreciation and self-reported behavioural outcomes. **Findings:** Feasibility and fidelity were confirmed. DiAlert was positively evaluated (8.1 on scale 1–10). Action planning with regard to changing diet ( $p=0.02$ ) and physical activity ( $p < 0.01$ ) increased. **Discussion:** DiAlert proved feasible and was well appreciated by participants. Positive trends in action planning indicate increased likelihood of actual behaviour change following DiAlert. Our next step is to test effectiveness in a RCT.

### Diabetes prevention: the professional perspective on family risk communication; a qualitative study

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**Background:** Aim of the study was to explore attitudes and opinions of Dutch health care professionals in primary- and secondary care regarding the need and acceptance of proactive patient education about familial diabetes risk and primary prevention via the family system. **Methods:** Eighteen semi-structured interviews were conducted in primary and secondary care. Transcripts of interviews were explored using thematic analysis (i.e. education, patient as messenger, proactive opportunistic screening). **Findings:** Results show that professionals are generally open to communicate familial predisposition with patients and relatives at risk to promote diabetes prevention. Most professionals were positive about utilising patients as 'messenger' to inform their relatives. Some professionals are open to proactive screening of patients with a family history of diabetes. **Discussion:** Results of the interviews confirm opportunities for primary prevention via the family system by communication of familial diabetes risk. However, the message should be neutral, not meddling, complete and positively formulated.

### The role of happiness and resiliency in life satisfaction

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Life satisfaction is a concept related to positive psychology. In recent years, extensive research has been done on this subject. (Kapteyn and co, 2009, Andrew and co, 2008). **Measurement:** 200 medical and nursing students have participated in this research (131 male, 69 female 0. Mean age : 23.4, SD: 2.58). They completed life satisfaction scale (Diener, Emmons, Larsen & Griffin, 1985), resiliency scale (CD-RISC; Connor and Davidson, 2003) and Oxford Happiness Questionnaire (Argyle, Martin, & Crossland, 1989). **Results:** The results indicate a positive relation between happiness and life satisfaction ( $r = 0/57$ ) and also a positive relation between the resiliency and life satisfaction ( $r = 0/62$ ). However some differences were observed between Married and single people in happiness and life satisfaction scale, yet no significant difference in resiliency. Married people showed a higher life satisfaction and happiness. Overall happiness and resiliency are two strong predictor for life satisfaction( $\beta = 0/38$ ).

### Quality of life in older adults: Findings from The Irish Longitudinal Study on Ageing (TILDA)

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**Background:** As the older population surges in absolute and relative numbers, quality of life (QoL) is a focus for health service and policy makers. This study assessed QoL in The Irish Longitudinal Study on Ageing (TILDA). **Methods:** TILDA recruited a baseline stratified clustered sample of 8178 individuals representative of community-dwelling Irish people aged 50+. QoL was measured using the CASP-19. **Findings:** Mean QoL was 42.7 (95% CI: 42.5–42.9), similar to wave 1 findings from ELSA (2002). Overall, 85% of participants reported considerable enjoyment from life. A significant decline was evident in those aged 75+ and those with least education, wealth and self-rated health. **Discussion:** Findings indicate a positive picture of ageing in Ireland. However, there are important exceptions, with implications for health and social service planning.

### Positive psychological well-being predicts lower risk of functional disability in community-dwelling elderly

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**Background:** The aim of this study was to examine the relationship between positive affect and subsequent functional ability among community-dwelling older Japanese. **Methods:** A two-year prospective study was conducted among 505 people aged 65 and older who reported no disability in performing activities of daily living at baseline interview. Positive affect was measured using the Geriatric Depression Scale (GDS), which include items that reflect positive affect as well as items that reflect negative affect. Functional ability, sociodemographic factors and medical conditions were measured. **Findings:** Increasing scores on the positive items of the GDS were significantly associated with reduced risk of functional disability two years later, after controlling for sociodemographic variables, medical conditions and negative affect (OR: 0.66, 95%CI: 0.50–0.89). **Discussion:** Our findings suggest that positive psychological well-being seem to have a favorable effect on maintenance of functional ability in community-dwelling elderly in Japan.

### Slovene medical students' attitudes toward empathic relationships in the context of patient care

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**Background:** Our aim was to evaluate Slovene medical students' orientation/attitudes toward empathic relationships in the context of patient care. We examined contribution of basic needs fulfillment to students' empathy and association between empathy and personality. **Methods:** 118 Medical students (74 female) completed the Jefferson Scale of Empathy, Big Five Personality Questionnaire, Basic Need Satisfaction in General Scale and Learning Climate Questionnaire. **Findings:** Mean scores of Slovenian students on empathy scale were significantly lower compared to US medical students. The student's empathic relationship was significantly associated with agreeableness, neuroticism and openness. Students with fulfilled feeling of competence show a trend toward having a more empathic relationships. **Discussion:** Our data indicates that students with higher agreeableness and neuroticism are more likely to evaluate a doctor patient empathic relationship higher. Instilling a feeling of competence may be a way to help medical students develop a more empathic relationship towards patients.

### **Predicting diurnal cortisol rhythm: A growth mixture modeling approach**

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**Background:** Diurnal cortisol rhythm predicts important physical and mental health outcomes in both healthy people and medical (e.g., cancer) patients. We modeled two common rhythms, namely decline and flattened responses, and reported factors that predict the two rhythms. **Methods:** A total of 105 younger adults provided salivary samples seven times a day (awakening, 30, 45, 60 minutes, and 4, 9, 14 hours after waking) and completed self-reported measures in a stress-free period. Growth mixture modeling (GMM) identified people with differential diurnal cortisol rhythm and predictors of the rhythms. **Results:** GMM identified two classes of diurnal cortisol rhythm: decline (87%) and flattened (13%). Income level and self-reported vigor positively predicted the intercept and the slope of both classes. **Discussion:** Implications on analyzing prospective data of stress biomarkers will be discussed. Studies are underway to investigate prospective change in diurnal cortisol rhythm and its predictors during periods of stressful encounters.

### **The subjective experience of patients with celiac disease: clinical analysis and qualitative approach**

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The objective of this study is to understand the subjective experience of celiac disease little understood by quantitative studies. We conducted 10 interviews undirected focused on adults aged 32 to 53 years and whose diagnosis was made 2 to 16 years. The exploration results include both a phenomenological analysis of the speech and a clinical analysis of the psychological functioning of the subject. The discourse analysis shows the importance for the patient's experience with the environment, the relationship with food and medical history. The analysis of mental functioning reveals the presence of anxiety intrusion (due to gluten). The main defense mechanisms observed are the control and reaction formation. In addition, the libidinal investment of the scheme appears to be a condition of compliance behavior.

### Stabilizing a behavior in spite of an unsustainable alternative: fluoride-safe water consumption in Ethiopia

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In the ground water of the Ethiopian Rift Valley, fluoride concentrations reach harmful levels. In one rural village, a fluoride-removal community filter was implemented. A personalized reminder was distributed to change people's behavior and increase the usage of that filter. During this promotion phase, an alternative unsustainable community filter was installed in a neighboring village. The study examines psychological factors explaining the change to the alternative unsustainable source. Further, the effectiveness of the applied behavior change technique on the use of the sustainable alternative was analyzed. In a complete survey, 180 households were interviewed through structured face-to-face interviews. A logistic regression showed that the better the taste ( $p = 0.012$ ), the higher the effort ( $p = 0.018$ ) and the lower the costs ( $p = 0.023$ ) for using the sustainable filter are perceived and the lower the vulnerability ( $p = 0.048$ ) the more the sustainable option is used. Further, also the personalized reminder had a positive effect ( $p = 0.014$ ).

### Resilience and Wellbeing in Chronic Disease

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The concept of resilience has an inherent affinity to wellbeing. This makes it attractive to health promoters and service planners who focus on the enhancement of wellbeing not only of entire populations but also of large groups of people who despite chronic disease report good quality of life and wellbeing. This paper reports on a review of the existing literature which explores resilience in chronic disease, resulting in 84 articles published since 1995. Only 19 of these linked resilience explicitly to wellbeing. Initial results indicate that the articles adopt a limited view of wellbeing as defined by standard, short questionnaire scales. The more sophisticated view of wellbeing containing hedonic and eudemonic dimensions as identified in UK national wellbeing surveys is so far absent from this literature. We suggest that a more complex view of wellbeing is potentially important in understanding its link to resilience from psychological, social and neurobiological perspectives, and in enhancing its value to health promoters and service planners.

### The relationship between proactive coping and awareness of self-growth

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**Background:** Student stress has become one of the critical issues in Japanese junior high school. The purpose of this study was to develop Proactive Coping Scale for Japanese Junior

High School Students (PCS-JHSS) and Awareness of Self-Growth Scale (ASGS), and to examine the relationship between PCS-JHSS and ASGS. **Method:** The sample of 424 junior high school students (male = 236, female = 188, mean age = 13.68, SD = 0.94) were asked to answer the questionnaire composed of socio-demographic questions and questions of PCS-JHSS and ASGS. Exploratory factor analysis, confirmatory factor analysis, reliability analysis and multiple regression analysis were used for statistical analysis. **Findings:** The results confirmed that PCS-JHSS and ASGS respectively had acceptable internal consistency and structural validity and that the subscales of PCS-JHSS were positively associated with those of ASGS. **Discussion:** The findings of this study support our hypothesis that students who use proactive coping strategies have high awareness of self-growth.

### Exploring the high rates of paediatric asthma hospital admissions in an innercity area of Birmingham

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**Background:** Birmingham has high paediatric asthma hospital admission rates. Understanding illness perceptions could inform interventions to address this. **Methods:** Four focus groups were conducted with 25 children who had an asthma attack with hospital admission after January 2010, and interviews with 15 parents of such children. These were supplemented with modified versions of the IPQR and International Study of Asthma and Allergies in Children Questionnaire. The data were analysed using thematic analysis. **Findings:** Three main themes emerged: Illness Representations; Care and Support; Environmental Factors. Participants believed asthma is severe but can be controlled. Parents felt GP care was inadequate and wanted help, medication and nebulisers/oxygen available at home to prevent hospital admission. **Discussion:** Illness representations, including causation beliefs, combined with parental beliefs about the adequacy of care can help understand high hospital admissions. Intervention mapping will be applied to the data, and a systematic review, to design and implement an intervention.

### Chinese wellness exercises of Tai Chi Chuan as a factor of psychological well-being

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**Background:** It is hypothesized here that regular Tai Chi classes can increase the overall level of psychological well-being and its components. **Methods:** Participants were 75 adults: experimental group included those who were engaged in Tai Chi gymnastics within 6 months, and control group – those who had no regular physical activity. The variables were assessed using Ryff's Psychological Well-Being Scale (PWB). **Findings:** The results show that after six months of classes there are statistically significant differences in experimental and control groups on the scales of Personal growth ( $p = 0.009$ ), Purpose in life ( $p = 0.003$ ), Self-acceptance ( $p = 0.003$ ) and Autonomy ( $p = 0.012$ ). The overall level of psychological well-being statistically increased in experimental group after 6 months ( $p < 0.001$ ). **Discussion:** Tai Chi Classes in gymnastics lead to positive changes in psychological well-being that allows us to recommend this type of physical activity to enhance mental health.

## Association between Decision-Making on Weight Loss and Stress Response in Japanese Middle-Aged and Older Women

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**Background:** Recent years, the change of lifestyles leads to lifestyle-related diseases. Obesity of middle-aged and older women is also acknowledged as a problem. The purpose of this study is to clarify the association between decisional balance on weight loss and psychological stress response in middle-aged and older women. **Methods:** Questionnaire survey was conducted in 785 middle-aged and older women. The SPSS 17.0J was used to investigate correlation between decisional balance scale for weight loss in middle-aged and older women and psychological stress response scale. **Findings:** The response rate was 81.5%. The mean age was 54.5 years (SD12.31), and the mean BMI was 22.2(SD3.22). Significant correlations ( $p < 0.01$ ) were found between Factor II(loss)of decisional balance scale for middle-aged and older women and psychological stress response. **Discussion:** Psychological stress influences decision-making on weight-loss behaviors. To induce behavioral changes, health psychological intervention may be needed to eliminate stress.

## Posttraumatic growth and depressive state in Japanese older adults

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**Background:** Posttraumatic growth (PTG) is a particular form of resilience and refers to a shift in perception as a result of struggling with challenging life circumstances. This study examined the relationship between PTG and depressive state in Japanese older adults. **Methods:** Participants were 189 older adults (mean age 67.7, SD = 4.52). The questionnaire included the Japanese version of the Posttraumatic Growth Inventory, the CES-D, overall life satisfaction, financial satisfaction, self-rated health, and demographic variables. **Findings:** There was no significant difference in PTG between male and female. PTG was significantly correlated with age, overall life satisfaction, and financial satisfaction. No significant relationship between PTG and depressive state was found. **Discussion:** Although findings on the relationship between PTG and age have been inconsistent, this study showed positive relation. Further research should investigate whether PTG varies by developmental stages. No relation with depressive state suggests that growth is not necessarily accompanied by less distress.

## A pilot study for evaluating the effects of coaching seminar

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Expectations for effective coaching programs on personnel development are rising in the Japanese business community. However, empirical research on program evaluation is scarce. This study aimed to explore the effects of social and emotional control skills coaching using a 360-degree assessment (self-report and ratings by supervisors, colleagues, and direct reports). **Method:** Japanese employees of an IT company ( $N=41$ , Mean age = 31.7) participated and received 5 × 5-hour sessions. The sessions included essential coaching skills. Five-factor Social and Emotional Competence Scale was measured pre-post intervention. **Results:** A significant improvement was observed in self-report 'emotional awareness of others'. No change was observed in others' ratings. There was a significant difference in four subscales among ratings by others. This study indicated the partial effect of the program only in self-report rating, and ratings varied among others. **Discussion:** Further study is required to address these limitations and determine what measures are appropriate for program evaluation.

### **Development and evaluation of a life-skills-program for siblings of children with chronic illness or disability**

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Having a sibling with a chronic illness or disability can be a risk factor for the healthy sibling. The aim of the study is to evaluate a life-skills-program to promote mental and physical health in siblings of chronically ill or disabled children. The program consisted of five sessions with activation of resources such as coping and social competences. A pre-post-follow-up waiting-list control-group design, including 12 children aged 8 to 14 years, was carried out to assess the feasibility of the program and its effects on the children's QoL, strain and coping. It is expected that the healthy siblings improve their ability to cope with their siblings' health problems and enhance their own QoL. The pilot-study will provide conclusions concerning the feasibility of the program. Furthermore, it may lead to implications about the primary prevention of maladaptive coping in siblings. Further research should assess the effectiveness of the program.

### **Effectiveness of a cognitive-behavioral intervention for fibromyalgic patients: preliminary results of a French pilot study**

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**Background:** Literature data have demonstrated the valuable application of cognitive-behavioral approach for the treatment of fibromyalgic pain (Thieme et al., 2007). Our study aims to assess the benefits of a cognitive-behavioral intervention for fibromyalgic persons. **Methods:** 30 patients (26 females, 4 males; age 23 to 60) have participated in eight weekly sessions of two hours. Evaluation measures were: pain intensity (VAS), quality of life (FIQ), coping skills (CSQ) and emotional distress (HADS). **Findings:** Results suggest that our intervention tends to improve their quality of life ( $t=4.49$   $p < 0.0001$ ), decrease in pain intensity ( $t=2.92$ ;  $p < 0.008$ ), reduces level of anxiety ( $t=3.041$   $p < 0.005$ ) and depression

propensity ( $t = 3.032$ ;  $p < 0.005$ ). Patients use also more distraction ( $t = 3.867$ ;  $p < 0.0006$ ) and less catastrophizing ( $t = 3.231$ ;  $p < 0.0031$ ). **Discussion:** Our results showed benefits of our intervention by increasing level of quality of life with new coping skills and reducing emotional distress.

### Evaluating a web and text-based smoking cessation intervention in Primary Care. The iQuit in Practice trial

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**Background:** Computer- tailored interventions can be effective in providing quitting support. Recently, text messaging has shown potential in facilitating efforts to quit. This randomised controlled trial assesses the feasibility, acceptability and effectiveness of a web and SMS text-message based intervention delivered in primary care. **Methods:** 600 participants were recruited. The trial compared usual care (Control) with usual care plus iQuit (intervention) – consisting of a tailored advice report and a 90-day program of tailored text messages. 4 week routine National Health Service follow-up was undertaken in the surgery. 8 week and 6 months follow-up was by postal questionnaires. **Findings:** We will report on the feasibility and acceptability of the trial including qualitative findings from feedback interviews with smoking cessation advisors. **Discussion:** iQuit is designed to enhance the effectiveness of the smoking cessation consultation and may be beneficial in providing behavioural support as an adjunct to level 2 advice delivered in general practice.

### The Relationship between Resilience and Well-Being among Slovak Teachers

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**Background:** To explore how resilience is related to subjective and social well-being among Slovak teachers. **Methods:** We used correlation analysis of the relationships between resilience (Smith, 2008) and the components of subjective well-being: positive and negative affectivity (Dzuka, Dalbert, 2002), life satisfaction (Rodny, Rodna, 2001) and social well-being (Keyes, 1998) on the sample of 265 teachers (89.6% women, mean age 42.14, SD 9.65). **Findings:** The resilience correlates positively and significantly with life satisfaction, positive affectivity, social well-being and social coherence. The strongest although negative significant correlation was identified between resilience and negative affectivity. **Discussion:** The results point to the existence of positive relationship between teachers' resilience and their subjective and social well-being. More resilient teachers are more satisfied with their lives, they experience positive emotions more frequently, their social well-being in school is higher and they perceive school environment more discernable, sensible and predictable.

### **Environmental determinants of child and adolescent diet: food availability, social norms and parenting practices**

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**Background:** The aim of presented research was to evaluate the relations between diet and body weight among children and adolescents, their perception of prevention interventions, availability of healthy/unhealthy food in their proximal environment and parental nutrition practices. **Methods:** Cross-sectional self-report data was collected among 834 students (age 10 – 17). **Findings:** The results point out that positive perception of schools and parenting prevention interventions are related with healthier diet. Availability of healthy/unhealthy food was related to student's nutrition. The parenting styles are indirectly related with children's diet (the warmth/involvement style and the strictness/supervision style) and with BMI (the warmth/involvement style). **Discussion:** The relation of parenting styles with children's diet and their BMI proved to be mediated by characteristic for parenting styles nutrition practices associated with diet of children and adolescents.

### **Applications of health behavior change models in child obesity prevention: Is theory applied in practice?**

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**Background:** Health behavior change taxonomy by Abraham and Michie (2008) suggests 26 health behavior change techniques, embedded in health behavior change theories. The present study aimed at identifying the application of the theory-based health behavior change techniques, which were applied in obesity prevention programs for children and adolescents. **Methods:** Structuralized expert interviews were applied to collect data referring to all child obesity prevention regional and nation-wide programs conducted in Poland in years 2005–2009 (regional scale;  $n=8$ ; nation-wide scale,  $n=15$ ). **Findings:** Most frequently applied techniques include providing information about behavior health link (80.4% of programs), providing information on consequences (73.9%), and providing instruction (50%). Only 40% of health behavior change techniques were used. All programs used a mixture of techniques from various theoretical models. **Discussion:** Regional and national child obesity prevention programs use combination of few techniques, selected without referring to a clear theoretical foundation.

### **Relationship between student's reaction to an audiovisual stressor and anger control**

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The study aimed at assessing the relationship between student's reaction to an audiovisual stressor and anger control. 19 men and 71 woman aged between 18 and 30 were subjects of the study. Students completed the Anger Control-Out, Anger Control-In scales of The State-Trait Anger Expression Inventory-2 (STAXI-2) to measure their anger control. Mind Media device

NeXus-10 was used for the evaluation of participants' physical condition. Body temperature, skin conductance, heart rate and respiratory rate were recorded while measuring participants' reaction to the audiovisual stressor. The results of the study showed that subjects who had higher anger control-in rates reacted to stressor less (skin temperature). However subjects who had higher anger control-out rates showed higher skin temperature and lower respiratory rate results than subjects with lower anger control-out rates while measuring their reaction to an audiovisual stressor, but their heart rate was higher.

### **Recovering from the Problematic Alcohol Use: Identity Changes Achieving the Long Term Sobriety**

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**Background:** Achieving long-term sobriety during recovery from problematic alcohol use is related with the changing personal identity. This study aims to analyze the dynamics of identity during the recovery from problematic alcohol use. **Methods:** In this qualitative research data will be collected through in-depth biographical interviews. Participants – those, who accept having serious social and psychological problems related with problematic alcohol use in the past and currently are achieving sobriety no less than three years. To reveal the processuality of the research phenomenon data analysis method of Grounded Theory is opted. **Expected results:** Biographical narratives of people recovering in the governmental and private institutional system of alcohol addiction treatment may differ from those achieving sobriety individually or/and do not employ the concept of addiction. Current stage of work: Theoretical part is in progress, collection of empirical data will start soon. **Discussion:** The results will contribute to better understanding of differences of identity changes in the group of problematic alcohol users.

### **Losing weight, gaining fertility: a multidisciplinary lifestyle program for overweight women with polycystic ovary syndrome (PCOS)**

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**Background:** Polycystic ovary syndrome (PCOS) affects 5–10% of women in their reproductive years. Losing weight often leads to spontaneous ovulation and pregnancy. Therefore, the aim of this study is to investigate the effect of this program on body mass index (BMI), reproductive and psychological outcomes. **Methods:** 234 patients will be randomized in an experimental group ( $n = 156$ ) and a control group ( $n = 78$ ). The experimental group receives a multidisciplinary cognitive-behavioural lifestyle intervention and additional maintenance intervention via SMS. The effect of the interventions on the outcome variables will be determined using mixed modelling. **Expected results:** We hypothesize that by changing dietary and physical habits it is expected that primary and secondary outcomes will improve. Current stage of work: This study is currently carried out. Preliminary results of 50 participants will be

presented. **Discussion:** This study will show whether lifestyle modification should be included in standard care protocols.

### Gender related differences of emotional tension in school children

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**Background:** It is known that emotional tension (ET) is related to self-rated health and more common in adult females than males. The aim of this investigation is to disclose differences of ET in boys and girls from grade 6th to 9th. **Method:** 7 items of modified Reeder scale (Cronbach's  $\alpha = 0.76$ ) were used to evaluate ET in 4658 boys and 4698 girls participants in Health project supported by Kaunas Region Municipality. **Findings:** Higher percentage of girls evaluated themselves as nervous, worried about school achievements, feeling exhausted at the end of the day and generally tense ( $p < 0.05$ ). Smaller percentage evaluated their daily activities as difficult, causing tension, feel tense when communicating. These differences exist in each grade, however total score of Reeder scale does not differ among boys and girls. **Discussion:** The observed differences in ET of boys and girls depend on content of questions used for evaluation.

### Cohabitation status and diabetes distress in a danish population of patients with type 1 diabetes

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**Background:** The objective is to explore the association between cohabitation status as an indicator of structural social network and diabetes related psychological distress in adult patients with Type 1 diabetes. **Methods:** Validated scales measured social network (Danish population health profile studies) and psychological distress (Diabetes Distress Scale 17) in a cross-sectional survey in a large Danish population of patients with Type 1 diabetes ( $N=2418$ ). The association between cohabitation status and diabetes distress will be explored by multiple regression analyses. **Expected results:** Preliminary age-adjusted results show that living alone is significantly associated with high diabetes distress ( $p < 0.0001$ ). Further analyses will elaborate the importance of gender, social support and self management behaviours. Current stage of work: Descriptive and bivariate analyses have been performed. **Discussion:** How can clinical practice systematically approach the problem of higher level of diabetes distress in patients living alone or having a poor level of social support?

### A systematic approach to psychological problems as part of diabetes care

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**Background:** Psychological problems are highly prevalent among people with diabetes, but are not systematically discussed in consultations with the diabetologist. The Brief Diabetes Distress Scale (DDS2) was developed to identify psychological distress in patients with diabetes but can potentially also be used as a dialogue tool. Our aim is to explore whether DDS2 can facilitate diabetologists' interaction with patients on psychological matters. **Methods:** 5–10 diabetologists from 2–3 Danish hospitals will test the DDS2 on 5–10 patients and will subsequently be interviewed individually about the usability of DDS2 as a facilitating tool. The analysis will be based on meaning condensation. **Expected results:** Knowledge about facilitating dialogue on psychological matters in diabetes consultation. Current stage of work: Interviews will be initiated in March 2012. In August 2012 we expect to be doing data analysis. **Discussion:** How do we enforce a systematic approach to psychological problems as a legitimate part of diabetes care?

### **Negative affect moderates the relation between impulsivity and risky behavior engagement among adolescents**

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The main goal of this study was to examine the moderating effect of trait negative affect in the relation between impulsivity and risky behaviors among adolescents. The sample consisted of 698 high-school students, with a mean age of 15.49 years. The participants completed measures of negative affect (Serbian Inventory of Affect based on the PANAS-X), impulsivity (Barratt Impulsiveness Scale-short form) and risky behaviors (Risky Behaviors Questionnaire for Adolescents). Moderation analysis revealed moderating effect of negative affect on the relationship between impulsivity and risky behavior engagement among adolescents. Individuals of different levels of negative affect did not differ in risky behavior engagement under conditions of low impulsivity, but significant differences were noted under conditions of high impulsivity: individuals high in negative affect reported engaging in more risky behaviors than those with low negative affect.

### **Resilience and Stress: Resisting *versus* recovering**

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The purpose of the present study was to compare the predictive power of resilience defined in terms of resisting adversity, on the one hand, and recovering from difficulties, on the other hand, in prediction of symptoms of stress. A total of 1374 students from University of Novi Sad participated in this study. The following scales were used: 10-item Connor-Davidson Resilience Scale (CD-RISC-10), Brief Resilience Scale (BRS) and Depression, Anxiety and Stress Scale (DASS-21). Data were analyzed using Hierarchical Multiple Regression Analysis. The CD-RISC-10 (Step 1) accounted for 7% of variance in symptoms of stress. The BRS (Step 2) significantly accounted for additional 9% of variance, while the  $\beta$  coefficient for the CD-RISC-10 on stress remained significant, but dropped from  $-0.27$  to  $-0.06$ . The results of this research showed that the ability to bounce back from stress is a better predictor of symptoms of stress than the ability to resist difficulties.

### Predictors of dental flossing habit formation

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**Background:** This study explored the impact of prospective memory, and placing flossing after *versus* before tooth-brushing, on habit formation following a personally-tailored intervention to promote flossing within dental routines. **Methods:** Dental routine, prospective memory, past behaviour, and attitudes were assessed at baseline (T1), immediately prior to administration of the habit-formation intervention. Flossing was recorded daily for the next 28 days. Habit strength was assessed at 1 and 8 months (T2, T3). 50 individuals received the intervention, of whom all completed T2, and 29 completed T3. **Findings:** More positive attitudes, more past flossing, and stronger prospective memory predicted more frequent flossing between T1 and T2. T2 habit strength was predicted by attitude and pre- and post-intervention behaviour. Flossing after (*vs.* before) brushing was associated with greater habit strength at T2 and T3, and more frequent flossing at T3. **Discussion:** Habit formation interventions might fruitfully consider features of idiosyncratic routines.

### Contribution of character strengths, personal projects, and well-being to social participation of physically disabled persons

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**Background:** How can we better capitalize on the skills, interests, and goals of disabled persons to further their full participation in society? Based on a positive psychology perspective, we examine how character strengths (Peterson & Seligman, 2004), personal projects (Little, 2007), social support (e.g., Taylor, 2007), and well-being (e.g., Keyes, 2005) contribute to the social participation of physically disabled persons. **Methods:** Using instruments that our laboratory has developed, adapted to this population, and pretested, we will conduct 30 interviews (open-ended and closed questions). Using a mixed-methods design, qualitative data will be content-analysed, quantified, and statistically analysed along with quantitative data. Current stage of work: Data collection. **Expected results:** We will identify the role that strengths, projects, support, and well-being play in disabled persons' social participation. **Discussion:** Findings will suggest pathways for promoting the social participation of disabled people, as well as providing innovative instruments for health psychology and rehabilitation practice.

### Sources of stress and support for nurses. Coping strategies and educational deficit

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Nurses are often very good experts in terms of professional level. However, they are not so well prepared as for psychosocial skills or mental hygiene. The aim of the research was to look into interpersonal relationships, sources of support and coping strategies for adults. / $n = 50$ , mean age 29.2 years/ in Prague-Motol hospital. The survey was conducted by questionnaire. Analyses showed that the most common source of conflict in the workplace is the lack of the communication among staff. We can find prevailing dissatisfaction with the resolution of conflict situations; the work is exhausting mentally and physically. The sources of the support are close relatives and colleagues. Research has shown that nurses cope stress using the eating, chocolate, cigarettes and alcohol. Nobody uses relaxation techniques and only 66% of nurses know Balint group. Research has shown educational deficit of nurses. They need education in psychosocial skills and mental hygiene.

### **Methodological Bias in the School Lunch, Perception and Behaviour Study**

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**Introduction:** Research suggests that moderate changes to the dining-room and lunch menu can significantly improve pupils' attention in the classroom during the post-lunch period. The exact mechanism driving this improvement is unclear. **Methods:** A small randomised controlled trial in six secondary schools (four intervention vs. two control) investigated the possible processes that influence such behaviour changes after implementing changes during the lunch period. Observational data were systematically collected during afternoon lessons, along with lunchtime food choices. **Results:** The multilevel model, adjusting for standard demographic characteristics, suggested an effect of the intervention on 'on task' behaviour. Subsequent examination of the data identified substantial bias due to a change in method of data collection, with 50% of the 22 outcomes significantly affected. **Discussion:** Several methodological problems were identified regarding the data collection within fieldworkers and between time points in both sets of data which highlight the importance of consistent procedures within trials.

### **Hospital restructuring: links between changing psychosocial work environment and psychological well-being of nurses in Lithuania**

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**Background:** Health care reform has taken place in Lithuania during the past twenty years. Due to hospital restructuring nurses are the largest group of health care specialists affected by intensive work related changes. Current study aims to examine links between changing psychosocial work environment and psychological well-being in a sample of Lithuanian nurses. **Methods:** A cross-sectional design will be used to survey nurses currently practicing in the hospitals under restructuring. Special scales are created to measure socio-demographic characteristics and psychosocial risks at work related with restructuring. Perceived Wellness Survey (PWS) and State-Trait Anxiety Inventory (STAI) will be used to examine psychological well-being. **Expected results:** It is expected that psychosocial risks and changes caused by hospital restructuring will be linked with lower psychological well-being of nurses. Current stage of work: Preparatory stage is completed. **Discussion:** Results of this research will

contribute to better understanding of hospital restructuring effects on psychological well-being of health care specialists.

### **Sexual aggression and love in relationship among university students**

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**Background:** The aim of the study is to explore associations among sexually aggressive behaviour, strength of romantic affection and several types of sexual risky behaviour in romantic relationship among heterosexual couples. **Methods:** Questionnaires concerning sexual behavior, sexual aggression and love in romantic relationship were administered to 170 first-year university students (42.7% boys, mean age 20.5). Binary logistic regression and *T*-test were used. Results In our sample every third student has reported some kind of sexually aggressive behaviour from his or her partner. Results indicate that those girls and boys which report high level of romantic affection were more likely to report sexually aggressive behaviour from their partners. Moreover those girls were less likely to report condom use from their partners during last sexual intercourse. **Conclusion:** Based on the findings we can conclude that those students which are in love are more likely to pardon or accept sexually aggressive behaviour from their partners.

### **Factors implied in well-being in a sample of Romanian adults**

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**Objectives:** The characteristics of a well-lived life are key issues in the maintenance of optimal functioning, and in the tailoring of effective prevention strategies. The major aims of the present study are: to evince the main characteristics of well being, and identify the most vulnerable areas that may further lead to malfunctioning. **Methods:** Our study involved 1925 Romanian adults, aged 24–80, assessed regarding, psychological well-being, depression, anxiety, stress, cognitive emotion regulation strategies, and demographic variables (age, gender, education, etc.). **Results:** Our results have shown that gender, age, and education may significantly influence well-being. Similarly, specific emotion regulation strategies are strong predictors of well-being and mental health problems. This is important if we consider that emotion regulation strategies may be successfully changed, thus enhancing the possibility of adaptation and thriving. **Conclusions:** Our results may assist professionals in the development of prevention and intervention programs that target the enhancement of well-being in healthy individuals, and those already experiencing mental health problems.

### **Psychological Determinants of Functional Adoptive Families**

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Adoptive parenthood with a child at various stages of development is a time in which such aspects of family life as confrontation of both the parents' and the child's mutual expectations, changes in family structure, forming of the adoptive family members' identity, and the disclosure of adoption play a vital role. The basic research question is thus which psychological variables are connected with the functional type of adoptive families? Research has been conducted based on the theoretical assumptions of the system perception of family, using the Circumplex Model (Olson, Russell, Sprenkle). It allows a distinction between 3 family types: balanced, midrange and extreme families. Balanced and midrange families are considered functional. The respondents were 100 adoptive families. The result of the research was the development of a Functional Adoptive System Model. Important variables remaining in a strict relationship with the functional (health) family were identified.

### **Personality dimensions and risky social and health behaviour**

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Personality dimensions are related to risky health and social behaviour that have a negative effect on the quality of life. Risky behaviour often provides short-term pleasure or stimulation and could expose individuals to serious health threats. The report presents results of a study of attitudes towards risky health and social behaviour of young adults in Bulgaria. Participants who scored higher on neuroticism, extraversion, normlessness, and sensation seeking were more prone to engage in risky health and social behaviours such as alcohol abuse, psychoactive substances abuse, and risky driving. The adapted questionnaires show high psychometric qualities in Bulgarian sociocultural context. This allows the development of an integrative model for predicting attitudes toward risky social and health behaviour among young people in Bulgaria. The results provide empirically grounded basis for improving prevention and health promotion programs.

### **Coping and resilience resources in early adolescents**

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Early adolescents usually lack the ability to cope when they experience stress. If they cannot cope with such stress, they may fail to develop in a healthy manner and may develop habits harmful to their health. To enhance positive behaviour a project was implemented using focus group interviews, trainings aimed at resilience resources in the groups adolescents. The objectives study were to identify stressors and their styles of coping; project implementation and evaluation. It is needed to support the development of the resilience resources, which are a predictor of an active coping for adolescent, specifically for the sake of their health. It is hoped that a larger scale project based on the findings of this project, will be implemented in the future. This will help to improve the generalizability of the present project and further support the usefulness of early prevention programmes for the promotion of adolescent health.

### The feature of IHP of the primarily school children

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The comparison analysis of IHPs of the first and the fourth grades children (130 children and parents). The methods were used: the questionnaire 'Health and illness notions', the Dembo test for self-appraisal, the health self-appraisal, the questionnaire for the parents about the health of their children. It was shown that the younger the children the more healthy they considered themselves and the level of the health self-appraisal did not connect with real health level. The fourth grade children appraised their health exactly than the first grade children. About 20% both the first and the fourth grades children had low level of IHPs. The more health level child appraised the more level of self-appraisal (Dembo test) he or she had. The level of the IHP is connected with the real health level of the fourth grade children and did not connect with the real health level of the first grade children.

### How does context influence walking in groups? A walk-along study

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**Background:** Insufficient attention has been given to the influence of context on health behaviour change. In this study we explored how contextual factors influence walking behaviours in groups. **Method:** Walk-along interviews were conducted with ten leaders of walking groups whilst leading their groups. The researcher prompted walk-leaders to talk about the environment they walked in and the logic behind specific actions they took to facilitate walkers' behaviour in these places. The analytic process drew upon thematic analysis and grounded theory. **Findings:** Three main understandings were generated from this analysis, each related to places of walks: in lap walks people aimed at achieving mainly health benefits, in park walks people aimed at achieving mainly social benefits and in city centre walks people aimed at achieving a time convenient group activity. **Discussion:** This research provides some insight on how place influences walking in groups and identifies potential areas for public health interventions.

### Information needs and information-seeking behaviour related to prostate cancer

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This study will look at information needs and information-seeking behaviour of people who have prostate cancer as well as those significantly related to them. In total 146 ( $N=146$ ) respondents participated. Significant associations were found between diet as a perceived risk factor and diet as an information need after diagnosis for prostate cancer patients ( $\beta=0.821$ ,  $p < 0.001$ ) and after realizing the risk of developing prostate cancer for those at risk ( $\beta=0.801$ ,  $p < 0.001$ ). On the other hand diet ( $\beta=0.283$ ,  $p=0.111$ ), smoking ( $\beta=0.271$ ,  $p=0.127$ ), alcohol consumption ( $\beta=0.124$ ,  $p=0.492$ ) and exercise ( $\beta=0.384$ ,  $p=0.028$ ) were

not significant predictors of lifestyle changes after diagnosis. We supported the hypothesis that diet as perceived risk factors predicts the need for information on diet after being diagnosed. However diet as a risk factor cannot explain the similar lifestyle change.

### **Health Related Behaviors and Medication Adherence in Patients with Hepatitis C Student**

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The present study was conducted to assess health related behaviors and medication adherence in patients with hepatitis C. It was hypothesized that, (a) there is a significant change in the pre-post health related behaviors of patients with hepatitis C, (b) the patients with hepatitis C are likely to show high adherence with their treatment regimen. A total number of hundred patients with hepatitis C were recruited from two different hospitals of Lahore, Pakistan. A self-constructed health related behavior questionnaire was used to assess pre and post health related behaviors of the patients. Morisky Medication adherence scale was used to assess the medication adherence of the patients. Results indicate that there was a significant change in the health related behaviors of the patients with hepatitis C post diagnosis and they were exercising better health related behaviors after diagnosis. Patients with hepatitis C showed medium to high adherence with treatment. The findings have implications for recovery of the patients with hepatitis C.

### **Resilience, Post Traumatic Growth and Coping Strategies Used by Flood Survivors**

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The present research aimed to examine resilience, post traumatic growth and coping strategies used by flood survivors of floods in Pakistan. It was hypothesized that: a) there is relationship between resilience, post traumatic growth and coping strategies used by flood survivors; b) there are gender differences in the level of resilience, post traumatic growth and coping strategies used by flood survivors. The sample comprised of 100 flood survivors from distant areas of district Rahim Yar Khan, Pakistan. Resilience Checklist, Coping Strategies Questionnaire (CSQ) and Post Traumatic Growth Inventory (PTGI) were used for assessment. Data was analyzed using Pearson Product Moment Correlation and Independent Samples *t*-test analysis. The results indicated significant positive relationship between resilience, post traumatic growth and coping strategies. There were no significant gender differences in resilience, post traumatic growth and coping strategies. Findings highlight the importance of resilience and post traumatic growth in survivors' coping with floods.

### **Emotional Distress and Risk Perception of Patients with Diabetes**

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The present research aimed to investigate risk perception related to complications in diabetes and degree of emotional distress in relation to the potential problematic areas of diabetes. It was hypothesized that: a) there is a relationship between emotional distress and risk perception of patients with diabetes; b) there are significant gender differences in the level of emotional distress and risk perception of patients with diabetes. The sample comprised of 100 patients with diabetes recruited from teaching hospitals in Lahore, Pakistan. Risk Perception Survey-Diabetes Mellitus (RPS-DM) Scale and Diabetes Distress Scale were used for assessment. The results revealed significant relationship between risk perception and emotional distress in patients with diabetes. Gender differences were found in the level of emotional distress. Female patients reported significantly more emotional distress as compared to male patients. Findings have important implications for psychological well-being of the patients with diabetes.

### **The relationship between emotional regulation difficulties and family problem solving among couples**

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**Background:** Emotional regulation includes all the external and internal processes which are responsible for monitoring, evaluating and correcting the emotional reflections of the people that can affect the personal relations and performances. The object of this research is studying the relation between emotional regulation difficulties and family problem solving among couples. **Methods:** In this study correlation design was used. Statistical sample consisted of 60 available couples (120 people) between 35 to 50. Evaluation tools were emotional regulation difficulties and family problem solving scales. Data was analyzed via Pearson correlation coefficient and *t*-test. **Findings:** The results showed that there was a reverse relation between the two variables ( $r=0.55$ ), and family problem solving skill and dependent variables on emotional regulation difficulties including lack of acceptance of emotional responses ( $r=0.27$ ), difficulties in performing objective behavior ( $r=0.39$ ), difficulties of impulsive control ( $r=0.45$ ), limited access to emotional regulation strategies ( $r=0.55$ ), lack of emotional awareness ( $r=0.20$ ) and lack of emotional transparency ( $r=0.58$ ). The results of *t*-test didn't show a meaningful difference between participating men and women regarding the studied variables. **Discussion:** The results showed that couples who had problem in emotional regulation, had low problem solving skills, and no difference was observed in the emotional regulation and problem solving skills among men and women.

### **Pediatric pain and negative pain-related affective constructs: a principal components and confirmatory factor analysis**

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Pain has been linked to various negative emotional states including anxiety and pain catastrophizing. Research investigating similarities and unique qualities of such constructs in adults has identified significant overlap between variables (Mounce et al., 2010; Vancleef et al., 2009). The current research aims to investigate the relationship between negative emotional

constructs in a healthy paediatric sample. This cross-sectional study includes 500 Irish children between 9–12 years. Measures include the Pain Catastrophizing Scale for Children (PCS-C; Crombez et al., 2008), the Children's Anxiety Sensitivity Index (CASI, Sliverman, Fleisig, Rabian & Peterson, 1991) and the Negative Affect Scale for Children (PANAS-C; Laurent, Potter & Catanzaro, 1999). Data will be analysed using Principal Components Analysis and Confirmatory Factor Analysis. Commonality between constructs measured is expected. Preliminary data is currently being collected. It is hoped this research will contribute towards a better understanding of how pain-related measurements can be best utilized in pediatric settings.

### **The effects of implicit measures of self-determination theory, and priming of motivation on goal-directed behaviour**

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Research has traditionally adopted explicitly-measured motivational constructs related to health behaviours. Recently, research has been augmented with developments in implicit measures and priming of motivation to provide further insight into the antecedents of behaviour. The aim of the present studies ( $N=80$ ) was to bring together the two main areas of implicit motivation research, measurement and priming, in relation to self-determination theory using a Solomon four-group design. Implicit measure completion significantly decreased behavioural engagement in the first study. Priming autonomous motivation significantly facilitated, and controlled motivation significantly inhibited, performance in each study. Finally, there was a significant implicit measurement  $\times$  priming interaction in the first study, such that priming only improved performance in the absence of the implicit measure. This research provides insight into the effects of implicit measurement and priming of motivation and the implications for health interventions.

### **The Czech Section of Health Psychology: History, Development and Current Activities**

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**Background:** The Czech Section of Health Psychology, a part of Czech-Moravian Psychological Society was founded in 1988, i. e. just two years after the EHPS foundation in 1986. **Methods:** The Section joined during this 24-year period a relatively large and lasting community of health psychologist implementing a considerable set of activities that will be demonstrated in our poster both by verbal, photographic and graphic means. **Findings:** Main part of activities consists of Annual Conferences, organized from 1996, with participants from Czech Republic, Slovakia, sometimes also from Poland, UK etc., development and updating

of the Section web page, stimulation and implementation of research projects, challenging, organizing and support of educational activities and courses at universities and educational institutions. **Discussion:** There are of course also some problems and limitations in our activities, e.g. the absence of approved Ph.D. programme in health psychology, lack of new, younger members, funds, etc.

### **Beliefs on health and healthy life style in a sample of Czech university students**

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**Background:** Within the current trends in health psychology a number of studies examines the impact of people's personality tendencies on their health and life style. **Methods:** The research sample consisted of Czech University students from Prague and Brno ( $N=1617$ , 376 men, 1241 women, average age 22.4). Beliefs on health and healthy life style were surveyed by Health Orientation Scale (Snell, 1996), dispositional optimism by Life Orientation Test – Revised (Scheier, Carver, Bdridges, 1994), and optimism as explanatory style by Academic Attributional Style Questionnaire (Peterson, Barret, 1997). **Findings:** The highest scores are related to scales Health Internal Control and Personal Health Consiousness, the lowest to scales Health Anxiety and Health Image Concern. Students believe they can influence their health. **Discussion:** No gender differences were found out except scale Health Internal Control (higher score of men). Dispositional optimism is related to positive Health Expectations and to positive evaluation of Health Status.

### **The effects of integrating instrumental and affective arguments in rhetorical and testimonial health messages**

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Recent research highlights the superior influence of affect over cognition in health decision making. The present study examined the independent and combined effects of two message characteristics that are thought to tap into the cognition-affect distinction: message format (rhetorical vs. testimonial) and argument type (instrumental vs. affective). In this two-by-two experiment, 81 college students were randomly assigned to one of four health messages discouraging binge drinking. Messages containing affective arguments were judged more positively and perceived as more effective than messages containing instrumental arguments. The results further revealed an interaction effect between message format and argument type. Testimonials were more persuasive when they contained affective compared to instrumental arguments. Mediation analyses revealed that instrumental arguments reduce the efficacy of testimonials because they prevent individuals from being transported into the story, and increase psychological reactance. In conclusion, health campaigners should include affective, not instrumental, arguments in their testimonial health messages.

### Exploring the relationship between sex education and contraception use at first sex in Ireland

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**Background:** Research suggests that sex education helps promote sexual health from onset of intercourse. This study explored this issue in an Irish context. **Methods:** Respondents were adults (18–45 years) surveyed in the 2010 Irish Contraception and Crisis Pregnancy Survey ( $n=3002$ ). A binary logistic regression explored the relationship between sex education and using contraception at first heterosexual intercourse. **Findings:** Three-quarters of adults surveyed received sex education: 86% of 18–25 year olds; 76% of 26–35 year olds; and 57% of 36–45 year olds. Respondents who received sex education were almost twice as likely ( $OR=1.810$ ; 95% $CI=1.488-2.201$ ), to use contraception when having sex for the first time, compared to those who did not receive sex education, controlling for current age, gender, SES, and education. **Discussion:** This study further highlights the role that sex education plays in peoples awareness of the importance of using contraception to protect against unwanted pregnancy and disease.

### The impact of illness invalidation on pain disability and pain acceptance in fibromyalgia

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**Background:** Disbelief about the legitimacy of fibromyalgia is common. The concepts of “pain identity” and “illness invalidation” are recurrent themes within the literature on fibromyalgia. We aimed to test a predictive model of components of the Perceived Illness Invalidation Inventory (IIA) with self-rated pain disability and pain acceptance outcomes. **Methods:** Participants were 439 individuals who met the Fibromyalgia Rapid Screening Tool criteria for fibromyalgia and completed an online survey. **Findings:** The predictive model accounted for 32.8% of the variance in pain disability ratings and 29.1% of the variance in pain acceptance ratings. Perceived illness invalidation added significant explanatory power to the predictive model of pain disability and pain acceptance. The process of symptom discounting independently predicted pain disability and pain acceptance. Lack of understanding independently predicted pain disability. **Discussion:** The results provide preliminary support for the utility of perceived illness invalidation as a predictor of pain-related adjustment in fibromyalgia.

### Depression, Anxiety and Addictive Behavior among Female Prisoners in Pakistan

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The present study aims to examine psychological implications of imprisonment for females in Pakistan. It was hypothesized that Depression, Anxiety and Addictive behavior. It was also hypothesized that nature of crime would effect depression and anxiety among female

prisoners. Sample comprised of 100 female prisoners recruited from Kot Lakhpat Jail, Lahore, Pakistan. To assess Depression and Anxiety among Female Prisoners, Symptom Checklist-R (Rahman et. al., 2000) was used. Structured Interview was devised by the researchers to identify the Addictive Behaviors among female prisoners before their imprisonment. The nature of crimes committed included: theft, fraud, murder, kidnapping, drug dealing, prostitution and zana (adultery) and theft, drug dealing and murder being the most common. Female prisoners were experiencing anxiety and depression but addictive behavior prior to imprisonment was not significant.

### **The relationship between sensory processing style and stress**

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**Objectives:** The aim of this study was to investigate the relationship between sensory processing style and stress in youth. **Methods:** A sample of 320 participants (160 Boys and 160 Girls, age range 20–28 years) in Malaysia completed Adolescent/Adult Sensory Profile (Brown & Dunn, 2002). This Self-Questionnaire evaluates person's behavioral responses to sensory experiences, and indicates four categories of sensory processing style (sensation seeking, low registration, sensation avoiding and sensory sensitivity) based on neurological thresholds and behavioral responses. **Results:** Data was analyzed through Pearson correlation method. Results show that there is a significant positive relationship between Sensory Sensitivity and Stress ( $p=0.007$ ,  $r=0.151$ ). Also between Sensation Avoiding and stress ( $p=0.034$ ,  $r=0.119$ ). **Conclusions:** Results of this study open new aspects of investigating factors that may cause psychological problems and psychopathological symptoms. Findings can help health professionals to protect mental health in people and to help individuals to reduce their experience of stress.

### **Mediating effect of personality traits on the relationship between creativity and positive outcome in resilience**

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Previous studies have suggested that creativity helps bring positive outcomes in resilience. This study investigated the mediating effect of the big five personality traits on the relationship between creativity and positive outcome in resilience among 198 Korean youths. Structural equation model analysis on AMOS was used to confirm our hypothesized model. Results revealed that extraversion, openness to experience and conscientiousness acted as mediators. Particularly in the group of youths who have experienced adversity, openness to experience served as a complete mediator. In the group without adversity, openness to experience was a partial mediator. In sum, openness to experience proved to be the most significant personality trait for the positive expression of creativity within the adversity context. This study (1) confirmed the role of personality traits as mediators in the process of resilience through empirical data, and (2) showed how the level of mediation changes depending on the existence of adversity.

### **Motivational processes in sedentary adults participating in a lunch-time walking intervention: A Self-Determination Perspective**

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**Background:** Based on Self-Determination Theory (SDT; Deci & Ryan, 1985), this study examined the longitudinal relationships between autonomy support, psychological need satisfaction and self-determined motivation in a physical activity setting. **Methods:** As part of an intervention designed around SDT principles, insufficiently physically active participants ( $N = 75$ ;  $n = 69$  females,  $n = 6$  males;  $M$  age = 47.68) from a 16 week lunchtime walking intervention completed a multi-section questionnaire (baseline, at week 3, 5, 10, 16 and 4 month follow up) investigating all aforementioned variables. **Findings:** Multiple regression analyses showed that an autonomy supportive environment at week 3 predicted psychological need satisfaction at week 10 and psychological need satisfaction at week 5 predicted self-determined motivation at weeks 10 and 16. **Discussion:** The findings expand on cross-sectional research and suggest that future interventions would benefit from using strategies that foster the facilitation of autonomy support and psychological need satisfaction.

### **Emotional intelligence as a factor of occupational health among university staff**

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**Objectives:** This study examines the level of Emotional intelligence (EI) among Russian university staff and its role in preventing and maintaining their occupational health. **Methods:** The participants involved in the current study were university lecturers ( $n = 80$ ). The variables were assessed using three questionnaires which evaluate occupational health on physical, psychic and social levels; and the level of EI (Manoilov, 2004; Yusupova, 2006). Moreover, control variables such as gender, length of experience and specialization (human *vs.* natural science faculties) were derived from employers' registers. **Results:** The results of correlation and regression analyzes confirmed the hypothesis of our study. Higher scoring in EI increased the probability of high level of occupational health (emotional well-being, proactive coping, etc.); and lower scoring – on the contrary. **Conclusions:** Emotional intelligence significantly contributed to prevention and promotion of occupational health among university lecturers. The practical implications of these results for employee well-being will be discussed.

### **Linguistic issues concerning the usage of McGill Pain Questionnaire and its adequacy**

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The McGill Pain Questionnaire (MPQ) is now the most widely used instrument for pain measurement. The construction process of the questionnaire, the adequacy of the adjectives chosen and the validity and reliability of the MPQ are sometimes disputed. There are also

doubts about MPQ adaptations, which were created by literally translating all of the adjectives from the original English version. So far, our study has shown, that the adjectives in the questionnaire are not adequate for the description of pain experience in Polish (Kalwak, Stupak & Bochaver, 2011). The aim of this study is to verify this result and to check if adjectives in general are the preferred lexical category for describing pain experience by Polish native speakers. A further aim of the study is to establish the grammar and stylistics of pain descriptions given by sufferers. This knowledge could help in construction of adequate tools for pain research and diagnosis.

### **Social support and personal control in childbirth, education and parental self-efficacy**

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**Background:** Parental self-efficacy is an important dimension of resilience in the transition to parenthood, increasing maternal well-being and children's resilience and psychomotor development. Previous research found correlation with childbirth satisfaction. **Methods:** In a 2-phase longitudinal study, parental self-efficacy development (Parental Expectations Survey; Reece, 1992) was followed in a group of 99 primiparous women in respect to internal and external sources of coping with childbirth (Childbirth Self-efficacy Inventory; Lowe, 1993; Support and Control in Birth; Ford, Ayers & Wright, 2009) and other determinants. **Findings:** In regression analysis models, parental self-efficacy before and after birth correlated significantly with each other and with perceived social support in childbirth in the group of women with secondary education ( $n = 50$ ); in women with college education or higher ( $n = 49$ ) postpartum parental self-efficacy correlated with external control during childbirth. **Discussion:** Different coping strategies are preferred by women depending on education.

### **The effectiveness of self regulation interventions on well-being of individual clients**

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**Background:** The aim of this study is to evaluate the effects of self-regulation interventions (SRI), including the principles of Maes & Karoly (2005), on well-being of individual clients in a psychology practice. The effects of the SRI-group were compared to a control group receiving cognitive behavioral therapy (CBT). **Methods:** Socio-demographics and well-being were assessed at baseline and after the intervention ( $N = 1044$ ). Repeated measures was used to evaluate the effects on psychological complaints, with age, gender and education as co-variables. **Expected results:** We expect that psychological complaints will decrease after SRI ( $p < 0.05$ ). Additionally, we expect more favorable results in the SRI-group compared to the CBT-group. Current stage of work: Data collection is completed and we are preparing for analyses. **Discussion:** We expect that SRI positively affect well-being of individuals. Additionally, SRI might be more effective to change unfavorable behavior on the short-term than CBT and therefore preferable in a psychology practice.

## Wellness effects of worksite health promotion programs in health care settings, a review

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**Background:** In this review the effectiveness of worksite health promotion programs (WHPP) on quality of work and well-being of health care employees is examined. **Methods:** In total 21 intervention studies with a quasi-experimental research design, published between 1976 and 2011, met the criteria to be included. **Findings:** The JDCS-model was the most applied theoretical model in the intervention studies. Moreover, organizational risk factors and a theoretical implementation framework seems to be missing components. Additionally, the intervention effects on different well-being outcomes varied between studies. **Discussion:** Methodological differences between studies were found in employee groups, measure moments and intervention periods. In future research on WHPP, besides the work conditions of the JDCS-model, organizational and personal factors should be considered as indicators of quality of work. Moreover, a theoretical implementation framework, e.g. a problem solving approach, might improve quality of work and well-being of health care employees in WHPP.

## A pilot study with self-regulation interventions to improve burnout complaints for employees with job stress

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**Background:** This pilot study describes the effects of self-regulation interventions (SRI), including the principles of Maes & Karoly (2005), on burnout complaints of individual clients in a psychology practice. The effects of the SRI-group were compared to a control group receiving cognitive behavioral therapy (CBT). **Methods:** Socio-demographics and burnout were assessed at baseline and after the intervention program ( $N=193$ ). Repeated measures was used to evaluate the effects on burnout, with age, gender and education as co-variables. **Expected results:** We expect a decrease in emotional exhaustion ( $p < 0.05$ ), depersonalization ( $p < 0.05$ ) and an increase in personal competence ( $p < 0.05$ ). Additionally, we expect more favorable results in the SRI-group compared to the CBT-group. Current stage of work: Data collection of the experimental group is completed and we are preparing for the analyses. Our goal is to increase the control group. **Discussion:** We expect that SRI positively affect burnout complaints of individual clients with job stress.

## Relations of Neuropsychological Functioning and Depressive Symptoms to School Achievement in Children

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**Background:** We examined whether executive functions and depressive symptoms contribute to prediction of school achievement above the contribution of intelligence. **Methods:** In a sample of 814 Prague children aged 9 to 11, we registered: grades (Mathematics, Czech Language, Grade Point Average), Children's Depression Inventory, Wechsler Intelligence Scale for Children, Auditory Verbal Learning Test, Pictorial Verbal Learning Test, Trail Making Test, and Verbal Fluency Test. The assessment followed standard ethical guidelines. **Findings:** Executive functions contributed to prediction of school achievement only in Mathematic grade in boys. Depressive symptoms predicted school achievement consistently across the three school grades and across genders. **Discussion:** School achievement and depressive symptoms are relatively stable over time and interconnected with socio-emotional well-being. Preventive and intervention efforts should start early in the school years, because depressive symptoms relate to school achievement as early as at the age of 9 to 11 years.

### The association between body image, gender and physical activity among adolescents

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**Background:** Our aim was to explore in adolescents the interaction of gender and body image as independent variables, with physical activity as the dependent variable. **Methods:** We obtained data regarding body image and physical activity in 2010 via the Health Behaviour in School-aged Children study ( $n = 8042$ , age 11-15 years, 49% boys, response rate: 79.5%). We explored the association of body image with physical activity using logistic regression models adjusted for age. **Findings:** Adolescents perceiving themselves as not fat (OR = 1.66, 95%CI 1.44-1.91) and boys (OR = 2.13, 95%CI 1.91-2.38) had a significantly higher probability of sufficient physical activity. In the next model, the interaction between body image and gender was added, and this interaction was significant (OR = 1.77, 95%CI 1.34-2.35). **Conclusion:** Gender seems to moderate the relationship between body image and physical activity in youths, which should be considered in interventions focusing on enhancing physical activity.

### The relationship between resilience, problematic internet use and personality among university students

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The aim of the study was to examine the relationship between resilience, problematic internet use and personality among university students. **Method:** Using the Brief resilience scale (Smith, 2008) relationship between resilience, problematic internet use (5factors scale GPIU, Caplan, 2002) and personality (5 factors scale NEO Big five, Costy, McCrae, 2001) was examined. Study sample consisted of 102 (85.3% female) university students (M 21, 37 year, SD = 2521) **Results:** Based on the analyzes significant negative correlations were found between resilience

and factor of GPIU mood regulation ( $r = -0.251$ ;  $p = 0.032$ ) and also between resilience and factors of NEO – emotional lability ( $r = -0.554$ ;  $p = 0.000$ ). Negative correlation was found between extroversion and factor of GPIU preference for online communication ( $r = -0.235$ ;  $p = 0.017$ ). **Conclusion:** Results correspond with the findings of other authors, and show that resilience has might have protective function in relation to problematic internet use. How ever differences in personality should be acknowledged.

### **The impact of instruction of behavior modification methods to mothers of children with ADHD**

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The purpose the current study was to investigate the effectiveness of the effect of behavior modification methods training to mothers of children with ADHD in enhancing the behavioral performance and decline parenting stress. 30 mothers of children with ADHD were selected using at-hand samplings, who were divided into control and experimental groups (15 mothers in each). Both groups filled parenting Stress Index and children behavioral performance questioner. In the next step the experimental groups were instructed behavior modification method in nine sessions while the control group went on their normal procedures. At the end of the instructional session both groups filled out the mentioned questioners as the post test. Result of the analysis of covariance showed that instruction of behavior modification methods improved the behavioral performance ( $p < 0/05$ ) and also analysis of covariance showed that decreased Parenting stress ( $p < 0/05$ ) among the mothers of the experimental group in comparison with the control group.

### **Theory of planned behaviour cognitions do not predict change in fruit and vegetable consumption**

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**Background:** The present study investigated whether theory of planned behaviour (TPB) cognitions predicted change in fruit and vegetable intake in a trial cohort of Australian young adults. **Methods:** Participants of a randomised controlled trial of a TPB-based intervention ( $N = 162$ ) completed questionnaires assessing fruit and vegetable intake and TPB constructs at baseline and 30 days. **Findings:** Change in attitude, perceived behavioural control and subjective norm predicted change in intention ( $p$ 's  $< 0.01$ ), but change intention and perceived behavioural control failed to predict change in fruit and vegetable intake ( $p$ 's  $> 0.05$ ). **Discussion:** Failure of the theory to predict behaviour change may be due to the inadequacy of the theory or to artefacts of the study design that facilitate change in fruit and vegetable consumption without corresponding changes in cognitions. Researchers should be cautious when interpreting empirical support for the predictive utility of the TPB as evidence the theory can be applied to behaviour change.

## Relationship between personality traits and psychological health characteristics in adult psychology students

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**Background:** The purpose of this study was to investigate the association between personality traits and such psychological health characteristics as activity, optimism, psychological stress, subjective comfort and type of emotions in adult psychology students. Also we investigated the question about the impact of personality traits on psychological health. **Methods:** The sample consisted of 107 students (aged between 23 and 55), which were taking a retraining course of practical psychology. Students completed questionnaires: MMPI (adapted by L. Sobchik), Optimism Scale, Subjective feeling scale, Psychological Stress Measure, Izard's differential emotions scale. **Findings:** The results of correlation analysis showed the traits which had strong and weak links with features of psychological health. The outcomes of multiple regression analysis revealed that anxiety influence 6 (from 7) studied characteristics of psychological health. **Discussion:** We gained a larger understanding about impact of the personality traits on the psychological health characteristics and the specificity of links between them.

## Breaking bad news in cancer : A comparison of physicians and nurses practices

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**Background:** Breaking bad news (BBN) has principally been studied on physicians. The aim of this study was to compare practices and perceptions of BBN among physicians and nurses trained in BBN. **Methods:** Fifteen semi-structured interviews were conducted with eight physicians and seven nurses. Two analysis were performed using Alceste software, which consists in modelling the main words distribution and identifying the repetitive language patterns most frequently used by the speaker. **Findings:** Physicians discourses are structured around four classes, referring to the stage of disease (curative/palliative) and the type of practices (disease centred/communication centred), whereas nurses discourses are structured around three different classes: work organisation, interpretation of patient experience, managing patient difficulties resulting from disease (work, finances etc.). **Discussion:** Nurses tend to adapt their work between physicians requests and patient/relatives needs. They generally adopt a patient-centred communication whereas disease-centred model is largely used by physicians.

## Neuroticism, coping styles and emotion in women with Mayer-Rokitansky-Kuster-Hauser syndrome: a moderated mediation analysis

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**Objectives:** Study participants are 46 women (age  $23.48 \pm 4.88$  years) with Mayer-Rokitansky-Kuster-Hauser (MRKH) Syndrome. Occurrence of the MRKH Syndrome is one in 4000–5000

female children. It was investigated (a) whether coping styles mediate the effect of neuroticism (N) on positive (PA) and negative (NA) affect, and (b) whether this mediation is moderated by the level of N and length of illness. **Methods:** Neuroticism, coping style as well as positive and negative emotions were assessed using the Polish version of NEO-FFI, CISS and PANAS. **Results:** Emotion-oriented coping style fully (for PA) or partly (for NA) mediated the effect of neuroticism on emotions and these mediations were moderated by the level of N. Additionally, direct effect of neuroticism on NA was moderated by the duration of illness. **Conclusions:** The level of neuroticism and the length of illness are important factors for the psychological functioning of women with MRKH Syndrome.

### Depression, physical activity and obesity among older women – the mechanism of relationships

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**Background:** To verify the relationship between depression, physical activity and obesity among older women. **Methods:** Symptoms of depression (Beck Depression Inventory), physical activity (ActiGraph GT1M accelerometer) and obesity (body composition analyzer IN-BODY 720) were assessed among 83 healthy older women (age  $63.25 \pm 5.51$  years). **Findings:** Obesity was significantly positively related to depression and negatively to physical activity. A two-way MANOVA yielded only significant depression and physical activity effects, but not interaction (depression  $\times$  physical activity) effect on obesity. Mediation analysis (controlled for age) indicated only direct effects between depression and obesity and physical activity and obesity. **Discussion:** It seems that depression and physical activity were independently related to abdominal obesity among women in their 50s, however physical activity or rather its lack was a better predictor of obesity.

### Focus group interviews to study the information needs of cancer survivors

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**Background:** Web-based cancer after care depends on individual needs. Focus group interviews will be held to study contentment with current aftercare and needs concerning coping with the aftermath of cancer. **Methods:** six – eight focus group interviews with six – twelve participants each will be held. Participants will be adult cancer survivors representing different subgroups based on demographics and cancer types. Data analysis will be conducted qualitatively by using inductive and deductive coding. This process will be performed by multiple observers using N-VIVO software. **Expected results:** A thorough insight into needs of cancer survivors concerning information on physical and psychosocial problems, self-management, social support and healthy lifestyles. Current stage of work: Recruitment of participants, organization of focus groups and development of an interview manual.

**Discussion:** Input will be used for the development of an easy accessible computer-tailored intervention to improve quality of life and decrease psychosocial problems in cancer survivors.

### **The impact of an emotionally expressive writing intervention on bodyweight and eating pathology**

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**Introduction:** Previous research demonstrating emotional influences on eating and weight suggest that emotionally expressive writing may have a significant impact on reducing risk of eating pathology. This study explored the effects of writing about Intensely Positive Experiences (Burton & King, 2004) on weight and disordered eating. **Methods:** Seventy-two female students wrote about Intensely Positive Experiences or a control topic. Before the writing task and 8 weeks later, participants completed the Eating Disorder Examination – Questionnaire (EDE-Q) and BMI (kg/m<sup>2</sup>) was recorded. **Findings:** There was no significant effect of the intervention on changes in BMI. However, in examining subscales of the EDE-Q, there was a significant effect of intervention on change in Dietary Restraint ( $p = 0.02$ ) but not Eating, Weight or Shape Concern. Specifically, expressive writers significantly reduced their dietary restraint while those in the control group did not. **Discussion:** Emotionally expressive writing may reduce risk of eating pathology at times of stress.

### **Catastrophizing and coping in chronic back pain**

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To explore the effects of catastrophizing and pain coping strategies on pain intensity, life satisfaction and anxiety/ depression. Questionnaire-based study in eighty-three patients with chronic back pain. Multiple regression analyses were conducted to explore the relationships between catastrophizing and other variables. Results revealed that catastrophizing and ability to decrease pain explained variance in severe pain (12%). Moreover, life satisfaction (Sobel's  $z = 1.94$ ) was found to mediate the catastrophizing-mild pain relation. Catastrophizing, pain coping and life satisfaction showed also significant effects on anxiety and depression. Negative thought patterns seem to be crucial for pain severity and negative emotional states. In conclusion, the results suggest that psychological interventions for reducing pain catastrophizing might improve functioning in patients with chronic back pain.

### **Pregnancy termination for fetal abnormality: a qualitative analysis of women's coping processes**

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**Background:** Pregnancy termination for fetal abnormality (TFA) can have lasting psychological consequences. Research has focused on women's psychological outcomes post-TFA, and little is known about how they cope. This study examined women's coping processes during and after TFA. **Methods:** Semi-structured, retrospective interviews were conducted with 27 women to explore their TFA experiences. Data were analysed using Interpretative Phenomenological Analysis. **Findings:** Coping processes during the termination included: seeking/providing support, acknowledging the baby, and dissociating oneself from the procedure. Post-termination coping comprised: seeking/providing support, remembering the baby, avoidance, and looking to the future (resilience and growth). Women mostly used adaptive coping strategies that were consistent over time suggesting the importance of dispositional factors e.g. resilience, self-efficacy. Maladaptive strategies were used to a lesser extent. **Discussion:** These findings can underpin client-centred clinical practice. They also indicate the need for health psychology interventions to strengthen women's protective resources to optimise post-termination psychological recovery.

### **Sex differences in effects of dietary autonomy on the translation of intention into planning**

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**Background:** Planning has been found to mediate between intentions and a healthy diet. However, individuals who do not perceive themselves as autonomous regarding their dietary behaviors might fail to translate their intentions into planning. It was assumed that this relation was different for men and women as women generally have higher autonomy beliefs regarding their nutrition. **Methods:** A longitudinal sample of 1870 women and 437 men was surveyed thrice. Separately for both sexes, intention, planning, and fruit and vegetable consumption were specified as mediator chain with autonomy as moderator. **Findings:** For women and men intentions were translated into behavior via planning. Only in men the interaction of autonomy and intentions was significant, indicating that men who perceived high autonomy were more likely to translate their intentions into planning. **Discussion:** Lacking autonomy might explain why men who are motivated to follow a healthy diet fail to act upon their intentions.

### **Psychosocial stress is associated with in vivo dopamine release in ventromedial prefrontal cortex**

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**Background:** Although prefrontal dopamine transmission is suggested to play a role in stress-processing, human studies investigating stress-induced changes in dopamine levels have focused solely on striatal dopamine transmission. The aim of this study was to investigate in vivo dopamine release in the human prefrontal cortex in response to a psychosocial stress challenge. **Methods:** 12 healthy subjects underwent a single dynamic Positron Emission Tomography (PET) scanning session after intravenous administration of [<sup>18</sup>F]fallypride. Psychosocial stress was initiated at 100 minutes postinjection. **Findings:** The psychosocial stress challenge induced detectable amounts of dopamine release throughout the prefrontal cortex, with dopaminergic activity in bilateral ventromedial prefrontal cortex being associated with subjectively rated experiences of psychosocial stress. **Discussion:** The novel finding that a mild psychosocial stress in humans induces increased levels of endogenous dopamine in the PFC indicates that the dynamics of the dopaminerelated stress response cannot be interpreted by focusing on mesolimbic brain regions alone.

### **A 10-year prospective study investigating synergism between early and recent adversity in psychosis**

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**Background:** Studies suggest that early adverse events, such as childhood trauma, may promote enduring liability for psychosis whereas more recent adverse events may act as precipitants. This study examines whether the association between recent adversity and psychosis is moderated by exposure to early adversity. **Methods:** A random regional representative population sample of 3021 adolescents in Munich, Germany, was assessed three times over a period of 10 years, collecting information on adversity and measures of psychopathology. Statistical nonadditivity between early adversity and more recent adversity was assessed in models of psychotic symptoms. **Findings:** Early and recent adversity were associated with each other and displayed statistical non-additivity at the highest level of exposure to recent adversity. **Discussion:** The findings suggest that early adversity may impact on later expression of psychosis either by increasing likelihood of exposure to later adversity and/or by rendering individuals more sensitive to later adversity if it is severe.

### **Prospective analysis of self-image and mental health in females with Adolescent Idiopathic Scoliosis treated conservatively**

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**Background:** We aimed to investigate the changes in the perception of the mental health and self-image in adolescent females with scoliosis treated conservatively. **Methods:** The study design was prospective. Thirty-six patients completed the Scoliosis Research Society-22 (SRS-22) questionnaire twice—first before the beginning of the treatment and then after 12 months. The mean Cobb angle was 27.1 degrees SD 5.0 in the first and 24.9 degrees SD 9.1 in the final examination. **Findings:** Patients scored 4.2 SD 0.3 in both completion of SRS-22. Thoracic apical translation was related to total score, function and mental health domains in the first assessment. In the second evaluation, thoracic apical translation correlated with function and mental health domains. **Discussion:** The longitudinal exploration of the perception of disease in the course of brace treatment may shed new light on factors determining patients' quality of life and, therefore, constitute practical implications for scoliosis patient support programs.

### **Body image in females with scoliosis in the course of brace treatment: a prospective analysis**

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**Background:** The objective of the study was a longitudinal exploration of assessment of trunk deformity in scoliosis patients treated conservatively. Additionally, we aimed to adapt the Trunk Appearance Perception Scale (TAPS) for Polish cultural conditions. **Methods:** The study design was prospective. Thirty-six females with scoliosis, aged 13.5 SD 1.7 in the first assessment and 14.5 SD 1.7 in the second evaluation, were asked to fill in the Polish version of TAPS before the beginning of treatment and again after 12 months. **Findings:** Patients scored 3.6 SD 0.6 in the first and 3.9 SD 0.5 in the second completion of TAPS. This difference is statistically significant ( $p=0.009$ ). Cobb angle in the first assessment was significantly adversely correlated with TAPS ( $rS=-0.45$ ). **Discussion:** Analysis of changes in body image among scoliosis patients in terms of brace-wearing duration, clinical and radiological data, is of special importance in the prevention of body image disturbances.

### **Improving quality of healthcare: the story of hospital-based nutritional screening**

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**Background:** Malnutrition is a problem in hospitals worldwide, but nutritional screening rates remain low, significantly impacting on the quality of healthcare. This work seeks to understand why, and identify strategies for improving clinical performance. **Methods:** Focus groups were held with nine groups of health professionals from a General Hospital, using a

semi-structured discussion guide: four with nurses, three with doctors, two with dietitians (total  $n=80$ ). Discussions were tape-recorded, transcribed and coded for emergent themes.

**Findings:** Emergent themes were the tension between clinical judgement and tick-box assessment, facilitators/barriers to screening, and nutrition knowledge/education. Using Critical Theory to synthesise these themes, screening was being done successfully where the organisation had enabled nurses to take control and set up effective systems and practices.

**Discussion:** The implication for health psychologists working to support health professionals to improve quality of healthcare is that they need to understand the interaction of system and person in order to motivate and enable change.

### **Development and validation of the scale of communication skills in healthcare professionals**

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The communication skills in the healthcare professionals are related in several empirical studies to more satisfaction, compliance and burnout prevention in patients and healthcare professionals. The aim of this study was to develop a questionnaire to assess the communication skills in healthcare professionals. The instrumental study included three phases. The first phase, was to define the conceptual and theoretical framework of construct, the relation with others constructs and the qualitative assessment of the construct definition. The second phase, entailed the construction and qualitative assessment of the items. In the third phase, the analysis of factorial structure was performed by means of exploratory measures, and it showed that the reliability of measures was adequate. The confirmatory factorial analysis guaranteed the stability of factorial structure proposed by the construct definition showing good fit indexes ( $\chi^2=258.694$ ;  $gl=126$ ;  $Sig.=0.000$ ;  $\chi^2/gl=2.053$ ;  $RMSEA=0.051$ ;  $GFI=0.935$ ;  $NFI=0.905$ ;  $TLI=0.937$ ;  $IFI=0.949$ ;  $CFI=0.948$ ).

### **Excess, Pain and Injury: Three ways to be resilient in sports' areas?**

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If ignoring injuries and playing through pain are expected in organized sport, the trauma that occurs can have potentially severe psychological repercussions. Nevertheless, we'll hypothesize, that excessive sport practice is a mechanism to help a person to avoid a time of emotional stress and that injury and pain are mechanisms to help a person to reconnect with this time of emotional stress. In a first time, we'll focus our attention about the connections which exist between excessive sport practice and psychological health. In a second time, we'll distinguish what are the meanings of a commitment in an excessive physical practice. Our work in progress concern clinical interventions with seven sportswomen who were abused and injured during their adolescence. Seven women's stories allow us to precise how a vulnerable person and an invincible person can be present at the same time during some embodied experiences in sports' areas.

### **Self-esteem mediates the relationship between insecure attachment and maternal depression: A moderated mediation study**

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The high prevalence of maternal depression has been considered public concern. Thus, investigating key factors contributing to developing effective interventions for maternal depression is of great importance. The present study aimed to examine the possible pathway to better understand the association between attachment schema and maternal depression through self-esteem and maternal self-efficacy. One hundred and thirty-eight Korean mothers who visited pediatrics centres completed questionnaires regarding adult attachment style, self-esteem, maternal self-efficacy and depression. Results showed that self-esteem fully mediated the relationship between preoccupied attachment and maternal depression, and partially mediated the association between fearful attachment and maternal depression. An inverse relationship between self-esteem and maternal depression was weaker for mothers with high maternal self-efficacy than those with low maternal self-efficacy. Finally, maternal self-efficacy moderated the positive and indirect effects of insecure attachment (Preoccupied and fearful type respectively) on maternal depression through self-esteem. Such mediation was significant only when maternal self-efficacy was low. Maternal depression benefits from interventions focusing on maternal self-efficacy.

### **Perceived Stress and Self-esteem Mediate the Effects of Work-related Stress on Depression**

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Job stress has negative effects on both physiological and mental health. The aim of the present study was to investigate the impact of perceived stress and self-esteem on work-related stress and depression. Two hundred and eighty-four Korean nurses participated in the study. The participants completed the Korean short version of the Occupational Stress Scale, the Perceived Stress Scale, the Rosenberg Self-Esteem Scale, and the Beck Depression Inventory. Structural equation modelling was used to determine the relationships among work-related stress, perceived stress, self-esteem, and depression. Work-related stress was positively associated with depression. Perceived stress was inversely related to self-esteem and positively associated with work-related stress and depression, respectively. Self-esteem was negatively associated with work-related stress and depression. Structural equation modelling revealed that self-esteem and perceived stress fully mediate the relationship between work-related stress and depression. Future studies should further

investigate the effect of psychological characteristics on work-related stress and symptoms of depression.

### **Gender impact on stress vulnerability and problem solving strategies on academic students**

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**Background:** Vulnerability to stress and coping strategies are important personal dimensions to face with daily and stressful events. This individual dimensions might vary across gender. This study proposes to analyse gender differences on stress vulnerability and problem solving dimensions. **Methods:** Cross study with a sample of 60 individuals assessed with the Vulnerability to Stress Questionnaire and the Problem Solving Inventory. **Findings:** Results showed that women are more vulnerable to stress than men in all dimensions ( $p < 0.05$ ) except on perfectionism and frustration intolerance; and inhibition and functional dependence which difference is not significant. Concerning to problem solving strategies, men reported high scores on all dimensions compared to women ( $p < 0.05$ ), except on help request. **Discussion:** Gender revealed to be an important dimension in identifying distinct stress vulnerable groups and different coping responses. These differences can be important to promote intervention strategies and support policies on university institutions and mental health services.

### **Is oncologists' perception of patients' needs related to perceived empathy?**

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**Background:** Empathy is advocated as a core communication skill in medical care. However, whether patients expect physicians to be empathic for any of their needs' domains remain unclear. We addressed this issue considering physical, psychological, and staff-related needs. **Methods:** Two hundred patients rated their needs on a brief version of the Supportive Care Needs Survey (SCNS) and evaluated physicians empathy using the CARE. Independently, 28 physicians (1 to 10 patients per physician) had to fill in the SCNS rating what they thought their patients had rated. **Expected results:** Empathy being defined as the ability to take another's perspective, an accurate physician perception of patients' needs should be associated with empathy. Current stage of work: Data collection has just finished. **Discussion:** Because it can be demanding for oncologists to take patients' perspectives, it is important to be sure that this effort is useful for any domain of patients' needs.

### Temporal factors on outcome importance for physical activity: Age, outcome immediacy, and their interaction

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**Background:** Considering a lifespan and temporal framework, this study examined whether age, outcome immediacy (i.e., how soon an outcome will be achieved), and their interaction influence the perceived importance of physical activity (PA). **Methods:** Participants included 307 Chinese adults aged 19 to 101 (Mean = 50.97, SD = 24.08), with 62% being women. They self-elicited the expected outcomes of PA participation, and subsequently rated their importance and immediacy, respectively. Age, immediacy, and their interaction were used to predict importance controlling for demographic factors in a multilevel regression, with elicited outcomes nested within persons. **Findings:** Among the 901 elicited outcomes, PA importance increased with age ( $\beta = 0.25$ ,  $p < 0.01$ ) and decreased with immediacy ( $\beta = -0.06$ ,  $p < 0.05$ ). The negative effect of immediacy dissipated with age ( $\beta = 0.07$ ,  $p < 0.05$ ). **Discussion:** Immediate PA outcomes tend to be less important. However, as future time becomes more limited with age, the immediate outcomes may become more highly valued and thus compensate its negative effects.

### The use of draw and write technique with children-the importance of the instruction given

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The present study aims to test whether different prompts when using drawing and writing techniques of data collection, stimulate different themes, and can be specially suited for understanding specific aspects of children's conceptions about health and illness. Participants were 230 school children aged 8 to 12. Children were asked to write about health and illness and four prompts were used: draw and write what it is a healthy and an ill person; draw and write about being healthy and being ill, write (only) what it is a healthy and an ill person and write (only) about being healthy and being ill. All texts are at the moment being subjected to content analysis based on a previously validated coding system (inter-rater agreement of 93%). The expected results are that the four prompts produce different data and if researchers are not aware of this fact, misleading conclusions may be derived from the results found.

### The CH:D to evaluate distress associated with emergency hospitalization of children aged 6 to 12

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The aim of this study is to analyze the adequacy of the Child Drawing Hospital (Clatworthy et al, 1999) as an instrument for the assessment of distress in children admitted for hospitalization through the emergency room (ER). Participants will be approximately 50 children aged 6 to 13, who will be administered the CH: D together with a Faces Scale for psychological distress and a Parent Report measure of child distress. At the moment 34 children were already studied and preliminary results (descriptive analysis, i.e., response frequency, mean, SD, skew, and kurtosis and analysis of inter-rater reliability) suggest that CD:H is an appropriate instrument with sensitivity to evaluate the impact of child hospitalization, by assessing their level of anxiety and through the presence of indicators of emotional disturbance. Moreover, drawing provides an enjoyable activity for most children that can also function as a distraction strategy that also facilitates communication with health professionals.

### Stress and Coping in Neurosurgical Portuguese Patients

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Research identifies surgery as one of the factors that induces stress in patients. According to several studies, preoperative stress influences both physical and psychological recovery, determining anesthetics and analgesic requirements, postoperative pain and disability, and hospital stay. The aim of this study was to identify the factors that induce stress in neurosurgical patients and coping mechanisms used by patients to cope with stress. Semi-structured interviews were conducted with 12 patients (aged 32 to 64 years and of both sexes), in the preoperative stage of an elective neurosurgery. Interviews were taped and transcribed verbatim and then subjected to detailed qualitative analysis using Interpretative Phenomenological Analysis. The results indicate several aspects, which in the patients' perspective, act as important stressors in the preoperative stage, such as risks associated with surgery, the hospitalization process and disease progression. Self-control and positive reappraisal were the most commonly used strategies to cope with stress experienced before surgery.

### Self-regulation or environment? Predicting snack intake from preadolescence to late adolescence

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**Background:** The study investigated the interplay between environmental variables (accessibility of snacks at home, parental social influence, accessibility of snacks at school/during outdoor activities, peers' social influence) and self-regulation of food intake (goal deliberation, controlling temptations, and suppression) in predicting snack intake across 4 adolescence stages. **Method:** Tempest project data was collected cross-sectionally among 2776 adolescents (aged 10–19) in the Netherlands, Poland, Portugal and United Kingdom. **Findings:** Path analysis showed different direct predictors of snack intake for the age groups. Direct effects of accessibility were stronger in earlier stages and negligible in middle and late adolescence. The role of self-regulation was negligible in preadolescence. Controlling temptations and suppression was significant in early and middle adolescence, whereas goal deliberation

became significant only in late adolescence. Social influence had indirect effects (via self-regulation). **Discussion:** Future interventions targeting adolescents may need to address different facets of self-regulation, depending on the developmental stages.

### **The Experience of Mental Health Service Use of Chinese Dutch**

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There is little research on the Chinese Dutch experiences with mental health services. This research uses the qualitative research method, in-depth interview, for data collection on Chinese's mental healthcare experience in the Netherlands. The conceptual framework was built on Kleinman's 'explanatory models' with NVivo9 used for data analysis. A total of 23 individual provided 29 anecdotes. Topics include the details of the mental problems of the protagonists in the anecdotes, their help seeking behaviours, and their experience with health care. Results show that Chinese Dutch view on the causes of mental illness to be one or a combination of biological factor, psychological factor, and social/environmental factor. While Chinese Dutch relies on Dutch health care as the main mental health resource, the issues of communication, the explanation of the illness, and the expectation of treatment have created gaps between the patients' needs and the Dutch care provisions.

### **Caregiver burden and Mental Representation in palliative home care**

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**Background:** Relatives caring for palliative and terminal patients is often a new experience requiring strong adaptation efforts, coping with the own fears and the patients' fears and necessities. Our aim is to assess the caregiver burden experience in relatives of palliative patients cared at home. **Methods:** Cross-sectional study with 26 relatives of patients from the Home Hospitalized Care Unit. A Caregiver Burden Interview, HAD Scale, Mental Representation of their relatives' illness and characteristics of the care giving were collected. **Findings:** Anxiety and depression reached high levels, and they related to perceived caregiver burden, self-care leaving and loss of social and family roles ( $r > 0.43$ ). In addition, depression shows associations with duration of and daily dedication to care ( $r > 0.39$ ). Personal control perception and Identity are related to all caregiver burden factors and emotional responses. **Discussion:** Caregiver burden and mental representation are important aspects to consider in the context of palliative care.

### **Hospitalization experience and mental representation in palliative and chronic patients: a comparative study**

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**Background:** Hospitalization is often a new experience which is uncomfortable and difficult for people. Our aim is to compare the hospitalization experience in patients in palliative care with chronically ill patients. **Methods:** Cross-sectional study. Structured interview, HAD and BIPQ. 30 terminally patients in the Palliative Care Unit (PCU) and 30 chronic in-patients (CP) in a long-stay unit. **Findings:** PCU patients perceived less distress and fewer amount of stressful events than CP. Main sources of well-being were: doctors' expert care and good relationships with them, pain control and symptoms relief and close family relationships, autonomy and privacy. In PCU, depression was related to less stress due to the hospitalization ( $r > 0.42$ ). In CP, depression was related to less Personal control, more Consequences and Preoccupation ( $r > 0.40$ ); anxiety was associated to hospitalization stress, Consequences and less Treatment Control ( $r > 0.40$ ). **Discussion:** Hospital care is essentially different for palliative than for chronic patients.

### Resilience and other psychological factors associated with quality of life after mild traumatic brain injury

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**Background:** The aim was to evaluate the association of resilience and other psychological factors with quality of life (QoL) after mild traumatic brain injury (MTBI). **Methods:** Forty-one (41) MTBI-patients were assessed for resilience (Resilience Scale), depressive- (Beck Depression Inventory) and posttraumatic stress symptoms (PTSD-Checklist-Civilian Version) one month post-MTBI. The association of those factors with QoL (rank transformed Quality Of Life after Brain Injury at six months post-MTBI) was assessed by separate linear regression analyses adjusted for demographic variables and the severity of physical injuries (Injury Severity Score). **Preliminary results:** Resilience (explaining 13.1% of the variance;  $p \leq 0.005$ ), depressive- (15.6%;  $p \leq 0.005$ ) and posttraumatic stress symptoms (14.1%;  $p \leq 0.005$ ) significantly predicted QoL. Current stage of work: Data will be further collected for 100 participants. **Discussion:** Resilience seems to be one important predictor in the recovery process after MTBI and its moderating effect will be tested in the final data.

### Understanding Internet use among adolescents – an qualitative perspective

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Internet is a popular informational, academic and entertainment tool of adolescents around the world. Although social scientists are studying many related issues, evidence of the effects of computer use by children is still ambiguous. In a qualitative setting, we addressed the current experience as Internet users of 20 Romanian adolescents of 15–16 years old, using semi-structured interviews. Based on the Grounded Theory approach as a method, initial coding offers insight usage patterns, needs met, perceived risks or effects and personal aims in computer use. Further stages of analysis should reveal relational issues of context of the

participants' experiences. The knowledge from current research will contribute to the better understanding of the development of the excessive Internet use or addictive behaviors of adolescents. Also, it will help uncover patterns of their evolution as Internet users with interest in health prevention strategies.

### **Exploring patients' experience of living with bipolar disorder and their perceptions of prescribed treatment**

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**Background:** To provide a better understanding of the illness and treatment beliefs held by people with a diagnosis of bipolar disorder, as well as a picture of any outstanding information needs. The identified themes would form the basis for the development of an intervention that will aim to address unmet patient need. **Methods:** Twelve adults currently prescribed medication for bipolar disorder participated in semi-structured interviews which were recorded and transcribed verbatim. Thematic analysis was used to identify and report themes within the data. **Findings:** Five themes were derived from the data: 'Impact of the diagnosis illness on an individuals' self-concept', 'Impact of treatment on an individual's self-concept', 'Stigma', 'Lack of control/ taking control', and 'Unmet information needs & Informed choice'. **Discussion:** This study identified aspects of patients' perceptions of bipolar disorder, its treatment and information requirements that should be elicited and addressed through an intervention to ensure that patients receive optimal care for their condition.

### **Psychological well-being and student academic performance: the moderating role of personality**

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Psychological well-being is one of the most relevant indicators of the quality of student's academic experience. This study aims at investigating the relationships between indicators of psychological well-being, Big Five personality dimensions, and academic performance of students. A total of 100 students (mean age 21 years, 82% female) completed the Psychological Well-Being Scale (Ryff, 1995), and International Personality Item Pool (Goldberg, 1992). Academic performance data were collected from academic records. Results show that personality aspects and psychological well-being had significant correlation with academic performance. Personality dimensions (conscientiousness, emotional stability, extraversion) moderate the relations between psychological well-being (purpose in life, environmental mastery, positive relations) and student performance. Having students with a high level of psychological well-being is an important goal of universities. Therefore, understanding the impact of this variable on student performance can be useful in promoting healthy behaviors in the academic field.

### Self-regulation of weight control among obese patients following gastric sleeve surgery

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**Background/goals:** There is insufficient knowledge about the impact of bariatric-surgery in eating behaviour and weight self-regulation. This study aimed to assess the impact of gastric-sleeve in body mass index (BMI) reduction and weight-loss self-regulation. **Methods:** Longitudinal retrospective analysis including patients (according to pre-defined inclusion criteria and informed consent) that underwent gastric-sleeve surgery at a main general hospital from Lisbon, from January-2008 to July-2010 (81 adults). Measures included: Eating Disorder Inventory, Treatment Self-Regulation Questionnaire, BMI and comorbidities-related assessments throughout pre- and post-surgery periods. **Findings:** Average BMI was significantly reduced after surgery. Average score of autonomous self-regulation subscale was higher than external self-regulation for both the decision to undergo surgery and the intention to continue controlling weight after surgery. Significant positive correlations were found between external self-regulation subscale BBI and total EDI score (after surgery). **Conclusions:** Peri-bariatric-surgery interventions should aim to promote internalization of motives for keeping weight under control.

### Caregiver's physical, emotional and social strain and vulnerability to stress

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**Background:** The task of caring can translate an intense overweight that will ultimately jeopardize the health, social life, emotional well-being. This eventually represents vulnerabilities in the informal caregiver. **Methods:** In this cross-sectional study with 250 informal caregivers we used a questionnaire: QASCI Scale (Physical impact, Emotional and Social Development) and Vulnerability to Stress Scale (VSS). **Findings:** 81.6% is vulnerable to stress (70.6% male, 83.3% female;  $\chi^2 = 3.178$ ,  $p = 0.075$ ). From the 7 factors of QASCI-Scale, only 3 presents significant differences: implications in the personal life of caregiver ( $t = 2.972$ ,  $p = 0.004$ ), financial overload ( $t = 2.226$ ,  $p = 0.029$ ) and QASCI-Total ( $t = 2.330$ ,  $p = 0.021$ ). **Discussion:** These results allow identifying the informal caregiver with increased risk for physical, emotional and social burden. Therefore, it can be clarified the specificity of the most affected dimensions and assess what are the determinants of quality of life in order to adapt a more sustained support structure.

### Patients' stress in intensive coronary care (icc)

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**Background:** The internment in ICC implies itself abrupt changes in patient's condition. This creates an emotionally committed atmosphere, where stress is present potentially affecting basic needs of these patients. **Methods:** In this cross-sectional study (90 participants) we used a questionnaire: Familiar Functionality (FF), Stress for patients in Critical Care (SPCI). **Findings:** 32.2% patients refer an high stress level (male 27.6%, female 40.6%;  $\chi^2(2) = 3.611$ ;  $p = 0.164$ ). The top 5 items with the higher scores of stress chosen by the patients were: pain (74.7%), fear of death (61.6%), inability to perform his/her family roles (53.4%), internment time (47.2%), financial issues (45.8%). We seek to relate the 5 items from SPCI with age and FF using linear regression stepwise methodology. Only in relation to the pain, the age was accepted by the model ( $\beta = 0.286$ ;  $t = 2.748$ ;  $p = 0.007$ ;  $R^2 = 0.082$ ). **Discussion:** These results provided a set of basic information for health caregivers, enabling to improve the level of patients' care in ICC.

### JD-R model compared with JD-C model to perform a reliable stress assessment

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The study aims to compare the Job Demand-Resources Model (Demerouti, 2001) with the Job Demand-Control Model (Karasek, 1979) in identifying stress condition in two different work settings in northern Italy respectively involving 138 (mean age = 40.3; 76% = female) and 324 (mean age = 42.2; 78% = female) care workers. Measures were the Copenhagen Psychosocial Questionnaire (Kristensen et al., 2005) and the General Health Questionnaire (Politi et al., 1994). Logistic regressions were performed. Results in both samples highlighted the crucial role of the resource 'meaning of work' (OR = 0.98 and 0.38 respectively) jointly with low demand (OR = 1.06 and 2.36 respectively) in reducing the probability to develop job stress. Coherently with the JD-C model a Job Demand-Meaning index was computed. Results showed that JD-M is more reliable than JD-C in identifying the high strain condition. JD-R seems to be crucial for reliable health promotion in work organization.

### Self-epistemic authority in health domain – causes and consequences

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Self-epistemic authority relates to the level of expertise people attribute to themselves in a given domain (Kruglanski et al., 2005). In the case of health, SEA may affect the people health behavior and their interaction with physicians. Two questionnaire studies ( $n = 700$ ) examine factors affecting people's SEA and its effect on their knowledge assessment. The results show that, in addition to the objective knowledge, SEA is influenced by cognitive structuring characteristics of the participants. SEA in turn is associated with the tendency of people to overestimate their performance on health related exam and the tendency to avoid choosing the option of "don't know" (and therefore choosing more incorrect responses). What is important, the overconfidence is known to be negatively related to use of expert advice

(Brucks, 1985), so the overconfident people will be less prone to fulfill the physician's recommendation or even to consult with him/her.

### **Relationships between mental health, depression, resiliency, self-esteem and suicidal ideation among high school adolescents**

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This study was conducted to explore the relationships between suicidal ideas, depression, resiliency, mental health and self-esteem among high school adolescents. 300 students high school adolescent were selected to participate. Students were asked to complete the following questionnaires: Beck's Depression and suicidal ideation, Mental Health (GHQ), Self-esteem (Coopersmith) and Resiliency (Connor and Davidson, 2003). Pearson correlation coefficient and stepwise regression analyses were used for the data analysis. Suicidal ideations were significantly and negatively related to resiliency and self-esteem. Depression and mental health had a positive relationship with suicidal ideations. Regression analysis revealed depression had the most contribution in predicting suicidal ideations while mental health, self-esteem and resiliency were the next contributing factors, respectively. These variables could predict 23 percent of suicidal ideations altogether. Psychological problems and mental health issues and other factors such as resiliency and self-esteem play an important role in suicidal ideations.

### **Losing weight and maintaining a healthy life style through internet**

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**Background:** STOB (STop OBesity) was established in 1990 and besides a direct influence applied especially within weight reduction courses held in 100 towns, it has an effect on tens of thousands of people through printed materials. For enhancing prevention and providing long-term support in an individual weight reduction, STOB set up community website [www.stobklub.cz](http://www.stobklub.cz). **Methods:** Besides community components (discussion, photo-gallery, blogs), a programme Self-coaching based on CBT principles serves for weight reduction and subsequent weight maintenance. **Findings:** The website has 50,000 registered members. Until now the programme Self-coaching has been used continuously by 3468 users with average BMI 28.0 that reduced their weight by 11,785 kg. **Discussion:** Activities of STOB involve not just weight reduction but mainly maintenance of gained weight losses and prevention by means of internet courses. We would like to help people not only to acquire knowledge but also to transfer it into real life situations.

### **A comparative study between a Portuguese and a Dutch unexplained chronic fatigue patient sample**

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**Background:** Few studies focus on cross-cultural differences in unexplained chronic fatigue (CF). This study compares fatigue impairment and severity, somatic complaints, psychological distress and Quality of life (QoL) in CF patients, between Portugal and the Netherlands. **Methods:** A total of 89 adult CF patients from Portugal (Mean age = 47.55, 97.8% women) and 169 patients from the Netherlands (Mean age = 45.35, 85.2% women) filled out the same questionnaires on fatigue severity and impairment (working status), somatic symptoms, psychological distress (anxiety and depression) and QoL. **Findings:** No significant differences were found in fatigue severity, somatic complaints and physical QoL. Portuguese patients presented significantly higher levels of depression ( $p < 0.01$ ) and anxiety ( $p < 0.01$ ) as well as a lower psychological QoL ( $p < 0.01$ ). Dutch patients presented greater functional impairment ( $p < 0.01$ ). **Discussion:** The cross-cultural results found are important in view of diagnosis and treatment of unexplained CF.

### **Domestic violence, addictions and depression in male criminal population**

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The purpose of this research was to determine differences in levels of domestic violence and depressive symptomatology in prison population by offense type. It is a non-experimental, transverse, descriptive and correlational study. Inmates of three Centers for Social Rehabilitation at Mexico ( $N = 844$  men) participated. The average age was 32.6 years ( $SD = 9.9$ ). A questionnaire with 3 scales was used to measure: family violence, depressive symptomatology (CESD) and addictions. The differences in levels of domestic violence, depressive symptomatology and alcohol consumption by crime, showed significant relationship: high levels of domestic violence ( $\chi^2 = 57.07$ ,  $p < 0.001$ ) high depressive symptomatology ( $\chi^2 = 36.67$ ,  $p < 0.001$ ) high levels of alcohol consumption ( $\chi^2 = 33.96$ ,  $p < 0.001$ ). The inmates with severe domestic violence and severe depressive symptoms committed theft. The factors studied were related to criminal population.

### **Back pain in nursing professionals**

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The back pain have a great impact on nurses, causing pain, functional limitation and high costs of health care. The scarcity of technical and human resources, adverse and restricted

working conditions, associated with individual risk factors and sociocultural factors contribute significantly to the increased risk of back pain. The study aimed to assess the prevalence of back pain in nurses, identify the major risk factors and functional incapacity for work. 103 nurses participated, aged between 25 and 54 years, it is a quantitative study of an exploratory descriptive cross-sectional and correlational. Nurses have a high prevalence of low back pain who are associated with various socio-demographic and professional factors. The results suggest structural, organizational and equipment failures. Most nurses present inability to perform physical activity, caused by back pain and also presents low fear-avoidance beliefs for performing tasks.

### **Quality of Life of People with Chronic Obstructive Pulmonary Disease**

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This research aimed to study the life quality of patients with Chronic Obstructive Pulmonary Disease and its relationship with sociodemographic and clinical variables. This is a quantitative, descriptive-correlational study developed from a sample of 50 participants. We use a data collection instrument built for this purpose, associated with SGRQ Scale. The studied population is mostly male, mean age 71.70 years, being married, low education levels living in rural areas. They are professionally inactive and inserted into highly functional families. The majority is in IV stage disease, having smoking history and low number of hospital admissions. Quality of life of most participants is significantly amended, particularly at the level of performance of physical activity, disease symptoms and psychosocial impact. We found also that a greater number of hospitalizations and a more advanced stage of COPD, contributes to a lower QOL in these patients.

### **Psychopathology symptoms and quality of life among adolescents with Marfan syndrome**

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Marfan syndrome is genetic disease characterized by connective tissue disorders. Symptoms are present in skeletal, cardiovascular and ocular systems. Patients are characterised by typical features – tallness, long slim fingers, deformed sternum, hypoplastic cheeks, retrognathia, dolichocephalia. **Aim:** Assess psychopathological symptoms and quality of life in adolescents with Marfan syndrome. **Methods:** 29 teenagers with Marfan syndrome. Psychopathological symptoms were analysed based on the Child Behaviour Checklist. Patients' quality of life was assessed too (Cantrill's Ladder). **Results:** Psychopathological symptoms were found in 20% of the patients – anxiety, depression, withdrawal tendency were prevalent. The intensification of symptoms was greater in young females and depended on the place of residence – it was higher in small cities. The intensification of physical symptoms resulted in lower QoL and anticipation of its deterioration in the following five years. **Conclusion:** Psychopathological symptoms seemed to be related to appearance and the feeling of stigmatization.

## Quality of Life in Epilepsy: Social and Psychological Aspects

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**Background:** Objective of the study was to explore how patients with epilepsy view their quality of life and issues related to their experience with this condition. **Methods:** Study was qualitative with 11 semi-structured focus groups that included 54 patients from various parts of Slovakia with different degrees of severity. Theoretical framework used for data analysis was the Social Representations Theory. **Findings:** Three areas where epilepsy mostly interferes with quality of life as reported by patients were the problem of finding employment, social isolation, and problems with claiming disability benefits. The social aspect is considered more important than somatic aspects of the condition. **Discussion:** Results suggest urgent need to create a framework for providing social services and support to patients with epilepsy. The project included a series of seminars with epilepsy specialists around Slovakia to educate them about psychological and social aspects of epilepsy.

## Forced menopause in breast carcinoma and cognitive impairments

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**Background:** The cognitive functioning during the forced menopause is an important topic that is not sufficiently investigated. We report a case of a breast carcinoma patient with abrupt cognitive and behavioural changes after radical right-sided mastectomy and hormone-therapy by Gosereline and Tamoxifen. **Method:** Case report for a 50-year-old woman, admitted at the Psychiatry Department of the University Hospital in Plovdiv with memory complaints, visual disturbances (macropsias and changes in color vision) and impairment of everyday functioning. The diagnostic methods included psychiatric, neuropsychological and ophthalmic examinations, MRI, and laboratory blood tests. **Results:** The ophthalmic examination revealed early macular degeneration. The MRI and the blood tests did not find pathologic changes. The psychological testing showed impairments of: attention, verbal and visual memory, verbal fluency, visuo-spatial and executive functions. **Discussion:** Our findings suggest that the side effects from the hormone-therapy on cognition could influence the patients' functioning and need further detailed studies.

## The role of autotelic personality characteristics on the affective experience of solitude

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The flow theory proposes that autotelic personality characteristics might contribute to buffer the effects of daily negative contexts. Solitude was associated with negative experiences and heightened cortisol. Our aim was to investigate the associations between autotelic characteristics, solitude and affect. Sixty-seven female college students used the Experience Sampling Method to assess daily life contexts and experience during a week. They carried an electronic pager that beeped randomly 8 times a day, prompting them to complete a questionnaire. Data were analyzed using multilevel modeling. Autotelic students showed similar levels of negative affect ( $B = -0.15$ ,  $SE = 0.39$ ,  $p < n.s.$ ), whereas non-autotelic students showed heightened negative affect in solitude *versus* other contexts ( $B = 1.33$ ,  $SE = 0.39$ ,  $p < 0.001$ ). Autotelic characteristics were not associated with positive affect in solitude ( $B = -0.01$ ,  $SE = 0.06$ ,  $p < n.s.$ ). Autotelic students' experience in solitude might shed clues about how to promote positive experiences in this context and prevent potential negative effects on health.

### Psychosocial factors influencing physical activity in a student population

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**Background:** Physical activity (PA) has been largely studied this last decade in different populations. Few studies have been devoted to the influence of psychological determinants on PA. **Methods:** 250 students are selected. We undertook an interview with each of them in order to collect sociodemographic informations. All the subjects were asked to complete questionnaires of coping (COPE), depression and anxiety (HAD), emotional regulation (TAS-20), life's goals (GIFS) and self efficacy (ESEP). Current stage of work: We are going to collect the data of this study. We will display the first results during the next EHPS meeting. **Discussion:** We think that such results can help us to better understand the impact of psychological factors on PA. The next steps will be to extend such researches to populations with physical and mental impairments. Then, we will study the relationships between such factors in order to bring a psychological new brand model of these relations.

### Social cognition variables linked to the motivation to engage in behavior change among offenders

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In France, in 2010, 30% of all fatalities occurred in accidents with drivers with a blood alcohol concentration of at least 0.5 g/dL. This research aims to understand social cognition variables linked to the motivation to engage in a behavior change about the intention of not drinking when they drive. Participants are included into awareness training about road traffic accidents. We refer to the transtheoretical model (Prochaska & Di Clemente, 1984), and the self-determined theory (Deci & Ryan, 2002). We added questions about HBGM. Offenders ( $N = 141$ ; age = 39 years) have participated over a period of two days. Results: offenders are in compensation (80%) and escape (20%). The intention of not drinking when they drive, the autonomy and the internal control increase between the time T1 and the time T2 ( $p < 05$ ). Readiness to change (not drinking) increase between T1 and T2 ( $p < 05$ ). An efficient prevention requires implementing action plans.

### The assessment of quality of life among women after breast reconstructive surgery

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Breast reconstruction is meant to bring psychological, health and utilitarian benefits to patients following oncological treatment. The main research question is: how does woman after breast reconstruction assess quality of life? The study was conducted based on assumptions of Health Related Quality of Life concept (Schipper). The analysis of research material included objective and subjective aspects of quality of life (Filipp, Ferring). Qualitative research was performed using the individual case study method. The study encompassed twenty-one Amazons, who underwent breast reconstruction in early or medium adulthood. The results of the study indicate that breast reconstruction contributes to an improved subjective assessment of the quality of life, even when the effects of the procedure do not coincide with the woman's expectations. Based on the analysis there were identified areas of life to which the surgery has the greatest impact. The results may comprise the basis of formulating therapeutical programs.

### Helpseeking for mental health problems: analysis of the Northern Ireland Study of Health and Stress

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**Background:** Epidemiological studies have shown symptoms of many mental health disorders are first manifested in childhood. The potential exists for successful intervention in this group. This study examines the factors affecting access of mental health services in Northern Ireland. **Methods:** Secondary data analysis of the NISHS; a representative survey of residents aged 18 or over, [ $N = 4340$ ]. Face to face interviews were conducted using the Composite International Diagnostic Interview. **Findings:** 21% and 19% of respondents had an anxiety or mood disorder. Logistic regression revealed no statistically significant differences in lifetime prevalence of mood and anxiety disorders between individuals seeking help and who do not. The common age of onset for depression was aged 18 [mean = 25.7; SD = 11.3] and anxiety was aged 24 [mean = 27.6; SD = 14.3]. **Discussion:** Individuals are reluctant to access mental services in Northern Ireland. Further research into the barriers affecting access to these services is recommended.

### Weight loss maintenance: psychological factors underpinning success and failure

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**Background:** To investigate psychological factors behind weight maintenance success and failure **Methods:** Semi-structured interviews were conducted with both successful and unsuccessful weight maintainers. Participants consisted of 9 successful maintainers (SM)

who had lost 10% of their body weight and maintained this weight for a minimum of 12 months, and 9 unsuccessful maintainers (UM) who met the above criteria for weight loss but had subsequently regained their weight. A thematic analysis was employed. **Results & Discussion:** Successful maintenance was related to the following factors: long-term goal setting, consistent exercise, planning and self-monitoring, the embodiment of a healthy lifestyle, avoiding deprivation and active coping skills. Although unsuccessful maintainers were aware of the factors necessary for success, their failure was a result of their inability to mobilise these factors into action. Unsuccessful maintenance was linked to short-term unrealistic goal setting, inconsistent exercise, planning and self-monitoring, dichotomous thinking, experiencing deprivation and poor coping skills.

### **Multiple goal-management: A longitudinal examination of concurrent management of a weight-loss goal with another valued goal**

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**Background:** Individuals regularly attempt to simultaneously manage other goals alongside their weight-loss goals. The current longitudinal study investigated characteristics contributing to successful goal attainment of a weight-loss goal alongside another valued goal. **Methods:** Participants with weight-loss and non weight-loss goals (e.g. academic goals) completed three online questionnaires a month apart (T1  $n=190$ , T2  $n=120$  and T3  $n=95$ ). The questionnaires examined multiple characteristics influencing the concurrent attainment of each goal, including persistence, efficacy, and temptations. **Findings:**  $\chi^2$  analysis showed those who were more successful in attaining both goals simultaneously (at T3) had higher levels of efficacy and persistence and experienced lower levels of temptations on both goals. Regressions showed weight-loss temptation (T2) predicted weight lost and goal attainment at T3. **Discussion:** The current study offers an insight into some of the characteristics necessary for successful concurrent management of a weight-loss goal with another valued goal.

### **Health professionals' public representations of expert identity**

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**Background:** This study examines how psychiatrists display their expert identity as a health professional in the context of interviews designed for radio broadcast. **Methods:** In this qualitative study, 13 interviews between a professional journalist and practising psychiatrists from the UK and the USA were analysed using discourse analysis. **Findings:** Results showed that interviewees constructed or refuted competing versions of psychiatric expertise within their descriptions of their profession. The participants explicitly dismiss popular portrayals of psychiatric expertise but rely upon their own professional expertise to do so. However, their criticisms of popular versions of psychiatric expertise are presented in ways that are sensitive as to how they will be heard by a listening audience. **Discussion:** These findings show how psychiatric health professionals negotiate occupational identity while attending to potential problems of being heard as critical of, or hostile towards, lay people and their understandings of psychiatry as a health profession.

### **Building Resilience in Australian Farming Communities: The relationship of farm and family to well-being**

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**Background:** Qualities of resilience have been strongly identified within farming populations. This resilience is being challenged, with high suicide rates raising concerns about the mental health of the farming population. This research explored those factors which impacted the resilience of farming families of Australia. **Methods:** Interviews were conducted ( $N=53$  participants) and analysed using Grounded Theory and Content Analysis. Based on qualitative findings, a subsequent sample ( $N=278$ ) of farming families from across Australia completed a survey. Measures of stressors, work-life balance, coping, buffering characteristics and well-being were distributed. **Findings:** Outcomes suggested themes of commitment and identification with farming helped build resilience. Path analysis indicated that buffering characteristics mediated and moderated the impact of stressors and role interference on indicators of well-being,  $\chi^2(18)=23.98$ ,  $p=0.156$ . **Discussion:** Recommendations were made for raising awareness to the farming community of the risk factors for poor health and suggestions for increasing the resilience of groups at-risk of poor well-being.

### **“Your cuts are yours”: the negotiation of identities on online self-injury discussion boards**

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**Background:** Despite self-injury being relatively common, there is little agreement as to how it should be described or understood. Proposed explanations focus on self-injury as negative behaviour and pay little attention to the meanings for those involved. Here, we examine how self-injury is negotiated in online discussions. **Methods:** Threads from three online discussion boards were selected for analysis. These data were analysed using discourse analysis, to examine how contributors interactionally negotiated the meanings of self-injury and the identities that resulted. **Findings:** Contributors commonly evaluated self-injury in terms that were positive or potentially positive rather than describing it as problematic. Where self-injury was described as problematic, it was attributed to failure on the part of others rather than of the individuals themselves. **Discussion:** In these contexts, individuals who self-injure resist being accountable for harmful behaviours. The resulting identities pose challenges for interventions designed to reduce instances of self-injury.

### **The psychological benefits and challenges of participation in organized outdoor activities**

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**Background:** Commonly social participation increases psychological well-being and interpersonal skills. We report findings from a study of the potential benefits of organized participation in outdoor activities for enhancing self-efficacy, self-confidence and employment-related skills. **Methods:** Participants were (1) young people taking part in outdoor activities organized by an Outward Bound scheme, and (2) activity leaders. Data were collected from the young people using photovoice, and from activity leaders by means of a focus group. The data were analysed using recognized principles of grounded theory. **Findings:** Key themes for activity leaders were (1) employability skills, (2) self-development skills, (3) endings and transitions, and (4) links with other agencies. This last theme was most relevant to the young people, impacting upon their commitment to the activities. **Discussion:** These findings demonstrate the importance of maintaining full participation of those intended to benefit from such schemes. We discuss the challenges involved in securing ongoing commitment.

### Effects of implicit illness memory and self-related memory on pain perception: preliminary results

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**Background:** Cognitive models suggest that activated illness-related memory causes increased reporting of health complaints such as pain. Illness-related memory is more likely to have an influence if it is enmeshed with self-related memory. We therefore investigated whether inducing this association would cause a stronger increase in reporting of pain. **Methods:** Forty-five healthy subjects were randomised into a  $2 \times 3$  between-subject design. They were primed with a self-related or non self-related stimulus (100x), and one of three health-related stimuli (100x, "pain" = negative, "door" = neutral or "fit" = positive). Pain variables were measured by a cold pressor task. **Findings:** No effect of the health words on pain perception was found. Independently of the effects of the health-related words, pain threshold was significantly lower in the self-related *versus* non self-related condition. The same difference was marginally significant for pain tolerance. **Discussion:** Preliminary results suggest that illness-related memory may not influence symptom reporting, while increased self-focused attention does.

### Caregivers' Knowledge on Pediatric Asthma: Evidence from a portuguese sample

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Caregivers' symptom awareness and treatment management, essential to pediatric asthma control, depend on asthma knowledge. This study evaluates caregivers' knowledge about asthma (50 parents of children with persistent asthma; mean age 10) followed in two outpatient hospital departments, with the 'Questionnaire of knowledge on asthma' (25 items). Overall knowledge was slightly higher than in previous Portuguese study. There was a significant positive correlation between caregivers' asthma knowledge and both education level and duration of child asthma. Asthma knowledge was unrelated to asthma severity evaluated by caregivers and to asthma control evaluate by the physician. Nevertheless, parents that considered their child's asthma not at all serious had lower knowledge levels. Parents with lowest knowledge identified very few symptoms in the last two weeks, although only two of

these children were rated by the physician as well controlled. Asthma knowledge and misconceptions may affect parents' communication with physicians and adherence to treatment.

### Self-management to support hypertensive kidney patients: The ESMO study

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**Background:** Controlling hypertension is vital in kidney patients. However, most patients face serious problems in changing their hypertension-related lifestyle, in particular with regard to reducing salt-intake. This study evaluates a self-management program to support patients.

**Methods:** In a multicenter open randomized controlled trial (RCT), 150 hypertensive kidney patients are allocated to either regular care or a self-management intervention which comprises education, motivational interviewing, and self-monitoring of blood pressure, dietary intake and sodium intake with lab-on-a-chip techniques. A linear mixed model is applied to evaluate the intervention' effectiveness. **Expected results:** Compared to regular care, the intervention will improve sodium intake, blood pressure, renal function and psychological outcomes. Current stage of work: The RCT started July 2011. At the moment 20 participants completed the final follow-up measures at 6 months. **Discussion:** A multi-component program based on Self-Regulation Theory may provide the support kidney patients need to improve their health, autonomy and well-being.

### A comparison in social functioning between chronically ill and healthy adolescents

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**Background:** Previous research emphasized the impact of chronic diseases on adolescents' social functioning. This study aimed to investigate social functioning differences between chronically ill and healthy adolescents. A non-categorical approach was used. **Method:** 64 participants (32 healthy), aged 13–16, filled in the Living with Chronic Illness Scale. The scale was adapted for the healthy sample. **Findings:** Analysis of variance indicated that chronically ill adolescents were not significantly different than healthy peers regarding social functioning, but reported significantly higher levels of distress due to functioning limitations. In the chronically ill sample, the perception of social functioning problems as being illness related had a main effect on distress level. Age and sex had no significant effect on social functioning. **Discussion:** Chronically ill adolescents have overall similar social problems as their healthy peers, but experience higher level of distress as they perceive these problems to be illness related.

### Cognitive coping strategies in children with neurological disorders versus other chronic conditions. An exploratory study

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**Background:** Children with neurological disorders have higher internalizing problems compared to children with other chronic conditions. Considering the importance of coping strategies in emotional adjustment, this study aimed to explore the differences in cognitive coping strategies between children with neurological disorders and other chronic conditions. **Method:** 53 participants (58.5% girls), aged 8–18, suffering from various chronic conditions, filled in the CERQ-kids questionnaire. **Findings:** Analysis of variance showed children with neurological disorders to use significantly more frequently Rumination as a coping strategy compared to children with cardiovascular disorders ( $p < 0.01$ ). Similar tendency was identified in the comparison between neurological disorders and asthma or locomotor disorders ( $p < 0.05$ ), but not in the comparison with diabetes. No other between-group differences were identified. **Discussion:** Rumination was previously identified as a predictor for psychological maladjustment. For prevention purpose, further studies are needed to understand cognitive coping strategies used by children with neurological disorder.

### **Migraineurs should improve their level of emotional competence!**

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**Background:** The level of emotional competence (EC) plays a crucial role in mental and physical health. This study aimed to explore (a) whether there is a lack of EC in migraineurs; (b) whether the intensity, duration and frequency of migraine attacks vary according to the level of EC; (c) whether EC have a protective impact on migraineurs' quality of life (QL). **Methods:** 500 fully diagnosed migraineurs completed questionnaires about EC, migraine attacks and QL. **Findings:** Results showed that (a) migraineurs' level of EC do not significantly differ from controls'; (b) EC has a moderating effect on migraine attacks (the higher the level of EC, the less frequent the crises); (c) EC has a moderating effect on QL (the higher the level of EC, the higher the QL). **Discussion:** Findings suggest that developing psychological interventions to improve emotional competences could reduce the frequency of crises and enhance QL.

### **Supporting Life After Institutional Care. Results of a mentoring programme fostering resiliency in institutionalized youth**

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**Background:** The current study explored the outcomes of a mentoring programme aimed at fostering one-to-one supportive tutorship relationships of institutionalized youth, acting as a protective factor. Adult mentors outside of the residential care system were assigned to foster a resilient transition into young adulthood for institutionalized adolescents. Qualitative interviews were used to collect data from nine youth. The accounts provided were analyzed using thematic analysis. We identified that some youth found in such cohesive relationships with mentors the support they needed for establishing and maintaining healthy interpersonal relationships, which subsequently led to better social integration, lower negative affectivity, higher perceived control and level of well-being. Understanding the mechanisms leading to resilient outcomes for institutionalized youth may inform adequate health policies aimed at fostering social inclusion and subjective well-being among this social category.

### Relation between adherence, support request and codependent tendency in middle-aged chronic patients in Japan

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**Background:** It is necessary for middle-aged chronic patients to receive support properly from medical staff and others to manage their condition better. Their support request or compliance often depends on their codependent tendency or sense of value. We examined the relation between adherence, support request, support hesitation and codependent tendency in middle-aged diabetes mellitus and chronic kidney disease patients in Japan. **Methods:** Participants were 104 Japanese diabetes or chronic kidney disease patients aged 40 to 84. Questionnaire included items and scales of support request, support hesitation, adherence and codependent tendency. **Findings:** The Cronbach's  $\alpha$ s of the scales were more than 0.71 except one subscale of codependent tendency. Support request and hesitation significantly correlated with the subscales of codependent tendency ( $p < 0.05$ , 01). Adherence significantly correlated with both support request and hesitation ( $p < 0.05$ ). **Discussion:** When we provide supports for chronic patients, we need to consider their personality along with other factors.

### Body image dissatisfaction among young Frenchs: relationships with self-esteem controlling for body mass

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The purpose of the present research was to examine gender differences in body image and investigate the relative importance of PBID compared with actual body size to an understanding of self-esteem. The sample included a nonclinical population of 382 young French's (254 girls, 128 boys) drawn from 2 high schools and one university in Southeastern France. We use different measures: Body-Image Questionnaire, Figure Rating Scale, Rosenberg's Self-esteem Scale, Center for Epidemiologic Studies Depression Scale and Body mass Index. The prevalence of PBID was comparative with previous findings. Interestingly, actual body mass and psychological well-being variables were found to be significantly related with PBID, whilst being independent of each other. Findings support proposals that PBID arises from a complex interplay of factors, including gender, age, self-esteem, and actual body mass. In particular, our findings highlight the need for future research of a prospective nature incorporating psychological, sociocultural, and maturational factors.

### Impaired Attentional Disengagement from Stimuli Matching the Contents of Working Memory in Social Anxiety

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Individuals with anxiety direct attention to task-irrelevant threatening stimuli, which increases anxiety. Although many cognitive models in anxiety propose that an impaired top-down control enhances the processing of task-irrelevant stimuli, few studies have paid attention to task-irrelevant stimuli under a cognitive load task. In the present study, we investigated the effects of the working memory load on attention to task-irrelevant stimuli in social anxiety. The results showed that as social anxiety increased, participants were unable to disengage from task-irrelevant stimuli identical to memory cue (Experiment 1). Even when the working memory load was increased, impaired attentional disengagement was positively correlated with social anxiety (Experiment 2). This impaired attentional disengagement was related to trait social anxiety, and not state anxiety. Our findings suggest that socially anxious people have difficulty in disengaging attention from the task-irrelevant memory cue owing to an impaired top-down control under a working memory load.

### **Sun in the tropics: Attitudes surrounding incidental sun exposure in North Queensland**

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**Background:** To date, skin cancer prevention initiatives have focused on attitudes and cognitions surrounding deliberate sun exposure such as tanning. In North Queensland (NQ) however, comparatively few people deliberately tan. This indicates that much of the damage caused by excessive sun exposure happens incidentally, whilst performing normal daily activities. Incidental exposure is not planned or deliberate, thus theoretical modelling used in research should reflect this. **Methods:** Twenty-nine semi-structured interviews were conducted in NQ. Sun-related attitudes and behaviours were explored using content analysis. **Findings:** While participants reported negative perceptions of deliberate tanners, those who acquire a tan incidentally are perceived in a positive light. Similarly, participants considered their own incidental exposure to be 'non-risky'. **Discussion:** The focus on deliberate sun exposure has meant that attitudes surrounding incidental exposure have not been adequately explored. Future research should target attitudes and behaviour surrounding incidental sun exposure, especially in high-risk regions such as NQ.

### **Do mindful individuals benefit more from stress reducing effects of regular physical activity?**

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**Background:** Effects of regular physical activity on stress reactivity have been investigated intensively, yet little is known about differential moderators of this relationship. Trait mindfulness, which has been suggested to reduce stress reactivity, is hypothesized to play an important role as a moderator. **Methods:** We performed a randomized controlled study with  $N=75$  subjects comparing the effects of a 12-week exercise training program with a relaxation group and wait-list control group on stress reactivity in the Trier Social Stress Test for Groups. Stress reactivity was measured via cortisol, heart rate, heart rate variability and self-report measures. Trait mindfulness was measured with the Mindfulness Attention Awareness Scale. **Expected results:** Regular physical activity reduces stress reactivity more effectively in

subjects with high levels of mindfulness. Current stage of work: Data collection is ongoing and will be finished in June 2012. **Discussion:** This research improves our understanding of the stress-regulatory potentials of physical activity.

### **Informal Caregivers burden in oncology patients caregivers**

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In palliative care, family and patient constitute the unit of care, recognizing both their needs and difficulties. The literature indicates that the process of caregiving in an informal context results in psychological impairment, namely, physical, emotional and social exhaustion. The aim of this prospective study was to evaluate the association between caregiver's burden and distress. Our sample included 52 caregivers of palliative cancer patients, assessed with HADS and QASCI. The results revealed a positive and significant association between caregivers burden and psychological distress (anxiety and depression), indicating that participants with higher levels of anxiety and depression also have, higher levels of emotional, physical and social exhaustion. These results are similar to previous research on the psychological impact of caregiving, and demonstrate the importance of developing psychological interventions aimed to promote caregivers adjustment.

### **Risk perception, precautionary behaviour and public health education for tick-borne disease risks**

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Lyme disease from tick bites represents a growing problem in the UK. While some tick-related risk communication materials exist, these have not been informed by evidence concerning the uptake of protective behaviours and their effectiveness has not been tested. Using a Mental Models approach, interviews were conducted with 13 experts and 25 members of the general public to explore the risks posed by ticks and Lyme disease. A quantitative survey is currently being conducted to provide information on which psychological variables are the strongest predictors of protective behaviours. This information will be used to develop communication-based interventions against tick-borne disease risks. These materials will be piloted in a randomised controlled trial where members of the public will be sent one of three versions of a leaflet, incorporating either disgust-based, health psychology-informed or pre-existing messages. The ability of these leaflets to increase the uptake of key protective behaviours will be assessed.

### **Dose-Response Effects Following a Brief Information + Self-regulation Intervention For Behavior Change**

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**Background:** The study tested dose-response effects of a brief information + self-regulation intervention, and whether behavior change was specific to days when participants used the self-regulation technique in a randomized controlled trial. **Methods:** After an intervention (information + self regulation training), women ( $N = 103$ , age 30–50) filled out a 7-day diary containing physical activity records and self-regulation prompts. **Findings:** More frequent use of the self-regulation technique predicted higher physical activity: Average weekly physical activity increased by 13.78 minutes with each additional use of the self-regulation technique. In addition, the intervention effect was specific to days when participants used the self-regulation technique. **Discussion:** Participants who made more frequent use of the self-regulation technique benefited more from the intervention. We will discuss the theoretical implications of these dose-response effects and ways to encourage adults to make frequent use of intervention techniques.

### Motivation and living kidney donation

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Living kidney donors (LKD) face the risk of physical and psychological complications. Initial motivation could impact outcomes after donation. The aim of the present study is to report the first step of the research, and specifically the adaptation of Treatment Self-Regulation Questionnaire (Levesque et al., 2007) to the LKD. At baseline, 538 living donors (38% males – 45 y.o.,  $SD = 15.94$ ) have completed the 19-item motivation questionnaire. We proceeded to principal component analysis and obtained 4 factors describing various forms of extrinsic motivation: external (6 items –  $\alpha = 0.71$ ), introjected (3 items –  $\alpha = 0.67$ ), identified (3 items –  $\alpha = 0.50$ ) and integrated (4 items –  $\alpha = 0.59$ ). Statistical results shown significant differences between males and females about the controlled motivation, but none regarding the more autonomous form of motivation. There's no link between age and motivation. Others results as the form of motivation and the relationship between donor and recipient will be presented and discussed during the conference.

### Social support and disability: a critical review

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**Background:** To gain a systematic overview of the current state of research about social support in people with spinal cord injury (SCI). **Method:** A systematic literature review was conducted. The literature search was carried out in Pubmed, PsycINFO, ERIC, CINAHL, Embase and SSCI. Publications were identified according to predefined eligibility criteria, the study quality was evaluated, study results extracted, and a narrative synthesis compiled. **Findings:** Fifty-eight publications about social support and SCI were included. Social support was positively related to physical and mental health, to pain, coping, adjustment, and life satisfaction. In specific, the quality not quantity of social support seems to be crucial. **Discussion:** Social support is associated with better health and functioning in people with SCI. However, type, source and qualifier of social support need to be differentiated. This could advise health psychologists in the development of targeted and effective interventions to enhance functioning of people with disabilities.

### **Obesity, diet and physical activity for individuals with mild-moderate intellectual disability: A qualitative exploration**

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**Background:** Obesity is highly prevalent amongst adults with intellectual disability (ID). McGuire, Daly, & Smyth (2007) reported 86% of people with ID in Ireland could be classified as being overweight or obese. Little is known of how individuals with ID understand obesity and behaviours related to obesity and healthy weight loss (Frey et al., 2005). **Methods:** Picture elicitation (Aldridge, 2007) will be used with 15 individuals with mild-moderate ID. Picture elicitation will prompt discussion related to obesity and related health behaviours and allow a participatory approach by overcoming any verbal/communication difficulties individuals with ID may experience. Picture elicitation interviews will be thematically analysed. **Expected results:** A thematic analysis of the interviews and discussion prompts will explore people with ID's perception of obesity. Current Stage of Work: Participant Recruitment. **Discussion:** Emerging themes will help inform how people with ID understand health behaviours and assist in developing health interventions for this population.

### **A psychological sketch for the patient with multiple sclerosis**

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Multiple sclerosis is a neurological degenerative disease. Muscular control and some of the cerebral functions are reducing the hope for life of the patient. The aim is to identify some psychological features of the patient (depression, anxiety, and self esteem). We investigated 60 adult people divided in a target group (30 MS patients) and a witness group (30 healthy adults). Used testes: Beck Depression Inventory, Anxiety Inventory STAI, Self-esteem Scale. We proposed to examine 3 hypotheses investigating these psychological aspects. After statistic processing (T test was used) 2 hypotheses were confirmed, which means that MS patients are significantly more depressed and anxious as a trait, but not as a feature. Regarding self-esteem there were no significant differences between the tested samples. Considering the unknown

etiology of MS and its unfortunate evolution, the ecology of the psyche by psychotherapeutic support is mandatory for improving the quality of life of the patients.

### **Psychological effects of heart failure in adult age**

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The alarming frequency of heart failure in many areas of the globe, justifies the need to look better in this matter. The aim of this research is identifying some psychological dimensions of the ones affected. We investigated 80 adult people divided in a target group (40 patients who suffered from heart failure) and a witness group (40 healthy adults). Instruments: Beck Depression Inventory, Anxiety Inventory STAI, and Locus of Control Scale. We proposed to examine 3 hypotheses investigating psychological aspects (depression, anxiety, locus of control). After statistic processing (T test was used) our hypotheses were confirmed, showing significant differences regarding anxiety, depression and locus of control. Patients who had a heart failure are more anxious and depressed. Considering the severity of this kind of event in someone's life, classic treatment needs to be enriched with proper psychotherapeutic intervention, to assure a better chance of life for the patient.

### **Teacher occupational stress Questionnaire. Psychometric properties, gender and interpersonal comparisons**

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Within a sample of 1137 participants, 1018 women and 119 men, aged 19 to 60 years, were examined the psychometric properties of the Occupational Stress in Education Questionnaire (OSEQ). The 20 items of the questionnaire were developed based on Shirom, Oliver, and Stein (2009) description of the main sources of stress in teaching. The OSEQ demonstrated a high internal consistency (0.90) and its criterion validity was also satisfactory. The exploratory factor analyses revealed a factorial structure in three factors, covering 53.62% of the variance: stress produced by current professional activities, stress produced by working condition, and stress related to discipline and classroom management. The questionnaire responses showed different scores by gender and by teacher's perceptions about the quality of relationships they have with pupils and parents. Implication and suggestions for future researches on the validity of this questionnaire are discussed.

### **Verification on psychological effects by intervention of voice training**

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The voice training provided breathing methods when speaking and how to keep balance. The purpose of this research was to find out psychological effects when there were changes in voice through voice training. Date: October to November, 2011 Subjects were 24 students from ages 19 to 22 (10 males and 14 females) from the Japanese university. Five 90-minute voice trainings per week were conducted. Six types of psychological measure and subjects' voice impression from others were measured before and after the intervention. The results showed one voice training improved activity, comfort and brightness and reduced a feeling of exhaustion and depression. Through continuance of 5 voice trainings, the insecurity was reduced. When there were changes in the voice through voice training, it was confirmed that the impression of the subjects' voice from others were changed to 'cheerful, positive and lively.' These results provide effective suggestion for the next intervention.

### **The effectiveness of an Expressive Writing intervention for Irritable Bowel Syndrome in a Romanian Sample**

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Depression, anxiety and a low quality of life are often associated with Irritable Bowel Syndrome (IBS). Considering that Expressive Writing (EW) has been found to result in significant improvements in psychological and physical health, we aimed to test whether EW is an effective intervention for patients suffering from IBS. We used a randomized clinical trial that compared two groups, each consisting of 25 patients. The experimental group- the intervention condition, that consisted in four 20-minutes writing sessions, and a control group (no-intervention). The outcome measures were: health-related quality of life (SF-12), anxiety (BAI) and depression (BDI), assessed both pre- and post-intervention. Our results have shown a clear improvement in emotional reactivity and perceived quality of life for the intervention group in comparison with the control group. Relevant implications for IBS patients counseling can be drawn, as the EW is a low-cost, effective and easily administered procedure in clinical settings.

### **Anxiety in patients with chronic heart failure: impact of perception of control and acceptance coping**

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**Background:** Anxiety may contribute to declining physical functioning in patients with chronic heart failure (CHF). The perception of control, a domain of illness perception, has been linked to anxiety. Acceptance is hypothesized to relieve emotional distress. We investigated if acceptance coping mediates the impact of perception of control on anxiety. **Methods:** 65 patients with CHF from a heart failure out patient clinic filled in the Brief Illness Perception Questionnaire, Brief COPE, and Hospital Anxiety and Depression Scale. **Findings:** Significant correlation between Control, Anxiety and Acceptance coping were found. In a path-analysis

the effect of Perception of control on anxiety remained significant ( $\beta = -0.30^*$ ) whereas the effect of acceptance coping as a mediator was rendered non-significant. **Discussion:** Perception of control has primacy over acceptance in predicting anxiety in patients with CHF, suggesting that the primary efforts for emotional support should be directed toward an enhanced sense of control.

### **The relation between perfectionism dimensions and body image dissatisfaction**

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The sensitivity toward thin ideal is one of the most studied influential factors of body image dissatisfaction (Grabe, Ward & Hyde, 2008). Also socially prescribed perfectionism and perfectionist self presentation are significant predictors of the attitude toward appearance (Sherry, Uriend & Hewitt, 2009). The study aims to identify relevant factors that contribute to body image dissatisfaction in young females, by exploring the relation between perfectionism dimensions and socio-cultural attitude toward appearance. 276 participants (19–21 years old) completed 'Multidimensional Perfectionism Scale' (Hewitt & Flett, 1991), 'Sociocultural Attitudes Toward Appearance Questionnaire' (Thompson et al., 2003) and Body Esteem Scale for Adolescents and Adults (Mendelson, White & Mendelson, 1997). Results revealed different patterns in measured dimensions for participants scoring high *versus* low in thin ideal internalization, in terms of socially prescribed perfectionism and self oriented perfectionism such as persons with high socially prescribed perfectionism reported higher levels of thin ideal internalization.

### **Stress, coping and multicultural attitude among adults refugees and asylum seekers in Luxembourg**

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The first part of this study consists of sorting out stressors among refugees ( $N = 50$ ) and asylum seekers in Luxembourg through semi-structured interview. Content analysis will be used. Secondly, the effect of multicultural attitude, self-efficacy and social support on coping strategies among refugees ( $N = 104$ , MANOVA) and asylum seekers in Luxembourg will be assessed. Folkman & Lazarus, (1988) ways of coping, Munroe, (2003) multicultural attitude, Chesney et al., (1996) self-efficacy and Sarason et al., (1983) social support questionnaires are adapted and used. The project is at the level of data collection. The following results are expected: Positive multicultural attitude, good degree of self-efficacy and social support should be associated with adaptive coping strategies. Adaptive coping is associated with good mental health (Endler & Parker, 2000). The model where multicultural attitude, social support and self-efficacy are predicting adaptive coping strategies should fit well to the data ( $N = 300$ ). With these findings, adapted psychological interventions in a multicultural context maybe constructed.

### Evaluating nurses and patients communication skills: A focus group study

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Nurses spend more time with patients than physicians. Our main objective is, to look for the more valued communication skills for patients and nurses to establish an adequate nurse patient relationship. **Methods:** It will be carried out in April four parallels focus groups (two of 8–10 patients and two of 8–10 nurses). Focus groups are a method of group interviewing in which the interaction between the moderator and the group, serves to elicit information and insights in response to designed questions. In this study we will try to elicit information about the best communication skills in nurse patient relationship from both patients and nurses (i.e. What do you think patients like more of nursing care?). **Expected Results:** we will obtain a list of communication skills that patients and nurses think they are the most important for an adequate nurse patient relationship. This list will allow us to design an intervention program to improve nurses communication skills.

### Screening for post-partum depression: the importance of home visits

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**Background:** Changes resulting from adaptation to motherhood, namely emotional, can increase individual vulnerability and impact the individual's health and the family's. The aim is to analyse the impact of postpartum depression through home visits. **Methods:** This is a quantitative, descriptive and correlational study with a sample of 175 women (mean age 28.47 years old). The assessment protocol allows for socio-demographic and obstetric characterisation. It also includes the Edinburgh Post-Partum Depression Scale and the Home Visit Scale, designed for the purpose, with four dimensions (education, importance, empathy/respect and information). **Results:** The puerperae suspected of depression have higher values in all dimensions and the scale overall shows statistical significance in dimensions education, importance, global and relationship empathy of the Scale ( $p=0.000$ ). **Discussion:** The home visit is fundamental in screening for post-partum depression, directing situations that stray from normal to psychological counselling.

### Communication skills of healthcare professionals with patients with hearing impairment

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In Portugal are estimated around 150 thousand hearing impairment people. This study assesses the communication skills of radiographers in relationship with patients with hearing impairment of the health services, and examines what this type of users think about

radiology service. The sample is consisted by five radiographers who works in a region Lisbon hospital and five hearing impairment patients. Appealed to a qualitative approach supported on semi-structured interviews originally developed, one for health professionals, and another for patients with hearing impairment. The content analysis of interviews suggest that, despite the difficulties, healthcare professionals feel able to communicate effectively (attested by the analysis of interviews) but is not always is efficient; the analysis emphasizes need to supplement their training to learn how communicate with this population type; identifies 'gestures', as a communication strategy most used and, reinforces the need to develop a symbolism appropriate for the context.

### **Self-determination theory applied to health contexts: a meta-analysis**

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Self-determination theory (SDT; Deci & Ryan, 2000) is a theoretical framework commonly used in research studies within health care and health promotion contexts. To systematically synthesise the findings of these studies, we conducted a meta-analysis using information from 184 independent data sets. We evaluated associations between the SDT-based constructs of perceived autonomy support and psychological need satisfaction; and relations between these SDT constructs and indices of mental and physical health. Results showed (1) the expected pattern of relations among the SDT variables and (2) positive relations between psychological need satisfaction and autonomous self-regulation with beneficial health outcomes. Several variables (e.g., study design) were tested as potential moderators when effect sizes were heterogeneous. Using the meta-analysed correlations, path analyses were used to test the interrelations among the SDT variables and health outcomes. Results suggested that SDT is a viable conceptual framework to study antecedents and outcomes of motivation for health-related behaviours.

### **Teacher's resilience and children's life competencies: results of a randomised controlled study**

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The influence of teacher's resilience on student's behaviour was analyzed in a randomized controlled trial testing three kinds of interventions intended to enhance life competencies among Swiss school children as well as their teachers and their parents. 72 teachers and 1236 children were randomly assigned to four conditions: a school intervention, a family intervention, a combined intervention and a control group. Data were collected using a battery of standardised questionnaires, including resilience scales. Ratings of children's behaviour were made by teachers, parents and children themselves. Whereas it can be shown that improvement of teachers' resilience seems to play a significant mediating role in the effect of the interventions on children's well-being, the underlying mechanisms of this effect remain unclear. Further analysis suggests that an altered perception of children among teachers is

likely to account for this result. An approach strengthening teacher's resources seems nevertheless promising for health promotion among children.

### **The role of the inner health picture (IHP) in the child's resilience**

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The term IHP was introduced for understanding the psychological mechanism of the resilience to the disorders. Since this point of view the forming IHP in children is the best way the risk disorders prophylaxis. We appreciated the IHP in 80 children of 4–7 years old. It was shown, that about 60% of children of 4–5 years old and 40% children of 6–7 years old instead of IHP had inner picture of illness. When they were asked what they need to do for being health, they answered they need to go to the doctor and use the pills. The program of IHP forming and were made and approved during a half of the year. The sickness rate decrease about 10%. The questions are come up: does the IHP connect with the child health level? What parameters are it influenced with on the different parts of the ontogenesis?

### **Health Behaviour and efficacy among Japanese University Students**

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A total of 192 Japanese university students participated in a questionnaire survey on health behaviors. The questionnaire consisted of a subjective health condition score (SHCS), general self-efficacy scale (GSES), and questions on smoking habits, drinking, sleeping, eating, and exercise. Mean age was 19.6 years (SD = 1.23) and mean body mass index was  $21.3 \text{ kg m}^{-2}$  (SD = 3.01). We conducted multiple linear regression analysis with SHCS as the dependent variable. Stepwise multiple regression analysis revealed that exercise ( $\beta = 0.301$ ,  $p < 0.0001$ ), sleeping ( $\beta = -0.187$ ,  $p < 0.006$ ), smoking ( $\beta = -0.200$ ,  $p < 0.004$ ), living alone ( $\beta = -0.162$ ,  $p < 0.021$ ), GSES ( $\beta = 0.160$ ,  $p < 0.023$ ), and being male ( $\beta = -0.139$ ,  $p < 0.047$ ) were significantly associated with SHCS (adjusted  $R^2 = 0.228$ ). Participants with higher GSES scores tended to have higher scores in family and self as contributors of maintaining good health as measured by the Japanese Health Locus of Control Scale. Our results suggest that students with good subjective health tended to have high self-efficacy in addition to a healthy lifestyle.

### **Psychometric Properties of the Brazilian Version of Brief Illness Perception Questionnaire (Brief IPQ)**

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In Brazil there are no valid instruments that evaluates the illness perception based in Leventhal's Self-Regulation Model, ensuring the relevance of this proposal research. The object of this study was to evaluate the psychometric properties of the Brazilian version of the Brief Illness Perception Questionnaire. The Brief IPQ was applied in 324 patients (59.9% women) with chronic diseases. The principal component analysis (PCA) with varimax rotation extracted three factors: Factor 1, emotional representation (emotions, concerns, consequences and identity); Factor 2, cognitive representation (treatment control, individual control and understanding); and Factor 3, temporal dimension. Two models were tested in the confirmatory factorial analysis: Model 1, based on theoretical Leventhal's Self-Regulation Model; and Model 2, based on the results of PCA. The Model 2 presented the best fit. The Brief IPQ was considered valid and reliable to assess the perception of illness in the practice of health professionals in Brazil.

### **Brazilian Version of the Brief Illness Perception Questionnaire (Brief IPQ): Linguistic Adaptation**

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The Brief Illness Perception Questionnaire (Brief IPQ) is an English tool of nine items that evaluates the illness perception based in Leventhal's Self-Regulation Model. In Brazil there are no valid instruments from the linguistic point of view with this proposal. The objective of study was to translate and to adapt the Brief IPQ to Portuguese, in the Brazilian context. Initially, the steps of reverse translation and semantic analysis were strictly followed with bilingual translators. The adaptation process also included the participation of ten patients with chronic diseases and health professionals that evaluated and identified possible advantages and difficulties in understanding the translated version of the tool. The Brazilian version of the Brief IPQ was considered compatible and appropriated of the linguistic point of view to assess the illness perception in people with chronic diseases in Brazil, being incated the evaluation of the psychometric properties of the tool.

### **Manipulating parkinson's patients' implicit technology theories when being introduced to smart phone speech therapy applications**

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Smart-phone Speech Therapy applications are being developed to encourage use of louder voice in Parkinson's patients, typically older adults less familiar with new technologies. Domain-specific mindsets have been shown to result in mastery or helpless behaviours. For these therapy-application interventions to achieve maximum effect, users must approach technology optimally. This study investigated if technology-related implicit theories could be manipulated, altering technology-approach. Twelve Parkinson's patients (10male, mean-age 66.75 years), with prior speech-therapist referrals, read either an entity or incremental

implicit-technology-theory manipulation. Participants then completed an implicit-technology-theory measure, and a semi-structured interview while critiquing an application prototype. Thematic analysis themes included: 'failures with technology' (entity-condition participants more commonly referring to external causes); 'plans of usage' (incremental-condition participants more frequently making elaborated plans); and 'effort' (incremental-condition participants more commonly endorsing the utility of effort). Findings suggest manipulation of patients' technology-mindsets is possible, with initial approach potentially impacting any eventual success of a technology-based therapy.

### **Predictors of intentional unprotected sex with occasional partners**

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Intentional unprotected sex with occasional partners (IUS) is associated with greater HIV risk. Nevertheless, some individuals still engage in IUS. The factors that may increase IUS rate are drugs use before sex, seroguessing, recreative sex, as well as gender and sexual orientation. Where gay and bisexual men are at greater risk of IUS. Participants ( $N=955$ ) compiled the questionnaire through Internet. A questionnaire was built to assess sex related behaviors (e.g. seroguessing, drugs use before sex, intentional unprotected sex). A SEM's results indicated that IUS is significantly associated with drugs use before sex ( $\beta=0.733$ ,  $p < 0.001$ ), recreative sex ( $\beta=0.273$ ,  $p < 0.001$ ), and seroguessing ( $\beta=0.253$ ,  $p < 0.001$ ). Gay and bisexual men were at greater risk ( $\beta=0.353$ ,  $p < 0.01$ ; interaction between gender and sexual orientation). Intentional unprotected sex is still engaged despite HIV risk associated. This study may help to delineate variables on which effective and efficient tailored HIV prevention interventions might be conducted.

### **The sense of humor as an emotional character strength enhancing the individual's psychosocial coping resources**

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The aim of this presentation was to test the hypothesis that the positive humor styles (self-enhancing, affiliative) can implicitly signal of the individual's mental health and resilience. The hypothesis was confirmed on a sample of 135 young adults split by the method of cluster analysis (K-means algorithm) into three groups which significantly differed on the participants' character strength variables, their psychological, social and subjective well-being characteristics, Coping Humor Scale scores, gelotophobia and humor – style variables. It was found out that the more significantly the participants differed on the variables, indicative of their positive functioning, the more frequently they resorted to positive humor styles, the lower was their gelotophobia. Given the new approach to assessing the mental health continuum (Keyes, 2008) is based on the frequency of feeling the subjective, psychological and social well-being, our findings open up new vistas for studying humor as an emotional character strength and a valuable psychosocial resource. of residence.

## The hierarchy of personality resources of mental health

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The presentation is aimed at substantiating the hierarchy of personality resources of mental health with reference to the theory of the pivotal role of human self-directed agency in well-doing. **Methods:** A set of variables, including those indicative of mental health continuum (MHC-SF, Keyes, 2008), were assessed on a sample of 135 participants (aged 18-35) and treated with the help of the exploratory factor analysis to extract principal components. **Findings:** The rotated component matrix yielded the key factor of “positive self-efficacy”, explaining 30.581% of cumulative variance, loaded by the variables of: the sense-of-the-life orientation (0.888), psychological well-being (0.795), subjective well-being (0.735), self-esteem (0.678), emotional intelligence (0.658), life satisfaction (0.564), conscientiousness (0.475), agreeableness (0.433) and problem-focused coping (0.471). The second factor was loaded by negative correlations (–0.845) with the feeling of envy and psychopathy symptoms, the third one signaled avoidance of stressful encounters. **Discussion:** Positive self-efficacy appears to be the major resource of mental health.

## The role of the simultaneous pursuing of athletic and academic activities in mental health enhancement

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**Background:** With reference to the theory that impairments in shifting attention between simultaneously performed tasks are related to anxiety (Eysenk et.al, 2008), it is hypothesized that the student-athletes, permanently exposed to the situations demanding switching attention between equally significant life tasks, are more likely to become resilient, develop self-directed agency and problem-focused coping style than their peers not confronted with the dilemma. **Methods:** Case-studies of the participants of the Collegiate Athletic program in the USA and a comparative experimental study of the relationship between resilience and mental health of the student – sportsmen and those not going in for sports in Ukraine (about 100 participants) are planned. **Expected results:** Student-athletes are likely to demonstrate both higher resilience and mental health thanks to the positive personality dynamics. **Discussion:** The study might provide an additional proof of the compatibility of athletic and academic activities in mental health enhancement.

### **The relationships between illness causal attributions, their fairness judgements and belief in a just world**

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**Background:** Relationships between belief in a just world (BJW), illness causal attributions and fairness judgements of those causes were investigated. **Methods:** Participants ( $N=200$ ) completed questionnaires measuring BJW, illness causal attributions and fairness judgements for 42 illness causes, classified into behavioural (most controllable), environmental and hidden (e.g., mystic) categories. **Findings:** BJW was positively correlated with all fairness judgements. Behavioral causes were judged fairer than environmental causes, which were judged fairer than hidden causes. Correlations between causal attributions and their corresponding fairness judgements were significant among all participants concerning behavioral causes, but only among participants with high BJW concerning environmental and hidden causes. **Discussion:** BJW moderates relationships between illness attributions and fairness judgments. Individuals with high BJW tend to believe that illness is deserved even when illness causes are uncontrollable. This may be explained as a defensive coping process, with potential implications for blaming patients and for engaging in health behaviors.

### **The skilled migrant women's experience: a qualitative study on personalization and social integration in Switzerland**

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Recent research on professional migrant women indicates a tendency for career damage. However, studies in this field tend to focus on gender inequalities or employment-oriented statistics. In fact, from a psychological perspective, difficulties faced by these women involve multiple transitions that may affect their self-esteem and identity. **Aims:** To investigate the meaning of the immigration experience from participants' own frame of reference and the impact on identity and social integration. **Methodology:** Semi-structured interviews will be conducted with skilled migrant women in Switzerland, whom are currently being recruited, and the resulting data analysed with thematic content analysis. **Expected results:** Identify participants' self-protection strategies to deal with these conflicts and the effects on their identities in the process of construction of meaning within social interactions. This research may contribute to the health and work fields of study and to a better understanding of the subjective experience of these women.

### **The life quality determinants among elderly women**

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The aim of the research is to determine the relationship between feeling of the quality of life and physical, social and professional activity as well as strategies of dealing with stress. The determinants of quality of life are: the level of self-esteem of one's well-being composed of

one's self-esteem, the evaluation of general health condition, the evaluation of level of stress, the feeling of satisfaction of life and the evaluation of the quality of life. Control over determinants of the feeling of quality of life was reached by conducting the research in four groups: individuals taking part in physical training; individuals participating in meetings of Seniors Club; individuals who are professionally active; control group. There have been around 150 women above the age of 50 enrolled in the research. Factor analysis and test of difference significance showed specific, statistically important dependencies between determinants and feeling of mature women' quality of life.

### **Psychological Group Intervention with Breast Cancer patients: the role of positive variables in resilience**

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The efficacy of group interventions in oncology is well documented in health psychology, as the mediator role of positive variables buffering patients distress. This work presents the results of a psychological group intervention in breast cancer, aiming to reduce clinical symptomatology and promoting positive variables. We used an experimental and a control group, with 6 participants, with similar clinical and sociodemographic characteristics. Participants were evaluated at: T1 – before intervention; T2 – post-intervention and T3 – six months after T2. Instruments used: HADS, Social support scale, meaning of life scale and a stress related growth scale. Our results show that the control group had higher levels of distress in T2 and T3, and the experimental group presented higher levels of social support, meaning of life and stress related growth. We conclude that social support and meaning of life are positively related with resilience, promote growth and psychological adaptation to cancer.

### **Efficiency of combined MBCT with CBT and traditional CBT on coping strategies of MDD patients**

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**Background:** Efficacy of combined MBCT with CBT and Traditional CBT on coping strategies of patients with MDD is considered in this study. **Methods:** This clinical-experimental study was carried out on 90 patients randomly selected from 160 cases that met DSM-IV criteria for MDD. They were divided into 3 equal groups including CBT, MBCT with CBT, and TAU. They were between 18 to 45 years old and evaluated through the SCID and self-report by CISS, in two pre and post tests. Data were analyzed by Co-variance analysis. **Findings:** Combined MBCT with CBT group and traditional CBT had significantly decreased on social diversion, in other hand Emotion – Oriented strategies were decreased and Task – Oriented strategies scores were increased in combined group. Distraction and avoidance strategies had no significant changes. **Discussion:** Elements from MBCT and CBT in comparison to CBT made different changes in coping mechanism and TAU had no important changes in those.

### **Karoshi cerebrovascular incidents – a psychosomatic disease?**

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Karoshi refers to sudden vascular incidents related to overwork. As reported by Haratani (2002) most of the cases are cerebrovascular events suffered by middle-age men. Half of karoshi incidents remains unexplained by medicine. Karoshi has never been studied in psychosomatic paradigm. The main purpose of presented research is to identify psychological risk factors of karoshi. Due to the fact that only 25% of victims survive (ibidem) and many of them are unable to be tested, the research is divided into two stages. First – explorative case study to precise hypotheses and then quantitative verification of them. The case study of 34 years old Polish victim that suffered cerebral bleeding has been conducted. The man was free of any medical risk factors. Besides interview, several psychometric methods were used. The results suggest that temperament imbalance may be a temperamental risk factor (Strelau, 2002) of such cases. This hypothesis is to be examined.

### **Personal competencies of a manager and welfare of the subordinates**

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Organizational culture as well as interpersonal relationships at work are important psychosocial hazards (Leka and Jain, 2010). The superiors' impact on work environment is crucial. The aim of the study was to determine the subordinates' job stress and well-being and explore individual differences of the managers. All of 71 participants worked in the same institution, 30 of them (29 employees+1 manager) in one department, 15 (14+1) in the second one and 26 (24+2) in third department. Job stress was measured in quantitative research with PWC questionnaire (Widerszal-Bazyl, Cieslak, 2000). The managers' competencies were examined via structured interview and several psychological tests. The findings suggest that the superior's personality, especially, their own stress resistance, as well as specific approach to conflict management may influence job stress level and deterioration of the subordinates' well-being, despite of the manager highly effective management style. This may be important for occupational health management.

### **Brief psycho-social training and Self-competence, Social Self-efficacy, Sense of Coherence among Slovak University students**

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**Background:** To examine the question, whether a brief psycho-social training can affect Self-Competence, Self-Efficacy, and Sense of Coherence among university students. **Methods:** Before and after training comparisons of Self-Competence (Tafarodi, Swan, 1995),

Self-Efficacy (Sherer, 1982), Sense of Coherence (Lundberg, Nysrom-Peck, 1995) scores from baseline (T1) to 2 months follow up (T2) was carried out among 106 students (88.7% women, 22.8 mean age) in experimental group (EG, 44.3%) and control group (CG). **Findings:** Significant increase was found in measures of Self-Competence among students of EG from T1 to T2. Significant decrease was found in measures of Social Self-Efficacy, as well as factor of Sense of Coherence – Manageability among students of CG from T1 to T2. Significantly higher level of Manageability was found among students of EG in comparison to students of CG post training. **Conclusion:** The results supported the protective effect of brief psycho-social training on personality health-related constructs.

### The meaning of life as a predictor of health

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The research presented in paper has been realised with two goals. The basic aim was an empirical verification of the theory of meaning of life developed by the author. The applied goal was to state the relationship between the meaning of life and the self-estimated health. The theory of meaning of life has been called a libertial-valuegrounded one. The adjectives used in the name are neologisms, because this is new two-dimensional theory of meaning of life. The participants of the study were 168 healthy persons. They were examined using the methods developed by the author: the Relation to Life Questionnaire, the Personal Freedom Questionnaire and the Sensibility to Values Questionnaire. The results of path analysis showed that, according to the theory, the meaning of life is conditioned by two mechanisms: personal freedom and sensibility to values. The meaning of life turned out to be the significant positive predictor of subjective health.

### HAPA predictors of physical exercise adherence and withdrawal in postmenopausal women

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**Background:** The study aimed to test the HAPA constructs in relation to exercise behavior short-term maintenance among postmenopausal women who recently initiated a supervised exercise program and adhered to it (adherers) or did not (non-adherers). **Methods:** Two hundred and forty three postmenopausal women completed a self-report on physical exercise and HAPA's protocol to evaluate psychological variables related to exercise behavior at baseline, during and after a supervised exercise program in which the experimental group (adhered plus non-adhered women) was enrolled. **Findings:** Forward step logit regression analyses according to the HAPA model were conducted. Short-term maintenance (adherence to the supervised program) was directly predicted by perceived positive outcomes at post-intervention. Non-adherence to the program was inversely predicted by perceived positive outcomes and maintenance self-efficacy at post-intervention. **Discussion:** Our findings support the predictive power of benefits perception and maintenance self-efficacy with regards to

exercise behavior maintenance among middle-age women. They also provide information for planning tailored interventions to increase physical exercise among postmenopausal women.

### Outcomes derived from short- and long-term adherence to exercise in postmenopausal women

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**Background:** Middle-aged women are the population with higher rates of a sedentary lifestyle. This study aimed to explore the health-related benefits derived from adhering to exercise among postmenopausal women. **Methods:** Two hundred and forty three postmenopausal women completed self-reports on physical exercise and health-related quality of life during postmenopause, and fitness indicators were assessed. Measures were conducted at baseline and 18 months later. **Findings:** Comparisons among active and sedentary women indicated positive changes in Body Mass Index, flexibility and several indicators of health-related quality of life, namely general quality of life, health after menopause, mental health, physical health, vasomotor symptoms and positive aging. **Discussion:** Our findings support the benefits derived from exercise in middle-age women. Cardiovascular health, daily life functioning and health-related quality of life improve with exercise. Given the risks linked to a sedentary behavior and the benefits derived from exercise, exercise promotion actions should be aimed at middle-age women, particularly postmenopausal women.

### An evaluation of a peer-led group intervention for people newly diagnosed with HIV

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**Introduction:** Although HIV infection shares common features with other chronic illnesses, it poses a number of unique challenges can have profound consequences on physical, psychological and social wellbeing, and onward transmission. **Methods:** We evaluated a peer-led, group-based and participatory newly-diagnosed course (NDC) at an HIV treatment centre in London. All individuals attending in 2011 were given a questionnaire at sessions 1 and 6. Validated self-perceived outcome measures were collected using the Likert-type scale. Sixty-five people attended 5 courses. **Findings:** Confidence was improved in dealing with: HIV status ( $z = -4.168$ ,  $p < 0.0001$ ); sex and relationships ( $z = -3.785$ ,  $p = 0.0002$ ); the future ( $z = -4.049$ ,  $p = 0.0001$ ). There was improvement in: emotional state ( $z = -3.252$ ,  $p = 0.0011$ ); access to information about treatment ( $z = -3.436$ ,  $p < 0.0001$ ); knowledge about HIV transmission ( $z = -4.26$ ,  $p < 0.0001$ ); accessing post-exposure prophylaxis ( $z = -4.508$ ,  $p < 0.0001$ ). **Discussion:** Delivery of peer-led support at diagnosis has an effective role to play in improving individual health outcomes and reducing transmission, through increasing self-care and engagement with healthcare providers.

### Planning, self-efficacy, and activity experience mediate the intention-behavior relationship

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Research suggests that planning and self-efficacy bridge the intention-behavior gap. The purpose of the present study was to examine whether this chain may be extended by positive experiences with physical activity. A sequential mediation between intention and physical activity via positive experiences, planning and volitional self-efficacy was assumed. 192 students aged 18–46 years filled in three questionnaires each with intervals of two weeks. The path analysis revealed that positive experiences (T2), planning (T2) and volitional self-efficacy (T2) mediated between intention (T1) and physical activity (T3) in the expected order (CFI=0.953, TLI=0.900, RMSEA=0.072,  $\chi^2=13.981$ ,  $p=0.052$ ,  $\chi^2/df=1.997$ ,  $R^2=0.32$ ).

**Findings:** suggest that the intention-behavior gap can be bridged apart from planning and self-efficacy by experiences. Intentions are associated with positive activity experiences that are related to planning. Planning is connected with volitional self-efficacy that fosters physical activity.

### Relation between mercantile-materialistic orientation, sport activity, quality of life and health among young adults

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**Background:** The authors want to verify the influence of mercantile-materialistic orientation on the way of sport engagement including motivation for sport activity, quality of life and health. **Methods:** participants: 200 young adults, questionnaires: health (Plucinska, 2010), quality of life (Stras-Romanowska, 1997), mercantile-materialistic orientation (Gornik-Durose, 2008), questionnaire of sport activity (Terry, Fowles, 2010); correlation analyses, moderator analysis, the *T*-Test (SPSS). **Expected results:** H1: Young adults usually do not lead an active lifestyle. H2: Among young adults engaged in an active lifestyle dominates mercantile-materialistic orientation. H3: Sport activity connected with mercantile-materialistic orientation correlates negatively with health. H4: Sport activity connected with mercantile-materialistic orientation correlates positively with subjective quality of life. Current stage of work: Data collection. **Discussion:** Better understanding of the way of sport engagement including motivation for sport activity, prevention of health behaviours (Luszczynska, 2011).

### Influence of the social support on the therapeutic adherence in early attention

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There are few studies that describe the variables that modulate the therapeutic adherence in physical therapy treatments in children with developmental retardation. The objective of this study is to determine the influence of the emotional variables in parents concerning the adherence to physical therapy treatments. This is a descriptive correlational study performed

in 2 centres for children with developmental retardation. A total of 79 parents with children that present different neurological and maturation pathologies were evaluated. Of these, 42 had sons and 37 daughters; 22 were premature, 8 presented encephalopathy, 3 muscular dystrophy, 6 congenital malformations, 4 Down syndrome, 25 muscle tone alterations, and 20 with no diagnosis. The ages were between 2 and 76 months. Results: There was no significant correlation between the therapeutic adherence and anxiety ( $-0.144$ ), depression ( $0.027$ ) or social support ( $0.035$ ). This indicates that it is necessary to delve further into the cognitive type variable.

### Self-efficacy and social support in chronic pain: family and patient perspectives

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**Background:** Research on the relationships concerning judgments of relatives about the capability of patients to manage chronic pain and satisfaction with social support and the perceptions of patients for the same areas; also to explore their predictive power over health outcomes. **Methods:** Cross-sectional, correlational research. Fifty Fibromyalgia and Rheumatoid Arthritis patients matched with their fifty relatives completed self-applied questionnaires. Data were analyzed using Pearson correlation and multiple regression analysis. **Findings:** The perception of relatives on the capability of the patient to manage their illness was related to the self-efficacy perception of the patient ( $r=0.59$ ,  $p\leq 0.01$ ); no significant relationships were found between provided and perceived social support. The perception of relatives on the self-efficacy of patients and not social support, was a significant predictor of the disability of patients ( $\beta=-0.33$ ,  $p\leq 0.05$ ) but not of the remaining health outcomes. **Discussion:** Relatives can be a therapeutic resource to improve physical function of chronic pain patients.

### Influence of social support in anxiety and depression in families containing children with developmental retardation

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The problems related to the developmental retardation of a child have an important emotional impact on the families. The objective of this study is analyze the perceived social support given to the families in response to their anxiety and stress. A total of 79 parents with children with different neurological pathologies were evaluated. Of these, 22 were premature, 8 encephalopathy, 3 muscular dystrophy, 6 congenital malformations, 4 Down syndrome, 25 muscle tone alterations, and 20 with no diagnosis. The ages were between 20 and 72 months. Results: The parents gave medium levels of anxiety and depression: 45.01 (moderate depression: 36–51), anxiety features 20.58 (P.C.: 20–25) and anxiety state 17.44 (P.C.: 20–23). Social support: 24.51 over 30. The correlations were significant: social support and anxiety features:  $-0.475$ ; social support and anxiety state:  $-0.513$ ; social support and depression:  $-0.628$ . Confirm that social support is an important variable to soften the emotional responses.

### Relationships between self-efficacy, catastrophizing, fear of movement and health outcomes in Fibromyalgia

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**Background:** To study the relationships and predictive power of Self-Efficacy, Catastrophizing and Fear of Movement on the experience of pain in Fibromyalgia, identifying the self-efficacy role in these relationships. **Methods:** 61 patients from the Fibromyalgia Integral Care Unity (San Vicente del Raspeig Hospital) completed self administered questionnaires for assessing the variables of this study. Pearson correlation and multiple regression analysis were performed. **Findings:** No significant relationships were found between fear of movement and other variables, only the perception of the overall impact of fibromyalgia and distress showed significant relationships with Catastrophizing ( $r = 0.43, p \leq 0.001$ ;  $r = 0.42, p \leq 0.001$ ) and Self-Efficacy ( $r = -0.51, p \leq 0.001$ ;  $r = -0.46, p \leq 0.001$ ). Self-Efficacy did not modulate the relationship between Catastrophizing and health outcomes, but it showed an effect mediated by the Catastrophizing over health outcomes. **Discussion:** Self-efficacy emerges as the most important variable explaining the experience of pain, constituting a therapeutic target also in the tertiary level of care.

### Flow and general health in a sample of Spanish health professionals of healthcare organizations

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The purpose of this paper is to analyze the effects of flow in physical health of health professionals belonging to Spanish healthcare organizations. A sample of 443 health professionals (127 physicians and 299 nurses) was examined using correlation analysis. Dispositional Flow Scale (Jackson & Eklund, 2002), Physical Symptoms Scale (Benavides & Martinez, 2005) and SF-36 General Health Questionnaire (Ware, Kosinski & Dewey, 2004) were administered. Results show that flow is inversely related with the presence of negative physical symptoms ( $r = -0.119, p = 0.033$ ), while is directly related with general health ( $r = 0.176, p = 0.001$ ), vitality ( $r = 0.189, p = 0.000$ ), role emotional ( $r = 0.190, p = 0.000$ ) and mental health ( $r = 0.133, p = 0.013$ ), measured by SF-36. This means that flow plays an important role in wellbeing, especially considering mental health. We can conclude that programs directed to improve flow process in health professionals, as defined by Csikszentmihalyi (1990), can improve some aspects of health.

### Personality, subjective health and evaluation of stress

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The research focuses on features of the five-factor personality model (Big Five) and the subjective evaluation and perception of stress and subjective health. The survey was carried out on a sample of respondents of working age ( $N = 672$ ; 361 men and 311 women) employed in various professions, using the NEO FFI and a questionnaire devised by the author to determine the respondent's subjective health and levels of work-related and non-work-related stress. Particular attention will be paid to personality traits of subjectively stressed individuals compared with those who rate their levels of work-related and non-work-related stress as only average or 'normal'. The main goal is to verify the hypothesis that personality traits in the 'Big Five' model influence the degree of perceived stress and health in different ways. The collected data were analyzed for correlation and variance and were subjected to the *t*-test.

### **Moderators of the effectiveness of tailored interventions in promoting physical activity among the over-fifties**

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**Background:** This study compared the effectiveness of a print-delivered to a web-based tailored advice in stimulating physical activity (PA) among (subgroups of) people aged over fifty. **Methods:** The interventions ( $N = 858$  per condition) and a control group were implemented in a clustered RCT. Participants received three tailored advices, delivered in four months. Regression analyses were performed with weekly minutes PA (6 months) as a dependent variable, considering age, gender and socio-economic status (SES) as possible moderators of the effect. **Results:** Overall, both interventions were effective in increasing PA. Response to the web-based intervention was lower (11.8% vs. 18.5%) and dropout was higher (70.7% vs. 49.9%) than in the print-delivered intervention. The print-delivered intervention was not effective in men or the high SES subgroup. The web-based intervention was effective in all subgroups. **Discussion:** Web-based interventions have the potential to stimulate PA. However, several limitations should be considered and more research is needed.

### **Mass Media Coverage of HPV Vaccination in Romania: A Content Analysis**

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**Background:** Romania has the highest cervical cancer mortality in Europe. Despite Minister's efforts to promote HPV vaccination as a preventive tool, the uptake remains very low. Given that media might influence immunization decisions this study aims to explore the content and quality of HPV vaccine news coverage in Romania. **Methods:** We conducted a content analysis of 271 news stories (from newspapers, magazines, videos, websites) published online between 2007 and 2012. **Findings:** Results revealed that 31.4% of articles were having a neutral tone, 17% were mixed, while 28.1% were negative or extremely negative toward the vaccine. The main concerns were side effects and insufficient testing. Inaccuracies were found and basic information about vaccine and HPV was constantly missing. Instead, statistics about cervical

cancer prevalence were well represented. Statements regarding the failure of the national vaccination program emerged frequently. **Conclusions:** Educational interventions are needed as a response to suboptimal media coverage.

### Gender similarities and differences in the association between resilience factors and quality of life

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**Background:** Resilience is an important aspect to enhance the quality of life (QoL); however, research has not explored how this association might vary across gender. The purpose of this study was to analyze gender similarities and differences in the association between resilience factors and QoL domains. **Methods:** In this cross-sectional study, a sample of 200 individuals completed the Resilience Scale for Adults and the QoL instrument WHOQOL-Bref. **Findings:** Overall, women reported higher scores on resilience factors, particularly on social resources. No differences were found on QoL domains. Among women, perception of self and family cohesion were significantly associated with all QoL domains. Among men, resilience factors (particularly planned future and family cohesion) were only associated Psychological, Social relationships and Environment QoL. **Discussion:** Although men and women reported individual differences on resilience factors, the accumulation of these characteristics appears to be equally important for males and females in promoting their QoL.

### Psychological distress and emotion expressed in carers of patients with eating disorders

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**Background:** The main objective of this study was to evaluate the level of Expressed Emotion (EE) and psychological distress in caregivers of patients with an eating disorder, considering the differences in terms of sociodemographic and clinical characteristics. **Methods:** 53 caregivers of patients with an eating disorder participated. The 39.6% of caregivers were men and 60.4% women, aged between 23 and 69 years old. The questionnaire used to assess was: the Spanish version of the Level of Expressed Emotion (LEE), the Spanish version of the Hospital Anxiety and Depression scale (HAD) and the General Health Questionnaire (GHQ-12). **Findings:** The results showed no statistically significant differences in EE in relation to the patient diagnosis and age of the caregivers. Significant differences were found regarding the type of relationship, the gender of the caregiver and the time evolution of the problem; the caregivers with higher EE had more anxiety and depression than caregivers with lower EE. **Keywords:** eating disorder, expressed emotion, distress, caregivers.

### Motivational Interviewing as a goal assessment for people with disability. The example of the accessibility

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**Background:** Accessibility is a part of the inclusion of people with disabilities. Few studies assessed the impact of motivation (Milner & Rollnick, 2002) on change and the link between quality of life and accessibility. **Methods:** The sample includes 40 individuals with motor, visual and hearing impairments. The method consisted of 4 sessions of MI. We include accessibility questionnaire, the goal importance facilitation scale, the World Health Organization Quality of Life, and Hospital anxiety and depression scale. Current stage of work: The data are under development. **Discussion:** The results will be discussed with regard to MI. The aim is to promote people to take public and special transports. We will compare MI conducted in a group *versus* individual format (Sobel, 2009). We are expected a behavior change most important in a group because they evoke and strengthen personal motivation to change more easily and they take into account environmental factors.

### Awareness of the Impact of Alcohol on Road Accidents: A Discourse Analysis of Traffic Offenders

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**Background:** Alcohol is over-represented in driving accidents. In France, since 2009, deaths associated with drinking drivers constituted the first accident risk factors. The aim of the present study is to better understand the level of awareness necessary to change (Prochaska & DiClemente, 1984). **Methods:** Our study focused on a sample of 116 offenders who participated training which aim to progressively change and control their alcohol use linked with driving, through a process of self-assessment. We applied a lexicographical analysis on these drivers verbatim with Alceste software. **Findings:** A hierarchical descendent classification of data showed 3 lexical fields ('motivations to drink', 'explanations of the traffic offenses', 'driving styles') and reflected the main representations and mental processes relating to awareness in the different stages of change. **Discussion:** We will discuss the real capacity of such courses to enhance the level of awareness of the drivers to change cultural habits concerning alcohol which are strongly valued.

### Factors influencing rehabilitation outcomes

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**Background:** This follow-up study was done in Abromiskes rehabilitation hospital. The aim of investigation was to disclose which factors at the beginning of hospitalization are the most

important ones for success or failure of the rehabilitation. **Methods:** WHOQOL-BREF questions were used to evaluate emotional well-being and ability to relax. There were 214 participants (110 female, 104 male). General Linear Model analysis with Repeated Measures was made using SPSS 19 to evaluate which factors influence patient's psychological state the most. **Findings:** Four questions from WHOQOL-BREF were found that made statistically significant influence to emotional well-being ( $p < 0.05$ ); 2. Six questions from WHOQOL-BREF were found that made statistically significant influence to ability to relax ( $p < 0.05$ ). **Discussion:** This model can predict hospital specialists if the rehabilitation of the patient will be successful or not. When aftercare is going to be ineffective additional procedures may be prescribed to avoid failure of the rehabilitation.

### Perceived control: hot flushes and night sweats during menopause

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**Background:** The objective of this study is to compare symptomatic women with high and low perceived control over the vasomotor symptoms, regarding both frequency and intensity of hot flushes (HF) and night sweats (NS). **Methods:** This cross-sectional study encompasses a vasomotor symptomatic community-based sample of 243 women. Menopausal status was determined according to the STRAW criteria (Soules et al., 2001), perceived control was measured with the Perceived Control over Hot Flushes Index (Reynolds, 1997) and frequency and intensity of vasomotor symptoms was assessed with Menopause Symptoms' Severity Inventory (Pimenta et al., 2011). Comparative statistics were used. **Findings:** Women with high perceived control had significantly lower frequency ( $t(235) = 2.022$ ;  $p = 0.044$ ) and intensity of HF ( $t(217) = 3.582$ ;  $p < 0.001$ ); similarly, participants with high perceived control presented lower frequency ( $t(235) = 3.267$ ;  $p < 0.001$ ) and intensity of NS ( $t(210) = 3.376$ ;  $p < 0.001$ ). **Discussion:** Perceived control should be considered a relevant variable for symptomatic middle-aged women, with a potential impact in symptoms' attenuation.

### A Predictive Model of Weight Variation around Menopause

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**Background:** This study explores the predictors of weight variation (maintenance, loss or gain) in menopausal women. **Methods:** This cross-sectional research encompasses a community sample of 497 women in peri- and post-menopause, who provided information about weight before menopausal transition and current weight. It was used the Body Shape Questionnaire (Cooper et al., 1987), the Depression, Anxiety and Stress Scales (Pais-Ribeiro et al., 2004) and the Life Events Survey (Silva et al., 2003). Structural equation modelling was applied. **Findings:** The significant predictors of weight variation were transition from peri- to post-menopause ( $\beta = 0.105$ ;  $p = 0.043$ ) and body shape concerns ( $\beta = 0.361$ ;  $p < 0.001$ ). Marginally significant predictors included annual income ( $\beta = -0.090$ ;  $p = 0.088$ ), parity ( $\beta = 0.079$ ;  $p = 0.071$ ) and stress ( $\beta = -0.143$ ;  $p = 0.063$ ). **Discussion:** Given the negative impact of overweight/obesity on health, prevention of weight gain in pre-menopause is recommended;

risk groups should be identified considering the characteristics which account for a significant prediction of weight increase.

### Menopause Symptoms: can spirituality predict a lower symptoms' severity?

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**Background:** This study aims at exploring if spirituality can predict menopausal symptoms' severity. **Methods:** This cross-sectional research encompasses a community sample of 710 peri- and post-menopausal women. It was used the Menopausal Symptoms' Severity Inventory (Pimenta et al., 2011) and the Spiritual Well-being Questionnaire (Gouveia et al., 2009). Structural equation modelling was applied. **Findings:** The results evidence spirituality as a negative and significant predictor for the majority of menopausal symptoms' severity, independently of socio-demographic factors, health and menopausal statuses. Spirituality predicted lower symptoms' severity in terms of depressive mood ( $\beta = -0.414$ ;  $p < 0.001$ ), anxiety ( $\beta = -0.308$ ;  $p < 0.001$ ), cognitive impairment ( $\beta = -0.287$ ;  $p < 0.001$ ), perceived loss of control ( $\beta = -0.177$ ;  $p < 0.001$ ), aches/pain ( $\beta = -0.148$ ;  $p < 0.001$ ), vasomotor ( $\beta = -0.125$ ;  $p = 0.005$ ) and sexual symptoms ( $\beta = -0.211$ ;  $p < 0.001$ ), and physical changes such as mouth, nails and hair modifications ( $\beta = -0.152$ ;  $p = 0.002$ ), and skin and facial hair changes ( $\beta = -0.184$ ;  $p < 0.001$ ). **Discussion:** Women who present a higher spirituality report less severe symptoms; hence, this psychological characteristic seems to have a positive impact on health.

### Burnout and Satisfaction Professional in the Nurse/Paramedic Ambulance

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**Background:** The nurse/paramedic is under a huge amount of tension from different factors in his/her day service; he/she can experience situations of burnout putting at risk the quality of his/her services. According to this situation our study is about burnout and professional satisfaction in the nurses/paramedics. **Methods:** This is a descriptive study with non-probabilistic sample group (104 nurses/paramedics). The mean age is 35.57 years; **Expected results:** 96.1% referred, work for the 'ambulance' service and the majority is satisfied. The burnout levels are low in the dimension of emotional exhaustion and unpersonalization but a medium/high level in the dimension of professional realization; Age doesn't interfere in the perception of burnout; Women find more professional satisfaction than men do, specially because they show low self-esteem; Current stage of work: Different professional categorization doesn't explain the gulf in perception of burnout. **Discussion:** The results suggest nurses/paramedics should get psychological help.

### Motivations for Aesthetic Plastic Surgery

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After bibliographic study we applied 17 semi structured interviews from which two sub categories arise: a) Physical motivations and b) Psychological motivations. Starting in the sense units we formulated a group of affirmations that referred to each one of the summoned categories and sub categories that in their group composed the first version of the questionnaire. This first version was presented to a group of 7 judges. The scale was then applied to a sample of 30 patients in two separate moments separated by three weeks (test-retest) in order to perceive the constancy of the results and the stability of the construct which was meant to measure. The scale was then applied to a sample of 122 patients of the aesthetical surgery appointments with the goal of scale validation which results (four factors that explain 63.3% of total variance) and internal consistence ( $\alpha = 0.938$ ) guarantee its adequacy.

### Conscientiousness Moderates the Intention-Planning-Behavior Chain

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**Objective:** Intentions are translated into exercise when people generate plans. The question is raised whether conscientiousness further facilitates this mechanism in a way that people higher in conscientiousness are more likely to act upon their plans. **Methods:** In medical rehabilitation, 136 patients were surveyed via questionnaires during rehabilitation (T1), six weeks (T2), and six months (T3) after discharge. Intention, planning, conscientiousness, and exercise were measured. A moderated mediation analysis was conducted. **Findings:** Planning mediated between intentions and behavior ( $p < 0.05$ ). The mediation effect was conditional on the level of conscientiousness: Highly conscientious individuals were more successful in translating their plans into behavior than their less conscientious counterparts (indirect effect = 0.13). **Conclusion:** Action-facilitating planning strategies may be more efficient in conscientious individuals. Conscientiousness may reflect a facet of dispositional self-regulation and is supportive when it comes to implement exercise behavior. Low conscientious individuals may benefit from more intensive planning interventions.

### Predicting intention to self-test for chlamydia using Theory of Planned Behaviour and Protection Motivation Theory

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**Background:** Chlamydia is the most commonly diagnosed sexually transmitted infection in the UK. Encouraging self-testing in the general population may facilitate reduced prevalence but little is known about predictors of intention to self-test outside official programmes and there is a lack of research incorporating theory. **Methods:** People reading about chlamydia testing on the internet were targeted using Google Adwords. They were invited to complete an online questionnaire which included items assessing constructs of the Theory of Planned Behaviour and Protection Motivation Theory. Responses were received from 310 adults aged 16–76 years. Sufficient data for multiple regression analysis were received from 100. **Findings:** Higher Vulnerability, Response Efficacy and Self-Efficacy predicted intention to self-test ( $\beta = 0.37, 0.22, 0.28$  respectively;  $p < 0.05$ ). The overall model was significant (Adj.  $R^2 = 0.42$ ,

$p < 0.001$ ). **Discussion:** Constructs in Protection Motivation Theory predicted intention to self-test. The challenges of accessing people at risk of chlamydia in the general population will be discussed.

### **The impact of psychological preparation for surgery on postoperative outcomes: A systematic review**

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**Background:** Psychological preparation has been demonstrated to improve post-operative outcomes including pain and health care resource use. This systematic review (registered with the Cochrane Anaesthesia Review Group) will investigate which methods of preparation are effective and for which outcomes. Economic data will be reviewed where available. **Methods:** Randomised controlled trials (RCTs) of adults undergoing elective surgery under general anaesthesia are included. Papers are identified using electronic searches, reference lists and contact with authors of studies to identify unpublished research. **Expected results:** In a meta-analysis including 38 RCTs, Johnston and Vogeles (1993) found psychological preparation to be effective in improving various postoperative outcomes. It is expected that this up-dated review will provide further evidence about which techniques are effective because more studies are now available. Current stage of work: Papers are being screened for inclusion. **Discussion:** Identifying effective pre-surgical interventions may result in improved patient outcomes and healthcare resource use.

### **Exploring primary care physicians' activity: a qualitative analysis**

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Psychological distress (burnout, substance abuse) is increasing among primary care physicians (PCP). PCPs' health is a core issue, because primary care is the first level of contact with the healthcare system. The aim of the qualitative part of this mixed methods study is to explore PCPs' activity. Semi-structured interviews ( $n = 20$ ) were performed. Thematic analysis shows that external work conditions and patients' demands intensify PCPs' activity. This intensification is embodied in the problematic of control. PCPs' work is made of multiple realities that are sometimes conflicting and may cause them stress. Prescribed work and reality are not converging. In order to match the different realities of their work, they have several resources that support their personal adjustments. PCPs' activity is complex. Studying the evolution of their work and how they manage it is helpful for preventing and caring psychological distress among junior doctors and PCP in private practice.

### Reasons for living of adolescents in context of traditional suicide risk factors

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**Background:** Reasons for Living (RFL) are considered as one of the resilience factors for the suicide. The aim of the study is to assess the relationship between adolescents' suicide behaviour and RFL in the context of traditional suicide risk factors. **Methods:** A representative sample of 743 9 – 11 grade students from Kaunas city and Kaunas district schools filled The Reasons for Living Inventory for Adolescents (RFL-A) and answered questions from Lifestyle and Coping Questionnaire and Behaviour in School – Aged Children Survey. **Findings:** The RFL-A and suicidal behaviour were significantly negatively correlated. Girls indicated having more reasons for living as compared to boys. However, prognostic value for suicidal behaviour of RFL-A was weak when traditional suicide risk variables (alcohol consumption and drugs, behavioural problems, such as bullying, depression, suicides in family history etc.) were taken into account. **Discussion:** The value of RFL-A as a resilient factor calls for further studies.

### Perceptions and attitudes towards the colorectal cancer and the Hemocult II® screening test in France

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The aim of this research is to establish social-cognitive factors related to participation and non-participation in the colorectal cancer screening program in France. In order to observe the perceptions and attitudes towards the colorectal cancer (CRC) and the Hemocult II® screening test, semi-directive interviews were conducted with a sample of the average risk population ( $N=54$ ). A propositional analysis was carried out and categories, according to the screening participation, were established as follows: 1/CRC causes, 2/attitudes towards CRC, 3/attitudes towards the test. The results show that participation in the screening program is associated with a higher rate of knowledge of the CRC causes, a vulnerability perception and positive attitudes towards the disease and the test via the perceived benefits. Non-participation is associated with poor knowledge and negative attitudes towards CRC and the test. These findings support the importance of specific cognitive and social factors involved in the CRC screening participation.

### Using Structural Equation Modeling to investigate condom use predictors in South African young adults

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**Background:** This study was conducted in Cape Town, South Africa, aiming to assess the ability of the Theory of Planned Behaviour (TPB: Ajzen, 1991) to predict condom use. **Methods:** Structural equation models were tested with Mplus in order to predict intentions to use condoms and actual (subsequent) condom use, in a sample of 389 university undergraduates. **Findings:** TPB predictors (attitudes, subjective norms, and perceived behavioural control) explained 43% of the variance of intention to use condoms among the sexually active sample, and 31% among the sexually inactive. In a separate analysis, which also included intentions and previous condom use as predictors, 57% of subsequent condom use among the sexually active students was explained. Moreover, age, religiosity, and relationship status were associated with condom use. **Discussion:** Our findings support the applicability and suitability of the TPB in South African university student populations, and allow for the inclusion of context-specific variables.

### **Ex-smokers are unstoppable – Comparing the users of an online smoking cessation program across Europe**

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**Background:** Online interventions have the potential to reach a large number of individuals at a very low cost. Whether cultural differences influence the “reach” of online interventions is unclear. **Methods:** In July 2011, the “Ex-smokers are unstoppable” campaign was launched in 26 EU-countries. The campaign was supported by a freely accessible online stop smoking coach in 26 official EU languages. **Findings:** Within 6 months after the launch of the campaign, more than 150.000 smokers registered on the coach. This means that more than 1 in thousand European smokers (participation rate: 0.12%) registered. The typical smoking registrant was a 33-year old male, employed smoker in the contemplation phase with at least secondary education. 46% of participants were between 25 and 34 years old, 56% were male. **Discussion:** This talk will compare the profile of participants across Europe. The data may provide useful suggestions to take into account when designing future interventions.

### **The Spanish Validation of the Revised Scale for Caregiving Self-Efficacy in Eating Disorders**

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**Backgrounds:** The aim of this study was to examine the psychometric properties of the Spanish version of the Revised Scale for Caregiving Self-Efficacy in eating disorders. **Methods:** A cross-sectional study was conducted among carers of relatives with an eating disorder. The sample consisted of 56 Spanish carers whose relatives were being treated at the Eating Disorders Unit at the Hospital of San Juan (Alicante). **Findings:** Reliability indices for each subscale were adequate: Self-efficacy to obtaining respite ( $\alpha=0.90$ ), Self-efficacy to calmly reacting to disruptive behaviors ( $\alpha=0.79$ ), Self-efficacy for controlling upsetting thoughts ( $\alpha=0.88$ ). The three factors accounted for 63.18% of variance. The factors showed significant negative relationships with the variables: Anxiety, Depression, Psychological distress, Criticism and Emotional Overinvolvement, providing evidence of external validity of the questionnaire. **Discussion:** We have got an instrument to obtain reliable and valid measures of self-efficacy in

caregivers of patients with eating disorders. **Keywords:** Eating disorder, caregiver, self-efficacy, validation.

### **The relationship between obesity beliefs and attitudes: differences in healthy weight, overweight and obese individuals**

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**Background:** The TPB purports that beliefs influence attitudes, which predict intentions and eventual behaviour. Therefore, it is important to understand the beliefs underlying attitudes in order that interventions may be successful in influencing individuals' behavioural intentions. This study examines beliefs about obesity in relation to attitudes towards obesity in different weight groups. **Methods:** 132 participants categorised according to their BMI as healthy weight, overweight, or obese completed pre-existing scales measuring attitudes, causal beliefs, risk perceptions and perceived consequences of obesity, in this cross-sectional questionnaire study. **Findings:** In the healthy weight group, aesthetic/social consequences negatively predict obesity attitudes. In the overweight group, psychological consequences, and beliefs about the impact on health negatively predict attitudes. In the obese group, cost consequences positively predict obesity attitudes, whereas timeline and psychological consequences negatively predict obesity attitudes. **Discussion:** Beliefs underlying attitudes towards obesity differ in groups of different weight; something to consider when tailoring interventions targeting weight loss intentions.

### **The role of emotional regulation in the relationship between positive affectivity and resilience**

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The overall goal of this study was to investigate whether emotional regulation styles mediate relationship between positive affect and resilience. In this study participated 1346 undergraduate students of the University of Novi Sad. Average age was 20 (SD=1.86). The participants completed measures of resilience (Brief Resilience Scale), positive affect (Serbian Inventory of Affect based on the PANAS-X) and affective style (The Affective Style Questionnaire). Using hierarchical regression analysis it is found that adjusting, one of affective styles, is potential partial mediator ( $\beta=0.495$ ,  $p < 0.00$ ). The Sobel test was significant ( $z = 12.769$ ,  $p < 0.00$ ). Positive affect on resilience is achieved in part by adjusting style of regulation. In addition, people who develop positive affectivity would be more flexible and more prone to adapt to the situational demands, which will lead to greater resilience.

### **“Take the stairs instead of the elevator”: An investigation based on psychological constructs**

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**Background:** Although physical activity is important to obtain health, many adults lead a sedentary lifestyle. One possibility to increase physical activity is taking the stairs instead of the elevator. As stair use (SU) has not yet been studied in conjunction with health psychological constructs, like perceived barriers, the study targeted on this investigation. **Methods:** A total of 85 participants ( $n=61$  female; age:  $M=32.1$ ,  $SD=10.26$ ) filled out an online questionnaire with the following measures: stair use, perceived barriers, habits, and intention to SU. **Findings:** Regression analysis revealed that SU could be explained ( $R^2=29\%$ ) via habit ( $B=0.26$ ;  $p=0.04$ ), perceived barriers ( $B=-0.34$ ;  $p=0.01$ ), and intention to use stairs ( $B=0.28$ ;  $p=0.04$ ). **Discussion:** The findings indicate that psychological constructs are important to explain SU. Therefore, these constructs should be taken into account when designing interventions.

### **Chronic pain: Predicting quality of life and pain status at 12 month follow-up.**

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This prospective study examines predictors of physical and psychological quality of life and persistence of pain in a 12-month follow-up of a chronic pain sample. Among those with chronic pain at baseline, 59.9% still reported persistent pain at follow-up. Persistent chronic pain was associated with a longer history of pain at baseline, more pain sites, higher depression, and greater pain intensity and disability at baseline. At follow-up, 12.7% had developed new chronic pain which was predicted by lower physical health quality of life at baseline. Recovery from pain at 1 year was associated with lower levels of expectation that pain would continue. A better psychological quality of life was linked to being older, lower depression, lower catastrophising, greater levels of social support and greater levels of understanding of pain. The findings demonstrate that pain persistence and quality of life is predicted by both clinical and psychosocial variables.

### **Posttraumatic growth, rumination and social support in women with breast cancer: impact of an intervention**

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Recent research supports the evidence of posttraumatic growth in women with breast cancer. Changes in assumptive world, deliberate rumination and social support predict the development of posttraumatic growth. With innovative methods, we intend to evaluate the impact of an intervention program to facilitate personal growth in, social support, core beliefs, rumination and posttraumatic growth. The study is descriptive, longitudinal and comparative, with 200 Portuguese women between the ages of 18 and 65 with breast cancer and involves a

group intervention during a period of 10 weeks. The assessment of psychosocial variables will be carried out in four stages, before and after the intervention and three and nine months later. At current moment, we are in data collection. It is expected that the intervention group increases the social support, the cognitive reconstruction, the personal growth and enhance the attribution of meaning to cancer experience and a better adjustment to disease. **Keywords:** breast cancer; posttraumatic growth; social support; rumination; core beliefs.

### **Attentional control mechanisms in childhood subclinical anxiety**

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Attentional mechanisms were investigated in a group of primary school children (aged 9–11). Based on The Revised Child Anxiety and Depression Scale scores we split the group into high *versus* low anxiety groups. Two versions of Simon Tasks were used in order to assess ‘cold’ *versus* ‘hot’ executive attentional mechanisms: a classical Simon Task (ST) and an Emotional Simon Task (EST – includes photographs of men and women with calm or fearful emotional expressions). Attention Network Task was completed in order to study the alerting and the orienting attentional mechanisms, in addition to executive attention. We found no differences in respect to the results that assess ‘cold executive attention’, but we found significant differences between the two groups using the EST. The theory used to analyze the results in this study is the Attentional Control Theory (Eysenck et al., 2007).

### **Is diabetes hindering my dreams? Relationship between life goals disturbance and patients’ quality of life**

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Based on self-regulation theories, this study explored to what extent patients suffering from type 1 diabetes experience disturbance of life goals. Moreover, differences in life goal disturbance according to age, to gender, as well as to affective status have been analysed and associated to patients’ quality of life. 321 patients with type 1 diabetes aged between 16 and 65 years completed an online questionnaire measuring life goal disturbance, well-being, as well as specific and generic quality of life. Results showed non-significant differences for age but significant differences for gender and patients’ affective status on life goal disturbance. Additionally, nearly 50% quality of life variance could be explained by patients’ affective status and life goal disturbance. Hence, integrating the patients’ future life perspectives is an important issue in tailoring health intervention for patients with type 1 diabetes.

### **Opinions of the citizens of the Czech Republic on health and healthy lifestyle education**

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In the study, data collected in a representative sociological survey based on submitted questions and conducted by the INRES-SONES company are interpreted. Questions sought to elicit opinions of the citizens of the Czech Republic on health and healthy lifestyle education, and its connection with the teaching profession. Citizens of the Czech Republic think that the most important source of health information for children and young people is the family, followed in second place by the school. Teachers are considered as more-or-less trained to teach health education to their pupils, but CR citizens also think that teachers do not set a particularly good example for their pupils in healthy lifestyles, although care for their healthy lifestyle is, as a rule, considered as the teachers' duty.

### **Intervention Engagement Promotes Smoking Cessation: Effect of a Virtual Bulletin Board Entry in an Online Program**

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Studies have shown that programs on smoking cessation are effective in the short-term, but the success is rarely maintained over time. The present study aimed to investigate whether engaging in a cessation program by making a bulletin board entry after the first smoke-free day positively affects long-term success of smoking cessation. Participants of a longitudinal online program who refrained from smoking for one day ( $N = 3733$ ) had the possibility to enter their names to a public list of success. Self-reported abstinence rates were assessed at 7 measurement points in time and were compared between participants who made an entry and those who did not. Those who made a bulletin board entry were more likely to refrain from smoking at each measurement point in time ( $p < 0.001$ ). High intervention engagement, such as online activities, might explain why smokers succeed in changing their behavior in the long run.

### **Stressful Issues for Women Physicians**

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This study evaluated whether stressful issues that have traditionally been problems for women physicians continue to impact their lives. It was part of a larger survey study of female graduates from a Midwestern medical school. We wanted to understand whether women physicians felt they were victims of sexual harassment and/or gender inequity, and how this impacted their feelings and professional choices. Surveys addressing professional experiences, family issues, and feelings about their chosen career were received from 248 women graduates. Data was subjected to group analysis. Twenty-five percent of the respondents reported that their medical practice had been negatively impacted by being a woman, and over 37% reported experiencing sexual harassment in the workplace. Fifteen percent reported leaving a medical practice because it was not "female friendly" and 47% said they were either unsure or would not encourage other women to go into medicine. Implications of these findings will be discussed.

## Changes in war-related distress in Croatia 1996 – 2004

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**Background:** Examine the relationship between war experiences and war-related distress in Croatia in 1996 and in 2004, and to test hypotheses concerning the levels of war-related distress and the relationship between war experiences and war-related distress. War experiences were measured by using a scale that sums the war experiences along with identified single crucial experiences. **Methods:** We combined two surveys to examine the overall changes in the level of war-related distress in Croatia between 1996 and 2004. We also examined if the fading memories of the war events are reflected in a weakened relationship between war exposure and war-related distress. **Results:** War-related distress was measured both by specific items and summary scales. Both show only minor changes from 1996 to 2004. **Discussion:** The level of war-related distress is strongly related to personal war experiences at both points in time and the relationship shows no sign of becoming weaker.

## Measurement of intention to do physical exercise in elderly people

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Our aim was to test the utility of the theory of planned behavior in the prediction of intention to do physical exercise in elderly people. **Methods:** In this study one structural equation modelling was used to test the model of TPB. 129 elderly people signed the informed consent. The model's variables were measured by the TPB questionnaire on physical exercise (Tirado, Neipp, Quiles & Rodriguez-Marin, in press) validated in a Spanish population. It consists in 20 items answered in a Likert-type 7-point response scale. This questionnaire evaluates the four variables of TPB model (attitude, subjective norm, PBC and intention) and it has good psychometric properties. **Results:** Only the perceived behavioural control had a significant impact on intention and explained 71.7% of the variance in intention. **Conclusions:** The most important variable for elderly people to have the intention to do physical exercise is their beliefs in their ability to execute the exercise.

## Individual differences in personality profiles of potential living donors for kidney transplantation: A pilot study

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**Background:** The psychosocial evaluation of live kidney donors (LKD) is widely advocated; however, there is a lack of data on it. This work aims to evaluate personality differences among live donors according to type of relation with recipient, and to establish possible

different profiles. **Methods:** We present a preliminary data from a study of 25 candidates for LKD from the General University Hospital of Alicante. Participants completed the MCMI-III questionnaire for the study of personality variables. **Findings:** According to results, women scored higher on the scale of compulsive personality than men, and subjects with blood relations with recipients scored higher in depressive and dependent personality than those with other type of relations. **Conclusions:** It appears that the largest number of female donors parallels their social role of care, and the compulsive personality profile. It will be necessary to complete this pilot study in order to reach more conclusions.

### **A resilience study: promotion of scholar success in disadvantaged portuguese children**

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**Background:** The aim is to study resilience in disadvantaged Portuguese children students. From an early age one can learn to handle emotions, see the world from different points of view, improving quality of life, health and success. **Methods:** This project involved 78 students from 10 to 14 years old. We used Strong Kids Program measured by Strong Kids Unit Tests, quantitative methodologies and Statistics Program for Social Sciences. **Findings:** We saw positive resilience evolution in students from experimental group, better success in children who were submitted to Strong Kids Program. Older students showed better performance and decrease of negative symptoms, increase of knowledge as well improvements in personal and social skills. **Discussion:** The intervention program had a positive effect. Results are consistent with american studies performed with students of the same age. Changes are suggested in the teaching/learning, evaluations and training for teachers to get a better intervention with disadvantaged children.

### **Resilience in portuguese children from 3 to 5 years old**

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**Background:** Resilience is a necessary and fundamental ability in children, which will be the tomorrow adults. The true measurement of a man is how he stands and surpasses the controversy and challenge moments. The study aims to evaluate the relation between social-demographic variables, the application of Strong Start Pre-K program and resilience in children from preschool. **Methods:** This is a quasi-experimental study involving 76 children (47.4% female; 55.3% male), with a mean age of 4.25 years. We used Strong Start Pre-K Program to develop resilience, WeBeST questionnaire to evaluate it and SPSS to process the data. **Findings:** Four years' old children and those who has a brother has more resilience; level of resilience is better in children from experimental group, that is after the application of program, in spite of children from control group have had better results in pretest. **Conclusion:** Intervention program had a positive effect on resilience of children in preschool.

### Correlates of invulnerability illusion to AIDS in Spanish college students

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**Background:** Perceived invulnerability to AIDS refers to a person's lower risk self-assessment of contracting the disease than peers. This study examined perceived invulnerability to AIDS and its relationship with stereotypes to persons that suffered AIDS and perceived control to contract the AIDS. **Methods:** An anonymous questionnaire about sexual practices, risk perceptions to AIDS and stereotypes to AIDS are being administered to a sample of 300 college students (aged between 18 to 23 years). Pearson correlation and regression analyses will be conducted. **Expected results:** In consonance with previous research, we expect that young people who have high invulnerability illusion to AIDS also will show strong stereotypes to persons with AIDS and high perception of control over the possibility of their contracting the AIDS. Current stage of work: We are currently administering the questionnaires. In august the paper will be finished. **Discussion:** This research will provide preliminary evidence about related factors with invulnerability illusion to AIDS in college students.

### A prospective study of nurses' occupational turnover intentions during their five first years of practice

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Nursing turnover continues to be a problem for health care organisations and longitudinal research is needed monitoring how intentions develop over time and identifying nurses with 'early' signs of wanting to leave. **Methods:** To prospectively monitor occupational turnover intentions, a cohort of 1417 new graduate nurses was surveyed annually 2004–2010. Intention to quit was measured using a summated scale of three items and analysed using latent growth curve modeling. **Findings:** Turnover intentions were generally quite low but showed an increase over time. Increases were associated with concurrent levels of burnout. Nurses who already during education did not expect to work as a nurse in five years and were more disengaged during education and had a higher level of intention to quit during the first year of practice. **Discussion:** It is essential to prevent early-career occupational turnover among nurses given the individual, educational and health care costs early career dropout involves.

### Family stress, marital satisfaction and well-being: the moderating effects of dyadic coping and religiosity

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The study examines the moderating role of dyadic coping and family religiosity in the relationship of family stress with marital satisfaction and well-being. Structural equation

modelling was used to analyze the responses on self-report measures for a sample of 430 married people. The paths indicate that family stress is negatively related to marital satisfaction and well-being, while dyadic coping and family religiosity are positively related to marital satisfaction and well-being. The interaction of stress and dyadic coping exert a significant direct effect on marital satisfaction, but not on well-being and the interaction of stress and family religiosity is significantly related with both marital satisfaction and well-being. Research results demonstrated the benefits of dyadic coping and family religiosity on the psychological health of family members; dyadic coping reduce the negative influence of stress on marital satisfaction, while family religiosity moderate the harmful effect of stress on both marital satisfaction and well-being.

### **The development of constructive communication between health professionals and patients**

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There is no doubt that a dialogue – a form of the constructive solution of the communicative tasks. The literature often stresses the importance of the dialogue of the teachers with the students. However, the ability to establish dialogic relations is of no less importance in the medical practice. In connection with this the aim of the creation of the personal and professional development improvement program emerged. Theoretical and methodological foundation of the program is humanistic psychology. The program consists of complementary blocks and three stages. The first stage is focused on the understanding of the personal problems in the professional activity and the search for the ways to cope with them. In the second stage the re-appeared knowledge and skills are consolidated in a specially designed training. The effect is a better understanding of another person (the patient) and the ability.

### **Suicide ideation in Portugal and Belgium: national prevalence rates in 2003 and 2011**

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**Background/goals:** There is lack of information regarding suicide ideation. This study was conducted by the consumer associations TEST-AANKOOP (Belgium) and DECO PROTESTE (Portugal) and aimed to estimate the prevalence of suicide ideation for these countries in 2003 and 2011. **Methods:** The same self-administered questionnaire was applied in 2003 and 2011. Both assessments followed the same cross-sectional survey-design and included representative samples of 18–64 years-old Belgian/Portuguese populations. **Findings.** Participated 7170 portuguese (5540 in 2003; 1630 in 2011) and 2582 belgians (1898 in 2003; 684 in 2011). In Belgium, 12-month suicide ideation prevalence increased: 19.6% (2003); 25.2% (2011). For Portugal, no significant evolution was found: 16.5% (2003); 15.6% (2011). Highest suicide ideation prevalence were found among women and among 18–24 years-old participants. Other variables associated with suicide ideation rates: family and economic situation, religiosity. **Discussion.** There is a clear need to delineate global effective national programs addressing suicide behavior prevention.

### Life satisfaction in urban population aged 45–72

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The study aimed to identify evaluation of life satisfaction, life domains and socio-demographic factors associations in urban population aged 45–72. A random sample of 1200 individuals aged 45–72 years was screened in 2006–2008. Life satisfaction was measured by asking participants to evaluate how satisfied they are with life. Life domains were assessed by WHOQoL-100 questionnaire. Independent variables as gender, age, education, marital and employment status were collected. Logistic regression was used to evaluate factors associated with life satisfaction. Results showed that lower level of pain (OR = 1.08, 95% CI = 1.01–1.17), dependence on medication (OR = 1.06, 95% CI = 1.01–1.14), negative feelings (OR = 1.16, 95% CI = 1.08–1.25) and higher level of positive feelings (OR = 1.18, 95% CI = 1.07–1.31), self-esteem (OR = 1.08, 95% CI = 1.01–1.17), personal relationships (OR = 1.19, 95% CI = 1.08–1.31), home environment (OR = 1.08, 95% CI = 1.01–1.15), financial recourses (OR = 1.14, 95% CI = 1.07–1.21) were independently associated with life satisfaction. Results showed that life satisfaction depends from subjective evaluation of physical, psychological, social life domains.

### Social sharing in CHD patients: impact of emotion expression intervention on psychological and physiological indices

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**Background:** Negative emotions have been associated with coronary heart disease. Negative affect combined with emotional inhibition is a strong psychological risk factor for CHD. Written emotional expression positively affects psychological and physiological health. A more novel direction of research lies in a more interactive social setting (social sharing). **Aim:** To compare the effects on psychological and physiological health of two social sharing interventions: facts and emotions *versus* facts only, with a usual care group. **Methods:** 120 CHD patients are randomly assigned to one of groups: Emotion Expression group, Just Facts group, Control group. The intervention comprises three weekly interviews with each participant. Participants discuss negative life events and emotions, or negative life events only. The Control group does not receive any intervention, but is assessed at similar time points to the intervention groups. Preliminary results suggest an increase in anxiety and rumination for the control, but not the intervention groups.

### Factors influencing body weight – results of a health survey for the rural population

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**Background:** Health behavior as a major risk factor for morbidity and mortality is determined by internal and external influences, leading to different health outcomes. **Methods:** Using a

health survey among the rural population of Austria, which involved 12,484 people, risk factors for overweight and obesity are analyzed. **Findings:** Key determinants of obesity are regional differences and a low educational level. Health awareness turned out as essential mediator, which helps to promote a weight-stabilizing lifestyle. An adverse health behavior is often due to unrealistic assessment of a risky overweight in connection with a negative attitude to reduce weight. **Discussion:** Target groups should be informed about the clearly better health status in normal weight compared with overweight and obese people, in order to raise health awareness and motivate people at risk for the modification of lifestyle. But this can only happen effectively if appropriate counseling and intervention are offered.

### Why do parents encourage their children to control their weight?

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**Objectives:** To identify factors contributing to parental encouragement of their children to control their weight. **Methods:** Parents of 1666 schoolchildren (50.3% boys, 7.1 ± 0.6 years) participating in the Baden-Wuerttemberg-Study received a questionnaire. Children's height and weight were measured. Data are analysed via logistic regression. **Preliminary results:** Of 1658 mothers 71.0% never encourage their child to control its weight, 11.2% rarely, 11.6% sometimes, 6.2% often/always. Crude Odds Ratios [95%CI] of possible factors influencing mothers' encouragement: -Child characteristics: girls 1.39 [1.13–1.73], BMI 1.85 [1.70–2.00], age 1.31 [1.10–1.55], migrants 2.43 [1.93–3.04]. -Maternal characteristics: body dissatisfaction 1.45 [1.17–1.80], perceived weight of child 2.86 [2.29–3.62], child should change weight 3.28 [2.56–4.19]. Current stage: Data is collected. Analyses of paternal encouragement and in-depth analyses stratified for gender will follow. **Discussion:** Parental encouragement is known to influence children's body dissatisfaction and unhealthy body change strategies. Understanding parents' encouragement gives further insight into what places children at risk.

### How effective are tailored mobile phone short-messages in increasing exercise among Dutch and German adults?

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**Background:** The main aim of this study is to assess the effectiveness of a physical exercise intervention delivered to Dutch and German adults via mobile telephone short messages service (SMS). Secondly, it will be investigated whether and how an exercise intervention may affect other health behaviors. **Methods:** Using a randomized controlled trial, levels of exercise, social cognitions, and other health behaviors will be assessed at four measurement points among 250 adults. The experimental group will receive several mobile phone short messages

tailored to exercise-specific cognitions from the HAPA and I-Change model. **Expected results:** By means of multivariate analyses, we expect to find the experimental group being more physically active and having a healthier lifestyle in general compared to the control group. Current stage of work: We are in the phase of intervention development. **Discussion:** Tailored feedback delivered via SMS may be an effective and easy way to improve exercise.

### **Talking about Sexuality in Gynaecology Consultation : the Mismatch between Patient's Expectations and Medical Practices**

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**Objective:** This study aims at exploring women's experiences and expectations concerning the integration of sexuality issues in Gynaecology Consultation. **Methods:** After having conducted interviews with gynaecologists, we led 3 focus groups with women participants. We applied a thematic content analysis to discursive data. **Results:** Our findings show that the most women would like to be asked about their sexuality during Gynaecology Consultation. They consider their gynaecologist as the most relevant health professional in order to discuss this subject. However, only a few women report to be asked about this issue. Our analysis highlights misunderstandings of ways of approaching the topics and also a mismatch concerning the definition of sexuality between physicians and patients. **Conclusion:** Sexuality is perceived as an important part in women's lives. This research suggests the need to reflect upon the incorporation of psychological and relational aspects of sexuality into Gynaecology Consultation.

### **The role of Emotion Regulation in the workplace and on eating behaviour**

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**Background:** Stress and emotion regulation strategies (ERs) of appraisal and suppression, affect eating behaviour. Workplace stress (WS) is increasingly common, ERs may influence coping, yet the relationship between ERs and WS on eating receives little attention. This study investigated the associations between ERs, WS and eating behaviour. **Methods:** 300 public sector workers completed measures of stress (hourly VAS, Daily Hassles Scale), ERs (ERQ) and a 7-day-weighted-intake food diary. **Results:** ERs 'appraisal' was associated with significantly lower hourly stress ratings, hassles, average snack intake and higher control than 'suppression' ( $r = -0.169, p < 0.05$ ;  $r = -0.142, p < 0.05$ ;  $r = -0.142, p < 0.05$ ;  $r = 0.141, p < 0.05$ ). Suppressors worked significantly more hours ( $r = 0.261, p < 0.001$ ), consumed significantly higher calories with a higher percentage of fat intake ( $r = 0.166, p < 0.01$ ;  $r = 0.142, p < 0.05$ ;  $r = 0.236, p < 0.001$ ). **Discussion:** In contrast to using suppression ERs, appraisal is associated with reduced WS, and healthier eating behaviours. The role of ERs, WS and eating requires further investigations and may provide an important, effective focus for future health interventions.

### Posttraumatic growth and resilience in cancer patients: a curvilinear association

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This longitudinal study aims to provide an empirical contribute about the relationship between posttraumatic growth and resilience – conceptualized as the abilities to maintain a psychological adjustment and to continue to pursue aims that give life meaning – event within highly challenging life circumstances (Zautra et al., 2010). 53 mixed cancer patients recruited in an Hospital of northern Italy completed the Posttraumatic Growth Inventory (PTG), the Hospital Anxiety and Depression Scale and the Sense of Coherence Questionnaire both at t0 and at t1. Linear and curvilinear associations between variables have been tested by GLM analysis. Results indicate a curvilinear association between growth and anxiety ( $\beta = -0.29$ ) and growth and SOC ( $\beta = -0.23$ ). Additionally, they indicate the absence of an association between growth and depression. These findings highlight the role of medium level of resilience to engage the emotional and cognitive processes needed to grow in the aftermath of cancer.

### Real and illusory sides of posttraumatic growth: indicators of cognitive change in redemption sequences

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To date there is a controversy concerning the nature of posttraumatic growth (PTG): real or illusory? (Sumalla et al., 2009). This study examines this problem moving from the theoretical and methodological assumptions of Pennebaker's differential emotion model (1997) and that of McAdams's identity narrative model (2001). Autobiographical sequences (means of words = 1095) of 40 mixed cancer patients were codified. The 100% used redemption sequences. The 26% used both positive and negative emotion words, the 37% used more positive emotion words and the other 37% used more negative emotion words. Surprisingly only the redemption sequences with more negative emotion words correlated with linguistic indicators of cognitive change ( $r = 0.82$ ) (i.e. real PTG) while the redemption with more positive emotions did not correlate with linguistic indicators of cognitive and emotion processes (i.e. illusory PTG). These results highlighted the crucial role of cognitive processes to promote a real PTG.

### Self-regulation skills and alcohol use among university students. A study of three European countries

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**Background:** We aimed to investigate the relationship between self-regulation skills and alcohol use among university students. **Methods:** 2569 university freshmen (72.3% females) from Slovakia ( $n = 814$ ), Lithuania ( $n = 936$ ) and Hungary ( $n = 819$ ) completed the Short Self-Regulation Questionnaire and the AUDIT. Logistic regression was performed to assess the relationship between self-regulation subscales (Impulse control, Goal setting) and the hazardous consumption, possible dependence and alcohol related problems. **Findings:** There were no gender and country differences in the association between self-regulation subscales and alcohol use subscales. The lower level of impulse control was associated with hazardous consumption ( $p < 0.01$ ) and alcohol related problems ( $p < 0.001$ ). Goal setting was not associated with alcohol use. **Discussion:** Our results confirmed that problems with impulse control may lead to hazardous consumption and may influence the likelihood of negative consequences that occur as a result of drinking.

### Effects of cognitive-behavioral intervention to treatment adherence in persons living with HIV/AIDS beginning antiretroviral therapy

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**Background:** The study aimed to describe a cognitive-behavioral intervention to patients beginning antiretroviral therapy and analyze the effects on adherence behavior, by comparing patients who underwent intervention (experimental group) with those who were not submitted because they had refused to participate or were not available to attend sessions (control group). **Methods:** Quasi-experimental design, with evaluation at baseline, six and twelve months after intervention, 15 patients in each condition. The instruments included a semi-structured interview and a self-efficacy scale for treatment adherence on HIV/AIDS. The individual intervention with weekly sessions include techniques such as self-monitoring, problem solving and cognitive restructuring. **Expected results:** Patients submitted to intervention will achieve full adherence and higher self-efficacy scores in follow-up. They will report more coping strategies to deal with barriers to adherence. Stage of work. Evaluations and interventions are going on. **Discussion:** The study will provide empirical evidence on the effectiveness of the proposed intervention.

### Effects of attitudes related to resilience in overcoming stress by Japanese Nurses

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**Objective:** It is known that nursing is a stressful job. The objectives of this study were to identify attitudes related to resilience in nurses, which allow them to successfully overcome

stressful situations. **Methods:** Japanese nurses working in a hospital ( $n = 162$ ) participated in this study. A questionnaire survey was conducted with the participants using the free-description method that inquired about how they overcome difficult situations. A total of 213 responses were collected and categorized by similarity and then further divided into several sub-categories. **Results:** Categorization of responses by similarity resulted in 12 categories. The five top ranking categories were, 'Positive thinking', 'Experience', 'Self interest', 'Changing perceptions', and 'Trying not to be obsessive'. **Conclusion:** It is suggested that even under stressful environments, factors such as positive thinking and having experience are useful for overcoming difficulties.

### Does a fitness assessment influence self-efficacy for exercise?

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**Background:** Self-efficacy (SE) is related to exercise behaviour; however, little research has examined the immediate influence of exercise experiences on SE for exercise. A fitness assessment, (i.e., a mastery experience), may influence SE. **Methods:** Task, scheduling and coping SE for exercise were examined before and after a submaximal aerobic fitness test in a sample of 96 (72 men; 24 women) sedentary adults, controlling for the influence of individual fitness level on the change in SE. **Findings:** Task, scheduling and coping SE increased from pre- to post- fitness test ( $\eta^2 = 0.13$ ). When fitness level was controlled for, the main effect of the fitness assessment on task SE was strengthened, and the main effects of coping and scheduling SE were attenuated. **Discussion:** A fitness assessment may be a convenient way to increase confidence for performing exercise related tasks, also, the effects support the dissociation of the three types of SE.

### Do resilience and optimism influence perceived stress and alcohol consumption in undergraduates?

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**Background:** Optimism and resilience are two dispositional characteristics that may influence stress and stress-related alcohol consumption in university students. **Methods:** Using a cross-sectional survey design, 506 undergraduate psychology students, aged 18 years and above completed the Life Orientation Test – Revised, the Connor-Davidson Resilience Scale the Perceived Stress Scale and the student alcohol questionnaire. **Results:** Path analysis showed that as optimism and resilience decrease, stress increases, and stress positively predicts alcohol consumption. Bootstrapping showed that optimism and resilience indirectly influence alcohol consumption through stress. Direct, indirect, and total effects for all paths were all significant ( $p < 0.05$ ). **Conclusions:** Findings suggest that optimism and resilience act as buffers of stress in students and ultimately reduce alcohol consumption. As optimism and resilience are both learned dispositional characteristics, this suggests that interventions to increase levels of resilience and optimism in students may be beneficial in attempting to reduce the stress levels and stress related alcohol consumption.

### How do resilience and optimism influence compensatory health beliefs?

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Optimism may negatively influence health behaviours particularly if an individual is highly optimistic and believes their risk behaviours can be compensated by healthy behaviour however, resilience may buffer this effect. The aim of this study was to establish the relationships between optimism, resilience and compensatory health beliefs (CHB). A cross-sectional questionnaire study asked 306 undergraduate participants to complete the Life Orientation Test – Revised, the Connor-Davidson Resilience Scale, and the Compensatory Health Belief scale. 4% of the variance in weight regulation CHB was significantly predicted by optimism (+) and resilience (-). There was no significant relationship between optimism, resilience and any other CHB (all  $p$ 's > 0.05). Individuals who score higher in optimism are more likely to believe that you can compensate health risk behaviours associated with weight with healthy behaviours. Whereas those individuals who are resilient do not believe that compensation is possible. Resilience and optimism needs consideration when targeting erroneous compensatory weight regulation beliefs.

### Prospective study of relationships between role in peer violence, coping stress strategies and psychological adjustment

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The way children cope with peer violence influence their psychological adjustment. The aim of the study was to investigate whether different roles in peer violence together with coping strategies are predictors of psychological adjustment. 478 elementary school children have been included in the study. School Relationship Questionnaire and Self – Report Coping Measure was used for assessments in peer violence and coping strategies. The standardized checklist Youth Self-Report was applied six month later for assessments of psychological adjustment. The results showed that the roles in peer violence and using of avoidance coping strategies are statistically significant predictors of different psychological adjustment. At the same time these results indicate that coping strategies are an important determinant of successful adaptation in childhood.

### Overcoming the behavioural impact of implicit attitudes

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**Background:** We investigated whether forming implementation intentions could overcome automatic avoidance of people with schizophrenia. **Methods:** Undergraduate participants

( $N=88$ ) believed they would interact with a person with schizophrenia and were randomly assigned to receive (a) no instructions, (b) a goal intention to be friendly, or (c) a goal intention plus an implementation intention ("As soon as I get a chance to be friendly and warm to this person, then I'll take it"). Attitudes to schizophrenia were assessed using an implicit association task before participants set out chairs for the interaction. Seating distance formed the dependent variable. **Findings:** Participants who formed implementation intentions sat closer to the target ( $M=90.26$  cm vs.  $97.96$  cm). Implicit attitudes significantly predicted seating distance for the control and goal intention groups ( $B=-5.61$ ,  $p < 0.05$ ) but not the implementation intention group ( $B=4.01$ , ns). **Discussion:** Our findings suggest it is possible to overcome unwanted behavioural effects of implicit attitudes.

### **Differences in psychological reaction to examination stress between neurotic and stable students**

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Previous studies have shown a higher stress level in students during exam period in comparison with non-exam period. Using different subjective stress measures, the aim of this study was to examine differences in stress level among neurotic and stable subjects during exam and non-exam periods. In total 76 university students completed Spielberger's State Anxiety Inventory, Thayer's Activation-Deactivation Check List and Checklist of Psychosomatic Symptoms during exam and non-exam periods, as well as Coping Inventory for Stressful Situation. As expected, the results showed higher stress level during exam period in relation to non-exam period. The results also showed a higher level of anxiety and high activation, as stronger and more frequent psychosomatic reactions in neurotic compared to stable subjects. These results can be partly explained by emotion – oriented coping strategies, which neurotic subjects mostly used.

### **Maternal bonding: a study of mothers of children with congenital heart disease**

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The aim of the study was to describe the experience of mothers of infants with congenital heart disease (CHD). Study is a part of the narrative research trend in psychology. Research material are autobiographical narratives obtained from four mothers of children treated in Children's Cardiosurgery Unit in Cracow. Hermeneutic approach was chosen for the analysis of the material. Findings suggest that cardiac surgery treatment may have influence on the maternal bonding. The category of medicalization of maternal bonding is discussed. Results suggest that mother-infant bonding and transition to motherhood may be important areas of psychological interventions addressed to mothers of children with CHD.

### Sense of coherence as a mediator between hostility and health-related quality of life among cardiac patients

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**Background:** This study aimed to explore the association between hostility and health-related quality of life (HRQoL) among coronary heart disease (CHD) patients, and whether this association is mediated by sense of coherence (SOC). **Methods:** 302 CHD patients (mean age  $57.2 \pm 1.2$ , 21.2% female) were examined. Hostility was measured using the 27-item Cook-Medley Scale; HRQoL using the Short-Form Health Survey 36, from which the Physical and Mental health Components Summary (PCS, MCS) were calculated. SOC was measured using the 13-item Orientation to Life Questionnaire. Data were examined using regression analyses. **Findings:** Hostility was associated with poorer MCS ( $B = -0.85$ ; 95% CI =  $-1.13$ ;  $-0.56$ ) when adjusted for age, gender, socioeconomic and functional status. Adding SOC into the model weakened the strength of the association between hostility and MCS ( $B = -0.34$ ; 95% CI =  $-0.61$ ;  $-0.07$ ). Neither hostility nor SOC were associated with poorer PCS. **Discussion:** Our findings indicate that SOC may play an important mediating role between hostility and MCS.

### Exercise Frequency and Eating Behaviors: A Study with Portuguese Adolescents

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**Background:** Exercise is positively associated with physical health and psychological well-being. These benefits have been well documented among adults, but fewer studies analyzed the benefits of exercise to younger people (Sallis, Prochaska, & Taylor, 2000). So, it becomes interesting to know the relation between exercise frequency and some health routines, like eating behaviors. This study analyzed the relation between the frequency of exercise and the tendency to eating disorder behaviors. **Methods:** This survey descriptive study included 192 Portuguese adolescents, divided into the occasional and regular exercise groups. It was evaluated the eating disorder behaviors (Fairburn & Beglin, 1994), the dieting status (Strong & Huon, 1997), and the physical activity of adolescents (Kowalski, Crocker, & Kowalski, 1997). **Findings:** Adolescents who exercised regularly assumed less eating disorder behaviors and less tendency to dieting behaviors. **Discussion:** This study reinforces the importance of regular exercise on the prevention of problematic eating behaviors in adolescence.

### “The Wind Island”: A health education instrument in speech therapy

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Predominantly oral breathing has a high incidence within the 5 – 15 y.o. age group. Children who are ‘oral breathers’ sometimes show related behaviour disorders – learning disabilities, attention deficits, hyperactivity and latent aggressiveness. The current research introduces a health education instrument in Speech Therapy – ‘The Wind Island’ – designed to work as a ‘therapeutic facilitator’ in intervention approaches carried out in speech therapy sessions. It is a game board with 32 pictogram cards, combined with therapeutic exercises, aimed at working on breathing and on stimulation of lip, face and tongue muscle tonus. It further provides support materials to the featured ludic-therapeutic exercises, and a self-assessment form to be completed by the child upon finishing the game. According to the results obtained, this health education instrument allows the child/player to assume an active and engaging part, to play a starring role, in the therapeutic and self-prevention strategies they are asked to follow.

**Keywords:** Pictogram; Health education instrument; Speech therapy; Self-prevention.

### A cognitive behavioral based group lifestyle intervention on obese mid-age woman

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**Background:** We used cognitive behavioral therapy (CBT) principles to achieve active lifestyle on fully employed sedentary obese mid-age women. The aim of the study was to investigate the effect of an 24-weeks lifestyle intervention (LI) focused on increasing of physical activity.

**Methods:** 20 women, took part in 12 weekly sessions of CBT programme, followed by 12 weeks interactive internet support. The movement intervention was based on recommendation of 10 000 steps per day. Compared the initial status × the terminal, over 24 weeks, LI improved steps per day ( $7099 \pm 2019 \times 9962 \pm 1647$ ;  $p < 0.01$ ), weight ( $89.6 \pm 9.2 \text{ kg} \times 86.1 \pm 9.1 \text{ kg}$ ;  $p < 0.05$ ), waist circumference ( $94.1 \pm 6.8 \text{ cm} \times 90.6 \pm 6.1 \text{ cm}$ ;  $p < 0.01$ ), HDL cholesterol ( $1.3 \pm 0.3 \text{ mmol L}^{-1} \times 1.6 \pm 0.3 \text{ mmol L}^{-1}$ ;  $p < 0.05$ ).

**Discussion:** A 24 weeks CBT programme, including internet backup, has positive influence on risk factors of lifestyle disease.

### The effect of psychosocial training on burnout syndrome among healthcare students

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**Background:** We examined the effect of psychosocial training on the level of burnout syndrome and personality predictors among students of health care professions. **Methods:** A

quasi-experimental pre-test/post-test design was used to evaluate the effect of six-month psychosocial training. Together 111 university students divided into experimental and control group were included in study (age  $20.7 \pm 2.8$ ; 86.1% females). SBI (School Burnout Inventory), Sense of Coherence questionnaire and Rosenberg self-esteem scale were employed. Linear regression was used to analyze data. **Findings:** Results showed that psychosocial training had a positive impact on the level of burnout (95% CI: 0.83–9.26) and a sense of coherence (95% CI:  $-9.11$ ;  $-2.64$ ), while it had no significant effect on the self esteem levels. **Discussion:** Psychosocial training proved to be effective supportive method for positive influencing of burnout. Improving of stress managing skills among students will be useful in prevention of later onset of burnout among health care professionals.

### **The role of job search training in decreasing cognitive rigidity among the unemployed**

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Cognitive rigidity is an important factor in coping with own unemployment. The evidence of rigidity shows its negative effect on the ability to function in occurring situation. The main objective of this study was to identify the role of the job training in decreasing level of rigidity among the unemployed. The sample consisted of 210 unemployed who voluntarily agreed to participate in the study. Questionnaires battery was administered in two waves (T1 and T2). The experimental group involved individuals attending the job search training ( $n = 50$ ). The significant decrease of rigidity has been observed in the control group (without training), however a majority of respondents manifested increased level of distress, assessed by the GHQ-12 scale. The level of distress were significantly lower in the intervention group what indicates that job search training may become important instruments for alleviating psychological distress and reducing its negative consequences to coping with own unemployment.

### **An Exploration of Women's Knowledge, Beliefs and Behaviour towards Breast Self Examination**

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**Background:** Controversy in the literature regarding the advantages of regular breast self-examination (BSE) as a health protection behaviour in the area of breast cancer has informed the aims of this study, which explores women's knowledge, beliefs and behaviour towards BSE and the 5-step technique. **Methods:** Sixty white British women aged between 19 and 67 engaged in an online 3-month longitudinal BSE instruction project in which personal blogs and open-ended questionnaires were used. **Findings:** Thematic analysis elicited five themes; Previous Experience, BSE Irregularity, Perceived Susceptibility, Coping Style and the Usability of the 5-step BSE Model. **Discussion:** The study concludes that the 5-step BSE technique is successful in encouraging BSE. Through clear instruction and guidance BSE becomes a more pleasant experience and an improved relationship with the breasts

is facilitated. Practical implications for health promotion programmes have been developed and further directions for BSE interventions are discussed.

### Is Good Self-Reported Health (SRH) a proxy of resilience in pregnant women?

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**Background:** SRH is a predictor of morbidity/mortality. Aim: to analyze the correlates of SRH, exploring if it can be a proxy of resilience. **Methods:** 575 pregnant women completed the Portuguese versions of POMS and PDSS and a set of items evaluating SRH, life stress, social support, life quality, and anxiety traits. **Findings:** Comparisons between poor and good SRH groups showed that good SRH was associated with lower levels of anxiety ( $p < 0.01$ ) and of negative affectivity ( $p < 0.05$ ), less depressive symptoms and physical/mental problems during pregnancy (both,  $p < 0.01$ ), higher levels of positive affectivity ( $p < 0.05$ ), better quality of life ( $p < 0.01$ ), higher education levels ( $p < 0.01$ ), and an active professional life ( $p < 0.05$ ). Controlling for demographic and personality variables, regression analysis showed poor SRH was associated with physical/mental problems, depressive symptoms and poor quality of life. **Discussion:** The SRH single item can be a proxy of resilience/vulnerability, and a good question to use in clinical settings.

### Patient Perception of Patient-Centeredness, Satisfaction and Adherence

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**Background:** Aims: to study psychometric properties of the Portuguese adapted version of the Patient Perception of Patient-Centeredness (PPPC; Stewart et al., 2000) and to analyze the relationship between PPPC and patient's satisfaction and adherence. **Methods:** 317 participants (mean age =  $30.6 \pm 19.5$ ) who visited the primary care physician in the last month, answered to the PPPC and to three Likert scale questions to assess satisfaction ("did you feel satisfied with the last visit?") and adherence ("since your last visit did you take the medication/ follow the other medical recommendations as prescribed?"). **Findings:** PPPC internal consistency was  $\alpha = 0.93$ . Factorial analysis revealed two factors explaining 60.60% of the variance (F1 Empathy; F2 Active Patient Involvement). Satisfaction and adherence were related to F1 ( $r = 0.55$ ;  $r = 0.56$ ,  $p < 0.001$ ), F2 ( $r = 0.37$ ;  $r = 0.12$ ;  $p < 0.001$ ) and PPPC total score ( $r = 0.54$ ;  $r = 0.27$ ,  $p < 0.001$ ). **Discussion:** The Portuguese version of the PPPC is reliable and valid. Perception of patients-centeredness promotes satisfaction and adherence.

### The influence of automatic thoughts and beliefs in smoking maintenance and cessation among students

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**Background:** Since motivation to quit smoking among University students is low and relapse rates high, the present research aims to study related disengagement beliefs. **Methods:** 1424 subjects, 18–30 years old, completed a battery of questionnaires (cross sectional design), assessing smoking behavior and relative beliefs. **Findings:** 39% of students were smokers, 23% heavy and 14% former smokers. 38% wished to quit within next 6 months. 32% reported one serious attempt to quit, 15% two and 46% none. Number of cigarettes consumed, age of smoking initiation and beliefs about positive effects of smoking, could predict heavy smoking ( $R^2=0.48$ ,  $p < 0.000$ ). Smoking dependence and specific beliefs (e.g. denial of smoking consequences, low readiness to quit) could predict motivation to quit ( $R^2=0.32$ ,  $p < 0.000$ ). **Discussion:** Findings suggest that smoking prevention and intervention programs in Universities should also focus on and challenge related beliefs in order to prevent smoking dependence and motivate students to become and remaining non-smokers before heavy dependence establishes.

### Poly-victimization and risk of suicidal behaviors in adolescence: Protective value of self-esteem

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The aim of this study was twofold: To calculate the percentage of poly-victimized adolescents reporting any suicidal behavior, and to determine the mediator role of self-esteem when taking account of the total kinds of victimization experienced. A total of 877 adolescents were recruited from eight secondary schools in Spain. The Youth Self Report, The Rosenberg Self-Esteem Scale and the Juvenile Victimization Questionnaire were employed to assess suicidal behaviors, self-esteem and victimization. Adolescents among the 10% most victimized were considered poly-victims. Results showed that 45% of poly-victimized girls and 25% of poly-victimized boys report suicidal behaviors. The more kinds of victimization they report, the lower their levels of self-esteem are. In turn, the lower their self-esteem levels, the more suicidal behaviors they report. Sobel test showed that self-esteem acts as a partial mediator; victimization not only has a direct influence on suicidal behaviors, but also a mild indirect effect through self-esteem.

### Wellbeing mediates the effects of anxiety and depression on adherence and functionality in cardiopulmonary rehabilitation

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**Background:** The impact of anxiety and depression comorbidity on functionality and well-being in later life has been shown (Cairney et al., 2008). This study aimed to investigate the role of emotional state and well-being on functionality and adherence in patients older than 55 years with cardiac or chronic respiratory diseases. **Methods:** Fifty five patients (72% male; mean aged 71 years) completed HADS, PANAS, SWLS, adherence, and the Six-Minute Walk Test (6MWT) at baseline ( $t_0$ ) and 1 month ( $t_1$ ) after participating in a cardio-pulmonary rehabilitation program. **Results:** Anxiety and depression decreased, and performance at the 6MWT improved after rehabilitation (ANOVA,  $p < 0.001$ ). Subjective well-being ( $t_0$ ) mediates the effects of anxiety and depression ( $t_0$ ) on adherence ( $t_1$ ) and improvement in 6MWT (Structural Equation Model:  $\chi^2_{(5)} = 3.15$ ,  $p = 0.67$ ; RMSA = 0.01; NFI = 0.96; CFI = 0.99). **Conclusion:** Subjective well-being is an important component to be taken into consideration in rehabilitation programs because of its effect on the main rehabilitation outcomes.

### Coping strategies as predictor of survival in ALS

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**Background:** We studied coping strategies of 49 patients with ALS and their impact on survival. **Methods:** Participants were asked to complete a questionnaire of coping (Brief COPE). We gathered the different coping strategies into 3 main factors active coping ( $\alpha$  0.84), social support ( $\alpha$  0.71), and avoidance ( $\alpha$  0.71). Equality of survival distributions for the different levels of coping strategies was estimated using the Kaplan-Meier (Log Rank (Mantel-Cox) with adjustment for clinical and SD variables. **Results:** Our results clearly demonstrated the positive impact of active coping strategies while taking account of mental health, ALSFRS-R scores, clinical form at onset, medical assistance, participation in a clinical trial and gender (Log Rank (Mantel-Cox)  $p < 0.05$ ). **Discussion:** Our study clearly demonstrated the impact of active coping strategies on survival in ALS. These results encourage us to develop further investigations in order to better understand this relationship and to offer better adapted psychological interventions for ALS patients.

### Measuring Snacking Behavior among Lower Educated Students: A Mobile Based Ecological Momentary Assessment (mEMA) Study

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**Background:** The present study aims to indicate the usability and feasibility of mobile based Ecological Momentary Assessment (mEMA) in health psychology. Furthermore, we attempt to determine personal and contextual factors influencing snacking behavior to overcome overweight among lower educated students in the Netherlands, using mEMA. **Methods:** During 8 days, participants ( $N \geq 400$ ) receive prompts from the EMA app on their Smartphone, requesting them to fill out a short questionnaire concerning personal and

contextual factors influencing their snacking behavior. Subsequently, multilevel analysis will be conducted. **Expected results:** At the conference, we expect to present data regarding mEMA's usability, feasibility and determinants which influence students' snacking behavior. Current stage of work: Currently, the mEMA application is finished and data will be gathered soon. **Discussion:** The contribution of the present study to health psychology includes new knowledge regarding determinants of snacking behavior and provides more insight into a relatively new research method (mEMA).

### **Emotional exhaustion in preschool teachers: the protective role of personal resources**

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The aim of this study was to explore relationships between emotional exhaustion and personal resources (optimism, self-efficacy, emotional competence and coping strategies) among preschool teachers. A total of 409 female preschool teachers from 11 institutions in Serbia took part in the study. The instruments used to collect the data include CBI (Kristensen et al., 2005), LOT-R (Scheier et al., 1994), GSE (Schwarzer & Jerusalem, 1995), ESCQ (Taksic, 2001) and CSI (Amirkhan, 1990). Discriminant analysis has shown that teachers who scored lower on emotional exhaustion have higher optimism, self-efficacy and ability to manage and regulate emotions, and lower avoidance than teachers who scored higher on emotional exhaustion. The results of this study show that optimism, self-efficacy and ability to manage and regulate emotions are possible protective factors for emotional exhaustion. A better understanding of the protective role of personal resources in emotional exhaustion can help build successful prevention and treatment strategies.

### **A cross-cultural analysis: Eating behaviour of adolescents in Turkey and Germany**

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Poor diet quality in adolescence is an increasing problem worldwide. So far, it is yet unknown how well applicable social-cognitive models such as the Prototype/Willingness Model (PWM) are in non-Western cultures. The present study therefore analysed, if social-cognitive factors are cross-cultural or culture-specific for eating behaviour of Turkish and German adolescents. PWM-variables were assessed via questionnaire in a sample of high school students in Turkey ( $N = 57$ ) and Germany ( $N = 61$ ). Less than 5% showed a favourable eating pattern. However, Turkish adolescents reported significantly higher fruit consumption. Hierarchical regression analyses revealed that the eating pattern was predicted by intentions, willingness, attitudes and descriptive norms. Fruit consumption was only predicted by cultural background and intentions. PWM-variables predicted eating behaviour cross-culturally. Nevertheless, the consumption of specific foods like fruit is associated with culture. These results need to be taken into account when developing interventions that effectively promote healthy eating.

## Unequal Ageing: A capabilities approach to understanding inequalities among older people

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**Background:** Population ageing raises concerns about standard of living disparities and health for older people. Sen suggests that standard of living is about freedom to pursue valued 'capabilities'. This study investigated older people's valued 'capabilities' across the gradient of deprivation. **Methods:** The data comes from in-depth qualitative interviews about desired living standards, with 143 volunteers aged 63–93 years. Participants were selected to represent a range of hardship, ethnicity, and geographic locations across New Zealand. The data were analysed for common themes regarding the particular capabilities valued by participants. **Findings:** Six areas of capability were desired by all participants: physical comfort, social integration, contribution, enjoyment, security, and autonomy. Examples of how the 'goods' of food, clothing and transport contribute to these capabilities are discussed. **Discussion:** A capabilities approach can be used to improve assessment instruments and provide information for practical use by health workers, support organisations, and policy makers.

## Risky factors in teacher's job

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This report represents a qualitative research study about situation of Czech teachers, especially their occupational stress and prevention opportunities. **Methods:** Focus groups Participants: experienced teachers (10–12 persons per group) **Findings:** Description of main specifics of teacher's occupational stress and suggestion some preventive strategies, e.g. social support, relationships at school etc. **Discussion:** Intervention in occupational teacher's stress.

## Social intelligence for substance use disorders patients

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**Background:** The aim is to clarify which are the Social Intelligence (SI) indicators for addiction disorder patients; are there differences in gender and addiction differences in the SI indicators. **Methods:** 154 men and 87 women (substance use disorders patients – ICD-10 diagnosis-F10.2–19.2) were questioned. Using The Tromso Social Intelligence Scale, it contains three components: social information processing (SIP), social skills (SS) and social awareness (SA). **Findings:** The mean arithmetical indicators of SIP were statistically significant and higher for males than females, for drug addicts than alcoholics, for male drug addicts than male alcoholics. SA and SS indicators were statistically significant and higher for drug addicts than

alcoholics and for male drug addicts than male alcoholics. For female drug addicts and alcoholics the SI factors had no significant statistical difference. **Discussion:** The results allude to the respondents' difficulties in adequately and critically assessing their own aptitudes of social intelligence.

### **A study on factors of self-efficacy for depressed patients to enhance returning to work**

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**Background:** In Japan it is urgent need to support the increasing depressed patients who are on administrative leave to return to work. The purpose of this study was to examine factors of self-efficacy for depressed patients to enhance returning to work. **Methods:** The investigations have done by eight times to sixty patients with depression (53male and 7female) from 2008 to 2011. The open-end-question, "Do you think what is effective for you to return to work?" was asked. **Findings:** Their answers were split to 635 words and categorized to 8 categories named "Interpersonal relationship", "ADL", "Cognitive" and so forth through discussion by four psychologists. **Discussion:** Further effective intervention for the patients to return to work would be done by focusing these 8 categories.

### **Quality and easiness of communication in family as protective factors for adolescent health**

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The aim of the study was to investigate relations among communication with parents and health, life satisfaction and risk behaviors of lower secondary schools students in Poland. The survey was conducted on a sample of 3201 students (age 13–15). A standard Health Behaviour in School-Aged Children study questionnaire contained questions about life satisfaction, subjective health complaints, current smoking, drinking alcohol, ease of communication with parents and clear communication scale from Family Dynamics Measure II. A cluster analysis divided the sample into groups with different family communication patterns. General linear model revealed that communication with parents explains 2% of variance of risk behaviors, 6% of health complaints and 9% of adolescent life satisfaction. For risk behaviors an only protective factor was clarity of communication, for subjective health complaints and low life satisfaction – both, clarity and easiness of family communication. Good quality of communication in family can protect adolescent health.

### **Relations between Health Perception and Behaviours of University Students**

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Health behaviour theories underline that development and adoption of health behaviours widely depend on individuals' perception and understanding of the meaning of health and well-being as a core concept. Main aims of this descriptive study are to define the health perception levels and dimensions of university students, and to assess the relations between health perception and behaviours. The study group consisted of 1622 students in Kastamonu University, Turkey. 3-degree Likert-type scale of 18 items and questionnaire of 14 items were used as the data collection tools. Results show that girls, non-smokers, and non-alcohol drinkers have significantly higher health perception levels. While the item 'Health means for me to like to be with my family' was stated by the students the most important indicator of well-being, the item 'Health means for me to get rare or no medicine' received the lowest rating. Our study indicated that individuals' understanding of health and well-being affects their health behaviours.

### **Nurses' perceptions of therapeutic outdoor environments and its restorativeness from stress**

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The purpose of study was to explore nurses' perception about therapeutic outdoor environment of healthcare facility and how the therapeutic environment contributes to restoration from stress of care delivery. A total of 370 nurses participated and their perceptions and experiences are sounded by self-report questionnaire, asks about their perception and experience of the outdoor environment, which is measured using connectedness to nature. Revised Perceived Resotrateness Scale by Hartig was applied to determine the therapeutic effect of the outdoor environment upon the healthcare workers' stress. The correlation between the outdoor environment and the perceived restorativeness among nurses looks significant. This indicates that the therapeutic outdoor environment in healthcare facility has a positive impact on stress relief and restorativeness among nurses. This means the caregiver/staff are directly influenced by the designed enhancing therapeutic environment including outdoor environment and are likely to be positively impacted when they are under high level of stress.

### **Play support for hospitalized children in Japanese hospitals conducted by nurses**

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**Background:** Hospitalized children have many stresses and play is useful to relieve these stressors. The conditions and problems of play support for hospitalized children conducted by nurses were investigated. **Methods:** Nurses ( $n=83$ ) working at eight Japanese hospitals were classified according to the ward where they worked: children's ward (Group A,  $n=56$ ), or children and adults mixed ward (Group B,  $n=27$ ). They were asked about (1) conducting of

play support, (2) reasons for not conducting play support (in case there was no play support). The data were analyzed Fisher's exact tests. **Findings:** Results indicated nurses giving play support was 75.0% in A and 25.9% in B ( $p < 0.0001$ ). The main reason for not conducting support was being 'busy' in A and 'they are accompanied by their mothers' in B. **Discussion:** It is important to reconsider the content of nursing work and improve equipment so that nurses can provide more play support for hospitalized children.

### Mapping behaviour change techniques to modes of delivery to enhance weight loss initiation and maintenance

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Obesity prevalence is increasing. For example, it is estimated that by 2050, 40% of the UK population could be obese. Self-regulatory interventions including goal-setting, self-monitoring and feedback have been found to be effective. However, it is unclear which behaviour change technique (BCT) combinations and which modes of delivery maximise weight loss. A systematic review of reviews of self regulatory, interactive interventions was undertaken. A search strategy based on the PICO framework was used to interrogate Medline, EMBASE, CINAHL, PsychINFO and the Cochrane library databases. Title and abstract selection, from 3185 hits, generated 26 reviews meeting our inclusion criteria. Few reviews linked BCT content to effectiveness. Some reviews focused on specific modes of delivery (e.g. Ehealth interventions) and none compared effectiveness across modes of delivery. Findings will be used to design a systematic review of primary intervention evaluations which links BCT content and mode of delivery to effectiveness.

### Perceived popularity of unhealthy eaters and self-control resources influence adolescents' food choices

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**Background:** Research suggests that individuals tend to engage in unhealthy behaviors if they hold positive images of the typical persons that perform these actions. Little is known about how positive images of unhealthy eaters are related to children and adolescents' eating preferences, and whether the relationship is influenced by self-control. **Methods:** Children and adolescents ( $N = 951$ , age range 9–19,  $M = 14.22$ ,  $SD = 2.58$ ) assessed the popularity of a typical peer who eats healthy *versus* unhealthy foods. Measures of self-control and food intake were also taken. **Findings:** The perception of unhealthy eaters as being popular is related to unhealthy foods intake. This relationship is partially mediated by self-control, which buffers the influence of unhealthy eater's popularity on unhealthy food intake. **Discussion:** Holding positive images of peers who engage in unhealthy eating, in addition to poorer self-control resources lead to unhealthy food consumption. These findings could inform future interventions aimed at improving children's eating habits.

### The role of functional and dysfunctional emotion regulation strategies in stress-induced eating

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**Background:** Psychosocial stress may lead to increased food consumption, as an attempt of individuals to escape negative self-awareness. We propose that only people who use dysfunctional emotion regulation strategies (ERS) would eat more in response to social stressors. **Methods:** We set an experimental design ( $N = 74$ ,  $M = 23$  years old,  $SD = 6.11$ ), with type of ERS instruction (suppression of emotional expression, cognitive reappraisal or no instruction) as a between-subject factor and the amount of cookies and chips eaten as outcome measures. Stress was induced by using The Trier Social Stress protocol. Individual differences in using different ERS were also assessed. **Findings:** There was a significant effect of the spontaneous use of suppression (but not of use of suppression as instructed), with participants who used this strategy eating significantly more cookies compared to the others. **Discussion:** Investigating how people use ERS might prove relevant for explaining eating in stressful social situations.

### The ups and downs of life – the most positive and negative events of ones life

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The research is focused on the most intense emotional experiences – both positive (peak experience) and negative (nadir experience). 17 seniors older then 65 years (10 w, 7 m) from Czech Republic, not living in an institution, were interviewed by the means of McAdams' method of Life Story Interview. Reported peak experiences were mostly wedding, improvement of health, completion of education, birth of children, their graduation or wedding. As positive were seen also experiences from the nature or of Christmas and the related belief in the Infant Jesus from the early childhood. The majority of participants reported the death of a close person to be the most negative event, own disease or the disease of one's child or partner, various family problems or the prosecution during the communist regime. The experiences were mostly unspectacular, however of great emotional value, able to influence significantly a persons wellbeing and health.

### Watching from the limits of hospital care: psychiatrists claim the need for community reintegration

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The cultural differences, subjective assessments, competing professional theories affect how “mental health” is defined (WHO 2001), and implicitly, how is addressed the process of recovery of persons with mental disorders. Therefore, we explore the psychiatrists’ views regarding the current understanding of mental health in a qualitative design, through 11 semi-structured interviews with respondents from a psychiatric hospital in Iasi, Romania. Results cover their patients’ reinsertion in society, including transition process from the psychiatric hospital to family or community and adaptation to social norms. Using Interpretative Phenomenological Analysis as a method, the themes found addressed the understanding of the mental illness, family support, community reintegration process, patients’ particularities. The views of psychiatrists indicate a set of attitudes and understandings of mental disorders, restricted in current practice to providing medical treatment, with little or no support from social services or community, affecting the process of recovery and reintegration in community.

### Who is fighting in obesity treatment? Patients or health professionals?

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**Background:** Recent studies indicate that general practitioners and specialty groups of health professionals related to the management of obesity have inconsistent practices and negative beliefs and attitudes toward obese. **Methods:** Semi-structured interviews about beliefs, attitudes and practices about obesity have been done to Portuguese general practitioners and nutritionists. Data is being analyzed according to Grounded Analysis’ procedures. **Expected results:** Finding similarities and differences between these groups and understand what impact they have in the management of obesity. Current stage of work: Analysis are being made. Both groups have negative conceptions and attitudes toward obese which make them have lower outcomes expectations. A constant struggle is used by nutritionists to describe the relation with obese and with general practitioners who seem to fail in the detection of priority cases. **Discussion:** Exploring this issue is important to improve strategies and communication between different groups of doctors engaged in the treatment of obesity. **Keywords:** Obesity, general practitioners, nutritionists, beliefs, attitudes.

### What does Research Data Management mean for Health Psychology funding? Developing best practice

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**Background:** Funders now require Data Management Plans (DMP) as part of grant applications. DMPs need to cover both data management and detail how data will remain accessible. This poster reports on two projects funded by JISC that have sought to develop discipline specific training and practice. **Methods:** The first project developed data management training resources for postgraduates. The second project developed guidance and technical resources to assist in the preparation of actual DMPs and establish a sustainable data repository for researchers. User feedback was gained via survey and interviews. **Findings:** Existing practice in this area was variable. The resources developed

were highly rated. There was a need identified for the institution to develop additional centralised resources to support data management. **Discussion:** The findings of this project indicate that there are considerable benefits in developing discipline specific training and support in this area and that this raises important resource issues.

### **Adherence to moderate or high intensity diet or exercise and effects on memory and well-being**

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**Background:** To explore the effect of different intensities of 2 health behaviour recommendations on adherence, memory and well-being over 6 weeks. **Methods:** Quantitative: Longitudinal between participants design measuring baseline fruit and vegetable consumption, exercise, well-being and memory then testing the effect (using MANCOVA) of 4 different conditions differing in intensity (moderate or high) and type of behaviour (exercise or fruit and vegetable consumption) on adherence, memory and well-being in 80 students. Qualitative: Interview & thematically analyse 8 participants' experiences (high & low adherers from each group) in relation to motivations, self-regulation & impact of recommendations. **Results:** Preliminary results suggest large variation in adherence across groups. Of the 80 participants, 38 have currently completed the 6 week intervention. Interviews are taking place between February and April. **Discussion:** Results will offer insight into multiple psychological effects of different health behaviour recommendations and implications for the design of behaviour change interventions.

### **Possible psychological and physiological background of endurance athletes' "wall" experience**

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**Background:** Endurance athletes often experience a temporary fatigue, called 'the wall'. The purpose of the study was to reveal the physiological and psychological characteristics of 'the wall', and clarify cognitional differences can caused the phenomena. **Methods:** 60 participants were recruited to participate in a 30-minute cycling test. During cycling physical and mental tiredness, rate of perceived exertion, hart rate and cognitive strategies were recorded in every five minutes. After the test questions were asked about the wall's attendance. **Findings:** 19 of the participants hit the wall. They reported higher values in physical and psychological fatigue with an earlier increase ( $p < 0.001$ ), and failed to detect it in accordance with tiredness ( $p > 0.05$ ). They used dissociative cognitive strategies to struggle the wall ( $p < 0.05$ ). **Discussion:** Our findings revealed some of the psychological side of 'the wall', that could help people to avoid it, maintain sport activity and a healthier life.

### Family functioning in amyotrophic lateral sclerosis

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**Background:** Amyotrophic Lateral Sclerosis causes physical impairment and other severe complications. Due to its clinical feature, the disease threatens patients' autonomy and fosters changes in family functioning. **Methods:** We evaluated family parameters of cohesion and adaptability by using the FACES III questionnaire with 15 couples of patients and caregivers. The questionnaires were administered two times within 6 months and the scores were correlated with patients' coping strategies (MND Coping Scale) and caregivers' burden (CBI). **Findings:** At T<sub>1</sub>, patients' perceptions of family cohesion correlated positively with Positive Action factor ( $p < 0.05$ ). Caregivers' ratings on family cohesion correlated negatively with the burden of care ( $p < 0.01$ ). At T<sub>2</sub>, a positive correlation between Positive Thought factor and family cohesion was found in patients' scores ( $p < 0.05$ ). **Discussion:** Family cohesion seems to have different implications for patients and caregivers, and in different disease phases, since it entails both positive coping strategies and high caregiver burden.

### Severe brain injury and caregiver burden within the context of the family

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**Background:** Brain injuries have a remarkable impact on the quality of life of patients, as well as on family relationships. Caregiving duties can be extremely demanding and the consequences of such involvement arouse an increasing interest. **Methods:** We evaluated caregiver burden (CBI) and quality of life (SEIQoL; SF36) of 28 caregivers of brain injured patients, taking into account also the perception of social support (MSPSS) and family organization (FACES III). **Findings:** Time dedicated to assistance correlated negatively with General Health Perceptions ( $p < 0.05$ ). Social support from family members resulted negatively correlated with the social dimension of caregiver burden ( $p < 0.05$ ) and positively with family cohesion ( $p < 0.05$ ). Family adaptability correlated positively with subjective quality of life ( $p < 0.05$ ). **Discussion:** These data emphasise the relevance of studying caregiver burden within the context of relational networks. Indeed, social support and family functioning seem to be significantly related to caregivers' quality of life and burden perceptions.

### Cultural and Mental Health Issues in Training the Performance Students

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Motivation: Training the performance students is nowadays becoming a certain need in some of the highschools, backgrounds and societies. Actual topic: There are redefined questions about the heredity-environment-education triad, concerning the genetic potential, the temper or the pulsional dynamic of the subjects. **Objective:** Revealing the personality structures of 30 teenagers from a National Highschool in Bucharest, who study in performance science classes. **Methods and instruments:** \*Personality Questionnaire CAQ\*; Projective Personality Szondi Test. **Results:** Disclosure the motivation in intergenerational connection Discovering triggers in activating the competition dynamic Relieving the report motivation – desire – involvement. Approaching the interaction between standard – target – limits **Expectations:** Releasing some predictive assumptions concerning the appropriate pedagogical training of performance students with a relevant psychological support.

### **Daily monitoring of chronic pain patients: insight in processes related to acceptance & commitment therapy**

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Not much is known about the working mechanisms of Acceptance & Commitment Therapy (ACT), a new form of CBT focusing on acceptance of pain and other negative private experiences. We explore the temporal characteristics and working mechanisms of ACT in an N-of-1 design. Daily monitoring (18 items) was performed by electronic diary for fifteen weeks in four chronic pain patients receiving an 8-week ACT. Measurements took place both before, during and after treatment. Data will be analyzed visually, but also with advanced statistical methods. We expect (individually varying) treatment effects in all participants, seen in a decrease in pain interference in daily life and an increase in values-based behavior. We expect that psychological flexibility will be the main working mechanism. At the time of the conference, data analysis is in progress. The N-of-1 design is a promising method of studying temporal characteristics and working mechanisms in treatments such as ACT.

### **Implementation of acceptance & commitment therapy (ACT) in Dutch pain rehabilitation**

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Acceptance & Commitment Therapy (ACT) is effective in chronic pain treatment by teaching acceptance of inevitable pain experiences. We developed an ACT course for multidisciplinary pain teams which is implemented in Dutch pain rehabilitation. The implementation process was evaluated. 175 professionals from nine institutes participated. Among other things, we measured professionals' attitudes and feelings of self-efficacy towards working with ACT.

Competencies were measured by self-assessment at start (T0), half way (T1) and the end of the implementation trajectory (T2), by video-recordings of professionals (T2) and by assessing patients' experiences. Preliminary results show that professionals hold positive attitudes towards ACT, the ability of their teams to implement ACT and the written self help book for patients. Results on competency in working with ACT from the first five institutes that completed T2 will be presented. Much can be learned from systematic implementation and monitoring of implementation processes in health care services.

### Does Athletic Experience Increase Athletes' Resilience?

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**Background:** Psychological conditioning for athletes has become one of the important issues in Japanese universities. The purpose of this study was to examine the relationship among students' athletic experience and psychological resilience with Psychological Resilience Scale for University Athletes (PRSUA) and Stress Response Scale for Athletes (SRSA). **Methods:** The subjects of 377 university athletes (male = 188, female = 189; mean age = 19.70, SD = 1.20) were asked to answer a questionnaire that was composed of socio-demographic questions, PRSUA and SRSA in July, 2010. *t*-test, ANOVA and step-wise multiple regression analysis were used for statistical analysis. **Findings:** Significantly higher resilience was found among the national athletic competition group than the non-national athletic competition group and among regular athletes than semi-regular and non-regular athletes. The sub-scales of PRSUA showed significantly negative association with those of SRSA. **Discussion:** The findings of this study support our hypothesis that high level athletes acquire high resilience through their athletic experience.

### Physical activity and performance at school. A systematic review of the literature including a methodological quality assessment

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The aim of this study was to describe the prospective relationship between physical activity and academic performance. Prospective studies were identified from searches in PubMed, PsycINFO, Cochrane Central, and Sportdiscus from 1990 through 2010. Studies had to report at least 1 physical activity or physical fitness measurement and at least 1 measure of academic performance or cognition during childhood or adolescence. We identified 10 observational and 4 intervention studies. Two studies were scored as high quality. Based on the results of the best-evidence synthesis, we found evidence of a significant longitudinal positive relationship between physical activity and academic performance. Participation in physical activity is positively related to academic performance in children. Because we found only 2 high-quality studies, future high-quality studies are needed to confirm our findings. These studies should

thoroughly examine the dose-response relationship between physical activity and academic performance as well as explanatory mechanisms for this relationship.

### **A study on individual determinants of physical activity in young adults. Longitudinal analyses over a 15-year period**

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The aim of this study was to identify psychological determinants of physical activity in young adults over a period of 15 years, as part of a larger conceptual model also including physical features, socio-demographic and behavioural factors. Self-reported coping behaviour, mild health complaints and personality data were provided in wave 5 (1985), wave 6 (1991), wave 8 (1996/1997) and wave 9 (2000) by 515 participants (48% male) of the Amsterdam Growth and Health Longitudinal Study. Univariable and multivariable Generalized Estimating Equations, specifically designed for analysing longitudinal data, were used to examine associations of psychological variables with self-reported time (min/wk) spent in light (4–7 metabolic equivalent (METs)), moderate (7–10 METs) and vigorous (> 10 METs) physical activity. All psychological factors were to some extent significantly associated with the physical activity levels. These results suggest that it may be possible to identify people who are at risk of being insufficiently active for preventive initiatives.

### **The predictive role of body image, depression and functional satisfaction in psychosocial adjustment following amputation**

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**Background:** An examination of the relationships between body image concerns, anxiety and depression scores, prosthesis satisfaction and psychosocial adjustment in individuals with unilateral lower limb amputation. **Methods:** 88 participants attending a Glasgow prosthetics clinic completed TAPES, ABIS and HADS by post. Logistic regression was performed to explore relationships. **Findings:** Body image, Functional satisfaction and Depression were significantly predictive of psychosocial adjustment ( $\times 2$  (7,  $n = 88$ ) 46.564,  $p < 0.000$ ). Body image concerns appeared to show the greatest association (Exp  $\beta = 8.333$ ,  $p < 0.05$ ) followed by depressive symptoms (HADS-D score  $\geq 8$ ) and functional satisfaction (Exp  $\beta = 4.431$ ,  $p < 0.05$ , Exp  $\beta = 0.754$ ,  $p < 0.05$ ). **Discussion:** Discussion of importance of body image and functional as opposed to aesthetic satisfaction, a shift of focus from depression and anxiety and specific reference to theories of self and embodiment (MacLachlan, 2004; Rybarczyk and Behel, 2002).

### An ipa exploration of the experience of limb loss: patient and prosthetist perspectives

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**Background:** A two part study examining the experience of prosthetists and individuals living with amputation. Themes of shared importance and/or discrepancy are discussed. **Methods:** 15 individuals living with amputation and 13 prosthetists were interviewed. Interpretative Phenomenological Analysis was used to gain a subjective understanding of their experience. **Findings:** IPA revealed themes including expectations of life post-amputation, positive rehabilitation, ideal outcome and the patient/professional relationship. Similarities in themes as well as areas in which the 2 groups differ greatly will be discussed. **Discussion:** The novel aspect of this study is the introduction of comparing the lived experience of both the patient and the prosthetist. The prosthetist and the healthcare system have the potential to greatly influence the subsequent rehabilitation of individuals. A greater understanding of this influence and of the lived experience of these participants will shed light on this area and allow suggestions for clinical practice to be made.

### Goal setting and goal striving among vocational students: a qualitative study

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**Background:** Goal-setting and -striving influence well-being. We aimed to comprehend goals, plans and barriers among vocational students. **Methods:** Six focusgroup-interviews were held with 57 vocational students (mean age 19.3, 42% men, 70% non-western ethnicity). A novel visualization technique for data collection supported interactive learning by mapping, sorting and ranking goals in domains. Four researchers further analyzed data on a theoretical-conceptual level conducting recursive abstraction. **Findings:** Short-term goals were mostly related to 'school'; long-term goals to 'relations with others'. Money-oriented ambitions were highly prevalent, especially among males. Students were (misguidedly) confident that most goals would be easily achievable and found it difficult to name barriers and sub-steps to their goals. **Discussion:** Most of the goals seemed to aspire financial independence, stability and status conform a 'picture-perfect', albeit remote, adult life. Students seem to lack abilities to plan and control, with possibility of goal-frustration and discouragement which could result in declining well-being.

### Improving Physical Activity Among Seniors with Intellectual Disabilities: Development of a Feasible Programme

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**Introduction:** To increase regular physical activity (PA) in seniors older than 45 years with mild or moderate intellectual disabilities (ID) a specific day-care programme was developed. **Methods:** The programme was developed following the six steps of Intervention Mapping and involved the use of theories of behaviour change and consultation of movement experts and the target population. **Findings:** The programme consists of an educational programme and an evidence based physical activity programme, which include the behavioral change techniques: tailoring, skill building, active learning, grading, modeling, feedback, and reward. The programme was well applicable for seniors with ID and was feasible according to the staff and movement experts who conducted the programme. Drop out (15 out of 81) was mostly caused by factors not related to the programme's content. **Discussion:** The developed day care programme is well applicable for seniors with ID and may be used by other subgroups to increase PA.

### The Development and Validation of a Screening Tool for Psychosocial Breast-Cancer Risk

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**Background:** Conventional breast-cancer prevention strategies usually focus on the reduction of physical breast-cancer risk factors while neglecting psychosocial factors potentially associated with its development: maladaptive coping with bereavement and other stressful life events, a 'breast-cancer prone' personality, and low social support. As part of the development of an electronic coping-enhancement programme for bereaved women, the Screening Tool for Psychosocial Breast-Cancer Risk (STPBR) was developed to screen potential candidates. **Methods:** Established scales were assessed for their reliability and validity. Subsequently, ninety-three women aged between 20 and 58 years ( $M = 34.5$ ,  $SD = 10.6$ ) completed pilot versions of the tool. **Findings:** Scales with the best face validity and highest internal consistency were selected to form the final version of the tool. **Discussion:** The STPBR is a first step towards contributing to psychosocial breast-cancer prevention, in need for further validation and implementation.

### Intersexual Differences in Well-being and Life Satisfaction in Context of the Adolescents? Quality of Life

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Several authors (e.g. Diener, Suh, 1997) saturate the concept of quality of life with two key indicators: a psychological well being and life satisfaction. In spite of these facts the research of adolescents' quality of life mostly focused on the group of adolescents who suffer with some diseases (also from the aspects of sex differences). The main objective of our research was to identify intersexual differences within the indicators of quality of life with adolescents who are healthy. The sampling included 154 adolescents in the age 15–17 (76 boys, 78 girls). We applied Psychological General Well-being Inventory (Dupuy, 1984) and Questionnaire of Live Satisfaction (Fahrenberg, 2000). We found out significant differences within the indicators of psychological well-being with girls comparing with boys in following dimensions: anxiety ( $t = -3167$ ,  $p \leq 0.01$ ) and depressed mood ( $t = -2420$ ,  $p \leq 0.05$ ). We found out significantly

higher evaluation of satisfaction with health in life satisfaction indicator with boys comparing with girls ( $t = -3627, p \leq 0.001$ ).

### **Positive and Negative Affect, Psychological Well-being and Life Satisfaction of Adolescents**

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The aim of the study were to assess the relationship of both positive(PA) and negative(NA) affect with psychological well-being (measured by Psychological General Well-being Inventory-Dupuy, 1984) and life satisfaction (measured by Life satisfaction questionnaire-Fahrenberg et al., 2000) of adolescents. Affectivity was measured by Bradburn scale of positive and negative affect (in Warr et al., 1983). Research sample consisted of 154 adolescents (in the age 15–17). We have observed a significant positive relationship between PA and life satisfaction ( $r=0.282, p \leq 0.001$ ) and psychological well-being ( $r=0.260, p \leq 0.01$ ). We have also observed significant negative relationship between NA and life satisfaction ( $r = -179, p \leq 0.05$ ) and psychological well-being ( $r = -0.287, p \leq 0.001$ ) in group of adolescents. We argue as well as Brennan et al.(2006) that given the distincts nature of PA and NA it is important to distinguish their respective potential influences on self-ratings of quality of life (both indicators- psychological well-being and life satisfaction).

### **Me, we, and vegetables: The effect of descriptive norm information on vegetable consumption**

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**Background:** Normative information has proven especially powerful in people who identify strongly with the referent group ('social identification'). This study examined the role of self-identity next to social identity in the effect of norm manipulation on vegetable consumption.

**Methods:** 57 students (86% women) completed questions on vegetable intake, self-identity and social identity, followed by information that vegetable intake was either low or high among the referent group. Hereafter, intention (immediately) and vegetable intake (1 week later) were assessed. **Findings:** ANOVA results showed, besides a significant main effect of self-identity, and interaction between social identity and norm condition in the prediction of vegetable intake. Norm manipulation was only effective among strong social identifiers when controlling for self-identity. **Discussion:** A simple norm manipulation appears capable of influencing vegetable intake among strong group identifiers, even among those whose self-identification with the behaviour is weak.

### **Smoking habits and attitudes towards smoking among medical students of Lithuanian University of Health Sciences**

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Health specialists are important role models for society. Therefore it is important to investigate smoking habits and attitudes among health professionals. The aim of the study was to assess trends of smoking during the period of 1995–2010 and the relation among smoking behavior of undergraduate medical students and their attitudes towards smoking. **Methods:** The data were collected from 2311 (response rate 79.2%) sixth-year medical students during 15 years, using anonymous questionnaire. **Results:** The daily smoking rate during 15 year period was 33.8% in males and 16.4% in females; More nonsmokers (76.3%) than smokers (59.9%) were aware of addictive nature of tobacco, but there was a little difference in their opinion about support to smokers for quitting: 86.8% of smokers and 89.9% of nonsmokers stated that medical doctors should help smokers to give up smoking and 68% of them thought that doctors had not enough knowledge how to help.

### How does body image contribute to the general life satisfaction among adolescents?

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**Background:** The aim of this study was to explore possible influence of body image on life satisfaction among adolescents. **Methods:** Dichotomized responses on questions about life satisfaction, body image, dietary behavior and physical activity were used in hierarchical logistic regression stratified by age groups and gender. Data from Health Behaviour in School-Aged Children study performed in 2010 were used ( $n = 4617$ , representative for 11-, 13- and 15-years old Slovak pupils). **Results:** Body image was associated with life satisfaction but only among 13- ( $p < 0.05$ , OR = 1.48, 95% CI: 1.05–2.09) and 15-years old ( $p < 0.01$ , OR = 1.79, 95% CI: 1.24–2.59) girls. Adjustment for dietary behavior and physical activity did not change these findings. **Conclusion:** Self-assessment of physical appearance plays an important role in shaping perception of self among adolescent girls, is more influential with increasing age and might influence their mental health and well-being.

### Do positive emotions experiencing increase resilience and life satisfaction to the adolescents with social anxiety?

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In the light of the Broaden-and-Build model of positive emotions (Fredrickson, 2001) we advanced the following research question: do the techniques designed to stimulate positive emotions experiencing added to the traditional cognitive-behavioral group therapy (CBGT) for social anxiety facilitate better results in alleviating the symptoms, increasing resilience, flourishing and life satisfaction than simply using CBGT? Therefore we are conducting a clinical randomized trial with adolescents with social anxiety, aiming at a 60 participants sample at least. The participants are randomly distributed in three distinct groups: the waiting list group, the group that receives the classical treatment (CBGT) during 10 sessions and the third group for which we are using, in addition, techniques for positive emotions induction at the beginning of each session of CBGT. We expect that the third group will obtain better results on the dependent variables (social anxiety symptoms, ego-resilience, life satisfaction and flourishing) than the others.

### **Developing a measure for physical post traumatic growth in men with prostate cancer**

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Post-traumatic growth (PTG) is the concept of positive change through experiencing trauma (O'Leary & Ickovics, 1995). Recently, it has been argued that there might be a further element to the PTG model. This new dimension of PTG known as 'physical post traumatic growth' may be unique to individuals who have suffered physical trauma. PTG has been traditionally measured by the Post Traumatic Growth Inventory (PTGI; Tedeschi and Calhoun, 1996). However, the PTGI does not take into account the unique affect which physical trauma may have on positive growth. This is of particular concern given that previous research has illustrated the role of physical trauma in increasing awareness of health and physical post traumatic growth. The aim of this study is to develop a measure of post traumatic growth in men with prostate cancer. Scale items will be generated from completed qualitative interviews. Subsequent exploratory and confirmatory factor analysis will be conducted.

### **Creative passion as well as susceptibility to disorders of the health condition**

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Undoubtedly to meaning of the life sense it is possible to rank passion understood as the very strong liking for something, dealing with it with passion. Creative passion can also be defined as a value, which realization constitutes for the artist one of the main Predicting feeling the sense of life. Thus, strong commitment into the creativity it is possible to consider in the context of implementation process about meaning of existence as well as source of feeling the sense and appropriateness of own existence, and as a result of identifying the meaning of own existence with completion of the creative act. Presented examinations conducted in frames of master's thesis were aimed to look at the issue of creativity from a point of view the sense of life issues and establishing the relation between meaning sense of the life and attitude to the creativity and health condition of young artists.

### **Social exclusion and disease – seeking for possible psychoneuroendocrine mechanisms**

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Social exclusion is known to be related to disease. Mechanisms behind are not well understood. We report results of a series of studies on the effects of experimentally induced social exclusion (Cyberball paradigm) on the cortisol response alone and on the cortisol response to subsequent laboratory stress (public speaking). Cyberball-induced social exclusion did not affect cortisol by itself but adversely affected mood and threatened fundamental needs (belongingness, control, meaningful existence, self-esteem). When Cyberball was immediately followed by a public speaking stress known to profoundly

increase cortisol concentrations women previously excluded showed no cortisol response to the speaking stressor in contrast to women included. No such effect was observed in men. This effect was replicated twice in further studies. In the most recent study we found rumination about Cyberball to predict the cortisol-stress response after public speaking stress. The results delineate possible mechanisms for associations between experience of exclusion and health.

### **Age during forced displacement within World War II and current posttraumatic stress disorder**

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**Background:** The relation between the age (2–20 years) during forced displacement within World War II and the occurrence of a posttraumatic stress disorder (PTSD) in older age was investigated. **Methods:** The data of a subsample from the German Longitudinal Urban Cohort Aging Study were analyzed. Three age groups were defined (0–7 years, 8–13 years and 14–20 years). Traumatic events and current posttraumatic symptoms were assessed by a self-administrated questionnaire. **Results:** Participants ( $N = 169$ ) had a mean age of 73.76 years ( $SD = 4.18$ ). The amount of traumatic events increased across age groups. The prevalence for a PTSD was 10–11% within each group. The oldest group reported most symptoms of avoidance. **Discussion:** Despite the augmentation of traumatic events, the prevalence for a PTSD was independent of age during forced displacement. The increase of cognitive abilities, coping strategies and resources in adolescence may serve a protective function in processing a traumatic event.

### **Identifying critical sun-protective beliefs among Australian adults**

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**Background:** Using the belief base of the Theory of Planned Behaviour as a framework, we investigated critical beliefs to target in interventions aimed at encouraging sun-protective behaviours among Australian adults, a population with the world's highest skin cancer incidence rate. **Methods:** Participants ( $N = 816$ ) completed a questionnaire assessing behavioural (costs and benefits), normative (important referents), and control (barriers and facilitators) beliefs, and a 1-week follow-up measure of sun-protective behaviour. **Findings:** The behavioural belief about being less likely to tan; the normative belief about friends; and control beliefs about forgetfulness, inconvenience, expected sun exposure duration, and more fashionable sun-protective clothing were the significant critical beliefs guiding people's sun-protective decision making. There were no observed gender differences. **Discussion:** Addressing these identified critical beliefs in public health campaigns and interventions may assist to combat the increasing rates of skin cancer among Australian adults.

### **Knowledge brokering and action planning for implementing guidelines into clinical practice**

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Successful implementation of guidelines mainly depends on health professionals changing their behaviour. Knowledge brokering has gained interest as strategy for implementation of evidence based practice. In this ongoing RCT we explore if action planning on top of knowledge brokering has added value on improving adherence to guidelines for stroke treatment. Twenty-two clinical sites including 54 knowledge brokers are participating in our study. The recommendation they are implementing is that health professionals should support patients to be physical active in the first weeks after stroke. Knowledge brokers from the 11 intervention sites are trained to instruct nurses ( $N=110$ ) to make and monitor their own action plans for implementation. Before and after the implementation period nurses of the control and intervention sites fill out a theory of planned behaviour questionnaire and patients ( $N=330$ ) a self-reported physical activity questionnaire. The change in intention of nurses to enhance physical activity and the patients' activity will be analysed.

### **Supporting cancer survivors with psychosocial, self-management, and lifestyle problems using an online tailored intervention**

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**Background:** As cancer survivors experience psychosocial, self-management and lifestyle problems, aftercare should meet the cancer survivor's needs. Therefore, an online tailored intervention will be systematically developed aiming at supporting cancer survivors to cope with these problems. **Methods:** An RCT with follow-up measurements at 3, 6 and 12 months will be performed comparing an intervention and control group (waiting list control). In total, 380 adult cancer survivors will be recruited. Logistic regression analyses will be used to assess whether the intervention results in decreased levels of psychological distress and improved quality of life in the intervention group compared to waiting list control. **Expected results:** The online tailored intervention will provide support on psychosocial, self-management, and lifestyle domains. Current stage of work: Organizing focus groups as preparation for intervention development. **Discussion:** The product will be an effective evidence-based tailored intervention aimed at improving the quality of life of cancer survivors.

### **“It was never an option not to breastfeed”: Exploring breastfeeding accounts of middle-class Nigerian mothers**

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Critical health psychologists working within feminist paradigms have drawn attention to tensions between breastfeeding promotion and women's right to control feeding practices. In this presentation, we explore the accounts of breastfeeding their infants provided by nine educated, pregnant Nigerian women aged between 28 and 33 years. Participants were interviewed and data were analysed using a social constructionist variant of interpretative phenomenological analysis which situates accounts of individual experiences within cultural and socio-political discourses. The women's experiences of breastfeeding were complex and shaped by several proximal and distal influences. Accounts of pain, psychological distress and worries over 'breast addiction' were juxtaposed with pride in perceptions of good mothering, connectedness with their infants and upholding cultural heritage. Breastfeeding performance and duration were heavily scrutinised and influenced by family and community members, and decisions to not breastfeed were frequently stigmatised. Implications and applications for supporting breastfeeding women and health promotion interventions are considered.

### **Experience sampling method to study implicit determinants of unhealthy between-meal snacking**

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**Background:** Unhealthy eating behaviour contributes significantly to overweight, cardiovascular diseases, diabetes and cancer. Implicit determinants such as fleeting emotions, stress, self-esteem and habit are crucial in predicting unhealthy eating. **Methods:** The effect of implicit determinants on between-meal snacking will be investigated using a smartphone application which is based on a validated structured self-assessment diary method. The app emits 10 random signals a day for 7 consecutive days prompting participants (age 20–45) to report current emotions, stress, self-esteem and between-meal snack intake. Multilevel regression analyses will be used. **Expected results:** Thorough insight in implicit determinants of unhealthy between-meal snacking and their dynamic interplay in daily life. Pilot study results will be presented. Current stage of work: Finalization of smartphone application, validation of dietary outcome measure, pilot study. **Discussion:** Results will be used for the development of a smartphone intervention to promote change to and maintenance of healthy eating behaviour.

### **Psychological predictors of health by patients after bone marrow transplantation**

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**Background:** A study on the relationship between level of health by patients after bone marrow transplantation (BMT) and their coping with stress is presented. The theoretical basis of researches is Helena Wrona-Polanska's Functional Model of Health (FMH 2003), in which health is a function of creative coping with stress and personal resources. Examined persons: 150 persons after BMT at the Hematology Clinic of Jagiellonian University. **Methods:** The questionnaires examining stress, coping strategies, personal resources, and grading scales of health and anxiety. **Results:** Mathematical analyses showed that health depended on effective coping strategies with stress, personal resources and temporal factor since transplantation. There is a clear difference in the FMH between examined male and female. The health of persons after BMT is a function of effective coping with stress. **Conclusions:** The basis of

health promotion by persons after BMT is development effective strategies of coping with stress and increase personal resources.

### Effective coping with stage fright and health

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**Background:** The subject of this report is to show relations between experienced stage fright, coping strategies, personal resources and health status. The objective also to describe relations between level of stage fright and health by musicians and actors is presented. The theoretical basis researches is functional model of health (Wrona-Polanska 2003), in which health is a function of creative coping with stress and personal resources. **Methods:** Questionnaires examining fears, coping strategies, personal resources and grading scales of health. Examined persons: 208 students of music schools. **Results:** Effective coping with stage fright depends on personal resources: sense of coherence, positive self-evaluation, mechanism of perceived control and good instrumental preparation for the performance. The level of stage fright is different by men and women. **Conclusions:** The level of stage fright is a function of creative coping and personal resources. To promote health should: increase personal and social resources.

### Sense of coherence as a predictor of poor mental health in Japanese adolescents

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**Purpose:** To determine whether sense of coherence (SOC) reduces the risk for future developments of poor mental health among Japanese adolescents. **Methods:** Subjects were 559 university students. The study has a prospective design including a baseline assessment and six-month follow-up. The data were collected with a questionnaire which included Antonovsky's SOC scale and the General Health Questionnaires 12 items. **Findings:** Among 559 subjects, 27.0% (male:21.2%, female:33.3%) of them had a poor mental health at baseline. Using logistic regression analyses that controlled for several covariates, high-levels (OR [Odds Ratio]=0.16, 95%CI [confidence interval]:0.05–0.51) and/or middle-levels (OR=0.46, 95%CI: 0.22–0.96) of baseline SOC score significantly reduced the risk for future developments of poor mental health in males. In females, baseline SOC score was a preventive factor of poor mental health (high-levels: OR=0.37, 95%CI: 0.16–0.88, middle-levels: OR=0.43, 95%CI: 0.21–0.89). **Discussion:** Higher SOC score reduces the risk for future developments of poor mental health among adolescents.

### The Relationship between Body Image and Social Physique Anxiety of Japanese Female College Students

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**Background:** The purpose of this study was to develop a body image scale for female college students and to investigate the relationship between their body image and social physique anxiety. **Methods:** In December, 2011, 263 female college students (mean age = 19.83, SD = 1.22) were asked to answer a questionnaire composed of questions related to body image and derived from Social Physique Anxiety Scale (SPAS). Exploratory factor analysis and confirmatory factor analysis were conducted to develop Body Image Scale (BIS). Multiple regression analyses were conducted to examine the relationship between BIS and SPAS. **Findings:** The results confirmed that BIS had four subscales with acceptable internal consistency and structural validity and the SPAS subscales had significantly positive association with one of the BIS subscales and negative association with the rest. **Discussion:** The findings of this study support our hypothesis that female college students with negative body image experiences have high social physique anxiety.

### Symptoms and perceptions scale (SaP): an exploratory psychometric analysis

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**Background:** To date, a generic questionnaire for the assessment and monitoring of health problems taking into account the multidimensional aetiology (psychological, social, biological) of symptomatology is lacking. The Symptoms and Perceptions scale (SaP) measures non-specific physical symptoms (classified based on the International Classification of Primary Care) in terms of number/incidence, duration, diversity, possible severity and related perceptions. **Methods:** Psychometric analyses were performed based on a sample of  $N = 6304$  respondents (response rate: 50%) from a nationwide cross-sectional study in the Netherlands. **Findings:** Analyses showed moderate to high internal consistency for the different scoring methods of the scale (Cronbach's  $\alpha$  ranging between 0.70 and 0.86). Convergent and discriminant validity were in general highly satisfactory for both the symptoms and perceptions part. **Conclusions:** The SaP scale seems to be a reliable scale for measuring different dimensions of symptomatology in the general population.

### Relations between impulsivity and alcohol consumption among students

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The aim of the study was to evaluate the relations between impulsivity and alcohol consumption among students. 130 students from Vytautas Magnus University participated in the study. Impulsivity was assessed with BIS-11 Barratt Impulsiveness Scale. Alcohol consumption was assessed with AUDIT – Alcohol Use Disorders Identification Test. The results showed that impulsivity is significantly correlated with alcohol consumption among students – higher impulsivity is related to the increase of alcohol consumption. However, this relation is significant only in a women's sample. The relation between impulsivity and alcohol consumption is higher among older students and among students studying in later years of studies.

### **Mothers' attitudes and emotional reactions towards children atopic dermatitis: web forum content analysis**

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Web forums are popular source of health information. The aim of the study was to reveal mothers' attitudes and emotional reactions to children atopic dermatitis (AD) and treatment in the web forum 'Supermama.lt'. Content analysis of subforum „Diseases – Atopic dermatitis' in web forum „Supermama.lt' was used as a method of data analysis. 70 pages of this subforum was analyzed in order to explore participants' attitudes towards children AD, it's treatment and emotional reactions. The results showed that cognitive aspect of attitude towards AD dominates in this web forum: participants share information about diet, skin care, diagnostics, attitude towards treatment and doctors. AD is perceived as serious and incurable illness. It was revealed that participants have negative attitude towards doctors in subforum, too. Mothers express emotions of happiness, support, disappointment in this subforum. The authors argue the need of better informing and psychological help for mothers having children with AD.

### **Primary schoolchildren's nutrition characteristics in Lithuania: the role of health beliefs and parental monitoring**

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Childhood is one of the most influential periods of human development for healthy lifestyle and health beliefs formation. This study was intended to assess how II–IV grade schoolchildren's nutrition characteristics are related to both children and their parents' health and nutrition beliefs, and parental health related monitoring. A cross-sectional random sampling survey using self-report questionnaires for children and for their parents was carried out in 2010. The questionnaire assessed participants' self rated health, nutrition, health beliefs and parental health related monitoring. The total sample included 206 schoolchildren and their parents. The results showed that participants eating habits do not match healthy nutrition guidelines. A healthier diet of children is associated with more favorable, more veridical children beliefs about health and nutrition, healthy eating of parents and parental healthy eating modeling. The study confirms both parental health behavior and monitoring influences to children eating habits and health beliefs formation.

### **Resilience and Stress – The Mediation Role of Hope**

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This study examined the mediation role of hope in the relations between resilience and stress. Previous research showed that hope was highly important factor of well-being, or the key factor in the process of psychological change. The research included 1374 undergraduate

students (78.5% female and 21.5% male), with average age of 20 years, who completed: Brief Resilience Scale (Smith et al., 2008), Depression, Anxiety and Stress Scale (Lovibond & Lovibond, 1995), The Adult Hope Scale (Snyder et al., 1991) and Personal Optimism Scale (Schweizer & Koch, 2000). The Regression analyses indicated that individuals with higher level of resilience have higher level of hope ( $r=0.365$ ,  $p < 0.001$ ), and that individuals with higher level of hope reported higher level of stress ( $r=-0.243$ ,  $p < 0.001$ ). The Sobel test ( $z=-7.86$ ,  $p < 0.001$ ) showed significant mediation role of hope in the relation between resilience and stress. Theoretical and practical implications of the findings will be discussed.

### “Cope with your stroke!” – differences in dyadic coping and marital quality after critical life events

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**Background:** This cross-sectional study aims to explore differences in marital quality and dyadic coping in couples who sustained major or minor life events or acquired brain injury (ABI, e.g. stroke). **Methods:** 12 couples with ABI, 35 couples with at least one partner who had experienced a major life event (MALE), 19 couples with minor life events (MILE); both partners completed measures of dyadic Coping (DCI), marital quality (FPQ) and Depression (ADS-K). MANOVA with control for covariates (sex, ADS-K). **Findings:** A multivariate between group effect can be observed ( $F(4, 106)=3.63$ ,  $p < 0.01$ ). Univariate ANOVAS indicate higher marital quality for ABI compared to MALE and MILE ( $F(2, 55)$ ,  $p < 0.05$ ). ABI and MALE use more dyadic coping than MILE ( $F(2, 55)$ ,  $p < 0.05$ ). For partner's rating no multivariate between group effect could be observed ( $F(4, 110)=1.03$ , n.s.). **Discussion:** Understanding the processes of dyadic coping is of practical importance for supporting couple's adjustment after critical life events.

### Positive and negative aspects of well-being as predictors of breast reconstruction decision

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The aim of the study was to assess predictive power of positive (self-esteem and generalized self-efficacy) and negative (depression and trait-anxiety) well-being for making the decision about breast reconstruction described in terms of the Transtheoretical Model of Change. The study comprised 216 women after mastectomy in the cross-sectional design. The multinomial logistic regression analyses were implemented and the action stage was chosen as a reference category. McFadden's pseudo R-squared for positive, negative and combined aspects of well-being models equaled 0.28, 0.13 and 0.27 (54%, 44% and 53% correctly classified cases),

respectively. For the model combining two aspects of well-being, the pattern was similar to the one observed for positive well-being. The likelihood of classifying women in the action stage was determined by three variables: being in relationship, better well-being and younger age. The results suggest that rather positive than negative well-being may be a significant predictor of breast reconstruction decision.