

This article was downloaded by:

On: 8 October 2008

Access details: *Access Details: Free Access*

Publisher *Routledge*

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Psychology & Health

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t713648133>

Abstracts

Online Publication Date: 01 January 2008

To cite this Article (2008)'Abstracts', Psychology & Health, 23:1, 15 — 278

To link to this Article: DOI: 10.1080/08870440802299543

URL: <http://dx.doi.org/10.1080/08870440802299543>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

Abstracts

Opening address

Making a difference: The role of behaviour change science in government policy

Fiona Adshead¹ & Susan Michie²; ¹Department of Health for England, UK; ²University College London, UK

The England and Wales cross-government public health white paper ‘Choosing Health’ set out a commitment to improving the nation’s health through assisting people to make healthier choices. We know that encouraging positive healthier choices can be challenging due to the complexity of human behaviour, and the associated change process. For government policy to achieve this requires sustained and co-ordinated action across sectors and at all levels.

While informational and awareness raising approaches to communicating on health are important, it has become increasingly recognised that these on their own are very unlikely to achieve further improvement in health and the desired reduction in health inequalities.

This talk will consider the application of psychology to promote and maintain health, and prevent illness. Behaviour change techniques have been incorporated into numerous projects at both a national and local level and have proved to be capable of making a significant contribution. Examples of the role of Health Psychology in developing and implementing health policy will be given.

Keynote addresses

Moralization of health behaviour: Costs and benefits

Joop van der Pligt; University of Amsterdam, The Netherlands

Most models of health behaviour stress the importance of utilitarian outcomes when making decisions about health behaviour. The general emphasis on cognitions underlying these decisions has been supplemented with research on the role of (anticipated) affect such as regret, worry and anxiety. In this presentation I focus on moral considerations as a determinant of health behaviour and attitudes towards health issues. Moralization frequently occurs in the health domain. Examples are food intake (meat, fat), cigarette smoking and drug use. In this context I discuss both the possible benefits of increasing the salience of moral considerations as well as possible drawbacks of emphasizing moral aspects of health-related behaviours. I provide a brief overview of the role of moral emotions such as disgust, guilt and anger, and discuss the mediating role of these emotions when predicting health behaviour and people’s evaluation of (un)healthy practices.

WHOse quality of life? Assessing quality of life to improve health care and policy-making

Suzanne M. Skevington; University of Bath, UK

The US Food and Drugs Administration sees quality of life assessment as essential evaluation for clinical trials and other interventions, yet there is considerable debate about the concept, its measurement and universality. Major challenges to assessing health-related quality of life in diverse cultures have been tackled by a collaboration working through the World Health Organisation, Geneva. The paper traces the novel development of the generic WHOQOL instrument, then outlines an adaptation for people with HIV infection living in 8 countries worldwide. Using an international database to test Heckman's chronic illness model, it is possible to predict which aspects of quality of life are most salient to people with HIV, and provide guidance to practice. Health inequalities, particularly for older adults with HIV will be explored. Implications for using subjective quality of life evidence in health care and policy-making will be discussed.

How stress kills: New Perspectives on stress and inflammation

Janice Kiecolt-Glaser; Ohio State University, USA

Proinflammatory cytokines influence the onset and course of a spectrum of conditions associated with aging. The production of proinflammatory cytokines can be substantially enhanced by stress and depression. Furthermore, stress and depression also contribute to greater risk for infection, prolonged infectious episodes, and delayed wound healing, all processes that indirectly fuel sustained proinflammatory cytokine production. Compounding the risks, health behaviours including poor sleep are commonplace consequences of stress and depression; poor sleep enhances proinflammatory cytokine production. In addition to these pathways, stress and depression can permanently alter the responsiveness of the immune system; stressors can effectively prime the inflammatory response, promoting larger proinflammatory cytokine increases in response to subsequent stressors and/or minor infectious challenges. Through these pathways stress and depression may influence the incidence and progression of age-related diseases. Interventions that diminish stress or depression or inflammation may enhance health through their positive impact on immune and endocrine regulation.

The psychology of appearance: Why health psychologists should “do looks”

Nichola Rumsey; University of the West of England, Bristol, UK

We live in a society in which messages associating physical attractiveness with success and happiness are pervasive. There is an epidemic of appearance concerns amongst teenagers and adults in westernised countries and body image dissatisfaction is now considered normative. Large numbers of people experience negative impacts on wellbeing and additionally, for the legions of adolescents and adults who “do looks”, appearance concerns are influential in choices about a range of health behaviours. Smoking is frequently used as an appetite suppressant and appearance concerns (including weight control and the desire to increase muscle tone and/or bulk) motivate patterns of eating and exercise.

The psychosocial consequences of this current societal obsession for the estimated one in five people who have a disfigurement are considerable. Challenges include difficulties with social encounters and coping with negative self perceptions, yet health care provision is driven by a biomedical model. Surgical and medical interventions are offered with the aim of ‘correcting deficits’ in appearance and function. Although treatments can be helpful for some, this biomedical approach adds fuel to the pervasive myth that life will be better for those who look better, and does little to ameliorate the psychosocial difficulties and distress encountered by many who look different from the norm.

The case is made that appearance concerns are implicated in a wide range of health behaviours, yet this is frequently overlooked within health psychology. In addition the needs of those affected are not currently met within the health care system. This area deserves much greater attention in future.

Workshop

Health psychology in action: Preventing type 2 diabetes: Recommendations on achieving lifestyle change from the IMAGE guideline development project

Convenors: Greaves, C.J.,* Sheppard, K., Abraham, C., Evans, P., Roden, M., & Schwarz, P.; IMAGE guideline development group (International collaboration group, led from University of Dresden, Germany. *Peninsula Medical School, UK.

Discussion Panel: Charles Abraham, Robert M. Kaplan.

Purpose: To present and discuss draft recommendations on behaviour change from the European Union's 'IMAGE' guideline for the prevention of type 2 diabetes.

Objectives: The convenors wish to raise awareness of this developing European guideline and discuss the validity and the practical applicability of the emerging recommendations for supporting behaviour change. Specific issues for discussion include (a) limitations of the methods used/interpretation of the evidence (b) challenges for applying the guidelines in practice.

Rationale: The IMAGE project is a European Union initiative (project grant No. 2006309) to develop an evidence-based guideline and a training curriculum which will inform future initiatives on the prevention of type 2 diabetes and its co-morbidities. It involves clinicians, researchers, behavioural scientists and consumer representatives from 32 organisations in 13 EU countries. To inform this work, a behaviour-focused systematic 'review of reviews' on interventions for promoting physical activity and weight loss in populations at risk of type 2 diabetes has been conducted by the convenors. At the time of the DHP/EHPS conference, the review will be complete and the IMAGE guideline will be well developed but not yet finalised. At this point in the guideline development, we wish to (a) raise awareness about the new guideline and (b) consult a range of stakeholders (including health psychologists) about the validity and applicability of the recommendations. A congregation of health psychologists from across Europe provides an ideal opportunity for meaningful discussion of this major EU initiative in diabetes prevention.

Activities: The convenors will present a summary of their systematic review and draft versions of the key recommendations and guideline implementation plan (20 mins). Questions of clarification will be invited (5 mins). A panel of invited discussants will then add their own comments, and addressing the specific objectives in particular (15 mins). The convenor will then facilitate a general discussion (10 mins). The session will be recorded to allow documentation of the main comments and a possible future web-cast. Written copies of key points from the draft recommendations will be provided with a feedback form, allowing further/detailed feedback to be provided if desired. Total 50 mins.

Description of intended participants: Suitable for all health psychologists and may be of particular significance to those with an interest in behaviour change interventions for weight loss and/or physical activity, or in clinical guideline development/implementation.

Maximum participants: not restricted.

Symposia

Symposium 1: “The hidden part of patient treatment trials: Things that take up so much time but we hear little about”

Convenor: Moss-Morris, R.; University of Southampton, UK

Aims: The aim of this symposium to discuss crucial and time consuming aspects of patient treatment trials which are often neglected in the write-up or presentation of trials. Issues around recruitment, manual development, supervision, and assessing the therapist relationship are addressed.

Rationale: There is an increasing trend towards translational research in the health psychology literature. The focus is often on how to translate theory into practice but there is less information around the pragmatics of running complex treatment interventions. The presenters in this symposium are all experienced trialists who will present work from their current and/or past patient intervention trials to provide a basis for discussing the conduct and validity of trials.

Summary: Wearden will begin by presenting research on why patients refuse to participate in an RCT. Understanding why patients refuse to take part may help increase uptake and generalisability. The following two presentations look at aspects of intervention design and treatment fidelity. Moss-Morris will present work showing how to develop patient manuals based on theory and a patient centred approach. Deary will discuss issues around training and supervision of therapists and how to assess competency before the trial begins. Finally, Chalder’s presentation focuses on the process of change across treatment. Understanding process mechanisms is vital in terms of ascertaining how much of the effect may be a therapist effect versus the active ingredients of the intervention itself.

Discussant: Peters, S.; University of Manchester, UK.

Paper 1

The recruitment of patients with chronic fatigue syndrome to a primary care treatment trial: Patient’s reasons for refusal

Wearden, A.; University of Manchester, UK

Background: We examined why patients did not wish to enter a randomised controlled trial of nurse-led self-help treatment for patients with chronic fatigue syndrome (CFS) in primary care.

Methods: Patients were screened by GPs for referral to the trial, sent study information, and then contacted after one week. Some patients volunteered reasons for declining to participate. Subsequently, these reasons were explored in semi-structured interviews with seven declining patients, which were analysed thematically.

Findings: 77/449 (17%) patients declined to participate. Reasons fell into four categories: Dislike of the treatments; too ill to take part; not wanting to be randomized; conflicting demands of work, life or family. Qualitative analysis of interviews underlined the role of significant others (GPs, family members) in reaching these decisions.

Discussion: Patients’ understanding of their condition, constructed in a social context, was a major determinant of their participation, but research and treatment trial issues were also important.

Paper 2

Combining empiricism, theory and a patient centred approach to develop a CBT intervention for adjusting to living with the multiple sclerosis (MS)

Moss-Morris, R.,* Dennison, L., Chalder, T., Yardley, L., Bogosian, A., & Devereux, A.;

*University of Southampton, UK

Background: The aim of this study was to develop a manualised, cognitive behavioural therapy (CB) intervention to assist people in the early stages of MS to adjust to living with the disease.

Methods: We conducted a systematic review of 72 studies which examined psychological factors relating to adjustment in MS. We also conducted qualitative interviews with 30 people with MS and 15 of their spouses.

Findings: Narrative synthesis of the empirical studies and thematic analysis of the qualitative data were used to identify factors, which may bring about better adjustment in MS. These data helped us develop a treatment model of adjustment to MS based on CB and response shift theory. The model was unpacked into ten core manualised interventions. The manual was piloted on 6 patients and revised according to their suggestions.

Discussion: Detailed therapy manuals provide clear guidelines for therapist training and for maintaining and assessing treatment fidelity.

Paper 3

Preparing the ground – process issues in the development and implementation of a CBT training package

Deary, V.; University of Newcastle, UK

Background: Whilst most studies of complex interventions have focussed on outcomes, there has been little attention to the processes whereby complex interventions are developed, adopted and integrated, or not, by the systems in which they are implemented. This presentation reports on the use of May et al.'s Normalisation Process Model (NPM), to describe the process whereby a speech and language therapist (SLT) was trained and supervised to conduct cognitive behavioural interventions for functional dysphonia.

Methods: This happened in several stages: (1) An initial pilot study (2) The use of SLT focus groups and interviews (3) The assessment of the current skills and attitude of the SLT (4) Tailoring the content and style of the training package (5) Delivering the training and (6) Supervision.

Findings: The NPM framework is shown to be useful in planning, implementing and maximising the utility of the training.

Discussion: An explicit awareness of process issues at the design stage may enhance the effectiveness of complex interventions research.

Paper 4

Assessing treatment process in the context of randomised controlled treatment trials

Chalder, T.; King's College London, UK

Background: The aim of this presentation is to give an overview of the factors involved in the process of change in psychotherapy trials and to describe three studies which examined different aspects of this complex process in chronic fatigue syndrome (CFS/ME).

Methods: (1) In the first study we designed a measure to assess both therapist and treatment factors and examined factors which predicted outcome in a trial of CBT for chronic fatigue. (2) In the second study we examined which cognitive responses were important in mediating change in the treatment of CFS/ME. (3) In the third study we examined factors which predicted treatment outcome in CFS/ME.

Findings: (1) Emotional processing including acceptance and expression of emotion predicted a good outcome in CFS. (2) Change in catastrophic thinking mediated change in social adjustment in CFS/ME. (3) Extreme behavioural and cognitive avoidance predicted worse social adjustment and fatigue.

Discussion: Implications of these findings for understanding treatment process and mechanisms of change in a wide range of disorders will be discussed.

Symposium 2: Vaccination: Using psychological theory to understand and promote health behaviour

Convenor: Waller, J.; University College London, UK

Aims: The symposium focuses on vaccine preventable disease and the application of health psychology to understand and guide effective implementation of immunisation strategies.

Rationale: This is a timely theme given the planned introduction of a HPV vaccination programme for the prevention of cervical cancer in the UK in September 2008. The UK roll-out of the new HPV vaccine for girls in Year 8 will coincide with the conference and makes the discussion of vaccination a highly pertinent issue. HPV is the first school-based vaccination programme to be rolled out in the UK for many years and it raises important psychological issues about translating theory into policy and practice, as well as about vaccinating adolescents against sexually transmitted infection. Health psychology research from other vaccine programmes will be useful in informing efforts to maximise uptake of the HPV vaccine. Vaccination is one of the most dramatic public health successes of the last century. As a discrete behaviour, rather than an on-going lifestyle change, it provides a relatively straightforward and controlled way of testing predictions from psychological theories and exploring ways of promoting health behaviour and informed participation. The planned introduction of HPV vaccination in the UK later this year, and its recent introduction in the US, Australia and elsewhere, make it particularly timely to consider how psychology can inform strategies for communicating with the public about vaccination.

Summary: In this international symposium, we present research on a range of vaccinations from studies that use psychological theory to explore vaccine uptake and informed participation. In the first paper, Cath Jackson will describe an RCT aimed at increasing informed decision making about MMR vaccination. Greg Zimet will present data on hepatitis B vaccination in which he explores the impact of message framing and social compliance on vaccination uptake. Two talks concern the new HPV vaccine. Laura Marlow will discuss omission bias in relation to intentions to accept the vaccination. Noel Brewer will examine whether parents beliefs about HPV vaccination-caused sexual disinhibition should guide policy or instead be a target of interventions.

Discussant: McCaffery, K.; University College London, UK.

Paper 1

Supporting parental decision making for MMR (combined measles, mumps and rubella vaccine): Empowerment or persuasion?

Jackson, C., Cheater, F.M., Peacock, R., & Bekker, H.; *University of Leeds, UK

Background: Interventions to increase MMR vaccine uptake typically employ methods of persuasion. Our interest is empowering parents to make informed decisions.

Methods: This exploratory cluster RCT evaluated the effectiveness and acceptability of a parent forum to support informed decision making. 142 parents were recruited from 12 GP practices and childcare organisations and randomised to a control or intervention group. Control group received an MMR leaflet. Intervention group received the leaflet and attended a parent forum. Informed decision making (decisional conflict) and related components were assessed by postal questionnaire at baseline, 1 week and 3 months post-intervention.

Findings: Parents positively evaluated the leaflet and the forum. In both groups, decisional conflict, knowledge and concerns about MMR vaccination altered post-intervention to levels associated with informed decision making ($p < 0.05$). No time by group effects were found.

Discussion: Leaflets appear to effectively foster informed MMR vaccine decision making.

Paper 2

Theory-Based Interventions to increase HBV vaccine acceptance among STD clinic patients

Zimet, G.; Indiana University School of Medicine, USA

Background/Methods: We evaluated, via a randomized, controlled design, two sets of theory-based interventions designed to increase hepatitis B virus (HBV) vaccine acceptance: (1) Message-framing (gain-framed; loss-framed; control) and (2) Social compliance (vaccine offered; vaccine recommended). 1,747 STD clinic patients completed computer-based surveys (ACASI) and were randomized by the ACASI to the framing conditions. Subsequently, participants saw a health care provider and were re-randomized to the social compliance conditions. Overall, 52% received the first dose of vaccine.

Findings: Logistic regression indicated that compared to the control condition (49.1% vaccinated), neither the gain-framed (54.5%; OR = 1.2, 95% CI = 0.98–1.6) nor the loss-framed (53.4%; OR = 1.2, 95% CI = 0.94–1.5) condition increased receipt of vaccine. In contrast, participants in the vaccine-recommended condition (56.1% vaccinated) were 1.4 times more likely to receive the vaccine than those in the vaccine-offered condition (48.6%; OR = 1.4, 95% CI = 1.1–1.6).

Discussion: Message-framing was ineffective, but simply recommending rather than offering vaccine resulted in a significant increase in vaccination rates.

Paper 3

HPV vaccination: Omission and action preferences as predictors of acceptability

Marlow, L., Waller, J., & Wardle, J.; University College London, UK

Background: In vaccination decisions, potential harm as a result of not vaccinating (omission) has been found to be more acceptable than potential harm as a result of vaccinating (action).

Methods: We explored this in relation to acceptability of HPV vaccination. 684 mothers completed a questionnaire (58% response rate). Mothers responded to two items: I would feel responsible if anything bad happened because I... (a) had my child vaccinated and (b) failed to have my child vaccinated. They were then asked about acceptance of HPV vaccination for their daughters. Respondents were divided into three groups: Those who showed a preference for omission, those who showed a preference for action and those who showed no preference.

Findings: Group was significantly associated with intention to vaccinate against HPV ($F = 9.45$, $p < 0.001$). Mothers who showed a preference for action were more likely to vaccinate than mothers who showed a preference for omission.

Discussion: The implications for public communication will be discussed.

Paper 4

The debate over HPV vaccination and sexual disinhibition

Brewer, N., Ziarnowski, K., & Smith, J.; University of North Carolina, USA

Background: Although our previous work suggests HPV vaccination is unlikely to cause risk compensation in adolescent girls, this hypothesis still receives substantial policy and media attention.

Methods: We examined whether beliefs that HPV vaccination may cause adolescents to become more sexually active may be harmful to public health. We interviewed 889 caregivers for girls aged 10–18 living in areas of North Carolina with cervical cancer mortality rates twice state and US rates.

Findings: Few caregivers (19%, 95% CI: 16%–22%) believed the vaccine could cause their children to become more sexually active. Adolescent daughters were less likely to have been vaccinated if their caregivers believed that HPV vaccination might cause sexual disinhibition (OR = 0.53, $p < 0.001$) or would regret it if the vaccine caused their daughters to become more sexually active (OR = 0.66, $p < 0.001$).

Discussion: The findings suggest few parents are concerned about HPV-vaccination-induced sexual disinhibition and disinhibition concerns are a risk factor for not vaccinating one's child.

Symposium 3: Current issues in 'stop smoking' research

Convenor: Myers, L.; Brunel University, UK

Aims: This symposium introduces new research which aims to aid smoking cessation.

Rationale: Each speaker discusses smoking cessation using a different approach.

Summary: Myers compares intervention groups, who watched a DVD of a widely broadcast negative antismoking scenario, with a control group, in their perception of risk of contracting smoking-related diseases. Worryingly, the groups who watched the scenario considered themselves less at risk than the control group. This has potentially serious consequences for negative health messages in motivational interventions. Many smoking interventions use pharmacological methods to help with withdrawal symptoms when attempting to quit, but there are also other methods. Cropley, in an intervention study of nonpharmacological interventions, uses various methods (e.g. isometric exercise) to investigate cigarette cravings and withdrawal symptoms in smokers after an overnight abstinence from smoking. He concludes that desire to smoke is lower in the intervention groups than the control group. Senior investigates the consequences of the government smoking ban in public places in England by assessing smokers one month before the ban and six months afterwards. Variables from an extended Theory of Planned Behaviour are significant predictors of quitting smoking. Vogt has identified that one of the problems in the lack of overall success of stop smoking interventions is that smokers tend to perceive these interventions as ineffective. He uses Repertory Grid methodology in order to understand smokers' beliefs about perceived effectiveness of smoking interventions.

Discussant: Albery, I.; University of Bath, UK.

Paper 1

Smokers' perceived risk of contracting smoking-related diseases after watching an antismoking message

Myers, L. & Mars, A.L.; Brunel University, UK

Background: Interventions about negative consequences of smoking may have detrimental effects on smokers' risk perception of contracting smoking-related diseases (Myers & Frost, 2002). The current study explored this possibility.

Methods: Eighty smokers watched a DVD of a negative antismoking scenario widely broadcast in the UK. Forty participants "imagined" they were part of the scenario, and 40 just "watched" the DVD. Participants then completed measures of risk perception for lung cancer, bronchitis, heart disease, stroke. There was also a control group ($N=40$). Data were analysed using ANOVA and chi-square.

Findings: ANOVA indicated that both intervention groups reported significantly higher perceived risk in suffering from all four illnesses vs the control group. The "imagined" group reported significantly higher perceived risk than the "watched" group for lung cancer and bronchitis.

Discussion: These findings suggest that negative health messages which attempt to engage smokers should not be used as part of quit smoking campaigns.

Paper 2

The effects of isometric exercise and body scanning on cigarette cravings and withdrawal in a real world setting

Cropley, M.,* Gillison, S., & Ussher, M.; *University of Surrey, UK

Background: This study examined the use of isometric exercise versus guided bodyscanning, against a control condition on cigarette cravings and withdrawal symptoms.

Methods: Following overnight abstinence, 48 smokers were randomly assigned to complete 10 minutes of isometric exercise, a bodyscan routine, or listen to a natural history passage. Ratings for strength of desire to smoke and cigarette withdrawal symptoms were taken before, immediately after, 5, 10, 30 minutes post intervention.

Findings: There were significant group \times time interactions for strength of desire to smoke, irritability, restlessness and difficulty concentrating, and in all cases the interventions produced lower cravings and withdrawal compared to the control. Relative to baseline, strength of desire to smoke was significantly lower immediately after, 5, 10 and 30 minutes post intervention for the intervention groups.

Discussion: This suggests that isometric exercise and bodyscanning may be effective in managing cravings and withdrawal in a real world setting.

Paper 3

Beliefs about the acceptability of smoking predict smokers' responses to the Smoking Ban in England

Senior, V., Vrought, A., Trebill, H., & Hesson, N.; University of Surrey, UK

Background: The introduction of the Smoking Ban in England in July 2007 presented an opportunity to investigate the cognitive predictors of smokers' responses to this legislation.

Methods: 210 smokers completed a questionnaire in the month prior to the ban with 127 (60%) responding six months later. Theory of Planned Behaviour constructs and self-reported smoking behaviour were assessed.

Findings: Before the ban intentions to quit in the following month (39.6% of variance explained) was predicted by personal norms (beta = 0.199) and moral norms (beta = 0.387). Following the smoking ban, 17 (13.6%) participants reported successful quitting. Successful quitting was predicted by younger age (OR = 0.84) and moral norms (OR = 5.47).

Discussion: The predictors of behavioural responses to the smoking ban concern the acceptability of smoking to others and in society. Persuasive communications that accompany new tobacco control legislation targeting these normative beliefs could be an effective means of motivating quit attempts.

Paper 4

Understanding smokers' perceptions of the effectiveness of health-related interventions: A repertory grid approach

Vogt, F.,* McEwen, A., Ashworth, M., Armstrong, D., Hankins, M., Hall, S., Sniehotta, F., & Marteau, T.; King's College London, UK

Background: Smokers' perceived ineffectiveness of stop-smoking interventions strongly predicts them not using any interventions. The aim of this study is to explore the nature of these perceptions.

Methods: Smokers ($n=18$) were interviewed using the repertory grid method to elicit constructs underlying their perceptions of the effectiveness of different health-related interventions. They then rated the extent to which each construct related to each intervention. Ratings were analysed using principle components analysis.

Findings: Constructs clustered around three components: "effect on ailment", "effect varies between users", and "holistic-effect". Interventions perceived to have effects on the ailment were also attributed non-holistic effects and effects that don't vary between users. Pharmacological and surgical interventions matched these perceived characteristics but stop-smoking interventions did not. The effectiveness of stop-smoking interventions was underestimated relative to the other interventions based on the published literature.

Discussion: Use of stop-smoking interventions may be increased by addressing the elicited components of perceived effectiveness.

Symposium 4: Theory-based intervention approaches to health behaviour change

Convenor: Reuter, T.; Freie Universität Berlin, Germany

Aims: Advancing the science of health behaviour change depends on theory and on the accumulation of evidence from theory-based interventions. However, many theories still lack sufficient empirical confirmation. Thus, this symposium will approach this issue and ties together differing research agendas such as intervention and experimental research as well as systematic reviews and meta-analyses as they are the best ways to evaluate and improve behaviour change theory.

Rationale: For theory refinement and improvement, it is critical to examine the psychological mechanisms (i.e., the intervening causes or mediating processes) that account for observed behavioural change. The identification of determinants, mediators and effective behaviour change techniques will advance the development of evidence-based practice in the field of health promotion and disease prevention.

Summary: The first paper by Sibley and Abraham reports on a systematic review and meta-analysis on the effectiveness of behaviour change interventions based on the Health Belief Model.

Davies and colleagues present an intervention to change attitudes towards MMR vaccination on the basis of the Elaboration Likelihood Model of Persuasion. Lemmens and colleagues present an evidence-based intervention to engage blood donors in donor recruitment. Reuter and colleagues illustrate an experimental-causal-chain design applying two RCTs to test the mediating role of planning in the intention-behaviour relation. Finally, Susan Michie will act as a discussant. The present symposium intends to contribute to the current debate on how empirical evidence from theory-based interventions allows researchers to advance the science of health behaviour change.

Discussant: Michie, S.; University College London, UK.

Paper 1

Does the health belief model provide a good theoretical basis for effective behaviour change interventions?

Sibley, E. & Abraham, C.; University of Sussex, Brighton, UK

Background: Objectives – To assess the effectiveness of behaviour change interventions based on the health belief model (HBM).

Methods: A systematic review and meta analysis were conducted.

Findings: Of 441 retrieved abstracts, 36 studies met the inclusion criteria. After removal of outliers, d values ranged from 0.41–1.33 with an overall average, weighted small-to-medium effect size of $d=0.42$. Sources of heterogeneity were explored, including the extent to which interventions were HBM-based.

Discussion: HBM-based interventions have proved to be effective but there is considerable variation in the extent to which interventions reflect the theory.

Paper 2

Evaluating the theoretical base of an intervention to change attitudes towards MMR vaccination

Davies, A.,* Prestwich, A., Newman, S., & Michie, S.; *University College London, UK

Background: A quiz intervention based on the Elaboration Likelihood Model of Persuasion (ELM) has been found to change parental attitudes towards MMR. The current vignette study investigated the ELM as a basis for the intervention, by separately examining the information and quiz format components, and the hypothesised moderator, Need for Cognition (NFC).

Methods: The study employed a 2 (quiz format: Yes/no) \times 2 (information: Yes/no) \times 3 (timepoint: Baseline/post-test/follow-up) design. 241 women (mean age = 27 years) completed attitude and NFC measures.

Findings: Receiving information predicted attitude change at post-test, $\beta=0.21$, $p<0.001$, and follow-up, $\beta=0.14$, $p<0.001$. Receiving information as a quiz did not add to the variance explained. NFC was not a moderator.

Discussion: Encouraging deeper processing of information did not increase attitude change, and NFC did not moderate attitude change. Explanations for tenets of the ELM not being supported will be discussed.

Paper 3

Evaluating an evidence-based intervention to engage blood donors in donor recruitment

Lemmens, K.,* Ruiter, R., Abraham, C., Veldhuizen, I., & Schaalma, H.; *Maastricht University, The Netherlands

Background: Interventions are more effective when they are evidence based. An initial study identified instrumental attitudes, self-efficacy, and recruitment responsibility as key correlates of donors' motivation to recruit new donors.

Methods: A leaflet was designed to promote these cognitions and, after piloting, evaluated in a controlled trial. 734 blood donors received (1) the evidence based leaflet and a set of 5 registration postcards to be given to potential donors (2) only the set of postcards, or (3) nothing (control group).

Findings: At one-week follow-up, both intervention groups had talked more about blood donation, directly asked potential donors, and recruited more new blood donors than the control group ($M_{\text{leaflet}} = 0.23$, $M_{\text{postcards}} = 0.27$, $M_{\text{control}} = 0.09$ new donors). At six-week follow-up, the leaflet group was more effective in recruiting new donors than both other groups ($M_{\text{leaflet}} = 0.35$, $M_{\text{postcards}} = 0.17$, $M_{\text{control}} = 0.14$ new donors, $p < 0.05$).

Discussion: Findings suggest that a theory and evidence based intervention could increase blood donor recruitment.

Paper 4

Planning as a mediator of the intention-behaviour relation: An experimental-causal-chain design

Reuter, T.,* Ziegelmann, J., Wiedemann, A., Gravert, G., & Schwarzer, R.; *Freie Universität Berlin, Germany

Background: The primary goal is to investigate the mediating role of planning between intentions and behaviour. While previous observational studies have shown that planning mediates the intention-behaviour association, the present research aims to provide experimental evidence for the mediation hypothesis.

Method: Employing an experimental-causal-chain design, two RCTs were conducted in which the independent variable (intention in Study 1, $N = 145$) and the mediating variable (planning in Study 2, $N = 115$) were manipulated.

Findings: In both studies, repeated measures ANOVAs revealed a significant Time \times Condition interaction. Changes in intention mediated the effects of the motivational intervention on planning activities (Study 1). Changes in planning mediated the effect of a volitional intervention on dietary behaviour (Study 2).

Discussion: The experiments supported observational findings on planning as a mediator in the intention-behaviour association. The findings might help to identify points of intervention in the process underlying behaviour change.

Symposium 5: Developing theory: Practice and principles

Convenor: Michie, S.; University College London, UK

Aims: (1) highlight key issues in the development and application of theories of behaviour change (2) outline principles underlying effective theory development (3) illustrate the challenges faced using three examples in health psychology (4) make recommendations to guide future practice.

Rationale: Health Psychology uses theories, both to explain health-related behaviour and to design interventions to change behaviour. However, Health Psychology is frequently criticised for the poor development of theory or the continued use of theories shown to be problematic. This reflects a lack of clear, explicit methods for developing theory. There is a need for a forum to discuss theory development, in addition to the work that tests and applies theory.

Summary: The symposium considers challenges and principles for effective theory development. The first three papers illustrate this in relation to developing comprehensive theories of behaviour change for (a) explaining the behaviour of people with disabling conditions, (b) understanding motivation more generally and (c) explaining volitional behaviour change. The final paper considers what makes 'a better theory'. The symposium recommends creating a co-operative network of researchers to agree, and apply, a set of core principles.

Discussant: Weinman, J.; Kings College London, UK.

Paper 1

Developing theory of activity limitations

Johnston, M.; University of Aberdeen, UK

Background: In developing a theory of activity limitations, the following principles were used: Parsimony; using evidence to select theories; experimentally testing key propositions of theories; testing mediation of key constructs in theory-based intervention; use of existing theory rather than theory proliferation; usefulness and usability; and general applicability.

Methods: A series of studies of people with disabling conditions using cross-sectional modelling, prospective, experimental, RCT and single-case study designs.

Findings: Data were incompatible with the WHO Impairments-Disability-Handicap model and with the coping construct of the Common-Sense-Self-Regulation Model (CS-SRM). The Theory of Planned Behaviour (TPB) and Social-Cognitive Theory (SCT) were both more parsimonious and compatible with the data.

Discussion: Combining the WHO Activity Limitations model with either the SCT or TPB model gives the best fit to the data compatible with the above principles. Problems encountered include: Discriminative construct measurement and adequacy of data for theory rejection.

Paper 2

Whether and how to develop a comprehensive theory: The example of the PRIME Theory of motivation

West, R.; University College London, UK

Background: Existing theories of behaviour change are not comprehensive. Each focuses on aspects of the domain but none canvass the major psychological concepts that we know are important: Choice, impulsiveness, desire, need, effort, self-control, planning, classical and operant conditioning, habituation, identity, self-efficacy, addiction, imitation, habit, routine, conscientiousness, mood, enjoyment, boredom, curiosity. Most behaviours can be influenced by any of these in different circumstances so failing to integrate them into a model is problematic.

Methods: Using the PRIME Theory of motivation as an example, a method of approaching development a comprehensive theory is outlined.

Findings: PRIME Theory has generated some novel, testable predictions about behaviour change interventions but it must be regarded as merely the start of a process.

Discussion: The field needs to advance ideas and methods for developing comprehensive theories, for example, using a network of researchers working to a set of core principles.

Paper 3

Towards a theory of volitional behaviour change: Development of a theoretical meta-model

Sniehotta, F.; University of Aberdeen, UK

Background: Prevailing social-cognitive theories of behaviour change do not explain how intentions are translated into sustainable behaviour change. Understanding intention-behaviour relationships requires a theoretical shift from passive beliefs to active planning and control behaviours and cognitions. A theoretical meta-model of volitional behaviour change integrating self-regulation theory, planning and learning theory is used to illustrate issues and challenges in theory development.

Methods: Theoretical integration was based on evidence, conceptual soundness and utility for intervention development. Proposed relationships between components were tested in longitudinal, experimental and randomised trial studies.

Findings: The model proposes that prospective planning processes and in-situ behaviour control efforts interact with each other. Their relative contribution depends on the self-regulatory task, environmental, personal, behavioural and temporal factors.

Discussion: Challenges for the development of volitional theory include the definition of distinct constructs, the link between theory and intervention techniques and the definition of a realistic and testable range of intended applications.

Paper 4

What makes a better theory?

Michie, S.; University College London, UK

Background: The development of better theories depends both on adopting appropriate methods of theory development and on clarity about what constitutes a good theory. This paper addresses two questions: What criteria should we use to (a) judge one theory to be better than another, and (b) decide that the discrepancy between theoretical prediction and empirical data is sufficiently great to warrant discarding the theory?

Methods: Participants: A multidisciplinary group of researchers drawn from psychology, sociology, anthropology and economics with expertise in theories of behaviour change. Procedures: Literature review and consensus meetings.

Findings: There was good agreement on criteria for theory evaluation but less agreement regarding those required to discard an established theory.

Discussion: Principles underlying theory development and evaluation will be considered in the light of this work and the findings and issues presented by the other three papers in the symposium.

Symposium 6: Critical and qualitative thinking in Francophone Health Psychology, an introduction

Convenors: Santiago-Delefosse, M. & Piot-Ziegler, C.; Lausanne University, Switzerland

Aims: The main objectives aimed by this symposium are: (1) to present the state of art in the Francophone world, particularly in France; (2) to make the empirical research in progress in this field known.

Rationale: Francophone Health Psychology, and more particularly, French Health Psychology, is not quite aware of the present theoretical developments in Critical and Qualitative Health Psychology. While reasons for this state of knowledge are rather complex, it is possible to highlight two of them. The first one, a historical one, is related to the separation between on the one hand, a cognitive behavioural approach, and on the other hand, a clinical approach concerned mainly by psychoanalysis. The second reason has to do with terminology. There are no qualifying adjectives in French other than 'clinique', in order to describe qualitative methods. Furthermore, the English term 'critical' is not easily translated in French. Whereas some authors have applied qualitative methods, some others have raised theoretical and epistemological issues closely related to 'Critical' Psychology without specifying this term.

Summary: The first paper will give a historical background to the development of Health Psychology and its different approaches in France. This will include the description of recent points of view regarding qualitative and critical perspectives. The three papers following the introduction will illustrate this debate and its current development. They will present empirical research having applied various kinds of qualitative methods, such as: Phenomenology, content analysis from a psychoanalytic standpoint, and grounded analysis. While these papers refer to qualitative methods, not all of them belong to the critical perspective. The introductory paper will describe how the Francophone Critical Psychology may be considered as a branch belonging to the rising perspectives in Qualitative Psychology. However, this critical part of the discipline has not been developed yet.

Discussant: Giami, A., France.

Paper 1

Historico-cultural analysis of French health psychology. Evolutions and new trends for a critical and qualitative health psychology

Santiago-Delefosse, M.; Lausanne University, Switzerland

In France, the development of Health Psychology has encountered certain difficulties due to a specific historical and professional context. This discipline was introduced in the eighties by two teacher researchers, Bruchon-Schweitzer and Fischer, who did not share the same perspective. However, practitioner psychologists were already well integrated in the medical field since the sixties – contrary to psychologists in the United States. Being used to applying a psychoanalytic framework, they did not accept Health Psychology, which was mainly described as quantitative and behavioural. This historical, theoretical, methodological and professional context explains to some extent the resistance that can still be grasped nowadays. The author will proceed by first presenting diverse factors contributing to this state of affairs. Second, she will show the current state of a qualitative and critical perspective and the modifications that this focus may introduce within Health Psychology. In addition, it will be shown how this critical perspective has epistemological and methodological similarities to a Francophone Clinical Psychology.

Paper 2

Existential questionings during the pretransplantation period: A qualitative phenomenological study

Piot-Ziegler, C.,* Ruffiner Bonner, N., Fasseur, F., Santiago-Delefosse, M., & Pascual, M.;
Lausanne University, Switzerland

Background: Transplantation improves quality of life (kidney transplantation), and saves lives (heart, lung or liver transplantation), but few qualitative studies have explored existential questionings before transplantation.

Methods: In this phenomenological qualitative study, patients registered for kidney ($n=30$), liver ($n=11$), lung ($n=15$), or heart ($n=15$) transplantation participated in a semi-structured interview.

Findings: The following aspects were discussed: The dilemma of choice, the evaluation process, the endorsement of the “good candidate’s role”, the modification of objects, time and space perception, the co-existence of life and death, and the challenge of the body integrity and of the person’s identity. Transplantation generates paradoxical situations, and challenges the person’s life values.

Discussion: Anxiety and distress may arise with awareness of existential questionings and the co-existence different worlds’ life values. Transplantation further generates a broader societal and ethical debate as how to accompany existential questionings in a pragmatic medical environment.

Paper 3

Representations of sexuality among cancer nurses a qualitative study

Giarni, A.,* Moreau, E., & Moulin, P.; *Inserm U822, France

Background: Health professionals, including cancer nurses are confronted to professional situations that may involve sexual issues. These issues may be related to sexual function and dysfunction treatment, general counselling about sexual issues or involve genital contacts related to care (hygiene for example). On an other hand, nurses, as women, may also be confronted to sexual harassment (verbal or physical) but also to a deep emotional involvement with a patient. A review of the question gave evidence that cancer nurses in France have received poor training and information about sexual issues and that this absence of professional knowledge is part of the strain they experience during nurse-patient interaction.

Methods: The presentation is based on a qualitative study carried out with open interviews in the Grounded Theory approach. About 20 interviews have already been collected.

Findings/Discussion: The representations of sexuality anchored in the idea of Holistic care will be explored in order to evaluate the importance of gender, and personal subjectivity in the construction of the professional knowledge. Preliminary results will be presented and the opposition between the representation of sexuality and sexual function discussed in a professional and gender perspective.

Paper 4

Qualitative approach of relationship between nurses and patients

Costantini, M. & Lancelot, A.; University of Metz, France

Background: Concerning health psychology, our approach is in most case qualitative. One of our research axis is the exploration of intersubjectivity in relationship between caregivers and patients. To approach this complex phenomenon, we think we can not understand psychical mechanisms in

this relationship only with the quantitative approach often used in health psychology. That's why we develop tools which respect scientific rigour as well quantitative as qualitative.

Methods: So, with content analysis of semi-directive interviews, we have created two scales: The first validated and called: 'Scale of caregiver's defence mechanisms' and the second soon validated: 'Scale of perceptible empathy'. We use qualitatively these scales with caregivers.

Findings: By using clinical examples, this presentation will expose how these scales and the way to use it give more differentiated data than a simple score in a test.

Discussion: When these scales are used qualitatively, they give the possibility to better explicit complex intersubjective dynamics in relationship between caregivers and patients.

Symposium 7: Social support: Emotional, behavioural and biological processes

Convenors: Molloy, G.J. & van Jaarsveld, C.H.M.; University College London, UK

Aims: This symposium aims to outline the relevance of social support to a wide variety of health related issues, from emotional adaptation in couples facing colorectal cancer, to behavioural aspects of primary and secondary prevention in cancer and coronary heart disease and physiological stress responses in the laboratory.

Rationale: Structural and functional aspects of social support are relevant to emotional, behavioural and biological processes that can determine subsequent morbidity and mortality from a range of diseases.

Summary: First, Mariët Hagedoorn from University of Groningen will present results from a study of couples confronting colorectal cancer that looks at the moderating role of past spousal support in the association between relationship-focused coping and emotional distress. Cornelia van Jaarsveld from University College London will present data showing that marital status and inviting both spouses together to colorectal cancer screening influence participation in screening. Next, Gerard Molloy from University College London will present the findings of a meta-analysis looking at the relationship between marital status and cardiac rehabilitation attendance following diagnosis of coronary heart disease. Finally, Brian Hughes from National University of Ireland, Galway will present findings from a laboratory study demonstrating gender differences in the relationship between social support and cardiovascular adaptation to laboratory stress. These studies and their broader relevance for this wider field of research on social support and health will be discussed.

Discussant: Coyne, J.; University of Pennsylvania School of Medicine, USA.

Paper 1

Past spousal support and relationship-focused coping in couples confronting colorectal cancer

Hagedoorn, M.,* Puterman, E., Sanderman, R., & DeLongis, A.; *University of Groningen, The Netherlands

Background: We examined the role of past spousal supportiveness (PSS) as a moderator of the link between one partner's relationship-focused coping behaviour and the other partner's distress and marital satisfaction.

Methods: A sample of 86 couples confronting colorectal cancer completed questionnaires 4 and 10 months after diagnosis. Data were analyzed using the Actor Partner Interdependence Model developed by Kenny and colleagues using hierarchical linear modelling.

Findings: Protective buffering by the partner was associated with more distress and less satisfaction in patients, but only when PSS was low. For partners, patient protective buffering was associated with more distress and less marital satisfaction, regardless of PSS. Less active engagement by the partner was associated with less marital satisfaction in patients, again only when past spousal support was low. A similar interaction was found for partners.

Discussion: These findings can be explained by recipients' tendency to make benign attributions that minimize the impact of negative partner behaviours, if PSS is high.

Paper 2

Marriage and cancer prevention: Does marital status and inviting both spouses together influence colorectal cancer screening participation?

van Jaarsveld, C.H.M., Miles, A., Edwards, R., & Wardle, J.; University College London, UK

Background: This study examined the influence of marital status and inviting both partners together on participation in colorectal cancer screening.

Methods: Data were from a subset of participants from the UK Flexible Sigmoidoscopy Trial. Screening intentions were assessed in 16,527 adults aged 55–64 years. Attendance was recorded in the 4,130 respondents who were subsequently invited.

Findings: Multivariate analyses, controlling for age and educational level, indicate that married people have more positive intentions (OR = 1.26 95% CI: 1.14, 1.38) and higher attendance rates at screening (OR = 1.23 95% CI: 1.04, 1.45) than non-married people. After adjusting for the marriage effect, inviting partners together significantly increased screening intentions among women (OR = 1.17 95% CI: 1.04, 1.31) but not men (OR = 0.97 95% CI: 0.85, 1.10). Co-invitation significantly increased attendance at screening in both genders (OR = 1.34 95% CI: 1.14, 1.58).

Discussion: In this age group, married adults are more likely to participate in colorectal cancer screening than the non-married, and inviting both members of a couple together further increases screening uptake.

Paper 3

Marital status and cardiac rehabilitation attendance: A meta-analysis

Molloy, G.J., Hamer, M., Randall, G., & Chida, Y.; University College London, UK

Background: Marital status has been clearly linked to subsequent health outcomes in those with established coronary heart disease (CHD). This robust association may be due to both pathophysiological and behavioural mechanisms. We employed meta-regression to examine the association between marital status and attendance at outpatient cardiac rehabilitation (CR) in published studies.

Methods: We searched electronic databases, e.g. Medline and Science Citation Index, for published studies that reported an association between a measure of marital or partnered status and CR attendance in patients with diagnosed CHD.

Findings: Eleven studies were identified which incorporated 6,984 CHD patients. Being married/partnered was associated with significantly higher odds of attending CR. Using a fixed effects model, the pooled odds ratio of CR attendance was 1.72 (95% CI 1.50–1.97) for those were married/partnered.

Discussion: CHD patients that are married or have a partner are between 1.5 to 2 times more likely to attend CR.

Paper 4

Social support in ordinary life and cardiovascular adaptation to laboratory stress: Gender differences in habituation-sensitization

Hughes, B.M.; National University of Ireland, Galway, Ireland

Background: Gender differences in heart disease are mirrored by differences in cardiovascular reactivity to stress (CVR) and in the nature of social support networks. However, little research has examined the association between CVR in laboratories and social support outside; and none has established whether associated gender differences can elucidate psychosomatic mechanisms.

Methods: Having provided psychometric assessments of social support in ordinary life, 92 undergraduate men and women underwent two consecutive CVR assessments.

Findings: Mixed factorial ANCOVA revealed inverse associations between social support and CVR during the second assessment, suggesting that highly-supported women exhibited CVR habituation ($r = -0.41$). For men, the opposite (support-related sensitization; $r = +0.19$) was observed.

Discussion: Men and women appear to differ in the degree to which social support in ordinary life moderates laboratory-based CVR. Habituation-sensitization patterns suggest that, when dealing with stress, women may derive benefit from background social relationships whereas men may find that such background relationships bring additional pressures.

Symposium 8: Self-regulation of health behaviour and cognitions

Wiedemann, A.; Freie Universität Berlin, Germany

Aims: Most health behaviour theories agree that forming intentions is a key determinant of behaviour change. However, holding strong intentions does not guarantee intention realisation, as internal and external constraints and barriers may interfere with initiation and maintenance of behaviour. Apart from intention formation, behavioural self-regulation also refers to goal-directed strategies such as planning and action control in overcoming barriers. This symposium aims to extend previous evidence on effects of self-regulation on behaviour change on both the interpersonal and intrapersonal level.

Rationale: The studies in the symposia are relevant for theory development because they suggest (a) to include self-regulation processes as proximal determinants of behaviour, and (b) to integrate moderating influences in health behaviour theories, as well as to (c) consider effects of past behaviour on cognitive variables. In practice, (d) theory-based interventions might include components inducing self-regulation processes to promote health behaviour.

Summary: Results of two theory-based interventions indicate that effects of planning on behaviour change are moderated by intentions: Godin et al. demonstrate that planning interventions are more successful among individuals with unstable intentions. Results by Wiedemann et al. indicate that baseline intentions influence effects of planning interventions. Hardeman et al. illustrate that health behaviour change results in changes in cognitions (intentions/perceived control towards making further changes), indicating a feedback mechanism which affects self-regulation of cognitions. Scholz et al. provide evidence on intrapersonal associations between intentions, planning, action control, and physical exercise in a time-series study.

Paper 1

The impact of Implementation Intentions on Behaviour Change: Moderating Effect of Intention Stability

Godin, G., Bélanger-Gravel, A., Amireault, S., Gallani, M.C.B.J., Vohl, M.C., & Pérusse, L.; Laval University, Canada

Background: To verify the impact of implementation intentions (II) on behaviour change taking into consideration intention stability (STAB).

Methods: First, STAB was assessed; defined as the lack of change in intentions to exercise in the next 3 months. At T3, individuals were randomly assigned to the II or control (C) group. Level of physical activity was assessed three months later (T6). A total of 221 participants (II: $n = 108$; C: $n = 113$) completed the study.

Findings: ANCOVA (covariate: Behaviour at T3) indicated the intervention had no significant effect on behaviour at T6 ($p = 0.40$). However, a significant “Condition \times STAB” interaction was observed ($p < 0.05$); unstable participants in the C group were less active at T6 than the other sub-groups ($p < 0.05$).

Discussion: STAB moderated the effect of the intervention. Interestingly, the intervention was more successful among individuals who needed support to change that is the unstable intenders.

Paper 2

Healthy Eating: Effects of a self-regulation intervention

Wiedemann, A.,* Lippke, S., Reuter, T., Ziegelmann, J., Schüz, B., & Schwarzer, R.; *Freie Universität Berlin, Germany

Background: Self-regulation of health behaviours is a crucial but difficult task in life-style change. This randomized controlled trial tests the effects of a computer-based intervention targeting behavioural self-regulation strategies (e.g., action planning) to enhance healthy eating (‘5 a day’).

Methods: The intervention was delivered to 246 participants with one-month follow-up measures (use of self-regulation strategies, healthy eating behaviour).

Findings: Participants in the intervention group reported more frequent use of self-regulation strategies. Increases in healthy eating were mediated by changes in the use of self-regulation strategies. The effects of the intervention were moderated by participants’ motivation (behavioural intentions), as indicated by multivariate analyses.

Discussion: Changes in the use of self-regulation strategies induced by the self-regulation intervention were associated with significant increments in healthy eating behaviour. This relation was moderated by participants’ underlying motivation, which suggests to take individual characteristics into account when designing health behaviour interventions.

Paper 3

Increases in objectively measured physical activity predict Theory of Planned Behaviour cognitions

Hardeman, W., Michie, S., Kinmonth, A.L., & Sutton, S.; University of Cambridge, UK

Background: Theory of Planned Behaviour (TPB) cognitions failed to predict change in physical activity in a trial cohort (ProActive), but causal pathways may be reverse. We hypothesised that

greater increases in activity over the year would result in weaker 12-months intentions and perceived behavioural control towards increasing activity further.

Methods: At baseline and 12 months, 365 adults completed questionnaires assessing physical activity over the past year and cognitions about becoming more physically active. Energy expenditure was measured over 3 days at baseline and 12 months. Linear regressions were conducted, controlling for baseline cognitions.

Findings: Increase in energy expenditure was a negative predictor of 12-months perceived control ($\beta = -0.127$, $p = 0.016$) and intention ($\beta = -0.105$, $p = 0.044$). Change in self-reported physical activity predicted neither cognition (p -values > 0.05).

Discussion: The TPB should include reciprocal causal pathways between cognitions and behaviour. Objective measurement appeared more sensitive than self-report at detecting the impact of behaviour change on cognitions.

Paper 4

Translating Intentions into behaviour: When Self-Efficacy Moderates the Planning-behaviour Relationship

Schwarzer, R. & Lippke, S.; Freie Universität Berlin, Germany

Background: Action plans are assumed to translate intentions into health behaviours. However, they often fail to do so. This could be due to a lack of perceived self-efficacy. People do not tackle challenging tasks if they harbour self-doubts, even if they have made an action plan. The present study is designed to examine the putative moderating role of self-efficacy in the planning-behaviour relationship.

Methods: In a longitudinal online study ($N = 812$), intentions were assessed at baseline, and action plans, self-efficacy, and physical activity were measured four weeks later. A moderated mediation model was examined. Plans were specified as a mediator between intentions and behaviour, whereas self-efficacy was specified as a moderator of the planning-behaviour relationship.

Findings: Results confirm that levels of self-efficacy moderate the mediation process: The strength of the mediated effect increased along with levels of self-efficacy. The results remain valid after accounting for baseline physical activity behaviour.

Discussion: For plans to mediate the intention-behaviour relation, people must hold sufficient levels of self-efficacy. If they lack self-efficacy, plans may be in vain. Implications for theory advancement and intervention development are discussed.

Symposium 9: Individual differences and social processes in health-related outcomes and behaviour

Convenor: Hagger, M.; University of Nottingham, UK

Aims: This symposium will: (1) identify key individual difference variables (e.g., mindfulness, motivation, somatosensory amplification, gender) as determinants of health-related outcomes (e.g., symptom reporting) and behaviour (e.g., binge drinking, exercise, healthy eating) (2) identify the mechanisms by which individual differences and psychological states lead to outcomes and behaviour and (3) identify key targets for intervention while accounting for individual difference variables.

Rationale: Individual difference variables are considered core determinants of health-related outcomes and behaviour (Baum & Posluszny, 1999). Recently, researchers have become interested in

resolving the relative contribution made by individual difference variables and state-like variables to health outcomes and behaviour with a view to identifying targets for behaviour-change interventions (Stone & McRae, 2007).

Summary: This symposium will showcase recent research on individual differences in health contexts with a focus on the relative contributions of state and trait influences and the psychological mechanisms involved. This is important for intervention design as it will provide health psychologists with viable targets for interventions for changing behaviour while accounting for individual differences. The symposium will also illustrate the diversity in individual difference constructs that influence health outcomes and behaviour (e.g., demographic, psychophysiological, personality, and implicit traits). Bibby's paper examines how a demographic individual difference can have a pervasive influence on the effectiveness of loss- and gain-framed messages. Lawrence and Ferguson's contribution will identify the importance of somatosensory amplification on symptom reporting in violence victims. McLachlan and Hagger's research will illustrate the importance implicit motivation in influencing health related exercise relative to explicit motives. Chatzisarantis and Hagger will examine the effectiveness of mindfulness in moderating intention-behaviour relationships in exercise and binge drinking.

Discussant: Hagger, M.; University of Nottingham, UK.

Paper 1

Effects of gender on gain and loss framed messages for eating fruit and vegetables

Bibby, P.; University of Nottingham, UK

Background: Persuading individuals to eat the recommended daily intake of fruit and vegetables is a high profile problem and a medical goal.

Methods: This study used a longitudinal pre-post intervention design with a control group to examine the way a message about healthy eating is framed can lead to behavioural change. This is important as, to date, framing research has rarely examined framing as an intervention for behavioural change. Participants ($N=101$) were allocated to a gain frame (benefits of action), loss frame (cost of non-action) or no frame condition and their daily intake of fruit and vegetables was measured before receiving the message and up to one month later.

Findings: Overall, it was found that both gain and loss framed messages were substantially better than no frame increasing the daily intake of fruit and vegetables. It was also found that sex of participant moderated this effect with males responding more to gain framed messages and females more to loss framed messages.

Discussion: It is argued that the context in which framing operates is important for determining impact and that framing studies would benefit from the inclusion of a control group.

Paper 2

The influence of somatosensory amplification on the impact of normative and counter-normative health messages

Lawrence, C. & Ferguson, E.; University of Nottingham, UK

Background: It is a common/normative view that being under stress and being bullied can result in ill-health (Croft 2000; Ferguson, et al., 2006). However, the counter-normative view that stress (reappraised as challenge) is beneficial is becoming increasingly popular (Segerstrom & Miller, 2004).

Methods: This study examined the effect of giving participants written normative or counter normative information about bullying and stress on participants' subsequent symptom reporting. 180 healthy undergraduate volunteers were randomly allocated to one of 4 conditions in a 2 (type of information: Normative or counter normative) \times 2 (domain: Bullying or stress) design. In addition, the role of individual differences in somatosensory amplification was also assessed.

Findings: Across both domains, those in the counter normative information reported more symptoms. This was particularly the case for those individuals high in somatosensory amplification.

Discussion: Results are discussed with reference to the role of individual differences in norm focus theory and theory of planned behaviour.

Paper 3

Effects of autonomous and heteronomous motives on exercise within an extended theory of planned behaviour

McLachlan, S. & Hagger, M.; University of Nottingham, UK

Background: Self-determination theory (SDT) research has indicated that autonomous motivation can be implicit and explicit in nature and that these forms of motivation are independent (Levesque & Pelletier, 2003). We hypothesised that implicit and explicit forms of motivation from SDT would have independent effects on exercise intentions and behaviour within an extended theory of planned behaviour (TPB). A secondary aim was to determine whether implicitly-measured appearance-related motives for physical activity are controlling, not autonomous.

Methods: Using a prospective survey design, undergraduate students ($N = 185$) completed measures of TPB and SDT variables, past behaviour and free-choice reasons for physical activity participation, followed by a self-report measure of exercise three weeks later.

Findings: Implicit motives predicted physical activity (Beta = -0.32 , $p < 0.05$) independent of explicit motives, and significantly moderated the effect of continuation intentions of success on physical activity (Beta = -0.28 , $p < 0.05$). The model accounted for 62.6% of variance in exercise ($R^2 = 0.626$, $p < 0.01$). Appearance-related free-choice reasons and explicit autonomous motivation were significantly and negatively correlated ($r = -2.71$, $p < 0.01$).

Discussion: Findings provide evidence that implicit and explicit forms of autonomous motivation predict physical activity independently and suggest that implicitly-measured appearance motives are controlling in nature.

Paper 4

Mindfulness and the intention-behaviour relationship within the theory of planned behaviour

Chatzisarantis, N.* & Hagger, M.; *University of Plymouth, UK

Background: Mindfulness describes a quality of consciousness characterized by heightened clarity and awareness of present experiences and functioning.

Methods: The present study examined moderating effects of mindfulness on the intention-behaviour relationship within the theory of planned behaviour.

Findings: Study 1 showed that mindfulness moderated the intention-behaviour relationship in a leisure-time physical activity context such that intentions predicted physical activity among mindful individuals and not among less-mindful individuals. Study 2 measured counter-intentional habits relating to binge-drinking and found that habitual binge-drinking obstructed the enactment of

physical activity intentions among individuals acting less-mindfully but not among individuals acting mindfully. Finally, Studies 1 and 2 demonstrated that the effects of mindfulness on physical activity were independent of effects observed for habit and variables contained in the theory of planned behaviour.

Discussion: These findings suggest that mindfulness is a useful construct that helps understand the intention-behaviour relationship within the theory of planned behaviour.

Symposium 10: Improving the science of behaviour change intervention evaluations

Convenor: Abraham, C.; University of Sussex, UK

Aims: The symposium will raise awareness of the need to improve reporting of behaviour change interventions (BCIs). It will present guidelines, which could enhance replicability and adoption. It will also highlight advances in the use of meta-analyses and trial design, which would improve the knowledge yield of BCIs.

Rationale: The symposium is supported by the WIDER (Workgroup for Intervention Development and Evaluation Research) group, dedicated to improving standards in conduct and reporting of BCIs. Much progress has been made recently including fruitful discussions with editors of journals publishing BCIs. It is important to provide EHPS and BPS DHP members with the opportunity to understand and comment on these developments.

Summary: Blair Johnson will illustrate how current reporting practice limits the power of meta-analytic reviews of BCIs to pinpoint determinants of effectiveness and suggest reporting improvements. Herman Schaalma will show how adherence to intervention mapping protocols could clarify the links between theorised change mechanisms and change techniques employed in BCIs. Charles Abraham will present preliminary proposals on aspects of content and delivery, which should be specified in journal articles and manuals describing BCIs. Dolores Albarracín will focus on advances being made in the design of BCIs which allow greater integration of factors determining effectiveness and also enhance ecological validity. Finally, Robert Kaplan, editor of Health Psychology will provide an editorial perspective on what is required to raise design and reporting standards in the behaviour change field.

Discussant: Kaplan, R.M.; University of California Los Angeles, USA.

Paper 1

Would that the missing data could speak: Incomplete reporting of source studies mutes meta-analytic findings

Johnson, B.T.; University of Connecticut, USA

Background: The proliferation of health promotion studies provides a rich knowledge base of daunting proportions. Systematic meta-analytic reviews have grown in popularity and sophistication but the knowledge they cumulate is sharply limited by the information available about reported studies.

Methods: Qualitative reviews of past meta-analyses of HIV prevention and other literatures.

Findings: Journal space for study reports is squeezed by editorial policies that restrict descriptions (e.g., word limits; manuscript blinding), despite journals' growing acceptance of new reporting standards such as TREND and CONSORT. Often omitted are details of intervention content,

timing and location of study and other information that would help situate research findings. Statistical imputation and author requests are inexact solutions.

Discussion: Missing information from source reports mutes knowledge generalization and the potential for complete explanation of study differences. Routine protocol archiving linked to publication is a promising solution, as is increased routine communication between authors and meta-analysis teams.

Paper 2

Decoding behaviour change interventions: Using intervention mapping to demystify intervention content

Schaalma, H. & Kok, G.; Maastricht University, The Netherlands

Background: The scientific literature includes few intervention descriptions that provide clear descriptions of specific behaviour change techniques that could be included in subsequent intervention designs. The Intervention Mapping (IM) protocol provides the tools that enable the production of adequate descriptions of content.

Methods: We will qualitatively review our and others' experiences with IM showing how following IM protocols specifies the links between theorised change processes and specific change techniques.

Findings: IM requires specification of change objectives, that is, identification of preparatory behaviours and psychosocial correlates of target behaviours. IM also asks interventionists to document the identification of behaviour change techniques that may be useful in achieving change objectives, including their considerations regarding the conditions under which these techniques are potentially effective.

Discussion: Intervention descriptions should demystify the decision-making process underlying the selection of change techniques and the reasons why particular activities and materials were preferred to others.

Paper 3

Standardising Behaviour Change Intervention Reports and Manuals

Abraham, C.,* Davidson, K.W., Kaplan, R.M., Michie, S., Johnson, B.T., Schaalma, H., & Johnston, M.; *University of Sussex, UK

Background: New reporting guidelines (e.g., CONSORT) have begun to standardise reporting of trial methods and analyses but descriptions of intervention content and delivery remain diverse and, in many cases inadequate to allow faithful replication.

Methods: Drawing on qualitative analyses of intervention content and delivery modes we will categorise characteristics of behaviour change interventions (BCIs).

Findings: We will specify a series of characteristics of BCIs which should be briefly reported in journal articles and detailed in manuals. These include: (1) specified change mechanisms (2) change techniques employed (3) materials used (4) setting and (5) mode of delivery. We will illustrate how descriptions of previously reported BCIs could be improved by explicit reporting of these characteristics.

Discussion: Analyses of intervention characteristics provide the basis for an extension of CONSORT specifying new standards of reporting BCIs in peer reviewed journals and in published BCI manuals/protocols.

Paper 4

The need for complex and ecologically-valid approaches to HIV-prevention outcome research: Meta-analysis and field research

Albarracin, D.,* Schaalma, H., & Ruiter, R.; *University of Illinois at Urbana-Champaign, USA

Background: A series of meta-analyses and field studies have yielded substantial knowledge about the efficacy of behavioural, HIV-prevention interventions in different contexts and groups. It is time to analyze the extent to which this knowledge is adequately captured through current trial methodologies.

Methods: This paper qualitatively reviews outcome research and proposals for broader, more complex research designs.

Findings: Complexity can be incorporated through multi-factorial experimental designs with high potential gains in our understanding of behaviour change. Ecological validity will increase through designs that examine exposure and completion as critical factors. These changes require going beyond traditional public health approaches to complex experimental designs and shifting from population-centred approaches to “technique by population” approaches. Several methods are available that could radically change the landscape of available data on intervention-outcome research.

Discussion: Changes in the diversity and breadth of future behaviour change could prompt scientific and practice advances.

Symposium 11: Understanding and facilitating informed choice in screening

Convenor: Mann, E.; King's College London, UK

Aims: Demonstrate a social cognitive approach to understanding informed choice in screening. Discuss the implications of the facilitation of informed choice for policy and practice.

Rationale: There exists a Europe-wide policy shift toward facilitating patient informed decision-making in healthcare. In the case of screening, there are concerns that increased choice may have negative impacts on public health, if individuals choose not to be screened. This symposium explores this concern.

Summary: An informed choice is one that is value-consistent and based on relevant information. Kellar et al. describe the development of an informed choice invitation for diabetes screening and explore the possible impact on attendance for screening. Two papers then explore the impact of facilitating informed choice. Mann et al. present the results of a clinical trial in which they found that informed choice invitations did not reduce screening uptake. Crockett et al. conducted a content analysis of participant's responses to informed choice and traditional screening invitations. They found response efficacy was similarly high in both groups even though the informed choice group were given information about the limited efficacy of screening. Steckleberg presents qualitative data suggesting that increasing knowledge of screening may not necessarily lead to sufficient understanding to result in a choice that is informed. Thus, whilst this research suggests that it may be possible to facilitate choice without negative impacts on screening uptake, it is possible that we are failing to facilitate informed choice effectively. The symposium will conclude with a discussion of these findings and their implications for policy and practice.

Discussant: Marteau, T.M.; Kings College London, UK.

Paper 1

Development and evaluation of an informed choice invitation for type 2 diabetes screening

Kellar, I.,* Sutton, S., Griffin, S., Prevost, T., Kinmonth, A.L., & Marteau, T.; *University of Cambridge, UK

Background: Objectives – To test if an invitation designed to facilitate informed choices, developed using a “think aloud” protocol, could promote informed choice compared to a traditional invitation.

Methods: Participants ($n=417$) were randomised to receive either a traditional or an informed choice invitation to attend for a hypothetical diabetes screening appointment.

Findings: Levels of informed choice were higher following receipt of the informed choice invitation compared to traditional invitation, both the immediately after receipt (49.6% versus 7.2%; $\chi^2 = 72.922(1)$, $p < 0.001$) and two weeks later (42.9% versus 11.2%; $\chi^2 = 41.121(1)$, $p < 0.001$). There were no significant moderating effects of social grade, school-leaving age, full-time employment, homeownership, age or sex on levels of informed choice.

Discussion: Careful development of materials, combining a “think aloud” protocol and efforts to enhance readability, generated an intelligible invitation, acceptable across the spectrum of social grades, and appeared to facilitate informed choices.

Paper 2

Impact of informed choice invitations on uptake of screening for diabetes: A randomised controlled trial

Mann, E.,* Kellar, I., Sutton, S., Kinmonth, A.L., Prevost, T., Griffin, S., & Marteau, T.; *King's College London, UK

Background: Objectives – To test the hypotheses that diabetes screening uptake is lower following an invitation designed to facilitate informed choices, compared with a traditional invitation and even lower in those who are socially deprived.

Methods: 1272 people aged 40–69y were randomised to receive either an invitation designed to facilitate informed choice or a traditional invitation to attend for diabetes screening.

Findings: Neither hypothesis was supported: 55% of those receiving informed choice invitations attended for screening, compared with 57% receiving traditional invitations (difference: 1.6%, 95% CI: 7.3 to -4.0% , $p=0.57$). Impact of invitation was not moderated by social deprivation.

Discussion: Contrary to concerns, this randomised trial suggests that provision of information to facilitate an informed choice about attendance for diabetes screening does not decrease uptake overall or differentially according to social deprivation.

Paper 3

Beliefs following a traditional or informed choice invitation to diabetes screening: An experimental analogue study

Crockett, R.,* Mann, E., Kellar, I., & Marteau, T.; *King's College London, UK

Background: Objectives – To compare beliefs motivating participation following a traditional or informed choice invitation to diabetes screening.

Methods: Participants ($n = 417$) received a traditional invitation to diabetes screening or an informed choice invitation describing the limited benefits and potential harms of screening. Intentions to attend were rated and participants then listed their thoughts. Thoughts were analysed using Linguistic Inquiry and Word Count and Content Analysis using constructs of Protection Motivation Theory.

Findings: There were no significant between-group differences in intentions to attend or in use of positive and negative emotion words. Preliminary analyses indicate that informed choice invitations were associated with fewer thoughts about vulnerability and fear of diabetes and more thoughts about the seriousness of diabetes. Both groups believed screening reduces the threat from diabetes.

Discussion: Receiving an informed choice invitation changed perceptions of the threat of diabetes but seemed to have little impact on beliefs about the response efficacy of screening.

Paper 4

Critical health literacy: A prerequisite for informed choice?

Steckelberg, A.; University of Hamburg, Germany

Background: Evidence-based information (EBPI) may not necessarily meet the expectations of patients and consumers. We analyzed three studies regarding consumers' and health professionals' perceptions on EBPI.

Methods: Post-hoc analysis of (1) a focus group study on EBPI on colorectal cancer screening ($n = 67$ healthy consumers), (2) a questionnaire survey on understanding of diabetes prevention studies ($n = 299$ diabetes care professionals), and (3) a feasibility study on EBPI on benign uterine diseases ($n = 10$ medical laypersons). The studies were performed between 2001 and 2007. We surveyed perceptions of information (EBPI and presentation of study results) and information needs (for informed choice) using standardized and open questions and think-aloud protocols.

Findings: Participants neither interpreted study results correctly nor had a profound understanding of the complexity of EBPI. Participants asked for tutorials (on evidence based medicine) to handle complex issues. Cognitive dissonance was caused, e.g. presentations of results or estimates of benefits were rejected because they strike prevalent expectations.

Discussion: Perception of EBPI requires critical health literacy. Otherwise patients and consumers are not prepared for informed choice.

Symposium 12: How do detect youths at risk?

Convenor: Husler, G.; University of Fribourg, Switzerland

Aims: There are four aims the symposium should achieve: (1) Presenting multidimensional assessment tools for youth to detect risk-behaviour, (2) Demonstrating the usefulness of the tools, (3) Discussing weakness and strengths of the tools, and (4) To bring forward the use of multidimensional assessment tools in prevention and health psychology (in research and practice).

Rationale: In prevention, consistent application of assessment methods remains unusual. There are different methods in the scientific research for risk detection. These methods are often used only in research and don't find the way into practice. It's time to present and discuss assessment tools that are made to detect youths at-risk and practical as well as useful in research and practice.

Summary: Usually, multidimensional assessments to detect youths at-risk are based on a combination of different parameters. In this symposium Social Background (Hüsler) – covering

different domains (family, school, environment) – is presented as a possible assessment tool. The Social Background is also part of the risk index (Werlen) that further includes internal, external and substance use problems. Other forms of multidimensional assessments are the discovering of contextual disconnection (from school and/or family) presented by Cartierre, and a nine problem areas covering tool (ADAD) by Plancherel. All four assessment-tools are created to detect health risk or risk-behaviour and are easily applicable in research, evaluation and practice.

Discussant: Bolognini, M.; University of Lausanne, Switzerland.

Paper 1

The social background: Indicator for risk behaviour in youths

Hüsler, G. & Werlen, E.; University of Fribourg, Switzerland

Background: About 20–30% of young people experience considerable difficulties in the course of their development as a result of individual, family and environmental factors. They have long lasting problems in fulfilling their roles in later life.

Methods: We submitted internet-based questionnaires to 12,821 youths (age: 10–26) in different populations for screening internal, external and substance-use problems and measuring the Social Background covering three domains (living-conditions, school/vocation, family).

Findings: The most important components of the Social Background (good = 48%; moderate = 36%; bad = 24%) are the number of relocations ($\beta = 0.45$) and school changes ($\beta = 0.32$) followed by classes repeated ($\beta = 0.23$) and parents “living-with-one-parent-only” ($\beta = 0.25$) separated/divorced ($\beta = 0.19$). Other elements are reprimands/school exclusions ($\beta = 0.11$), apprenticeship break-up ($\beta = 0.11$), stay in institution ($\beta = 0.09$) and father ($\beta = 0.09$) or mother ($\beta = 0.06$) unknown or dead. Social Background is associated with internal ($r = 0.15$), external ($r = 0.21$) and substance-use ($r = 0.22$) problems.

Discussion: The Social Background is a valid measure that explains part of risk-behaviour.

Paper 2

ADAD: An assessment for substance use in youths

Plancherel, B.; University Child and Adolescent Psychiatric Clinic in Lausanne, Switzerland

Background: During the past twenty years, a variety of assessment instruments of adolescents’ substance use have been developed. A standardized multidimensional assessment instrument adapted for adolescents is needed in order to assign them to the most appropriate treatment setting and to conduct treatment outcome evaluations.

Methods: We developed and validated a French version of the Adolescent Drug Abuse Diagnosis (ADAD). A total of 102 adolescents, aged 14–19 years, were recruited and longitudinally followed over 3 years in the French-speaking part of Switzerland.

Findings: Results clearly show that substance use is not a disorder per se in adolescence, but is part of a multidimensional complex of problems that some adolescents may encounter. Increase and decrease in substance goes together with an increase or decrease in the other areas.

Discussion: The ADAD appears as an appropriate instrument since it allows identifying the most important psychological, social, and relational characteristics in adolescence.

Paper 3

Cumulative risks for health of adolescent girls and boys: Disconnection from family and school contexts

Cartierre, N.; University of Lille, France

Background: In this presentation, concerning adolescents' health, we want to show the interest to consider both gender and quality of contextual transactions. The presented study aims at examining the links between contextual disconnections (family, school), and the health of adolescents, according to the extent and scope of the contextual disconnection and health outcomes.

Methods: Middle school adolescents – 521 girls and 466 boys – participated in this research. Three health measures were used: Externalized disorders, internalized disorders, and consumptions. Four groups were constituted: No disconnection, Family disconnection, School disconnection, Double disconnection (family and school).

Findings: The results show that a double disconnection increases the risks of health disorders, compared to a single one. The pattern of the links between disconnection groups and the health scores varies depending on the considered gender and health outcomes.

Discussion: The health measures used permit to measure double disconnection as an indicator of health risks.

Paper 4

Description of risk patterns in different groups at different ages

Werlen, E. & Hüsler, E.; University of Fribourg, Switzerland

Background: Risk behaviour is not uniformly distributed among youths. It is necessary to identify those at-risk. Adolescents with different socio-demographic and psychological characteristics exhibit risk-behaviour to different degrees.

Methods: We calculated a risk index in five samples (school: $N=3647$, mean age = 14; vocational training: $N=4074$, mean age = 19; supra-f younger 16: $N=904$, mean age = 14; supra-f older 15: $N=1251$, mean age = 17; SeMo: $N=2898$, mean age = 14) and described its distribution in these samples. Supra-f and SeMo are institutions providing assistance for school and vocational integration.

Findings: We found 13% in schools and 24% in vocational training showing high risk. In the supra-f centres were 38% of the younger and 50% of the older youths at high risk. In the SeMo 35% showed high risk.

Discussion: The newly developed risk index permits to identify youths with high risk-behaviour. It is an important tool for secondary prevention diagnostic.

Symposium 13: Do psychological factors really affect health and disease outcomes?

Convenor: Vedhara, K.; University of Bristol, UK

Aims: The proposed symposium seeks to address the question “Do psychological factors really affect health and disease outcomes?”.

Rationale: This will be achieved through presentations from four research groups who will present study findings from a range of clinical contexts with a focus on 4 diverse, but clinically relevant outcomes: Healing rates in chronic wounds; immunity to infectious viral disease; fertility and cancer.

Summary: The first presentation will focus on results from a prospective observational study examining whether coping and distress affect wound healing i.e., the healing of diabetic foot ulcers, in older patients with type 2 diabetes. The second presentation examines results from a randomised controlled trial of a massage intervention in a younger population of healthy students. The trial examined the effects of stress reduction on immunity to infectious viral disease by exploring whether massage could boost immune responses to hepatitis A and B vaccinations. The third paper reports on results from two related studies examining the effects of mood on fertility outcomes in men (semen pH and volume) and women (conception rates). The final paper examines the potential role of psychological distress in the onset of prostate cancer by examining (i) the relationship between indices of distress and levels of prostate specific antigen (a marker of potential prostatic disease) and (ii) indices of distress and the likelihood of receiving a diagnosis of prostate cancer.

Discussant: Kiecolt-Glaser, J.; Ohio State University, USA.

Paper 1

Coping and distress predict the healing of diabetic foot ulcers

Vedhara, K.,* Wetherell, M., Searle, A., Dawe, K., Miles, J., Weinman, J., & Campbell, R.;

*University of Bristol, UK

Background: Research with acute experimental wounds has shown that psychological distress significantly delays healing. We examined the effects of distress and coping in the healing of chronic non-experimental wounds i.e., diabetic foot ulcers.

Methods: 116 diabetic patients with an active ulcer were recruited. Demographic and clinical factors, psychological characteristics and ulcers were assessed at baseline. Ulcer assessments were repeated at weeks 6, 12 and 24 post-baseline. Logistic regressions examined, first, potential clinical/demographic determinants of healing; then psychological distress and coping were entered into the model and finally baseline ulcer size.

Findings: Patients whose ulcers had not healed by 24 weeks exhibited greater distress and a propensity towards confrontation coping at baseline. Inclusion of initial ulcer size, attenuated the effect of distress but not coping.

Discussion: Psychological interventions to reduce distress and challenge confrontation coping may promote healing rates in this patient group.

Paper 2

Lower antibody response to hepatitis B vaccination following a massage stress-reduction intervention

Petrie, K.,* Loft, P., Thomas, M., Vedhara, K., & Booth, R.; *University of Auckland, New Zealand

Background: This study explored whether a massage intervention lowered self-reported stress, physiological responses to an acute experimental stressor, and altered antibody responses to hepatitis B vaccination.

Methods: Seventy medical students reported on stress, underwent a CO₂ inhalation test, and received a single hepatitis B vaccine dose during a period of close temporal proximity to an examination period. Participants randomly assigned to the massage group, underwent weekly 50-minute massages over the 4-week intervention period undertaken prior to examinations.

Findings: The massage group reported lower state anxiety, $F(1, 63) = 3.88$, $p = 0.05$, and the groups differed in antibody response 2-weeks following vaccination, $t(49) = -2.18$, $p = 0.03$. The groups did not differ in HR, BP, or salivary cortisol response to the CO₂ inhalation test.

Discussion: Findings indicate that a massage intervention reduces emotional responses to stress and results in less vigorous humoral immune responses during a period of increased naturalistic stress.

Paper 3

Stress and infertility: Identifying the missing link(s)

Panagopoulou, E.; University of Aristotle, Greece

Background: Studies on the association between stress and infertility have so far yielded equivocal findings. This paper will discuss evidence from two studies examining the discrepancy in the reported findings.

Methods: The first study addresses the use of general, versus infertility-specific measures of stress, and the lack of an explicit theoretical framework. 342 women attending a fertility clinic in Greece were interviewed on the day of embryo transfer.

Findings/Discussion: Controlling for medical and psychosocial factors, women who expressed their emotions were less likely to become pregnant ([OR] 1.272; 95% [CI] 1.06–1.52). The second study addressed the assessment of chronic versus acute stress. Twenty healthy male adults produced two semen samples: The first sample was obtained in the lab after an acute stress-inducing task, and the second one at home. Semen volume was significantly higher after acute stress ($p = 0.02$). Semen pH was significantly lower after acute stress ($p = 0.039$).

Paper 4

Psychological distress and prostate specific antigen levels in men with and without prostate cancer

Turner, E.,* Lane, J.A., Metcalfe, C., Down, L., Hamdy, F., Neal, D., Donovan, J.L., & Vedhara, K.; *University of Bristol

Background: We examined the relationship between psychological distress and prostate specific antigen (PSA) levels in men with and without prostate cancer; and the relationship between distress and cancer diagnosis.

Methods: Anxiety, depression and urinary symptoms were assessed in 4,886 men who attended PSA testing and biopsy as part of the ProtecT (Prostate testing for cancer and treatment) study.

Results: Controlling for urinary symptoms, anxiety and depression were not related to PSA levels at biopsy. When data from men with and without prostate cancer were examined separately, depression was positively associated with PSA levels in men with prostate cancer, reflecting an 8.6% increase in PSA for every five-unit increase in depression. Logistic regressions further suggested that men with 'possible' clinical depression at PSA testing ($n = 519/4886$) were 23% more likely to have a diagnosis of prostate cancer.

Discussion: These data highlight the need for further investigations into the role of depressed mood in the onset of prostate cancer.

Symposium 14: Using diaries in health psychology: Methods, analysis and applications

Convenor: Johnston, D.W.; University of Aberdeen, UK

Aims: The symposium should provide the audience with: (1) An understanding of the main diary methods. (2) An understanding of the statistical issues involved in analysing diary data. (3) An introduction to multilevel modelling, the most commonly accepted method of dealing with such data. (4) Examples of state of the art applications of diary methods to substantive issues in health psychology.

Rationale: There is considerable interest measuring behaviour in real life using both paper and pencil methods and powerful new technologies, such as PDAs and smart phones. However knowledge and experience of these methods are limited. We believe it is therefore timely to present a symposium on diary methods with a methodical and analytic focus.

Summary: Diaries can be used to sample the experience of individuals at a particular moment in time, often repeatedly. In this symposium Burton will describe the main diary methods. Rasbash will describe some of the problems inherent in analysing repeatedly measured diary data and introduce the preferred solution to these problems, multilevel modelling. O'Connor will present a four week diary study of the impact of conscientiousness and hassles on healthy eating and Jones will describe a nursing study of the impact of serious clinical incidents on mood recorded frequently over three shifts. Ferguson will discuss the methodological, statistical and psychological issues raised by the four presentations.

Discussant: Ferguson, E.; University of Nottingham, UK.

Paper 1

An introduction to diary methods in health psychology

Burton, C.; Edinburgh University, UK

Diary methods offer psychological and behavioural researchers a range of opportunities, particularly when carried out electronically. In this introduction I will consider the kind of questions that diaries may be used to answer and how technology may be used to do this. In particular I will examine the evidence that electronic diaries reduce the biases inherent in data collection. Finally I will present some features of good and bad electronic diary design.

Paper 2

The uses of multilevel modelling in data that occurs at several levels

Rasbash, J.; University of Bristol, UK

Multilevel models are increasingly used in the social and health sciences for the analysis of clustered data. There are two main reasons for this. Firstly, failing to properly account for clustering in a single level regression analysis can lead to incorrect inferences. Secondly, the ability of multilevel models to simultaneously analyse data at multiple levels of systems provides a framework for investigating a wider range of types of research question than is available with traditional techniques.

This introductory talk describes the basic multilevel model and gives examples of analysis where the quality of inference is improved and new types of research question are addressed because a multilevel modelling approach is adopted.

Paper 3

Effects of conscientiousness and daily hassles on health behaviours

O'Connor, D.B.,* Conner, M., Jones, F., McMillan, B., & Ferguson, E.; *University of Leeds, UK

Background: This study investigated the impact of conscientiousness and daily hassles on health behaviours and the moderating effects of conscientiousness on the hassles-health behaviour relationship.

Methods: 422 employees completed daily diaries over 4-weeks. Day-to-day within-person effects of daily hassles on health behaviours were examined, together with the influence of conscientiousness.

Findings: Using Hierarchical Multivariate Linear Modelling, the results showed conscientiousness was associated with reduced consumption of high fat snacks and increased caffeine intake and smoking (in smokers) across the 28-day study period. Conscientiousness was also found to moderate the effects of daily hassles on alcohol intake and the number of portions of fruit consumed each day. Participants with high levels of conscientiousness consumed less alcohol and more portions of fruit in response to daily hassles.

Discussion: These findings indicate that conscientiousness may exert protective influences directly via changes in health behaviours and indirectly through influencing stress-health behaviour relations.

Paper 4

The effect of clinical incident severity and managerial support on work based affect in nurse

Jones, M.C.* & Johnston, D.W.; *University of Dundee, UK

Background: The effect of aspects of the work environment on negative affect (NA) have been described in nurses (Johnston et al., 2006), but little is known about the effect of clinical events and the support received.

Methods: Sixty-eight nurses in a large district general hospital in England completed computerised behavioural diaries over three shifts. The diaries measured the severity of the worst incident during a shift, managerial support and NA. Results were analysed using multilevel modelling (MLwiN).

Findings: Nurses with generally high levels of NA reported incidents as more serious ($t=4.2$, $p<0.001$). Immediately after a serious event nurses reported higher NA ($t=2.0$, $p=0.04$) which persisted for the remainder of the shift ($t=2.0$, $p=0.04$). Managerial support was associated with higher levels of NA ($t=2.81$, $p=0.005$).

Discussion: Serious clinical events have immediate and enduring effects on NA. Managerial support may be used following more serious events and hence associated with higher NA.

Symposium 15: Psychosocial aspects of fertility treatment

Convenors: Benyamini, Y. & Boivin, J.; Tel Aviv University, Israel

Aims: To understand how individual and social characteristics contribute to the initiation and experience of fertility treatment.

Rationale: Infertility is a timely topic at this conference because: (1) This condition enables testing psychological theories of stress and coping in a unique context in which couples are coping with a potential and highly threatening loss; and, (2) the rapidly accumulating health psychological research on the psychosocial aspects of this condition can inform better health and psychosocial care for women and couples.

Summary: The speakers will present work on the psychological aspects of fertility treatment from different theoretical perspectives, methodologies, and cultures. This work ranges from the initial stages of acknowledging the problem through the stressfulness of coping with treatments. Laura Bunting shows that motivation to seek medical help for fertility problems is often blocked by fear of diagnosis and fear that one cannot be helped. Pauline Slade shows that as early as the initial fertility consultation, attachment style is associated with couples' adjustment to infertility, via appraisal and coping strategies. Yael Benyamini demonstrates that fertility problems are amongst the most demanding of medical conditions in pronatalist societies and shows that women benefit from a structured intervention to be more actively engaged in the fertility consultation. The qualitative work of Irina Todorova demonstrates that the pain of infertility and how it is embodied by Bulgarian women remains very much grounded in the pronatalist social discourses of individual responsibility for health as well as in those that construct women mainly as mothers.

Discussant: Boivin, J.; Tel-Aviv University, Israel.

Paper 1

Need and demand for fertility treatment and the importance of raising public awareness about fertility health issues

Bunting, L. & Boivin, J.; Cardiff University, UK

Background: The studies aim to better understand help-seeking behaviour for fertility problems and identify targets for public health campaigns to improve fertility health.

Methods: Study 1: Review of 25 population surveys reporting the prevalence of infertility. Study 2: Women ($N=426$) trying to conceive naturally who completed an online fertility decision-making questionnaire. Study 3: Young people ($N=149$) completed a knowledge questionnaire on risk factors for infertility.

Findings: Study 1: The prevalence of infertility is 9% but only 56% of couples experiencing fertility problems seek medical advice. Study 2: The main cause of delay in seeking medical advice is lack of fertility knowledge, fear of discovering a problem and/or being labelled infertile. Study 3: People know risks for fertility problems but many misconceptions.

Discussion: Raising public awareness about fertility is key to helping women and men change behaviour to preserve fertility and/or know when to seek help for fertility difficulties.

Paper 2

The influence of attachment, appraisal and coping on adjustment in men and women experiencing infertility

Slade, P., Bayley, T.M., & Lashen, H.; University of Sheffield, UK

Background: Attachment style may influence distress and relationship satisfaction in infertility. Appraisal and coping are linked to adjustment and may relate to attachment. These associations were examined in attenders at initial infertility appointments.

Methods: Attachment, appraisal, coping, general well-being, infertility-related stress and relationship satisfaction questionnaires were completed by 98 women and 64 men. Correlations and path analyses were completed.

Findings: In women attachment anxiety was associated with well-being via loss appraisals and increased self-blame/avoidance (SBA) coping. It indirectly affected infertility-related stress through increased SBA. Low cognitive restructuring (CR) and increased informational/emotional support seeking (IES) also predicted infertility-related stress. For men, attachment anxiety indirectly affected well-being and infertility-related stress again via SBA coping. Increased CR predicted well-being and increased threat appraisal infertility-related stress. Attachment anxiety negatively predicted relationship satisfaction in both sexes.

Discussion: Attachment influences relationship satisfaction and has indirect effects on adjustment via appraisal and coping in infertility.

Paper 3

Perceptions of infertility among patients undergoing treatment and the effects of preparing them for the medical encounter

Benyamini, Y.,* Casdai, S., Gozlan, M., & Kokia, E.; *Tel Aviv University, Israel

Background: Undergoing infertility treatment can be a stressful experience. Our aims were to: (1) Compare perceptions of infertility with published scores from other patient populations on the Brief Illness Perception Questionnaire (BIPQ); (2) Test an intervention aimed at increasing female infertility patients' involvement in the medical encounter on their satisfaction with the encounter.

Methods: 149 patients undergoing fertility treatments were randomly assigned to experimental/control group. Participants filled in the BIPQ and in addition, the experimental group received a brochure encouraging active participation in the encounter and structured instructions for preparation for the encounter. Satisfaction was assessed in both groups following the visit.

Findings: (1) Patients perceived more severe consequences and emotional responses and less personal control; (2) Satisfaction with the medical encounter was significantly higher in the experimental group.

Discussion: Infertility is a stressful experience and preparing young women in this situation for the medical encounter can increase their satisfaction.

Paper 4

Because you are doing it for a purpose, you don't feel the pain so much: Embodiment and the experience of pain in infertility treatment

Todorova, L.* & Panayotova, Y.; *Health Psychology Research Centre, Bulgaria

Background: The sociopolitical changes in Bulgaria after 1989 have included shifts in values and meanings related to gender, the body and health. The current paper aims to explore women's contextualized experiences of the body and pain in infertility treatment.

Methods: We conducted interviews with 17 women undergoing infertility treatment. The interviewing and analysis were informed by Interpretative Phenomenological Analysis. The transcripts were read several times, coding for emergent and superordinate themes, shared across the different transcripts.

Findings: The woman's body was constructed as responsible for infertility and for its treatment, through a shifting between embodiment and disembodiment. The women narrated a distancing from the body and redefining of its boundaries, in order to be able to endure pain for a meaningful purpose. At the same time, the disengagement from the body was fleeting and the painfulness of the procedures were both acknowledged and minimized.

Discussion: Women's experiences and meanings of the body and pain are grounded in pronatalist social discourses of responsibility for health, as well as in those that construct women mainly as mothers.

Oral and poster presentations

In alphabetical order by first author

Premature menopause following cancer treatment: Current management and quality of life

Absolom, K.,* Eiser, C., & Greenfield, C.D.; *University of Sheffield, UK

Background: This study examined the quality of life (QOL) implications of premature menopause and views of hormone replacement therapy (HRT) in young women following gonadotoxic cancer therapy.

Methods: Measures of menopausal status, symptoms, sexual activity, quality of life and HRT use were completed by 178 women at risk of premature menopause (aged 18–51 years, $M = 38.5$).

Findings: Eighty-nine (50%) women reported experiencing a premature menopause. Worse menopausal symptoms were negatively associated with both sexual activity ($p < 0.05$) and QOL ($p < 0.001$). 34% of women with premature menopause were not taking any hormone replacement. Increased cancer risk was the most commonly reported disadvantage of HRT.

Discussion: Premature menopause is poorly managed in this group of young patients, with many not receiving appropriate screening or treatment. Women need to be better informed about HRT in order to reduce fears about cancer risk.

Association between internalizing disorders and body mass index: The moderating effect of eating disorders

Agrinier, N.,* Teissier, S., Muller, L., Spitz, E., & Briancon, S.; *Nancy Université, France

Background: The objective was to describe the association between internalizing disorders and corpulence in adolescents.

Methods: We used a sample of 1841 high school students, involved in the PRALIMAP cluster randomized trial, at the first wave of inclusion. Weight and height were measured to compute Body Mass Index (BMI). The Hospital Anxiety and Depression scale (HAD), and the Eating Attitude Test questionnaire (EAT-40) were self administered. All scores were standardized (range 0–100). Linear regression was performed with SAS 9.1.

Findings: The mean HAD score was 28 (+/-12), and the mean BMI was 21.6 (+/-3.5) kg/m². After adjustment for potential confounders, the relationship between BMI and HAD score was significant ($\hat{a}=0.32$, $p=0.048$), but moderated by the EAT-40 score (\hat{a} for interaction term = -0.02, $p=0.017$).

Discussion: The moderating effect of eating disorders on the association between internalizing disorders and corpulence could explain the conflicting results reported in the literature.

Facilitators and barriers to undergoing MRI scans: Pilot work in the development of an intervention

Ahmad, M.,* Johnston, M., & Powell, R.; *University of Aberdeen, UK

Background: Many people report anxiety when undergoing an MRI scan which can lead to incomplete scans, motion artifacts and reluctance to return for future scans. Psychological intervention might enhance these outcomes. This pilot study explored patients' perceptions of facilitators and barriers to scanning.

Methods: 7 outpatient adults scheduled for MRI scans were interviewed after scan completion using a structured interview protocol. They were asked what made the scan experience easy, and what made it difficult. A framework analysis was conducted.

Findings: Barriers reported by participants included physical restriction, noise and temperature. Facilitators included distraction (by radio) in the scanner and receiving reassurance and procedural information from radiography staff.

Discussion: These results suggest that interventions which give both sensory and procedural information as well as behavioural instruction and cognitive coping techniques might be relevant in developing a psychological intervention to improve the experience and success of MRI scans.

Does early educational career predict a CHD risk in adulthood?

Alatupa, S.,* Mattsson, N., Viikari, J., Raitakari, O., & Keltikangas-Järvinen, L.; *University of Helsinki, Finland

Background: It is known that socioeconomic situation predicts metabolic syndrome. We investigated whether the scholastic success in childhood and adolescence and duration of the unemployment in adulthood predicts the metabolic syndrome (MBO) in adulthood.

Methods: The participants ($N=1053$) were taken from the population based ongoing prospective Cardiovascular Risk in Young Finns Study. They were 3, 6, and 9 years old at the baseline. The grade point averages (GPA) were reported in 1980, 1983, 1986, and 1989. The level of basic education, the duration of unemployment and the MBO were examined in 2001.

Findings: Subjects with MBO had significantly lower GPAs, less years of education and longer duration of unemployment than participants without the metabolic syndrome. The results were true with females and males separately.

Discussion: Poor early educational career predicts adulthood metabolic syndrome resulting in lower level of education and higher duration of unemployment.

Self-perceived and actual body weight status and weight control behaviour among Bulgarian adolescents

Alexandrova-Karamanova, A.; Health Psychology Research Center, Bulgaria

Background: The aim of the study is to investigate the relationships between self-perceived and actual body weight and weight control behaviour among Bulgarian adolescents participated in the first Bulgarian Health Behaviour in School-aged Children (HBSC) study 2005/2006.

Methods: A national representative sample of 4854 schoolchildren aged 11, 13 and 15 completed the HBSC international standard questionnaire. The results to be presented are based on descriptive statistics and correlation analysis.

Findings/Discussion: Results indicate significant gender differences: Body weight dissatisfaction, dieting and other weight control methods are more common in girls and overweight and obesity are more common in boys. Two thirds of adolescents dissatisfied with their body weight are with normal weight or underweight and 1/4 are dieting. Self-perceived weight has a modest positive correlation with BMI ($r=0.351$, $p<0,001$) and with weight control methods directed at decreasing energy intake. About half of the dieters are dissatisfied with body weight and only a quarter are overweight or obese.

Parental concerns: Preliminary validation study of an instrument of evaluation

Algarvio, S.,* Leal, I., & Maroco, J.; *ISPA – Instituto Superior de Psicologia Aplicada, Lisbon, Portugal

Background: In previous works we developed a scale to measure parental concerns based on the work of Mesibov, Schroeder and Wesson (1993) where they tried to identify parental concerns in a large number of parents in a paediatric setting. In this study our purpose was to analyse its psychometric properties.

Methods: The participants were 302 parents of children between 0 and 12 years old in an educational setting in Lisbon region. The scale is constituted by 26 items and assumes a Likert scale form.

Findings: The results obtained showed valid coefficients of internal validity for the total scale, (0.95 Cronbach's alpha) and for the 5 different sub-scales that were found. These 5 sub-scales consist of Family and School Problems (0.87 Cronbach's alpha), Child Development (0.87), Death and Moving (0.74), Fears (0.84) and Negative Behaviours (0.86).

Discussion: Theoretical models and clinical practice demonstrate the importance of evaluating parental concerns prior to a child intervention.

Executive control deficits predict the intention-behaviour gap in dietary behaviour

Allan, J.,* Johnston, M., & Campbell, N.; *University of Aberdeen, UK

Background: Healthy eating intentions are rarely effectively translated into action. The present study investigates whether the intention-behaviour gap for dietary behaviour is related to individual differences in executive control (EC) as predicted by Hall & Fong's Temporal Self-Regulation Theory.

Methods: Participants ($n=28$) reported behavioural intentions for fruit/vegetable and snack consumption over a 3-day period and completed four EC tasks (task switching, inhibition, planning, and verbal fluency). Dietary behaviour over the corresponding period was recorded using computerised diaries.

Findings: In regression analyses, poor executive control was associated with more failures of dietary intention. Task switching, planning and fluency together predicted 13% of the variance in

intention-behaviour gap for fruit/vegetable consumption ($p=0.05$) and 31% for snacking ($p=0.002$). There was no effect of inhibition.

Discussion: As executive deficits are exacerbated by cognitive resource depletion (e.g. during multi-tasking), predictions can be made about when dietary intentions may be particularly likely to fail.

Meaning and life goals in Portuguese college students' cannabis users and non-users

Alves, M.* & Fonte, C.; *Universidade Fernando Pessoa, Portugal

Background: This study explores the role of meaning in life and life goals in cannabis users and non-users.

Methods: 218 portuguese college students participated in the study, responding to the Purpose in Life Test. To evaluate drug use a self report questionnaire was administrated. Data were analysed by quantitative and qualitative analysis.

Findings: The results suggest that, in general, cannabis non-users seem to be more satisfied with life, more aware of their life goals and evaluate more positively the progresse to achieve them. Cannabis non-users refer more study, professional and intrapersonal life goals. Cannabis use occurred more in men and in participants without religious affiliation.

Discussion: This study indicated that life goals and also some dimensions of meaning in life appeared to be important variables in understanding cannabis use in college students. The results are discussed in order to suggest strategies to prevent health risk behaviours and health promotion.

Development of a psychological measure: Practices to support self management of long term conditions

Anderson, J.K.*, Wallace, L.M., Turner, A., & Ahmad, N.; *Coventry University, UK

Background: Review revealed 6 measures with partial relevance to practices to supporting long term conditions (LTC).

Methods: 154 items reviewed by 8 experts, creating a 30 item pool for Q-sort by 8 further experts. 40 items were rated for (a) practicality (b) effectiveness of supporting self management (SM LTC) by 67 clinicians.

Findings: Factor analysis produced three scales: Clinical self management support (14 items), Patient centeredness (4 items), Organization of services (7 items) (Cronbach's Alphas 0.94, 0.78 and 0.85. Item-total correlations above 0.50).

Validity: Duration of experience with patients with LTC and use of SM practices ($r=0.28$; $p=0.02$; $r=0.34$; $p=0.04$; $r=0.26$; $p=0.03$). Prior training in SM and use of PSM activities; clinical self management support ($t=-2.2$; $df=64$, $p=0.03$) organization of services; ($t=-2.1$; $df=64$; $p=0.03$).

Discussion: The PSM shows good psychometric properties and is suitable for testing interventions to improve SM support by clinicians.

Applying Self Determination Theory in explaining the motivation of clinicians undertaking self management support activities with patients with long term conditions

Anderson, J.K.*, Wallace, L.M., Edmunds, J., Turner, A., & Ahmad, N.; *Coventry University, UK

Background: Self-Determination Theory (SDT) describes the formation of attitudes to self management support (SM).

Methods: Practices in Self Management support (PSM), SDT constructs – psychological needs satisfaction and motivational regulation were measured in a survey of 67 clinicians.

Findings: Competence in goal setting and PSM: Clinical self management support, patient centeredness and organization of services to support self management ($r = 0.44, p = 0.001$; $r = 0.27, p = 0.03$; $r = 0.31, p = 0.01$). Competence when following up patients (Pearson's $r = 0.30, p = 0.01$). Autonomous motivation (intrinsic, integrated and identified) and PSM ($r = 0.60, p = 0.001$; $r = 0.50, p = 0.001$; $r = 0.42, p = 0.001$). External regulation and amotivation and PSM ($r = -0.24, p = 0.05$; $p = 0.02$; $r = -0.06$). Patient centeredness and intrinsic motivation ($r = 0.24, p = 0.06$). Organization of services and autonomous motivation (intrinsic and integrated motivation) $r = 0.35, p = 0.00$; $r = 0.29, p = 0.02$).

Discussion: Increasing clinicians competence and supportive social context may enhance motivation to use SM practices.

Developing a web-based intervention for cold symptoms

Andreou, P.,* Yardley, L., & Little, P.; *University of Southampton, UK

Background: Objectives – (1) Explore people's experiences having cold symptoms. (2) Gain a better understanding of their actions to control symptoms including seeking professional help. (3) Elicit their views on the content and format of an online self-care support source, tailored to individual symptoms and needs.

Methods: Semi-structured interviews ($n = 20$) analysed using a grounded theory approach. The first part of the interview focused on their experiences with colds and the second elicited their views and suggestions on the web-intervention.

Findings: People develop a repertoire of knowledge which helps to assess their symptoms and guide their subsequent actions. This repertoire is enriched with age and influenced by social networking. Participants welcome a web self-care source but they are uncertain and not confident in getting a non face-to-face diagnosis and subsequent advice on what to do.

Discussion: The findings highlight theoretical constructs, e.g. illness perceptions and self-efficacy, which can be addressed in improving the intervention.

Attitudes towards infant feeding: Evidence from an Implicit Association Task

Andrew, N.,* Gaffan, E., Harvey, K., & Ogden, J.; *University of Reading, UK

Background/Methods: In order to investigate implicit attitudes towards different infant feeding methods, 40 pregnant mothers completed a computerised Implicit Association Task. Two weeks after recruitment at their 12-week dating scan, participants categorised pictures as breastfeeding or formula-feeding whilst categorising words as meaning 'motivated' or 'inactive'. All participants carried out both conditions, BM&FI (in which breastfeeding shared a response key with 'motivated') and BI&FM (breastfeeding shared a response key with 'inactive'), in counterbalanced order.

Findings: Mean reaction times were significantly faster in the BM&FI condition (903.56ms) than the BI&FM condition (1201.03ms). This suggests that expectant mothers find it easier to associate breastfeeding with motivation and/or formula-feeding with inactivity rather than the opposite combinations.

Discussion: This is part of a longitudinal study in which mothers' implicit and explicit attitudes are examined as predictors of their subsequent feeding decisions, and therefore has implications for the promotion of breastfeeding.

Crossed perceptions of burden and illness in couples with alcohol problem

Antoine, P.,* Christophe, V., & Nandrino, J.L.; *University Lille North of France, France

Background: The aim of the study was to describe discrepancies between patients and spouse about dyadic adjustment, burden of spouse and temptation to drink of patients during alcohol abstinence.

Methods: Data were self-report and collateral report for Short-Michigan Alcohol Screening Test, Alcohol Abstinence Self-Efficacy Scale, Dyadic Adjustment Scale (DAS) and the Caregiver Reaction Assessment. The sample consisted in 66 couples.

Findings: Patients gave higher self-ratings than their spouse for the DAS. Patients overestimated dyadic adjustment of their partner. Spouses underestimated scores of the patients. No significant difference was found between the burden assessment by the spouses and the patients. There was no difference between the partner's scores for the psychosocial impact of alcohol consumption, but the spouse overestimate the patient's temptation to drink.

Discussion: Results shows the discrepancies concerning marital functioning and temptation to drink. These results are important when planning treatment and prevention for drinkers and their families.

The utility of the stages of change for targeting an implementation intention intervention to reduce smoking

Arden, M.A.* & Armitage, C.J.; *Sheffield Hallam University, UK

Background: This study examined: (a) the effectiveness of an implementation intention-based intervention to reduce smoking, and (b) whether the stages of change represent a valid means of targeting such an intervention.

Methods: Participants were smokers ($N=350$) recruited from a UK company who were randomized to a passive control (questionnaire only), active control (questionnaire, plan to quit) or experimental condition (questionnaire, plan to quit, implementation intention). Behaviour and cognition were measured at baseline and 2-month follow-up.

Findings: Significantly more people quit smoking in the experimental condition than in the control conditions. Significantly more participants in the experimental condition quit smoking if they had been in the preparation stage (35.3%) compared to precontemplation (7.7%) and contemplation (8.7%).

Discussion: The results demonstrate that the "active ingredient" within an implementation intention is the linking of a critical situation with an appropriate behavioural response and that the stages of change represent a valid means of targeting public health interventions.

Effects of guided written disclosure on wellbeing in ovarian cancer patients and their partners

Arden-Close, E.,* Gidron, Y., Moss-Morris, R., & Bayne, L.; *University of Southampton, UK

Background: This study tested the effectiveness of guided written disclosure of diagnosis and treatment on distress and quality of life (QoL) in ovarian cancer patients and their partners.

Methods: In a RCT, 102 couples were assigned to either guided writing (about the patient's diagnosis and treatment) ($n = 53$) or control writing (about patients' activities) ($n = 49$), for 15 minutes per day over 3 days. Perceived stress, QoL, intrusions and illness-related couple communication were assessed at baseline, 3 and 6 month follow-ups. The writing was analysed using Linguistic Inquiry and Word Count.

Findings: The GDP increased intrusions in partners ($p = 0.009$), and worsened patient QoL ($p = 0.04$) at 3 months; there were no effects at 6 months (repeated measures ANOVAs). However, use of positive emotion words correlated positively with patient improvement (illness-related communication $r = 0.30$, perceived stress $r = -0.34$).

Discussion: Written disclosure may be detrimental short-term for this population. Positive emotion words enhance improvement in patients.

What is the best way to change self-efficacy to promote physical activity? A systematic review

Ashford, S.,* Edmunds, J., & French, D.P.; *Coventry University, UK

Background: Evidence supports self-efficacy as an effective method to increase physical activity. This systematic review aims to describe strategies for increasing physical activity self-efficacy, and determine the most effective techniques.

Methods: A search of three electronic databases identified 37 papers, describing 28 distinct intervention studies. Papers reporting lifestyle physical activity interventions with healthy adults were included. Multiple behaviour interventions and clinical or student populations were excluded.

Findings: The most common strategies used were mastery experience, including self-monitoring ($n = 16$) and feedback ($n = 12$), and persuasion ($n = 18$). Goal setting ($n = 17$) and barrier identification ($n = 8$) were also frequently used.

Discussion: A reliable database of techniques to increase self-efficacy has been developed. This database will provide interventionists with examples of strategies to draw upon in the development of physical activity interventions, and allow an evidence base to be developed specifying which techniques are most effective in increasing self-efficacy and physical activity.

Breastfeeding in public: Women's experiences of breastfeeding in public in the United Kingdom

Ashford, S.,* Wallace, L.M., Bayley, J., & Baum, A.; *Coventry University, UK

Background: WHO/UNICEF recommend exclusive breastfeeding for the first six months to maximise health advantages, but this is provided for under 2% of UK babies. The subjective norm construct of the TPB highlights the importance of personal normative influences on breastfeeding decisions; yet wider cultural norms are also potentially influential. This study aims to understand women's experiences of breastfeeding in public.

Methods: 1389 breastfeeding mothers completed a web survey. Quantitative and qualitative (thematic) analyses were applied to the survey data.

Findings: 22% of mothers with experience of breastfeeding in public were asked to stop ($n = 287$) and only half reported it was a positive experience ($n = 614$). Five themes were generated; Intimidation, social exclusion, lack of facilities, support and protection.

Discussion: The impact of cultural norms is a powerful influence on breastfeeding duration. A broad multi-faceted approach which encompasses society and legal policy is therefore required to increase breastfeeding rates in the UK.

Psychosocial concerns of adolescents with PCOS: Naturalistic data collection from an internet discussion forum

Aston, M.,* Kunihiro, J., & Percy, C.; *Coventry University, UK

Background: This study investigated the psychosocial concerns of adolescent girls with the common chronic endocrine condition polycystic ovary syndrome (PCOS), using an internet peer support forum. Such sites may offer more naturalistic data than that collected in clinic.

Methods: Thematic content analysis was conducted on 1037 messages from an on-line forum for adolescents with PCOS.

Findings: Concerns ranged from PCOS signs and symptoms, e.g. obesity, acne, hirsutism and period problems, to emotional issues, e.g. feelings of isolation, depression and anger. Specific concerns included fear of rejection from peers, as well as queries about the impact of PCOS on sexual activity and alcohol consumption. Participants used the forum to express difficult emotions, and to seek information and support.

Discussion: Adolescents with PCOS have age specific information and support needs which may not be met by routine healthcare. On-line peer support has the potential to address these, but further research is needed.

Beliefs, knowledge and understanding of symptoms of stroke and coronary heart disease

Ayers, B.* & Myers, L.; *Brunel University, UK

Background: In 2007 the UK government announced a 10-year, stroke-care strategy. They suggested awareness of coronary heart disease (CHD) was high but low for stroke. The present study aims to explore this view.

Methods: 193 participants (18–70 years) from the general population completed a questionnaire about beliefs, knowledge and understanding of symptoms of stroke/CHD. Data were analysed using ANOVA and chi square.

Findings: There was no evidence that participants' beliefs, knowledge, understanding of stroke were worse than for CHD. However, there were a number of significant gender differences for both conditions. Men had more realistic beliefs than women (e.g. for surviving a stroke, $F(1, 198) = 7.96$, $p < 0.01$. but women had better understanding of symptoms (e.g. drooping arms/legs for stroke, $\chi^2 = 6.33$, $df = 1$, $p < 0.05$).

Discussion: Findings did not support the UK government's views, but it is important to further explore the gender differences.

Moderators of implicit/explicit attitudes and eating behaviour

Ayres, K.,* Conner, M., Perugini, M., O'Gorman, R., & Prestwich, A.; *University of Leeds, UK

Background: Many people fail to perform healthy behaviours, despite holding positive attitudes towards acting healthily. Examining moderators and different types of attitudes (implicit/explicit

attitudes) might explain variance in behaviour unaccounted for by explicit attitudes alone. The present study tested these issues in relation to eating behaviour.

Methods: In a prospective design, participants ($N=93$) completed an Implicit Association Test (IAT) and individual difference measures (Self-Report Habit Index, SRHI; Need For Cognition, NFC, explicit attitudes toward chocolate and fruit). Participants then chose a chocolate or fruit snack before completing a 7-day food diary.

Findings: Regression analyses revealed that the IAT-behaviour relationship was moderated by SRHI (choice: $\beta=0.557$, $p<0.05$; diary: $\beta=0.236$, $p<0.05$), while the explicit attitude-diary behaviour relationship was moderated by NFC ($\beta=0.416$, $p<0.05$).

Discussion: Examining moderators of implicit/explicit attitude-behaviour relations may help to explain when, and for whom, implicit and explicit attitudes guide health behaviours.

Intention to obtain HBV vaccination among risk groups

Baars, J.E.,* Boon, B., De Wit, J., Van de Eijnden, R., Garretsen, H.F., & Van de Mheen, H.; *IVO, Rotterdam, The Netherlands

Background: This study explores which demographic, behavioural and social-cognitive factors predict intention to obtain HBV vaccination among drug users (DUs), commercial sex workers (CSWs), and men who have sex with men (MSM).

Methods: Our recruitment procedure was based on ethnographic mapping and targeted sampling in three regions in the Netherlands. In total $n=309$ DUs, $n=259$ CSWs and $n=320$ MSM were included in the present study and interviewed (semi-structured) on location (shelters, clubs, etc.).

Findings: Multivariate analyses among those susceptible to HBV show that attitude was the most important predictor of intention to obtain HBV vaccination among all three risk groups, next to health benefits specifically among CSWs and perceived susceptibility among MSM. Age was positively associated with intention among DUs, and negatively associated with intention among CSWs.

Discussion: Future HBV vaccination programs should address specifically perceived susceptibility among MSM, health benefits among CSWs and attitude towards vaccination among DUs, CSWs and MSM.

Effect of counseling on behavioural and psychosocial cardiovascular disease risk factors and quality of life

Baban, A.,* Kallay, E., Burdea, L., Sincai, D., Colcear, D., & Zdrenghia, D.; *Babes-Bolyai University, Romania

Background: The aim of this study was to evaluate the effect of the CHDR Program (Coronary Heart Disease Rehabilitation Counseling) on psychosocial and behavioural risk factors and quality of life in patients with coronary heart disease. The CHDRP is an intensive lifestyle modification counseling, which incorporate elements of motivational interviewing, negative emotions and stress management.

Methods: Participants included in the study (90 women, aged between 45–65 years) were divided in two groups: CHDRP Group ($n=45$) and Control Group ($n=45$) which received standard treatment. Data on risk behaviour (e.g. diet, exercise), quality of life variables (SF-36 Scale) and five

psychosocial risk factors (depression, anxiety, anger, family stress and social support) were collected from both groups at baseline, 2 months, and 4 months.

Findings: At 2 and 4 months, CHDRP group participants demonstrated significant improvements in 21 from 24 of the variables, while the control group improved in 11 outcomes.

Discussion: Our data indicate that lifestyle counseling significantly affects psychosocial risk factors and quality of life.

Psychosocial factors affecting adherence to antiretroviral drugs in patients with HIV/AIDS in Zambia

Bachi, G.,* Van Wersch, A., & Bunton, R.; *University of Teesside, UK

Background: The aim of the study was to explore the psychosocial factors affecting adherence to antiretroviral therapy in 40 male and 40 female HIV/AIDS patients, age 18–55.

Methods: Qualitative interviews were conducted with patients enrolled on the Development of Antiretroviral Therapy (DART) programme in Zambia. Data were analysed using thematic analysis.

Findings: Three major themes emerged, mentioned by all participant in relation to their adherence behaviour: ‘Social support’, ‘Disclosure of HIV status’, and ‘Unseen forces’. Medication was mostly obtained and provided by spouses, parents or children, depending on who in the family was still alive, this being the most influential factor for adherence. Other support was depended on not disclosing one’s HIV status to avoid isolation, being seen as out casts and being forced to flee one’s homes and start new lives on one’s own, forcing termination of the therapy.

Discussion: This study emphasises the importance of the cultural context of adherence behaviour.

Testing the efficacy and utility of a tailored intervention for dietary behaviour in adolescent girls

Baker, A.,* Bakhshi, S., & Rees, G.; *London Metropolitan University, UK

Background: The aim was to assess the efficacy of a brief tailored intervention utilising the Theory of Planned Behaviour to improve dietary behaviour and associated cognitions in adolescent girls.

Methods: Using a repeated measures design, a tailored intervention was compared with a generic intervention to examine changes to dietary behaviour (wholemeal bread, wholegrain cereal, fruit and vegetables) over 6 weeks. Participants were randomised by class to either a tailored intervention group (237) or control group (220).

Findings: Results showed significant increases in consumption, general attitudes and motivation to change ($p < 0.05$) for wholemeal bread only in the tailored group. Participants who received the tailored intervention had greater confidence and interest in improving their diet ($p < 0.05$).

Discussion: The findings suggest that brief tailored interventions can be used in adolescents with some success, although there is a lack of theoretical explanation. Further consideration is needed in design and content to maximise effect in this sample.

Marital stress related to personality dimensions

Balog, P.,* Szabó, G., & Kopp, M.S.; *Semmelweis University, Hungary

Background: The aim of this study was to investigate marital stress (MS) with regard to personality dimensions.

Methods: From the Hungarian Epidemiological Panel 2006 we selected men (1282), and women (1732) who were cohabiting in both times of examination, aged 65 years or younger. We assessed MS and personality dimensions: Shortened Marital Stress Scale, Cloninger's TCI, Rahe's Brief Stress and Coping Inventory, Shortened Purpose in Life Test, Shortened Anomie Questionnaire, Self-efficacy Scale and Shortened Hostility Scale. Partial correlations were performed, controlled for age and education.

Findings: Both in men, and women, we found positive associations between MS and novelty seeking ($r=0.13^{***}; 0.06^*$), boredom ($r=0.11^{***}; 0.15^{***}$) anomie ($r=0.09^{**}; 0.17^{***}$), hostility ($r=0.07^{**}; 0.12^{***}$), and negative associations between MS and self efficacy ($r=0.16^{**}; 0.14^{***}$), meaning of life ($r=-0.14^{***}; 0.18^{***}$), solidity ($r=0.11^{***}; 0.10^{***}$) and self-directedness ($r=0.23^{***}; 0.20^{***}$), and no association between MS and persistence.

Discussion: The results underline the importance of personality development trainings in young age, in order to provide for good marital relationships.

Who monitors blood pressure and/or glucose and how do they compare?

Baral, S.,* Haque, M.S., & McManus, R.J.; *University of Birmingham, UK

Background: Self monitoring of blood glucose (SMBG) is long established within diabetic populations however little is known of who monitors blood pressure (BP) and whether in the case of diabetes, prior experience of self monitoring of blood sugar (BS) affects practice.

Methods: To determine the prevalence, frequency, methods and characteristics of self-monitoring of blood pressure in hypertension and diabetes. A cross sectional survey was sent to eligible patients with hypertension and/or diabetes from general practices in the West Midlands. 592 questionnaires were analysable (53% Response Rate).

Findings: BP was self monitored by 159 (27%), blood sugar by 83 (14%) and both by 28 (5%). 32/77 (39%) reported monitoring BP more than once a day compared to 44/154 (28%) who monitored blood pressure once a week or more. Several people (17, 3.5%) were monitoring BP or BS without a formal diagnosis. Self monitoring for BP and/or BS was clear within this community, moreover was threefold compared to the general population.

Discussion: Understanding the behaviour and motivations within these groups is required to elucidate the reasons for the findings with important implications in managing these long term conditions.

The psychological intervention for hemodialysis patients

Bargiel-Matusiewicz, K.* & Trzcieniecka-Green, A.; *University of Warsaw, Poland

Background/Methods: The study was a randomized controlled trial using a convenience sample of 62 patients with end-stage renal disease who were assigned to experimental (psychological intervention) or control (usual care) groups. Participants in experimental group listened to CD with psychological intervention twice a day during 3 weeks. Instruments comprised: Cognitive Appraisal Inventory and STAI-Anxiety Inventory.

Findings: The experimental group after using psychological intervention had lower level of anxiety $t(31)=2.99$; $p=0.005$ and stronger intensity of cognitive appraisal of treatment situation as a challenge $t(31)=2.76$; $p=0.05$. The applied psychological intervention makes it possible to decrease the level of anxiety and thus to improve a patient's comfort. Perceiving illness as a challenge may help to concentrate upon possible forms of activity.

Discussion: The applied psychological intervention has a positive influence on patients' psychological state and may contribute to increasing their activity.

Positive outcome expectancies for healthy eating predict quality of diet in disadvantaged women

Barker, M.,* Lawrence, W., & Crozier, S.; *University of Southampton, UK

Background: Qualitative work suggests that beliefs about the benefits of healthy eating may explain why some disadvantaged women eat better than others. We examined the role of outcome expectancies (Bandura, 1986) in determining quality of diet in disadvantaged women.

Methods: 212 women recruited from Sure Start facilities in Southampton were interviewed using Schwarzer's 12-point outcome expectancies for healthy eating scale. Diet was assessed with a food frequency questionnaire. Details of age, number of children, educational attainment and dress-size were recorded. Linear regression was used to examine the relationship between outcome expectancies and diet.

Findings: More positive, but not negative, outcome expectancies for eating healthily were associated with better quality diet, explaining 14% of variation in dietary quality, independent of age, number of children, and dress-size.

Discussion: The public health intervention being planned in Southampton to improve the diets of disadvantaged women will address their understanding of the immediate and long-term benefits of healthy eating.

Beliefs about psychological help among firemen

Basińska, B.; Gdansk University of Technology, Poland

Background: The aim of this study was to identify beliefs and perceived barriers in psychological help, particularly stigmatization, in occupations involving high work-related and post-traumatic stress.

Methods: Barriers to care (Britt), Antonovsky's SOC-13, Perceived Job Stress Questionnaire (Dudek et al.), Scale of stress management (Urant, Czapinski), indicator of traumatic events during rescue action, subjective health evaluation and well-being (GHQ-12). The group consisted of 191 firemen.

Findings: 75% of the firemen consider psychological help unavailable. More than a half fear blaming for the problems and different treatment by the leadership, but not by peers. The perceived stress and participation in traumatic events are related with negative beliefs. Avoidance coping mainly accounts for not trusting psychologists and for fear about stigmatization (OR=0.69 and OR=0.74, respectively).

Discussion: Building up a friendly climate for mental health care by the leaders will favour elimination of barriers in psychological prophylaxis and treatment.

Does more "high-tech" lead to more "high-touch" in palliative care?

Beate, A.,* Ringdal, G.I., Rannestad, T., Loge, J.H., & Kaasa, S.; *Norwegian University of Science and Technology (NTNU), Norway

Background: Symptom assessment is important in palliative care. Computerized Technology (CT) is now available for use in such assessment. The aims of the present study were to investigate the

attitudes and behaviour toward the implementation of CT among personnel in symptom assessment at a palliative care unit.

Methods: Seventeen respondents participated in an in-depth interview. A qualitative approach was used in analyzing the data.

Findings: The conflict between the “high-tech” and “high-touch” is more visible in palliative care units and will make the implementation process more difficult. This effective use of “high-tech” can lead to more time released for “high-touch” and possible more quality of life for the patients.

Discussion: The focus on being close to the patient and to meet their needs and wishes can easily be seen as opposed to more efficient and accurate symptom registration.

Response shift and Quality of Life (QOL): A priming study

Beeken, R.,* Eiser, C., & Sheeran, P.; *University of Sheffield, UK

Background: The primary aim was to create a response shift in QOL scores by priming a shift in individuals' internal standards. Secondly, we investigated some of the antecedents and mechanisms proposed by the response-shift model of QOL.

Methods: 268 undergraduates completed a web-based questionnaire including demographics, measures of social comparisons, personality, mood and QOL, a priming task and a single item on standards. The data were analysed using independent *t*-tests, correlations and multiple regressions.

Findings: There was no effect of the prime on QOL. QOL was related to gender, personality, social comparisons and mood ($p < 0.01$) and to standards ($p < 0.05$). Regression models predicted 31.3–42.8% of the variance in QOL.

Discussion: Although we were unable to prime a response shift, the findings support the response-shift model of QOL and have implications for our understandings of QOL and its measurement, indicating a need to control for variables other than health status when assessing QOL.

Media and public concerns about food risks: Experts' views

Belendez, M.* & Martin-Llaguno, M.; *University of Alicante, Spain

Background: The objectives of this study were to examine experts' views on: (1) public beliefs about food safety and food risk messages; (2) public concerns regarding food issues; (3) the role of food experts in risk communication.

Methods: A web-based survey, adapted from De Boer et al. (2005), was completed by 120 food scientists drawn from different scientific and academic institutions across Spain.

Findings: Most experts stated that media coverage of food hazards includes confused information (82.5%) and that public expects absolute pronouncement on food risks (88.3%). Both mass media and education level were rated as having more influence on worries about food issues than income or lack of trust in food industry ($p < 0.001$). Many experts asserted that scientists should gain skills for interacting with the media (88.3%).

Discussion: Findings from this study support previous research in which experts showed negative opinions about media influences on worries about food safety.

Shift working, coping, happiness and physical health amongst Spanish nurses

Benavides, G.,* Martinez, F., Martin, B., Solanes, A., & Pastor, Y.; *University Miguel Hernandez, Spain

Background: Significant differences in coping, happiness and physical health, between two groups of nurses with different work schemes: (1) steady and (2) shift.

Methods: Research included $n=264$ nurses belonging to four different hospitals in Alicante province. Questionnaires: SF-36, the Lazarus & Folkman Coping Scale, the Jackson & Eklund Flow Scale and a physical symptoms list. The data were analyzed using *t*-test for independent groups.

Findings: Significant differences were found in: Health, physical functioning (SF-36) and the physical symptoms list ($p<0.05$); positive re-evaluation coping style ($p<0.05$); optimal experience/complete happiness ($p<0.01$); and subscales of goals, concentration and auto telic experience ($p<0.01$).

Discussion: Nurses with shifting turns informed of more physical symptoms related to their work and daily activities, while those with steady shifts showed higher positive re evaluation and optimal experience/happiness related to their job.

Can emotional support influence psychological and physical functioning in early RA patients?

Benka, J.,* Nagyova, I., Van Dijk, J.P., Rosenberger, J., Calfova, A., Macejova, Z., Middel, B., & Groothoff, J.W.; *PJ Safarik University Kosice, Slovakia

Background: The aim of this study was to explore the role of emotional support in the course of rheumatoid arthritis with regard to patients' psychological and physical functioning in early RA.

Methods: Data were collected annually over a four-year period (T1–T4) from 160 RA patients (83.8% women; mean age 48.2 ± 12.0 ; mean disease duration 22.8 ± 16.0 months). Emotional support (ESS) was assessed in the first wave and patients were trichotomised indicating low, medium and high emotional support. These groups were compared using ANOVA in psychological (GHQ-28) and physical (GARS) functioning.

Findings: Patients with higher emotional support had better psychological functioning in every wave (T1–T3 $p \leq 0.05$; T4 $p \leq 0.01$) but no significant differences in physical functioning were found. Functional status within groups declined over time but the levels of psychological functioning remained fairly stable.

Discussion: Results suggest that emotional support and psychological functioning are closely related in the long term when facing challenges of RA.

The use of imagery and hypnotherapy as complementary and alternative therapies in rheumatoid arthritis patients

Bennett, B.,* Callow, N., & Jone, J.; *Bangor University, UK

Background: The use of CAM therapies specifically in patients with chronic conditions is increasing. Rheumatoid arthritis is a chronic condition where the most commonly presented problems are pain and fatigue. Even with current medical treatment many patients still report high levels of pain, fatigue and functional disability. The purpose of the study was to examine the effect of imagery and hypnotherapy in patients with rheumatoid arthritis.

Methods: We conducted a randomised controlled intervention trial with 42 stable rheumatoid arthritis. Measures of pain, fatigue, and functional disability were taken at baseline, post-intervention and six months follow-up.

Findings: Pain: There was a main effect for time, $F(2, 78) = 5.826$, $p < 0.05$, both imagery and hypnotherapy groups reported a decrease in pain over time. Fatigue: There was a main effect for time but more importantly an interaction, $F(4, 78) = 3.783$, $p < 0.05$, both imagery and hypnotherapy reported a decrease in fatigue over time. Functional disability: There was a main effect for time, $F(2, 78) = 7.555$, $p < 0.005$, both imagery and hypnotherapy groups reported a significant decrease in functional disability. Furthermore, the decreases in functional disability were also clinically significant.

Discussion: We found that both imagery and hypnotherapy were effective at reducing the most commonly reported problems of living with RA.

Burnout and engagement in physicians at medical urgencies services in Spanish hospitals

Bernabé, M.,* Martín-Aragón, M., Quiles, M.J., Quiles, Y., Terol, M.C., Esclapés, C., & Tomás, O.; *Universidad Miguel Hernández, Spain

Background: We study the relations between Burnout and Engagement at medical urgencies services in Spanish Hospital.

Methods: In the pilot study participated physicians ($N = 40$) from four medical emergency services, 60% were men. The mean age sample was 38.4 (DT: 8.39) and the mean experience years was 9.82 (DT: 7.85). Burnout was measured by MBI-GS (Salanova & Grau, 1999), and Engagement measured by UWES (Schaufeli & Bakker, 2003), both are Spanish Version. We analyzed Cronbach's levels and correlation between scales.

Findings: Cronbach's α levels were high to all subscales in both surveys: Emotional-Exhaustion (0.80), Cynicism (0.81) and Lack of Professional Efficacy (0.77) to MBI-GS; Vigor (0.74), Dedication (0.80), but moderately lower in Absorption (0.65) to Engagement. There are only one significant relation between Emotional-Exhaustion and Vigor ($R: -0.47$; $p < 0.05$).

Discussion: Results show a possible way to study Burnout from other perspective in Health Psychology, is necessary increase the sample size to have reliable results.

The construct validity of the Somatosensory Amplification Scale revisited

Bernini, O.,* Berrocal, C., Ciarabella, A., Poli, P., & Guazzelli, M.; *University of Pisa, Italy

Background: The Somatosensory Amplification Scale (SSAS; Barsky et al., 1988) was originally developed for measuring sensitivity to bodily sensations. The present study explores the psychometric properties of the adaptation into Italian of the SSAS among chronic pain patients, with particular attention to the construct validity of the scale.

Methods: Two-hundred and forty six adult patients affected by chronic pain completed the SSAS, and additional questionnaires measuring constructs conceptually related with somatosensory amplification. They also participated in a cold pressor task for measuring pain threshold and tolerance. Statistical analyses for evaluating the psychometric properties of the questionnaire were carried out.

Findings: Results support the unidimensional structure, internal consistency, and test-retest reliability of the Italian version of the scale.

Discussion: Findings in this study suggest, however, that the SSAS does not likely measure somatic sensitivity, but a cognitive process, i.e., the extent to which people believe they are somatically sensitive.

Reliability and validity of the Italian version of the Chronic Pain Acceptance Questionnaire

Bernini, O.,* Berrocal, C., Pennato, T., & Guazzelli, M.; *University of Pisa, Italy

Background: The present study reports on the psychometric properties of the Italian version of the Chronic Pain and Acceptance Questionnaire (CPAQ; Mc Cracken et al., 2004). The CPAQ is aimed at measuring the tendency to experience pain without avoiding or controlling it, and the pursuit of life activities in a normal way even when pain is being experienced.

Methods: Participants included a sample of 102 patients with chronic pain. In addition to the CPAQ, subjects were asked to fill up additional questionnaires aimed at measuring constructs theoretically and empirically related with the acceptance of pain. Statistical analyses for exploring psychometric properties of the questionnaire were carried out.

Findings: Results support the factorial structure, reliability, and validity of the CPAQ in Italian samples.

Discussion: Findings also provide additional support to the association of acceptance of pain with measures of quality of life, physical functioning, and psychological well-being.

Evaluation of a computer based psychosocial intervention for individuals with visible differences

Bessell, A.,* Brough, V., Clarke, A., Harcourt, D., Moss, T.P., & Rumsey, N.; *University of the West of England, UK

Background: The present study assessed the effectiveness of a new computer-based psychological intervention to enable individuals with visible differences to cope more effectively with social situations.

Methods: 70 participants were randomly allocated to a no treatment control, face-to-face intervention or the computer program. Participants completed the HADS, DAS-24, BIQLI and short FNE at pre and post intervention and at 3 and 6-month follow-up. The data was analysed using multiple analyses of variance.

Findings: Preliminary pre/post data suggest a significant reduction in anxiety ($F(1,21)=16.36$, $p>0.001$) in both the computer intervention and the face-to-face intervention (pre=8.42, post=3.63), but not in the control (pre=7.77, post=9.50). All data including preliminary 3 and 6-month data will be reported.

Discussion: These findings provide encouraging support for the effectiveness of computer-assisted health interventions to offer support to those that cannot seek face-to-face interventions.

A qualitative analysis of patients' experiences of acupuncture: Implications for understanding non-specific effects

Bishop, F.L., Lewith, G.T., & Yardley, L.; University of Southampton, UK

Background: Acupuncture is a popular form of alternative medicine. It has shown large non-specific effects, but which factors contribute to these effects is unclear. We therefore aimed to identify psychosocial factors that might contribute to treatment outcomes in acupuncture.

Methods: We interviewed a purposive sample of 35 individuals (29 women) who had used acupuncture for various conditions and to varying effect. We used framework analysis to summarise and interpret the data.

Findings: Participants described intra-personal and inter-personal experiences before, during and after acupuncture needling that could contribute to treatment outcomes. Key themes in the analytic framework reflect individual physicality, cognition and emotion; social negotiation and support through the therapeutic relationship and close social networks; and societal and environmental influences.

Discussion: The psychosocial context of acupuncture from patients' perspectives is broad. We should expand placebo theories in order to generate more comprehensive understandings of non-specific treatment effects in complex interventions.

Patients' perceptions of the role of relatives in cancer adjustment

Blois, S.,* Morin, M., Dany, L., & Mahieux, M.; *University of Provence, Aix-en-Provence; "La Timone" University Hospital, Marseille, France

Background: Facing the growing consideration of relatives in the accompaniment of cancer patients, this research questions their place and their role in cancer experience such they are perceived by patients.

Methods: 42 semi-structured interviews were performed with cancer patients. Data were submitted to a Textual Analysis with Alceste, and to Interpretative Phenomenological Analysis in order to seize the links between categories.

Findings: Alceste analysis shows that relatives are mainly evocated in the "socio-affective universe" and stresses the importance of temporality in the definition of "close relatives". IPA results suggest that social support is perceived as a resource that complete or reinforce individual resources such as optimistic disposition, autonomy or stoicism. It also determines the efforts to cope with illness, and by the way, indirectly influences biopsychosocial adjustment.

Discussion: These results underline the importance of taking into account the biopsychosocial context of illness to understand the role of social support in cancer adjustment.

Using the Theory of Planned Behaviour and the Prototype Willingness Model to predict condom use among adolescents

Boer, H.,* Pieterse, M.E., & Kuijpers, D.; *University of Twente, The Netherlands

Background: We examined the value of the Theory of Planned Behaviour (TPB) and the Prototype Willingness Model (PWM) in predicting condom use.

Methods: Among 205 adolescents, we assessed attitude, subjective norms, self-efficacy and intended use. Respondents indicated willingness to engage in unsafe sex, and rated characteristics of, similarity to and attractiveness of a typical user (unsafe sex prototype) and non user of condoms (safe sex prototype).

Findings: Intention was negatively related to attractiveness of the unsafe sex prototype and positively related to attitude and social norms. Condom use during the last year was related to attitude, social norms and self-efficacy. Condom use during the last sexual intercourse was related to similarity to and attractiveness of the safe sex prototype, and to social norms.

Discussion: We conclude that condom use over longer time periods is stronger related to TPB variables, while condom use during a single sexual encounter is stronger related to PWM variables.

Explaining intended and actual condom use among rural, illiterate females in the Amhara region, Ethiopia

Bogale, G.W.,* Boer, H., & Seydel, E.R.; *Educational Media Agency, Addis Ababa/University of Twente, The Netherlands

Background/Methods: We examined the value of the Theory of Planned Behaviour (TPB) and Protection Motivation Theory (PMT) in explaining condom use among 200 illiterate females, from the rural central highland of Ethiopia. Using female data collectors, who read aloud questionnaires, we collected data on condom attitude, subjective norms, self-efficacy, perceived vulnerability to HIV infection, response-efficacy and intended condom use. The reliability of all scales was good.

Findings: Compared to non users, users of condoms scored significantly higher on all social cognitions. Intended condom use was significantly related ($R^2=0.87$) to self-efficacy ($\hat{a}=0.63$), attitude ($\hat{a}=0.15$) and perceived vulnerability ($\hat{a}=0.14$). Logistic regression analysis indicated that actual condom use was significantly related (Nagelkerke $R^2=0.65$) to educational level ($B=0.30$), attitude ($B=0.30$) and intention ($B=0.39$).

Discussion: We conclude that social cognition models are valuable tools for the analysis of condom use among illiterate populations in Africa.

Experiences of partners of people newly diagnosed with multiple sclerosis: An interview study

Bogosian, A.,* Moss-Morris, R., Yardley, L., & Dennison, L.; *University of Southampton, UK

Background: Partners of people with Multiple Sclerosis are known to experience a heavy physical and psychological burden. Little research explores in details the partners' experience in the first few years after diagnosis. The aim of this study was to discover how partners of people relatively newly diagnosed with MS perceive the illness and how they adjust.

Methods: 15 semi-structured telephone interviews were conducted to assess partners concerns and difficulties. Data were audio-taped, transcribed, and analysed using inductive thematic analysis.

Findings: Participants were unaware of what the future might hold, hence they felt helpless and out of control. Furthermore, partners reported that other people could not understand and support them which led to a feeling of social isolation.

Discussion: The research illustrated the disruptive impact that MS has on partners' lives and highlights the need for support to focus on partners' needs as well as the needs of the person with MS.

Self-regulation, ego-depletion and habit related to misperception of physical activity behaviour

Bolman, C.,* Mudde, A., Van Stralen, M., & Lechner, L.; *Open University of the Netherlands, The Netherlands

Background: Many people assume their physical activity level (pa) as sufficient, while it does not meet the health guideline (overestimators). Studies have shown that these people have less motivation and intention to change than those who correctly estimate their behaviour as insufficient (low realists). The aim of this study was to explore differences in self-regulation (goal setting, coping planning, action planning, implementation intentions), ego-depletion and habit strength between people with and without misperception of their pa.

Methods: A prospective online study was performed ($N=577$; response 63%). Misperception was measured by combining a subjective estimation of pa with a detailed measurement by SQUASH. Existing scales measured cognitive factors and habit.

Findings: Overestimators reported more self-regulation and habit strength and less ego-depletion than low realists did.

Discussion: Changing pa by enhancing self-regulation or habit strength will not be effective in overestimators as long as they persevere in their wrong perception of their pa.

Relationships between workplace bullying, coping with job stressors and depression

Bolman, C.,* Vollink, T., Pouwelse, M., & Dehue, F.; *Open University of the Netherlands, The Netherlands

Background: Workplace bullying may lead to problems such as depression. Aim of the study was to gain insight into the relationships between workplace bullying, coping with job stressors and depression.

Methods: Self-reported data were obtained from a nation-wide survey among 1000 Dutch employees (response rate = 36%). The Beck Depression Inventory, the Leyden Mobbing scale and the Occupational Stress Indicator were measured.

Findings: Regression analyses indicated that the relationship between workplace bullying and depression was moderated by 'emotion focused' and 'problem focused' coping. In those who frequently used denial and compensatory behaviour (emotion focused), bullying was significantly related to depression, while it was not in case of little use of this type of coping. The relationship between bullying and depression was stronger if respondents reported more problem focused coping (direct action, seeking social support).

Discussion: The relevance of helping persons to cope with job stressors in case of workplace bullying.

IPQ-R personal control predicts mortality in liver transplant recipients

Bonaguidi, F.,* Michelassi, C., & Filippini, F.; *CNR Institute of Clinical Physiology, Pisa, Italy

Background: Aim of the study was to evaluate the role of illness representation in predicting post-liver transplant prognosis.

Methods: Eighty-three end-stage liver disease patients, (mean age 54 yrs), scheduled for liver transplantation were assessed for illness representation by Illness Perception Questionnaire (IPQ-R). After transplant, patients were followed for three years for death events. A multivariate analysis (Cox model), including IPQ-R components, demographic and clinical data as covariates, was performed to assess the relative contribution of each variable to mortality.

Findings: During the follow-up, 12 deaths were recorded. The Cox analysis identified in IPQ-R Personal Control the most significant mortality predictor. Patients with a high score on Personal Control had a 4.3 higher risk of death compared with patients with low score.

Discussion: Strong belief that the disease is controllable was related to mortality following liver transplantation. Further understanding of psychological influence on post-transplant outcome could help in implementing psychological interventions to improve outcome.

Using psychological theory to design a health promotion intervention delivered by primary care dentists

Bonetti, D.,* Clarkson, J.E., Young, L., & Ramsay, C.; *University of Dundee, UK

Background: Little is known about how best to impart oral hygiene advice in primary care. The main objective of this study was to use psychological theory to design a health promotion intervention that could be delivered by primary care dentists.

Methods: Design – A cluster RCT. Measures were assessed by questionnaire and by clinical examination at baseline and at eight weeks (± 2 weeks). Participants 50 general dental practitioners across Scotland/489 patients attending for a check-up. Outcome measures – Cognitive: Self-efficacy; Behavioural: Toothbrushing; Clinical: Plaque. Procedure – Dentists in the intervention group delivered oral hygiene advice framed using Social Cognitive Theory (Bandura) and action planning (Gollwitzer). Participants in the control group received routine care.

Findings: The intervention group had significantly higher self-efficacy (CI=0.01 to 1.8), better timing and method of toothbrushing (CI=1.9 to 4.8; CI=3.6 to 7.8) and a better clinical outcome (plaque CI= -25.7 to -7.7).

Discussion: A simple, theory-based intervention delivered within the constraints of a primary care environment was more effective than routine care in influencing oral hygiene cognitions, behaviour and health.

How interpersonal exchange contexts mediate the passage from health knowledge into safe practices: A cross-cultural comparison

Bosio, A.C.,* Graffigna, G., & Olson, K.; *Università Cattolica di Milano, Italy

Background: This paper presents the results of a qualitative cross-cultural research (designed according to a discursive and conversational analysis approach) that was aimed at analysing how the situational context in which the interpersonal exchange has place mediates the passage from the reception to the “use” of HIV-AIDS preventive information.

Methods: The study consisted in 16 homogeneous focus groups (8 in Italy and 8 in Canada), with young people (18–25 years old), in 4 different situational contexts (face-to-face; on-line forum; on-line chat; on-line forum + chat) in which a preventive message on HIV-AIDS was introduced as a discussion stimulus.

Findings: The study showed that the different contexts of the exchange specifically influenced the group’s “metabolising” of preventive information: This happened in a way that was fairly constant in the two countries.

Discussion: In particular the forum + chat context promoted a better implication in the discussion and a more pragmatic and pro-active attitude toward HIV-AIDS risk prevention.

Predictors of cancer worry following mammography in younger women on a family history breast screening programme

Brain, K.,* Henderson, B., Tyndel, S., Bankhead, C., Watson, E., Clements, A., & Austoker, J.;
*Cardiff University School of Medicine, UK

Background: Previous reports of this prospective study highlight the psychological benefits of a breast screening programme for younger women with a family history of breast cancer. The present paper identified risk factors for cancer worry in these women.

Methods: 1286 women completed questionnaires one month prior to screening (T1), and one (T2) and six (T3) months after screening results. Breast cancer worry, perceived risk, cognitive appraisals, coping, and dispositional optimism were measured.

Findings: T1 cancer worry explained 56/61% and 54/57% of the variance in worry at T2 and T3 respectively. Other salient predictors included high perceived risk of breast cancer, appraisals of high relevance and threat associated with the family history, and low perceived ability to cope emotionally. A false positive screening result, pessimistic personality, and religion/substance use coping predicted outcomes at T2 but not T3.

Discussion: Interventions to ameliorate high levels of cancer worry and negative appraisals are needed.

Influence of content of patient testimonials on the evaluation of patient characteristics

Brakel, T.* & Dijkstra, A.; *Groningen, The Netherlands

Background: Personal disclosures of patients may influence how they are evaluated by others. These evaluations may be influenced by the information the patient provides but also by the recipients needs.

Methods: In an experimental study, healthy female participants ($N = 61$) listened to a female cancer patient's testimonial (25 minutes) in which the patient told about either her negative emotions during radiation therapy or coping strategies she used. The dependent variable was participant's evaluation of the patient.

Findings: The results showed a main effect of condition, meaning that patients who told about their coping were perceived as more sympathetic, courageous and realistic. As indicated by a significant interaction, this effect was especially strong in participants with a strong inclination to compare themselves to others.

Discussion: These data show that the personal information that patients provide to others influences how others perceive them. This may have consequences for the others' motivation to provide social support.

The moderating effects of attentional bias in emotional disclosure

Brant, H.,* Adamopoulous, E., Byrne-Davis, L., Dieppe, P., Vedhara, K., Mackintosh, B., Hoppit, L., Tovee, M., & Pennebaker, J.; *University of Bristol, UK

Background: The aim was to investigate whether individuals with an attentional bias toward threat information, would engage and therefore benefit more from an emotional disclosure task.

Methods: A student sample ($N=105$) completed a standardised dot probe attentional bias task and the Profile of Mood States. Individuals whose scores were in the top and bottom 20% ($N=38$) were identified as having a negative or avoidant attentional bias and completed a standard emotional disclosure intervention. Measures of mood were repeated at 1, 4 and 8 weeks post-disclosure.

Findings: Regression analyses were conducted and negative attentional bias was a significant predictor of an improvement in depression, anger, fatigue and total mood disturbance scores at 8 weeks compared to the avoidant group.

Discussion: This suggests a moderating role of attentional bias in emotional disclosure. As attentional bias can be modified this could indicate a method by which the emotional disclosure intervention could be optimised.

Evaluation of a digital relapse prevention system

Brendryen, H. & Kraft, P.; University of Oslo, Norway

Background: Happy Ending (HE) is a smoking cessation intervention delivered by internet and cell-phone.

Methods: In this study we evaluated the relapse prevention (RP) component of HE. Data stem from two RCTs (total $N=686$). The RP system is based on Marlatt's cognitive behavioural model of relapse; and is delivered by Interactive Voice Response technology (IVR). The RP-system is monitoring the smoking-status of participants; provide encouragements to abstainers, and therapy to lapsers. This is done automatically and interactively by daily IVR-calls to the participants.

Findings: Compared to the other components of HE, adherence to the RP-system was found to be the best predictor of abstinence, and was also rated more useful. Additionally, as compared to a control group, those receiving HE with the RP-component tended to attribute lapses more constructively both in terms of failures and successes.

Discussion: In sum, the results show great promise for this form of RP systems.

Antecedents of anticipated regret related to HPV vaccination

Brewer, N.T.* & Ziarnowski, K.; *University of North Carolina School of Public Health, USA

Background: Anticipated regret strongly motivates health behaviours, but its antecedents are not well understood.

Methods: We conducted experiments with parents ($N=889$) examining whether HPV vaccination mandates and harm would influence regret. Four experiments used a 2 (default vaccine administration or not) \times 2 (harm or not) factorial design.

Findings: When adolescents experienced harm (genital warts or abnormal Pap smears) that vaccinating could have averted, vaccinating elicited lower anticipated regret in parents than not vaccinating (experiments 1–2). When adolescents experienced neurological harm that vaccinating could have caused, parents anticipated more regret from having vaccinated than not (experiment 3). Surprisingly, when adolescents became sexually disinhibited, parents anticipated LESS regret if they had been vaccinated, even if vaccination caused the harm (experiment 4). Default status had no effect.

Discussion: The findings suggest that anticipation of sexual disinhibition more complexly affects anticipated regret than previously thought. We will discuss the findings' theoretical implications for conceptualizing anticipated regret.

Patients' spontaneous discourse on the importance of significant others in the course of transplantation: A qualitative study

Bridy, C.,* Ruffiner-Boner, N., Fasseur, F., Santiago, M., Pascual, M., & Piot-Ziegler, C.;
*University of Lausanne, Switzerland

Background: This study explores significant ones' implication before and after transplantation.

Methods: Longitudinal semi-structured interviews were conducted in 64 patients awaiting all-organ transplantation. Among them, 58 patients spontaneously discussed the importance of their significant other in their daily support. Discourse analysis was applied.

Findings: During the pre-transplantation period renal patients reported that significant others took part in dialysis treatment and participated to regimen adherence. After transplantation, quality of life improved and the couple dynamics returned to normal. Patients awaiting lung or heart transplantation were more heavily impaired. Significant others had to take over abandoned roles. After transplantation resuming normal life became gradually possible, but after one year either transplantation health benefits relieved physical, emotional and social loads, or complications maintained the level of stress on significant others.

Discussion: Patients reported that significant others had to take over various responsibilities and were concerned about long-term stress that should be adequately supported.

Primary health care service: The role of psychologists (Lisbon)

Brigido, M.; Cacém Primary Health Care Service, Portugal

Background: It is intended to characterize and to put into context the intervention of the Psychologist in a Primary Health Care Service, namely in the Cacém Health Centre (Lisbon).

Methods: Through the participation of multi-skilled team, with health professionals such as Doctors, nurses, social workers, health & ambient technicians, the psychologist integrates the following programs: Healthy school environments; Women's health & family planning; Maternal Health.

Findings and Discussion: The necessity of giving special attention to the psychological welfare of the individuals and groups, through the different phases of the life cycle. In this place the Psychologist functions are: (1) Direct Assistance: Through the evaluation and accompaniment of critical and problematic situations; as there only is one Psychologist in the Cacém Health Centre, the consultations are not open to the community. The Patients are referred by the multi-skilled team or by the General Practitioner. (2) Mentoring: Through training sessions either for community individuals such as teachers, carers, youngsters, etc., or to other Health Technicians. (3) Research: Aiming at aspects considered relevant in health psychology.

Does personal risk information change cardiac patients' risk perceptions?

Broadbent, E.,* Leggat, A., & Kerr, A.; *The University of Auckland, New Zealand

Background: This study investigated whether giving personal cardiac risk information to patients with acute coronary syndrome could improve the accuracy of their cardiac risk perceptions.

Methods: 79 patients with acute coronary syndrome were recruited from the coronary unit of a large hospital. Patients were randomised to receive either standard care or standard care plus a brief nurse-led individual discussion about personal cardiac risk based on a computerised decision support system. Patients' perceptions were assessed before the intervention, the next day and at 3-months.

Findings: Patients who received the intervention reported better understanding of risk information and higher illness coherence, shorter timeline perceptions, and higher control perceptions compared to the control group. There was no difference in risk perceptions between groups.

Discussion: Provision of personal risk information can improve illness perceptions. Further research needs to investigate how to alter personal risk perceptions in cardiac patients.

Diabetes self-care beliefs and the self-as-doer: Exploring behavioural identification

Brouwer, A.M.; University of Wisconsin-Milwaukee, USA

Background: Diabetes requires consistent self-care management. Yet, little is known about self-care beliefs among diabetics. This study uses the recently developed self-as-doer construct, which assesses one's identification as the "doer" of particular actions, to explore such beliefs.

Methods: Ninety-two people participated in a larger study on diabetes illness identity and self-care. Participants created self-as-doer statements (e.g., "blood-glucose-tester") which reflected ideas about behaviours that could affect their disease. Open-ended responses were analyzed qualitatively for content.

Findings: Responses were primarily related to diet, exercise, blood-glucose control, and weight. Less common self-as-doer constructs related to stress management, eye/foot care, and social support.

Discussion: Self-as-doer statements were generally consistent with diabetes self-care guidelines (ADA, 2005). However, non-traditional constructs also emerged suggesting that interventions should focus on psychosocial concerns (e.g. stress) along with traditional care. Future research should explore behavioural self-efficacy relating to self-as-doer statements and whether acquisitions of such statements predict related behavioural outcomes.

Volitional intervention development for adolescent contraceptive use: Findings from engaging with sexual health professionals

Brown, K.E.,* Abraham, S.C.S., Joshi, P., & Wallace, L.M.; *Coventry University, UK

Background: The UK has the highest rates of teenage conception and STI transmission in Europe, and Government targets for reductions are unlikely to be met. Research shows teenagers may intend to use contraception but fail to translate their intentions into action.

Methods: A computer-based intervention was designed. This applied psychological theory, including implementation intention formation. A pre-test was conducted with 10 health professionals and interviews conducted with each. Interviews were transcribed and subjected to thematic analysis.

Findings: Interviews provided specific feedback for further development of the intervention. They also revealed beliefs held by the professionals about influences on sexual health education and provision, such as gender related power differentials. Incongruence between Government prescribed reduction targets and educational health promotion approaches adopted were also identified.

Discussion: Findings hold implications for the delivery of sexual health services and education in Britain, and demonstrate the importance of re-testing and involvement of potential users.

Defensive responses to an emotive anti-alcohol message

Brown, S.* & Locker, E.; *University of Derby, UK

Background: We investigated the idea that emotive imagery used in health promotion advertising can facilitate a defensive response that adversely affects risk perceptions.

Methods: One hundred student drinkers were exposed to either a printed message accompanied by images designed to maximize emotional distress, or the same message presented using less emotive images.

Findings: A three way interaction was found, whereby the presentation of distressing images caused lower personal risk estimates in participants higher in denial and vulnerability to alcohol-related problems. This effect may have been mediated by lower reading times, suggesting that participants avoided the messages.

Discussion: Moderation by denial suggests that the effect is attributable to defensiveness, whilst moderation by vulnerability suggests that it is threat specific. Emotive images might trigger defensive avoidance responses that reduce message effectiveness in some audience subpopulations.

An implementation intention intervention to promote intergenerational family communication about mammography

Browne, J.L.* & Chan, A.Y.C.; *University of Wollongong, Australia

Background: We investigated intergenerational family communication as a novel strategy to encourage older women to have mammograms.

Methods: Young women aged 18–39 ($N=116$) completed a Theory of Planned Behaviour (TPB) questionnaire that measured attitudes, perceived control, perceived norms, and intentions regarding initiating a conversation about mammography with an older female relative. Participants were randomly allocated to either the control or experimental condition, and the latter formed implementation intentions (IIs) concerning initiating a conversation about mammography with an older female relative.

Findings: At six-week follow-up, while intention levels for both groups had risen significantly, the experimental group were more likely than controls to report having initiated the conversation with an older female relative ($\chi^2=4.838$, $p=0.028$), with positive perceived outcomes. Condition predicted behaviour over all TPB variables, except perceived control.

Discussion: The findings provide impetus for further work examining the role of intergenerational family communication in mammography promotion, and provide evidence for IIs in facilitating such communication.

Assessing child dental anxiety: The Revised Smiley Faces Program

Buchanan, H.; University of Nottingham, UK

Background: Child dental anxiety is a common and distressing problem. The Smiley Faces Program (SFP) is a validated computerized scale to assess dental anxiety in children. This study aimed to validate a revised version of the SFP which includes extra items, an updated response set and a voice-over.

Methods: 420 children aged 5–11 years completed the SFP and a valid paper-and-pen anxiety questionnaire to test concurrent validity. Forty children completed the program again 2 weeks later for test-retest reliability.

Findings: The SFP was internally consistent ($\alpha=0.8$), demonstrated concurrent validity ($r=0.7$) and test-retest reliability was good ($r=0.8$).

Discussion: These findings suggest that the SFP is a reliable and valid measure for assessing children's dental anxiety. It could be used to identify children with high dental fear; to tailor treatment interventions to their individual needs and to monitor the effect of future treatment interventions.

Risk factors at work in nursing for the elderly

Buruck, G. & Richter, P.; University of Dresden, Germany

Background: The work-place situation of nurses is characterised by high work demands and vulnerability for stress-related health outcomes (Schaufeli, 2007). Risk-models require the combined analysis of psychological and physical workload. In the last two decades two theoretical models for understanding stress at work have gained considerable popularity. The Job-Demand control model (JDC) (Karasek & Theorell, 1990; de Lange, Taris, Kompier, & Houtman, 2003) and the Effort-Reward Imbalance model (EIR) (Siegrist, Starke, Chandola, Godin, Marmor, Niedhammer & Peter, 2004).

Methods: This study, consisting of 194 nurses in elderly care (response rate: 85, 6%), intended to identify risk factors at work by use of questionnaires and objective method.

Findings/discussion: Muscle pain and reduced psychological health were associated with high psychological job demands, non-permanent work contracts, and increased physical workload. In addition, poor ergonomic conditions, reduced social support, and information deficits, jointly, are correlated with higher muscle-skeletal complaints.

Emotional disclosure during pregnancy: The effects of the expressive writing in 47 women

Cammarata, G.,* Di Trani, M., & Solano, L.; *University of Rome, Italy

Background: The purpose of the study was to evaluate the effects of writing about pregnancy on different parameters of birth and post-partum, in interaction with alexithymia levels.

Methods: The participants were 47 pregnant women. The experimental group (24 Ss.) wrote on 3 occasions, once a week for 20 minutes, about their experience of pregnancy.

Findings: Our results showed that alexithymia was in relationship to several psycho-biological variables. For example, women who gave birth to their child with a caesarean section or which had a difficult delivery showed higher scores on TAS-20, than the other women. Furthermore, subjects who had difficulties in resuming sexual intercourse after showed higher scores on TAS-20, than the control group.

Discussion: Our results showed a significant positive effect of written disclosure on the reduction of alexithymia levels. The experimental group showed a shorter time of latency with feeding and lower number of paediatric examinations during the 2 months after birth.

The use of internet support group in prostate cancer treatment decision making: A content analysis

Campbell, K.A.,* Coulson, N.S., & Buchanan, H.; *University of Nottingham, UK

Background: This study explores the ways in which treatment decision making in prostate cancer is being discussed in a public internet support group.

Methods: Fifty threads (237 messages) from a prostate cancer internet support group were analysed for evidence of exchanges regarding treatment decision making, using content analysis.

Findings: 145 messages (61.2%) involved discussion regarding cancer treatment decisions. Forty five requests and 426 responses were found within these messages. People requested personal experience of others (33.3%), information (28.9%) and advice (22.2%), about treatment (71%) and treatment providers (15.5%). In response, information (50.5%), advice (40.2%) and personal experience (9.3%) were offered. Information and advice mainly related to treatment (82.4% and 50.5% respectively), while personal experiences mainly consisted of success stories (65%) and none offered a failure story.

Discussion: This internet support group was frequently utilized by prostate cancer patients facing treatment decisions. Future research should examine the mechanism through which online information is integrated into patient decision making.

Women's intentions to undergo prenatal screening: Predictive validity of an extended Theory of Planned Behaviour

Carroll, F.* & Ravis, A.; *University of Bristol, UK

Background: This study examined the utility of an extended Theory of Planned Behaviour (TPB: Ajzen, 1991) for the prediction of women's decisions to undergo prenatal screening.

Methods: A cross sectional survey design was employed. One hundred and seven females (mean age = 27 years) voluntarily completed a questionnaire comprising measures of test familiarity, test knowledge, TPB variables, moral norms, anticipated regret and prototype perceptions.

Findings: Hierarchical regression analysis showed that the extended TPB accounted for 50% of the variance in prenatal screening intentions, above and beyond age, test familiarity and test knowledge. Age was negatively associated with prenatal screening intentions.

Discussion: The findings show that an expanded TPB possesses utility for the prediction of women's prenatal screening intentions. Since increasing age is a risk factor for abnormalities in pregnancy (Morris, Mutton and Alberman, 2002), further research is required to understand why increasing age is associated with weaker intentions to undergo prenatal screening.

Predictive models of adolescents' health: Gender, disconnections from family and school

Cartierre, N.,* Demerval, R., Coulon, N., & Nandrino, J.L.; *University of Lille, France

Background: This study aims at examining the links between on the one hand adolescents' health behaviours and on the other hand gender and disconnection from family and school.

Methods: Participants were 1036 French 14 years-old adolescents. Thirteen health indicators were considered. Logistic regressions were used to determine the predictive models using the gender, family and school disconnections as well as the interactions between the factors.

Findings: Four different types of predictive models emerge from the logistic regressions. Thus, depending on the considered health indicator, the gender, family disconnection and school disconnection factors do not have the same influence and do not combine with each other in the same way.

Discussion: These results show that the effects of the processes at stake in the human development vary as a joint function of the characteristics of the developing person, the context, and the nature of the outcome under consideration (Bronfenbrenner, 2006).

Externalized disorders among girls and boys with cumulative contextual disconnection

Cartierre, N.,* Demerval, R., Delelis, G., & Nandrino, J.L.; *University of Lille, France

Background: This study aims at examining the links between contextual disconnections, from family and/or school, and the externalized disorders for girls and boys.

Methods: Middle school adolescents – 521 girls and 466 boys – participated in this research. Three groups were constituted – No disconnection, Family or School disconnection (single disconnection), Double disconnection (from both family and school) – and an externalized disorders measure was used. Statistical analyses were multivariate analysis and post-hoc comparisons.

Findings: The disconnected participants have more unfavourable scores than the not-disconnected ones. The double disconnection increases the risks of externalized disorders, compared to a single one. Overall, boys exhibit more unfavourable externalized scores than girls but the scores of double-disconnected girls come close to unfavourable scores of boys.

Discussion: This study highlights amplification effects of health disorders following cumulative disconnections. It reveals a complex dynamic in which the links between externalized disorders and contextual disconnection are modulated by gender.

Inhabiting different worlds: Clients and physiotherapists reflect on the experience of physiotherapy for ataxia

Cassidy, E.,* Reynolds, F., Naylor, S., & De Souza, L.; *Brunel University, UK

Background: Despite its prevalence almost no research has been conducted on the experience of living with progressive cerebellar ataxia. This paper reports the experience of physiotherapy from the perspectives of physiotherapists and clients with ataxia.

Methods: Twelve people with cerebellar ataxia were interviewed and 22 specialist physiotherapists participated in four focus groups. Data was analysed using Interpretative Phenomenological Analysis.

Findings: The findings suggested that physiotherapists and clients inhabited very different life worlds. Physiotherapists were frustrated and uncertain about their treatment approach and focussed on progress and improving impairments and outcomes. In contrast clients were not seeking advice from physiotherapists about how to cure or recover from their condition. Physiotherapy was regarded as a resource; a means of preserving function to prolong participation in meaningful activities.

Discussion: Understanding the experiences and perspectives of physiotherapists and clients should help to align the needs and expectations of clients with the rehabilitation approaches and support provided by physiotherapists.

Impact of caring as a function of communication, information, and relationship to carer

Cassidy, T.* & Fotiadou, M.; *University of Ulster, UK

Background: Caring for a loved one with cancer imposes a burden that stretches psychological resources and since the carer is a key part of health care there is a need to understand the factors that affect burden.

Aims: This study set out to explore the role of perceived burden, satisfaction with health care, family support, the carer role, time since diagnosis, and relationship with the care recipient in the well being of the carer.

Methods: In all 157 carers (30 males and 127 females), 60 caring for a spouse, 54 caring for a child, and 43 caring for a parent, were assessed.

Findings: Hierarchical multiple regression analysis shows that the best predictors of well being were support, satisfaction with health care communication, time since diagnosis, and perceived burden.

Discussion: This research suggests that more attention needs to be given to the psychosocial context and process involved in health care.

Increasing fruit and vegetable intake over a six-month period: An investigation of 'booster' implementation intentions

Chapman, J.* & Armitage, C.J.; *University of Sheffield, UK

Background: This study tests a new concept of 'booster' if-then plans to enhance the longitudinal effectiveness of implementation intentions to increase fruit and vegetable intake in a young adult population.

Methods: Participants ($N=650$) completed measures of motivation and behaviour before being randomised to a 3 (intervention format: Passive control vs. active control vs. if-then plan) \times 2 (booster intervention: If-then plan at 3 months vs. no if-then plan at 3 months) between-participants design. Follow-up measures were taken at three (T2) and six months (T3). Analyses were conducted on an intention to treat basis, ANOVA was used.

Findings: (a) total intake increased by 0.23 portions over 6 months ($F(1, 644) = 37.01, p < 0.01$). In the if-then plan conditions: (b) allocating a booster at three months resulted in a 0.53 portion increase from T2–T3 ($F(1, 118) = 54.06, p < 0.01$) (c) no booster at three months lead to a decrease by 0.22 portions from T2–T3 ($F(1, 118) = 15.59, p < 0.01$).

Discussion: Booster if-then plans can be used to enhance the longitudinal efficacy of implementation intentions in this area. Further research is required to apply these preliminary ideas to other health behaviours.

'How do people change their diet? A qualitative study

Chapman, K.* & Ogden, J.; *University of Surrey, UK

Background: Research concerning eating behaviour has focused on difficulties that individuals experience in making and maintaining changes in their diets. This study explored how healthy people change their diet in the longer term and what factors facilitate this process.

Methods: Twenty participants, predominantly British, from diverse occupational backgrounds were interviewed. The results were analysed using Interpretative Phenomenological Analysis and revealed that diet changes can occur with or without individual's active involvement (active path and passive path).

Findings: Four themes emerged that denote the mechanisms of change: Accumulation of evidence, trigger, imposed change and seamless change.

Discussion: For some people, changes in diet occur in an active way and are motivated by their determination to change. For some, this sort of change takes place with the accumulation of evidence. For others, the dietary changes are spurred on by a trigger. Some people also experience dietary changes in a passive way. They may be aware and accepting of changes taking place that have been imposed upon them by new circumstances. They may also be unaware of changes that are the result of a seamless process of getting older or being able to buy a bigger variety of produce.

Befriending improves subjective global health ratings in carers of people with dementia

Charlesworth, G.* & Newman, S.; *University College London/North East London Mental Health Trust, UK

Background: Subjective ratings of global health predict mortality. This study examined whether emotional support influences subjective global health ratings (SGHR) in carers.

Methods: Longitudinal data were collected from family carers as part of the BEfriending and Costs of CAring (BECCA) randomised controlled trial. Measures of SGHR, psychological well-being, loneliness, social support and coping were assessed at baseline and 2 year follow-up for 179 carers. Hierarchical linear regression was used to examine variables related to SGHR.

Findings: SGHR declined overall, but improved for those using befriending. Baseline psychological well-being and perceived social support did not correlate with change in SHGR. Baseline SGHR and loneliness accounted for 30% of the variance in change in SGHR, with use of emotional support and engagement in befriending each explaining an additional 2%.

Discussion: This study demonstrates the importance of emotional support in maintaining SGHR in family carers.

Illness perception among children suffering from asthma and their parents

Chateaux, V.,* Brockly, J., & Spitz, E.; *Universite Paul Verlaine-Metz, France

Background: The assessment of illness perception in chronic conditions has become crucial to research and clinical practice. This study compared children's and parents' asthma perceptions among children suffering from asthma.

Methods: One hundred and forty six asthmatic children (8–12 years old) filled in the Revised-Illness Perception Questionnaire (IPQ-R, Moss-Morris et al., 2002); the latter was also completed by ninety-two parents.

Findings: Results show significant differences between the children's and their parents' asthma perception. Children report that their asthma depend on them and they can influence it, while their parents seem to be more sensitive to the disease chronicity and have a better understanding of asthma.

Discussion: The originality of this research lies in its taking into consideration both children's and parents' asthma perceptions through the use of the Revised-Illness Perception Questionnaire. It would be fundamental to pay attention to this to improve or adapt therapeutic education.

Who protects their health? Factors that influence health preventive behaviours and body mass index

Chater, A.* & Cook, E.; *University of Bedfordshire, UK

Background: This study aimed to identify the extent to which levels of happiness and self-efficacy could predict preventive health behaviours (such as healthy eating and exercise) and body mass index (BMI).

Methods: Data was collected from 100 adults (59% female), mean age 24.75 years, measuring generalised self-efficacy beliefs, happiness, health preventative behaviours, BMI, age and gender.

Findings: Results indicate that both happiness and generalised self efficacy significantly predict health preventative behaviours, explaining 20% and 26% of the variance in the behaviours respectively. Mood was negatively correlated with BMI ($r = -0.17, p < 0.05$). Relationships were also noted between generalised self efficacy, happiness and BMI.

Discussion: Evidence presented here suggests that happiness and high self-efficacy beliefs can significantly enhance health protective behaviours. Moreover, those who express higher levels of happiness, also exhibit higher levels of self efficacy and have a lower BMI. Suggestions are made to tailor health promotion campaigns towards enhancing mood and personal control beliefs.

Marital and psychosocial predictor factors of the psychological well being of women with breast cancer

Chaves, C.,* Gomes, V., Albuquerque, C., Martins, R., Pereira, A., & Monteiro, R.;
*Polytechnic Institute of Viseu, Portugal

Background: Objective – To determine the effect of some psychosocial variables and of the marital context in the prediction of the psychological well-being of women affected by breast cancer.

Methods: In this cross-sectional study, of a quantitative nature, we have worked with a sample of 229 women.

Findings: The psychosocial variables and the marital context significantly predict, in an additive way, the psychological well-being of women with breast cancer: The psychosocial variable that best predicts psychological well-being is the body image since it explains the greatest percentage of variation in the psychological well-being ($R^2 = 0.262, p = 0.000$); women who are married, active, paid for their jobs, and part of a highly functional family show better psychological well-being.

Discussion: Our study corroborates other studies which have identified marital context and body image as variables with significant prediction weight regarding the psychological well-being of the women affected by breast cancer.

Marital and psychosocial predictor factors of the quality of life of women with breast cancer

Chaves, C.,* Gomes, V., Monteiro, R., Albuquerque, C., Martins, R., & Pereira, A.;
*Polytechnic Institute of Viseu, Portugal

Background: Objective – To analyse the predictive weight of psychosocial variables and of the marital context in the quality of life of affected by breast cancer.

Methods: In a cross-sectional study, of a quantitative nature, we have worked with a random sample of 229 women, aged between 30 and 78 ($M = 57,73; Dp = 10,59$).

Findings: The psychosocial variable that best predicts the quality of life is the instrumental support (Social Support Scale) since it explains the greatest percentage of variation in the quality of life ($R^2 = 0.053, p = 0.000$); the variable related to the marital context that is the best predictor of the

quality of life is the satisfaction regarding the sexual relationship, because it explains the greatest percentage of variation in the quality of life ($R^2 = 0.098$, $p = 0.000$).

Discussion: Conducting this study has enabled us to recognise quality of life as an essential dimension in the life experience of women with breast cancer.

The mental health of caregivers of the sub-region of health of Viseu, Portugal

Chaves, C.,* Dionisio, R., Oliveira, S., & Duarte, J.; *Superior Health School – Polytechnic Institute of Viseu, Portugal

Background: Objective – understand the impact of caregiving on the mental health of caregivers, mainly on depression.

Methods: Descriptive analytical correlation method. The sample is composed by 93 providers of informal care, where only 7 are of the male gender and the rest of the female gender.

Findings: The age ranges between 17 and maximum of 82 years, and most (88.2%) married, with basic education (34.4%) of respondents. 36.6% of employees in this study, are with severe depression, 32.2% with depression classified as light and average and only 31.2% are classified without depression.

Discussion: The total social support provides an inverse relationship with the state depressive meaning that the higher the perception of social support of the provider of informal care, the state is less severe depression or vice versa. Also through the results, noted that the depressive state is aggravated with the overload of work carried out by the care provider.

Knowledge of old people about AIDS

Chaves, C.,* Duarte, J., & Pereira, C.; *Polytechnic Institute of Viseu, Portugal

Background: World Health Organization estimates that more than 47 million people world-wide were infected by AIDS virus. The number of infected people is increasing among elder people.

Methods: In this research we tried to determine the knowledge of old people about AIDS. To achieve this propose we applied a scale formulary, in a population of 215 elder people (112 women and 93 men), from Viseu, Portugal. This allowed us to know their social and demographic conditions, and their awareness about disease.

Findings/Discussion: The results of this research lay to 51.5% of women and 48.5% of men having high level of knowledge's concerning AIDS and not having significant differences between sexes. Population presenting an higher level of knowledge about AIDS, are aged below 70 years old (61.5%). Population living in villa proved higher level of knowledge (53.5%), in contrary population living in village (60.5%) showed the lower level of knowledge about AIDS.

The information and knowledge the health staff have about AIDS

Chaves, C.,* Duarte, J., Ferreira, M., Dionisio, R., & Sobral, H.; *Polytechnic Institute of Viseu, Portugal

Background: It was our purpose to, contribute to the consciousness about the health staff potential, as educational agents in the AIDS' health education context.

Methods: The investigation was mainly quantitative (descriptive and correlational) with a sample of 143 nurses and 47 doctors, from both sex, aged from 22 to 66 years old, in Viseu, Portugal.

Findings: The tests results indicate this activity as a subjective experience, not exclusively explained by the attitudes and behaviours towards AIDS. The attribute variables sex and socio-economic level as well as the service time, tie and professional category professional characterization variables and also the formation and information about AIDS cognitive variables did not evidence as relevant. Age and self-concept were predictors of health education in total.

Discussion: The results point out the AIDS' health education practice complexity. The above mentioned variables should be taken into consideration towards a more intentional and effective practice.

The impact of being informed on coping in Indian cancer patients

Chittern, M.R.,* Scarnà, A., & De Abreu, G.; *University of Sheffield, UK

Background: The impact of being informed on coping was investigated in Indian cancer patients. In India, families and physicians sometimes give a less severe diagnosis (e.g., fever, ulcer) than cancer to patients.

Methods: The COPE Inventory (Carver, Scheier & Weintraub, 1989) was administered to 20 informed and 20 uninformed cancer patients.

Findings: Informed patients scored higher in strategies such as 'active coping' and 'planning', whilst uninformed patients scored higher in 'denial' and 'behavioural disengagement'. One-way ANOVAS on each of ten coping strategies showed a significant impact of being informed. Factor loadings of the COPE items in the study differentiated coping approaches into cognitive and emotional styles, showing a trend wherein uninformed female patients used a "cognitive" coping approach while uninformed male patients favoured an "emotional" approach and vice versa for informed patients.

Discussion: This indicates that information-giving impacts on coping with cancer, and suggests that the cultural context of diagnosis disclosure requires further investigation.

Lifelong learning: A study of the Career Development of Doctoral student

Chou, Y.J.,* Chang-Rui, A., & Lien, B.Y.H.; National Chung Cheng University, Taiwan

Background: In modern career development perspective, people might go back to school and alternate between work and school, so-called lifelong learning. This qualitative study discusses the motivation of doctoral students coming back to school from the aspect of career development and expected understanding their learning attitude. We also discuss how further study can direct students and encourage their learning activities and plan their learning schedule and the effectiveness of current class design.

Methods: In this research, we adopt two approaches that are "case study" and "grounded theory". The data collected from the in-depth interviews with six participants who are doctoral students, candidates and alumni and secondary data contains learning records, learning evaluation, and publications.

Findings: Three propositions were emerged: "career development", "learning motivation", and "learning results"; and one finding related to women work value.

Discussion: The results of the study provide insightful information for the doctoral students and can be appreciated in society.

Breast is not always best: South Asian women's experiences of infant feeding

Choudhry, K.* & Wallace, L.M.; *Coventry University, UK

Background: Acculturating to a host country negatively impacts immigrant women's breastfeeding practices outside the UK. This study explored whether acculturating to the UK had detrimental effects on breastfeeding in South Asian women.

Methods: Twenty-one women completed a questionnaire and semi-structured interview exploring infant feeding experiences. A standardised bicultural measure was used to assess acculturation status and interview transcripts were analysed using thematic analysis.

Findings: Acculturation was related to decisions to breastfeed. Women displaying low levels cited the convenience of breastfeeding and cultural teachings about the benefits of mother's milk in relation to decision-making. Role conflict resolution was cited as the aim of decisions to bottle feed. In contrast, acculturated women cited the convenience of formula feeding and the 'bottle feeding norm' as relevant to their decision-making.

Discussion: Health promotion efforts need to consider factors that underpin feeding choices. Paying attention to acculturation pathways (not simply ethnicity) that may govern such decisions is critical.

Where do you find out about sex? A cross sectional survey of teenagers experiences and preferences

Choudhry, K.,* Wallace, L.M., Newby, K., & Brown, K.; *Coventry University, UK

Background: Sex and relationship education is embedded in PSHE lessons-yet teens often report these do not meet their needs.

Methods: We report a survey exploring what sex/relationship advice teenagers ($N=1332$, 13–16 years) used and wanted to use. We explored differences in topics and sources varied by sexual experience (virgin/non-virgin).

Findings: Virgins were more interested in sexual issues; $\chi^2(1, n=644)=5.978, p<0.001$, and relationships $\chi^2(1, n=644)=31.107, p<0.001$ whilst non-virgins wanted advice on unwanted pregnancy; $\chi^2(1, n=644)=43.553, p<0.001$, and contraception; $\chi^2(1, n=644)=42.512, p<0.001$. Virgins consulted teachers; $\chi^2(1, n=962)=12.157, p<0.001$ and friends; $\chi^2(1, n=961)=3.652, p<0.001$, whilst non-virgins were more likely to seek advice from doctors; $\chi^2(1, n=962)=102.999, p<0.001$ and sexual health services $\chi^2(1, n=962)=59.486, p<0.001$. Phone based advice was little used but thought to be potentially very appropriate by most respondents irrespective of experience.

Discussion: Classroom sex education cannot address the individual needs of teenagers, and teen focussed advice lines could be a testable solution.

Cancer patients' understanding of their participation in a randomized clinical trial

Christophe, V.,* Leroy, T., Penel, N., Antoine, P., Vanlemmens, L., & Clisant, S.; *University of Lille North of France, France

Background: Several reports had clearly showed that the included patients misunderstand the modalities and aims of the clinical trials. Objectives – This study aims to compare the comprehension about RCT between cancer patients already included (cases) and cancer patients who had never received informed consent about clinical trials (controls).

Methods: 75 cases and 107 controls filled out a validated questionnaire (ICEC-R) exploring the comprehension of RCT.

Findings: Globally, the mean score at the ICEC-R is higher in cases ($M=6.43$) than in controls ($M=4.68$; $p<0.001$). But the scores were lowest in both populations for items exploring the comprehension of randomization process and the uncertainties on the benefit of treatments.

Discussion: Efforts in practice should be made to improve the way randomization is explained to patients and the way they are informed about uncertainties concerning the impact of the clinical trial on their health.

Can patterns of coping predict efficacy of coping with examinational stress?

Chylińska, J.; Medical University of Warsaw and University of Warsaw, Poland

Background: The literature suggests (Compas, 2001) that it is difficult to predict when coping efforts bring the highest quality of life, or, in other words- when coping is most effective. The aim of the study was to investigate whether more complex forms of coping such as coping patterns are better predictors of coping efficacy than single strategies.

Methods: The participants were 269 high-school students, aged 17–18. The Coping with School-related Stress Questionnaire (CSSQ), which allows to distinguish task-, emotion- and avoidance-oriented strategies, was administered just before an important school test. The indices of efficacy were emotions related to the situation (assessed with the Profile of Mood States) and the received grade as well as subjective satisfaction with a grade (rated on the 5-point Likert-like scale).

Findings/Discussion: On the base of cluster analysis 4 coping patterns were distinguished and their relationship with coping outcomes was assessed and compared with relationships between outcomes and single strategies.

The psychosocial impact of a train accident on the community: A qualitative study

Cicognani, E.,* Pietrantoni, L., Palestini, L., Prati, G., Villano, P., & Marcon, A.; *University of Bologna, Italy

Background: This case study examined the psychosocial impact of a train disaster by focusing on different victims (Taylor, 1999): Individuals directly involved, families and friends, rescue workers and the community.

Methods: Data considered included 8 in-depth interviews with rescue workers (firefighters, health personnel, psychologists) and newspaper articles on the disaster published during the 20 days after the accident. Interviews were analysed by qualitative content analysis; newspaper articles were subjected to textual analysis by T-Lab software.

Findings: Results showed partly different reactions to the disaster in the four levels of victims. Besides first level victims and families, the accident impacted on rescue workers, emphasising their

need for psychological support. Community responses were particularly negative among train personnel and travellers.

Discussion: Analysis of newspaper articles showed a different treatment of the critical incident by the different journals; moreover, the crucial themes of debate changed across time. Implications for interventions for different categories of victims are discussed.

Coping with minor stressors in adolescence. Relationships with social support, self-efficacy and well being

Cicognani, E.; University of Bologna, Italy

Background: This research investigated coping strategies used by adolescents in dealing with everyday minor stressors (Seiffge-Krenke, 1995). Moreover, the relationship with perceived social support, self-efficacy and the impact of coping on psychological well being were assessed.

Methods: A sample of 350 Italian adolescents, 62.3% female and 37.7% male, aged 14 to 19 yrs-old, were submitted the Coping Across Situations Questionnaire (CASQ) (Seiffge-Krenke, 1995), assessing coping strategies adopted across eight domains. Other instruments included MSPSS (Zimet et al., 1988), the General Self-efficacy scale (Schwarzer & Jerusalem, 1993) and the Berne scale of subjective well being (Grob et al., 1991).

Findings/Discussion: Results of the CASQ indicate that specificities in both coping strategies and domain are present: Active strategies are more used, especially for problems with parents, peers and school. Gender and age differences in coping were found. Predictors of well being include mostly Self-efficacy, Family support and withdrawal coping, with some gender specificities.

Perceived work quality, sense of community at work and well being

Cicognani, E.* & Chiaranti, R.; *University of Bologna, Italy

Background: The study investigates the role of perceptions of work quality and Sense of Community (SoC) at work in influencing workers' subjective well being. Differences according to socio-demographic variables and on workers' position were also assessed.

Methods: A self-administered questionnaire was submitted to a representative sample (10% of the total) of 213 individuals working in the Italian branch of a large industry. Included were scales measuring meaning of work (drawn from MOW study, 1987), importance of work in life, Sense of Community at work (Eby & Borroughs, 1998; Campbell & Clark, 2001) and life satisfaction (Diener et al., 1985).

Findings: Results confirm that individuals enjoying a higher SoC at work have better attitudes toward their work activity and find more meaning in work. Perceived meaning of work and SoC positively affect workers' subjective well being. Less qualified positions are associated with lower scores on all variables.

Discussion: Implications for health outcomes will be discussed.

Assessing Quality of Life (QOL) following paediatric bone marrow transplantation (BMT) within family risk-resiliency theory

Clarke, S.A.* & Eiser, C.; *University of Sheffield, UK

Background: BMT for paediatric malignancy is a life-threatening procedure with long-term implications for child QOL. We report the role of individual (child optimism, mother mental health) and family variables (communication, emotional security) as predictors of QOL in survivors of paediatric BMT controlling for disease and treatment variables.

Methods: Families of survivors >1 year post-BMT ($N=21$; mean age 12.85 years) and two non-transplanted chronic illness control groups ($N=38$) completed measures of QOL, individual, family, disease, and demographic variables.

Findings: QOL post-BMT was significantly poorer than norms and non-transplanted controls [$F(2, 54) = 3.29, p = 0.04$]. Individual variables (child optimism [$r = -0.50$] and mother mental health [$r = 0.60$]) were significantly associated with QOL, but no significant associations were found with family variables.

Discussion: Family variables do not contribute to QOL >1 year post-BMT. In contrast to times around transplantation, individual child and mother resources may be more appropriate than family variables as a basis for developing clinical interventions to optimise QOL.

A qualitative investigation of change and stability in psychological adjustment to appearance

Clarke, S.A.,* Newell, R., & Thompson, A.; *Appearance Research Collaboration (ARC), Universities of Sheffield and Bradford, UK

Background: This qualitative study aimed to explore individual accounts of psychological adjustment to appearance altering conditions over time, in light of data obtained from quantitative measures previously completed by the same participants.

Methods: Thirty-two participants with a range of medical conditions affecting appearance who had previously completed longitudinal measures of adjustment to appearance participated in a semi-structured interview. Interviews were analysed using template analysis.

Findings: Behavioural strategies such as avoidance and concealment were common but with different implications for adjustment depending on cognitive factors. Positive coping was associated with cognitive characteristics such as optimism and external attributions to explain the reactions of others. Social and professional support were also perceived as important.

Discussion: Living with an appearance altering condition can involve a continual demand on psychological resources. Positive coping is influenced by both social support and cognitive factors that are likely to be amenable to therapeutic input.

Illness perception questionnaire: An investigation of the structure of illness perceptions in systemic lupus erythematosus

Cleanthous, S.,* Cooke, D., Kirk, A., Isenberg, D., & Newman, S.; *University College London, UK

Background: The present study set out to examine the structure of the Illness Perceptions Questionnaire (IPQ) in a group with SLE and the clarity of the allocation of items in lay sample.

Methods: A longitudinal design examined 103 SLE patients on their illness representations. The experimental study recruited 100 students asking them to categorise the 16 core belief IPQ items into the three IPQ dimensions.

Findings: A principal component analysis of the IPQ indicated that the item loadings were not always in line with the IPQ although the 3-factor structure was largely maintained. The complementary experimental study data revealed that on average 19.6% of the responses were not congruent with their original IPQ dimensions ($p < 0.01$).

Discussion: The findings challenge the original dimensions of the IPQ and lend support the need to examine their structure across different conditions. Certain items do not yield unambiguous allocation to the IPQ dimensions.

The Italian validation of the Exercise Dependence Questionnaire (EDQ)

Clementi, C.,* Benassi, M.G., Bolzani, R., Tossani, E., & Grandi, S.; *University of Bologna, Italy

Background: The Exercise Dependence Questionnaire (EDQ) (Ogden et al.) conceptualized the exercise dependence (ED) within biomedical model of addiction and psychosocial perspective.

Aim: Validation of the Italian version of EDQ (I. EDQ) (Clementi, Grandi).

Methods: I. EDQ was administered to 197 habitual exercisers and 62 controls. A cut-off point ($EDQ \geq 116$) was used to discriminate ED. Internal validity was calculated by factorial analysis, internal reliability by Cronbach's alpha and correlations analysis between subscales. EDQ was compared to EDI-2, MDQ, SQ and TCI for external validity.

Findings: Six factor emerged from factorial analysis, explaining a cumulative variance of 62%; they were well correlated with EDQ's subscales. Internal reliability was ($\alpha = 0.9$). A significant relationship with EDI-2 subscales, MDQ, hostility (SQ), persistence and cooperativeness (TCI) emerged.

Discussion: I. EDQ is a valuable and reliable tool for ED. It correlates to measures of eating disorders, muscle dysmorphia and some personality traits.

Saliency of the medical identity and communication training and perceived similarity of patients

Clucas, C.; University of Bristol, UK

Background: Based on Self-categorization Theory and patient-centred approaches to communication training, the study investigates the interaction between saliency of the medical identity and communication training on perceived similarity of patients.

Methods: 36 hospital consultants and 56 clinical medical students were assigned to two experimental conditions designed to enhance self-categorization as doctor or personal identity. Measures included amount of communication training, EPA ratings of the two last patients seen and strength of the medical identity.

Findings: ANOVA results showed (1) doctors with a stronger medical identity perceived patients as more similar to each other ($p = 0.014$) and (2) medical students perceived patients as more different from each other with more communication training ($p = 0.027$). For this, a trend was also observed for the doctors ($p = 0.095$).

Discussion: Hence, a strong medical identity might increase, but communication training reduce perceived similarity of patients, with implications for patient satisfaction and doctors' respect for patients.

Psychological distress, coping and locus of control among patients undergoing IVF treatment: Gender differences

Conversano, C.,* Lensi, E., Arpone, F., & Pratali, S.; *Pisa University, Italy

Background: Previous studies have found that prior to treatment women report more anxiety and depression and gender differences in coping with infertility. Locus of control have been studied mainly in females.

Methods: Twenty-seven women (mean age 36.93) and twenty-two men (mean age 39.73) undergoing IVF treatment programme at the Medically Assisted Procreation Centre of the Azienda Ospedaliero-Universitaria Pisana were asked to participate. We examined gender differences in anxiety, depression, coping and attributional styles. Data were analysed using Student's *t*-test and χ^2 -test.

Findings: Women showed more evident trait anxiety ($p=0.047$), somatisation ($p=0.020$), depression ($p=0.019$) than men. Men used proportionately greater amounts of behavioural disengagement coping ($p=0.032$) when compared with women, whereas there are no statistically significant differences in attribution style between the two genders.

Discussion: These results are highly important for clinical staff as they indicate where it is relevant to intervene in order to help fertility patients to reduce stress.

Gender differences in emotional balance among patients undergoing IVF treatment

Conversano, C.,* Lensi, E., Arpone, F., & Pennato, T.; *Pisa University, Italy

Background: Negative emotions and poor psychological well-being have been found in infertile women.

Methods: Twenty-seven women (mean age 36.93) and twenty-two men (mean age 39.73) undergoing IVF treatment programme at the Medically Assisted Procreation Centre of the Azienda Ospedaliero-Universitaria Pisana participated. We examined gender differences in illness perception, experience in close relationships, alexithymia, prevalent emotions and psychological general well-being. Data were analysed using Student's *t*-test and Chi²-test.

Findings: Women experienced most frequently negative emotions ($p=0.037$). They most often feel anxiety ($p=0.017$), delusion ($p=0.005$), powerlessness ($p=0.044$), melancholy ($p=0.001$), nostalgia ($p=0.032$), guilt ($p=0.012$), uneasiness ($p=0.029$), sadness ($p=0.011$) in comparison with men, who showed more vitality ($p=0.021$). There are no statistically significant differences in alexithymia and in the experience in close relationships between the two genders.

Discussion: Emotional balance is a compromised aspect in women even before treatment. So it is important to consider it in all treatment steps to promote psychological adjustment.

The Impact of Continuous Glucose Monitoring (CGM) on Fear of Hypoglycaemia (FH) in Diabetes

Cooke, D.,* Steed, L., Hurel, S., & Newman, S.; *University College London, UK

Background: As outlined in the fear avoidance model, fear of hypoglycaemia (FH) can lead to maladaptive approaches to diabetes self-care, that in turn, reduce metabolic control (Wild et al., 2007). Few longitudinal studies have been conducted on FH. Self-monitoring is the cornerstone of self-management theory (Creer & Holroyd, 1997). CGM enables prediction and avoidance of hypoglycaemia which may impact on FH. This was examined in the context of a 4 group efficacy RCT.

Methods: Individuals were randomly allocated to standard care, attention control or to one of two CGM devices. 202 participants with full data to 18 months were analysed.

Findings: No effect of using a CGM on FH was found (ANOVA). However there was a reduction in FH at 3-months ($p=0.02$) following the intensive phase of the intervention and 12-months ($p=0.02$).

Discussion: Reduction in FH was due to trial participation rather than use of the CGM devices.

What moderates the prediction of screening attendance? A meta-analysis of Theory of Planned Behaviour studies

Cooke, R.* & French, D.P.; *Aston University, UK

Background: Meta-analysis was used to explore variation between studies in how well the Theories of Reasoned Action (TRA) and Planned Behaviour (TPB) predict screening intentions and attendance.

Methods: Systematic literature searches identified 33 studies that applied the TRA/TPB to predict screening intentions or attendance.

Findings: Generally, TRA/TPB relationships for screening were in line with the broader TPB literature. To explore heterogeneity in results, type of screening test (e.g., cervical) was examined as a moderator variable. Attitude-intention and subjective norm-intention relations, were larger for prenatal studies than for other tests. PBC-intention relations were largest for colorectal screening. Intentions to attend prenatal screening were more predictive than intentions for other tests.

Discussion: Different interventions may be needed for different screening tests: Targeting attitudes is the best way to promote prenatal intentions, while targeting PBC is the best way to promote colorectal intentions. Meta-analysis has value in generating hypotheses for future research.

Symptoms beliefs, treatment risk beliefs, and decision-making in 'high risk women' treated for menopausal symptoms

Cordingley, L.,* Seif, M., Panteli, A., Towey, M., Haq, S., & Bundy, C.; *University of Manchester, UK

Background: The aim of this study was to explore how beliefs about risks associated with HRT affect treatment decision-making in women already considered 'high risk'.

Methods: Twenty semi-structured interviews were conducted with women recruited via a tertiary menopause clinic. Participants had pre-existing conditions e.g. hypertension, identified breast cancer risk, history of M.I. A qualitative framework approach was used to design the interview format and analyse responses.

Findings: Key themes identified were: Balancing everyday quality of life against long term risk, reassurance through monitoring, responsibility for treatment decision-making, sexual and social identity, coping with risk information, symptom attribution. Strategies for reducing anxiety related to risk beliefs included minimising perception of susceptibility or emphasising current benefits of treatment.

Discussion: There is a need to investigate the use of additional monitoring as a means of enabling women to access treatment normally denied to them, and as way of reducing anxiety about treatment risk.

Moderating effect of emotional intelligence on the “negative affect/motivation to drink” relationship among alcoholic inpatients

Cordovil de Sousa Uva, M.,* de Timary, P., Cortesi, M., Mikolajczak, M., du Roy de Blicquy, P., & Luminet, O.; *Universite Catholique de Louvain

Background: In order to understand how emotional aspects evolve and are related to craving, different emotion-related variables and their time-dependent improvement were examined during an alcohol detoxification program.

Methods: State affectivity (PANAS), emotional intelligence (TEIQue), and craving (OCDS) were assessed in alcoholic inpatients (DSM-IV, $N=41$) matched controls ($N=30$) at the onset (T1) and at the end (T2) of the cure.

Findings: A significant decrease in craving ($p<0.001$) and negative affectivity (NA) ($p=0.009$) was observed from T1 to T2. Emotional intelligence (EI) remained low at both times. Positive correlations emerged between craving and NA. Regression analyses showed that trait EI significantly moderated the impact of NA at T1 on craving for alcohol at T2.

Discussion: After a 3-week alcohol rehabilitation, craving of alcoholic inpatients with low trait EI scores is due to their difficulty to face initial negative mood. Psychotherapeutics approaches were discussed.

Impact of personal goals on adolescents’ psychological distress

Costantini, M.L.,* Recchia, S., Muller, L., & Spitz, E.; *University of Metz, France

Background: Studying personal goals (PG) is useful to understand the way adolescents regulate their behaviour. This study explored the impact of adolescents’ goal achievement on their psychological distress. On the basis of exploratory interviews (Massey, 2005) a scale measuring the importance and disturbance of teenagers’ PG was developed. A varimax factor analysis yielded a five factors solution (romantic relationship, social achievement, social integration, self-affirmation, and well-being).

Methods: 1098 teenagers (49% male, 13–20 years old, mean age of 16.15, SD of 2.26) completed a set of questionnaires (psychological distress, self-esteem, life satisfaction, and PG).

Findings: Multiple linear regression indicated that 38.5% of variance of psychological distress was predicted by life satisfaction ($\beta=0.37$), self-esteem ($\beta=0.26$), and perceived difficulties in attaining self-affirmation goals ($\beta=0.23$).

Discussion: Apparently, goal disturbance affects adolescents’ health. Future analyses will further understanding of PG in self-regulation’s mechanism.

Dental fear in cyberspace: An analysis of communication within a dental anxiety online support group

Coulson, N.S., Buchanan, H., & Malik, S.; University of Nottingham, UK

Background: Dental anxiety is a common problem which often leads to avoidance of dental care thus poorer oral health. With an expansion in Internet access, individuals have new opportunities for sharing their experiences online. This study aimed to explore communication within an online support group for dental anxiety/phobia.

Methods: Data were collected from an online support group for individuals experiencing dental anxiety or phobia. Messages posted to the group during a 16-month period were downloaded which resulted in 621 messages. Thematic analysis was conducted on the postings.

Findings: The sample of messages analysed identified three emergent themes: Feelings of embarrassment, a lack of control associated with having dental treatment; and an overwhelming desire to overcome these feelings to get dental treatment.

Discussion: Although the postings revealed the negative impact of dental anxiety, there was also a desire to overcome the fear. These findings may have implications for web-based treatment interventions for this population.

Testing a two-component model of the theory of planned behaviour: Condom use during casual sex

Cousins, G.,* McGee, H., & Layte, R.; *Royal College of Surgeons in Ireland, Dublin, Ireland

Background: Aim – To test the discriminant and predictive validity of a “two-component” theory of planned behaviour (TPB) model, in relation to condom use with a casual partner.

Methods: A national cross sectional telephone survey regarding young adults’ most recent sexual encounter with a casual partner was conducted ($N = 137$; 19–30 years). Direct measures of TPB constructs (affective and instrumental attitudes, injunctive and descriptive norms, and perceived behavioural control and self-efficacy) were measured.

Findings: Factor analyses using principle components extraction (oblique rotation) supported the two-component measurement model. Furthermore, TPB components explained 33% of the variance in condom use intentions ($p < 0.001$), with affective attitudes and injunctive norms remaining independently significant. Condom use intentions were significantly related to condom use (OR 3.9, 95% CI 2.1–7.4, $p < 0.001$).

Discussion: The findings support the distinction between TPB components, and highlight the importance of affective attitudes and injunctive norms in intention formation, which in turn promotes condom use with a casual partner.

Is health psychology ready for meta analysis? Using clinical connoisseurship to decide

Coyne, J.C.* & Hagedoorn, M.; *University of Pennsylvania School of Medicine, USA

Background: Demands that interventions in health psychology be evidence-based have spawned numerous meta-analyses. This presentation provides a systematic re-review of recent meta-analyses published in high impact journals including evaluations psychosocial interventions for breast cancer and arthritic pain.

Methods: Shortcomings in the available literature require a clinical connoisseurship, a familiarity with clinical issues to evaluate the appropriateness of combining the results of diverse interventions involving diverse patients and outcomes.

Findings: Using numerous examples from the papers in question, it will be argued that meta-analyses very often yield conclusions that do not fit the results of the best of the individual studies that go into them. In many instances, a summary judgment is premature, and in others, an alternative best practices approach is preferable to combining results of similarly flawed studies.

Discussion: Tips will be provided for quickly assessing the transparency of a report of a meta-analysis and the credibility of its conclusions.

The impact of self efficacy and school social capital on perceived mental and physical health of Romanian adolescents

Craciun, C.* & Baban, A.; *Babes Bolyai University, Romania

Background: The study examines self-efficacy and school social capital, operationalized according to Morrow's definition (1999), as predictors of mental and physical health of Romanian adolescents. Gender differences in self-efficacy and school social capital are explored.

Methods: Data were gathered within the HBSC school survey from 1562 adolescents aged 15.

Findings: Girls benefit from more teacher support in school, while boys tend to be more engaged in school activities. On average girls report lower self-efficacy than boys. Regression analysis showed both self efficacy and school social capital to be significant predictors of perceived mental and physical health, with the former being a better predictor. From the social capital variables, peer support and school identity proved the best predictors of adolescent health.

Discussion: The study has important implications for health policy and education design to improve internal and external assets of adolescents in the school context and ensure better mental and physical health.

The role of context and knowledge in reasoning about oral health

Crocker, S.* & Buchanan, H.; *University of Derby, UK

Background: For oral health promotion, it is important to understand how people reason about good and bad outcomes in oral health. This study aimed to investigate these factors across different age groups.

Methods: 39 6–7 year-olds, 46 9–10 year-olds and 32 adults were given hypothesis testing tasks concerning causal or non-causal factors. In the causal task, half the participants were presented with plausible evidence (e.g. brushing leads to healthy teeth) and half implausible evidence. Each task had a good (e.g. healthy teeth) or bad (e.g. unhealthy teeth) outcome.

Findings: There were main effects of task type, outcome and age (all $p < 0.05$). For the causal task, participants given implausible evidence and a bad outcome, or plausible evidence and a good outcome, were more likely to choose a scientifically appropriate test ($p < 0.01$).

Discussion: Context and knowledge play an important role in reasoning about oral health which has implications for health promotion campaigns.

Children's perceptions of oral health and disease: A developmental study

Crocker, S.* & Buchanan, H.; *University of Derby

Background: Children's understanding of health and illness develops over time. This study aimed to explore whether there are age-related differences in their perceptions of oral health and disease.

Methods: 71 children aged 4–11 were interviewed in schools. Questions were based on knowledge and understanding of behaviours and practices that contribute to oral health and disease [e.g. what makes teeth healthy/unhealthy?]. The data were coded used content analysis.

Findings: Overall, even very young children demonstrated a basic understanding of behaviours and practices that contribute to oral health and disease. However, older children were more likely to

mention that drinks ($F(3, 67) = 5.012, p = 0.003$) and oral care ($F(3, 67) = 6.716, p = 0.000$) affect the health of teeth.

Discussion: These findings suggest that children's knowledge and understanding of oral health develops over time. This has implications for the promotion of oral health to different age groups.

Choosing between health-related behaviours: Testing the utility of the TPB to predict intention choice

Cruickshank, M.* & Francis, J.; *University of Aberdeen, UK

Background: The utility of the theory of planned behaviour (TPB) may be enhanced by considering behavioural options. This study extended the TPB by measuring cognitions about two health-related behaviours (drinking water; drinking sugar-sweetened soft drinks [SSSD]) to predict intention choice. Measuring intention choice involved individuals rating their intentions towards performing these behavioural alternatives on bipolar scales with the behaviours as end-points.

Methods: Online cross-sectional TPB-based questionnaire (132 items), completed by 80 internet users (46 females; 34 males; mean age 30 years).

Findings: Hierarchical regression showed that attitude, subjective norm and perceived behavioural control (TPB predictors) for drinking water significantly predicted intention choice (drinking water versus drinking SSSD; R^2 change = 0.35; $p < 0.05$). Adding TPB predictors for drinking SSSD significantly increased R^2 change ($p < 0.01$).

Discussion. Studies using the TPB often investigate behaviours in isolation. Extending the TPB by taking account of cognitions regarding two health-related behavioural alternatives increased prediction of intention choice.

Effectiveness of online word of mouth strategies and content on exposure to an internet-delivered intervention

Crutzen, R.,* De Nooijer, J., Brouwer, W., Oenema, A., Brug, J., & De Vries, N.K.; *Maastricht University, The Netherlands

Background: Since most young adults are not suffering from chronic disease, they are not likely to be internally motivated to visit an Internet-delivered intervention aimed at primary prevention.

Methods: Two experiments were conducted to test effectiveness of online word of mouth strategies and content on exposure to an Internet-delivered intervention aimed at changing implicit attitudes towards alcohol.

Findings: A movie clip was not more effective to attract young adults to the intervention and did not attract young adults who differed with regard to alcohol use and alcohol-related problems, expectancies and explicit attitudes. If participants visited the intervention to watch a movie clip, however, an incentive increased the chance that they actually logged on.

Discussion: It is not recommended to solely use peripheral cues to attract young adults to an intervention. Future research should focus of the effectiveness of peripheral cues in addition to an invitation to participate in an intervention.

Prostitution and AIDS

Cunha, M.* & Chaves, C.; *Instituto Superior da Maia, Portugal

Background: Prostitution constitutes a risk situation which implies the adoption of strategies to deal with it.

Research Question: Does socio-demographic variables influence knowledge level related to AIDS?

Methods: To analyse the relationship between knowledge and the female prostitutes' quality of life. Type of Study: Correlational study in a sample of 200 female prostitutes (mean age=30.19; sd = 7.029).

Findings: In this study, women's knowledge about AIDS was related to: ● Nationality ($H = 10.124$; $p = 0.000$); foreign women present better knowledge; ● Residence area ($t = 2.312$; $p = 0.021$); women living in urban areas present better knowledge; ● Academic qualifications ($H = 20.999$; $p = 0.000$); women with higher qualifications presented better knowledge;

Discussion: The knowledge about AIDS transmission revealed to be associated to quality of life, ($r = 0.296$; $p = 0.000$), that is, the higher level of knowledge about AIDS, the better women's quality of life will be.

Quality of life in blood donators

Cunha, M.* & Chaves, C.; *Instituto Superior da Maia, Portugal

Background: Blood donation is an action performed by healthy people. In this context, we investigated the Blood Donators' psychosocial functioning and Quality of Life (QOL).

Research Question: Do psychosocial variables influence QOL?

Methods: Correlational study aiming to investigate QOL in a sample of 275 Donators. Data collection and analysis: ● Quality of Life Scale SF-36 ● Inventory of Clinical Depression Evaluation ● Vulnerability to Stress Scale 23 QVS.

Findings: ● 23.74% of the donators are vulnerable to stress. Vulnerability to stress affects 24.16% of the female and 21.66% of the male. ● 14.54% of the sample had depressive symptoms; 3.63% presented moderate depression indexes, and 10.91% mild depression.

Discussion: The higher is the level of stress ($r = -0.486$; $p = 0.000$) and depression ($r = -0.464$; $p = 0.000$), the worse is QOL; this suggests that blood donators should be trained to manage their emotions, in order to raise their QOL.

Health determining factors during the pregnancy period

Cunha, M.J.; Instituto Superior da Maia, Portugal

Background: To test an explanatory model of health determining factors during the pregnancy period. Independent variables: Bonding and attitudes about Pregnancy and Maternity. Intermediate variable: Coping global resources. Dependent variable: Psychopathology.

Methods: Inclusion criteria: Confirmed pregnancy, with a pregnancy period over 12 weeks and less than 28, with no reported history of mental disorder. Participants: 293 women Instruments: Adult Attachment Scale (AAS), Attitudes to Pregnancy and Maternity Scale, Troubleshooting Inventory and Psychopathological Symptoms Inventory.

Findings: The multi-way study of multiple regression has shown that the model explains 57% of the total variance and that both the bonding and the attitudes constitute themselves as mental health protection mechanisms. The coping resources, more than just acting directly upon the psychopathological symptoms, act throughout the relation they create with bonding and attitudes.

Discussion: The results conduct to a meditation about the importance of health care during pregnancy, developing guidelines for the involvement.

Health care workers' perceived barriers to providing psychosocial care for patients in isolation with MRSA

Cunningham, M.,* Swanson, V., & Holdsworth, R.; *University of Stirling, UK

Background: Hospital inpatients with MRSA are generally placed in isolation to prevent infection spread. This may cause stress, although reasons for lack of psychosocial care for MRSA patients are unclear. This study investigated staff attitudes towards MRSA and barriers to providing psychosocial care.

Methods: This was a qualitative study. Semi-structured interviews were carried out with 9 surgical ward nurses. A framework approach was used to analyse the data.

Findings: 6 themes were identified: Barriers, current practice, psychological effect of MRSA and isolation, psychological beliefs, MRSA attitudes, and recommendations.

Discussion: Participants were concerned about the psychological effect of isolation on patients. Barriers to providing psychosocial care included lack of time, a perception of low priority, lack of ownership of psychosocial issues, and insufficient training for staff. The findings suggest the need for more training on MRSA for both staff and patients, and a greater focus on psychosocial care for isolated patients.

Experiences in developing a behaviour-change intervention as a NHS health psychology trainee in Scotland

Dale, H.; NHS Fife, UK

Background: Single men with cancer are a particularly vulnerable group with poorer survival rates than partnered men or single/partnered women. This development study, which maps onto Scottish HEAT targets, aimed to produce an intervention to increase healthy behaviours and reduce isolation among this group.

Methods: A systematic review of interventions for men with cancer was first conducted. The findings were then incorporated with theories/models in health psychology, along with further literature and expert opinion from those working locally in the cancer field, to develop the intervention.

Findings/Discussion: Whilst interventions for single men with cancer were scarce, those applied to all men with cancer proved useful in intervention development, as did the additional sources drawn upon, thus enabling a broad, well-informed intervention to be developed. Being situated within a large psychology department in the NHS allowed utilisation and development of existing networks and contacts, assisting the development of the intervention.

Dysfunctional emotion regulation as a risk factor in eating disorders

Danner, U.N.,* Brandys, M., Evers, C., & De Ridder, D.T.D.; *Utrecht University, The Netherlands

Background: Negative emotions and emotional problems (e.g. depression) are important risk and maintenance factors for eating disorders (ED). Especially binge episodes are found to be preceded by negative emotions and are therefore considered to be an attempt to regulate these emotions. However, binge episodes may also be the result of a dysfunctional emotion regulation strategy (suppressing emotions).

Methods: The current study explored how the tendency to suppress emotions is related to eating disorder symptoms in a normal population. 161 women from different backgrounds participated in a survey-study to assess this relation and possible moderating factors.

Findings: It was indeed found that the tendency to suppress emotions was related to eating disorder symptoms. Moreover, the results revealed that especially women who appraise their body very negatively and suppress their emotions show more eating disorder symptoms than those not suppressing their emotions.

Discussion: These findings emphasize the importance to consider emotion regulation in eating pathology.

Body image and self-esteem among French adolescents

Dany, L.* & Blois, S.; *Provence University, 'La Timone' University Hospital, France

Background: This study examines how body dissatisfaction is related to self-esteem in an adolescent population.

Methods: A total of 188 French adolescents completed a questionnaire included the Body Image Questionnaire, the Figure Rating Scale, the Rosenberg's Self-Esteem Scale and information concerning weight and height.

Findings: Results indicate that girls want to be smaller, reported more body dissatisfaction and body discrepancy, and lower level of self-esteem. However Body Mass Index does not differ from gender. Regression analyses were carried out for each gender. They indicate that BMI and body satisfaction were significant predictors of Self-esteem for boys. Body satisfaction was the only predictor factor for girl's self-esteem. Results were consistent with those realized in different Western culture.

Discussion: Findings support proposals that self-esteem arises from a complex interplay of factors, including gender, body dissatisfaction and actual body mass. In particular, our findings support that girls are more influenced than boys by 'subjective' body considerations.

Exploring online peer support: Informal caregivers' usage of a mental health discussion board

Darcy, J.,* Brunsdon, V., & Hill, R.; *Nottingham Trent University, UK

Background: Around six million adults in the United Kingdom take on the role of an informal caregiver to a friend or relative with mental ill health. The aim of this study was to explore informal caregivers' understandings of co-support in an online mental health discussion board.

Methods: A purposeful sampling strategy acquired a total of 487 posted messages from 82 users, which were analysed using interpretative phenomenological analysis (IPA).

Findings: Results revealed four emergent themes: 'an anonymous community', 'emotional catharsis', 'a different perspective', and 'I am not alone'.

Discussion: Findings suggested that participation facilitated many aspects of the caregivers' role, and acted as an empowering and practical adjunct to traditional support routes. This suggests it could be

beneficial for health professionals to encourage informal caregivers to use online discussion boards, to promote the health of both caregivers and those that they care for.

A theory of planned behaviour intervention to promote walking: A waiting list randomised controlled trial

Darker, C.D.,* French, D.P., Eves, F.F., & Sniehotta, F.F.; *Trinity College Dublin, Ireland

Background: This study investigated whether altering Perceived Behavioural Control (PBC) increases intention to walk more and objectively measured walking behaviour, as predicted by the theory of planned behaviour (TPB).

Methods: A waiting-list randomised controlled trial with 130 UK adults. The face-to-face intervention consisted of three motivational strategies to boost PBC, plus action planning and, coping planning.

Findings: The intervention increased PBC, intentions and objectively measured walking from a mean of 20 minutes to 32 minutes a day ($d=0.8$). The effects of the intervention on PBC were not mediated by control beliefs, although the effects on intentions and behaviour were mediated by PBC. At one month follow up, participants maintained their increases in walking.

Discussion: These findings partially support the proposed causal nature of the TPB. This is the first study using the TPB to develop, design and evaluate an intervention that has shown mediated effects on objectively measured behaviour.

Using health baseline theory to predict well-being in early-stage breast cancer patients undergoing chemotherapy

Davies, N.J.,* Kinman, R.G., Thomas, R.J., & Bailey, T.A.; *Cranfield University, UK

Background: Health baseline comparison theory (HBC: Davies & Kinman, 2006) proposes that people draw on a range of social, biological and illness-related factors when evaluating their health status. This study examines HBCs as predictors of quality of life (QoL) and mental health in early-stage breast cancer patients.

Methods: 45 patients undergoing chemotherapy completed measures of HBCs, cancer-specific QoL, and mental health. Treatment type and comorbidities were also assessed.

Findings: The HBC variables and illness-related factors explained 58% of variance in QoL ($p<0.001$) and 45% of variance in anxiety ($p<0.05$). Social comparison and illness-specific baselines made the strongest contribution to these outcomes. The HBC variables were not significant predictors of depression.

Discussion: Patients undergoing chemotherapy for early-stage breast cancer who utilise specific HBCs tend to have poorer well-being. This longitudinal project will subsequently examine the stability of HBCs, psychological health and QoL following the course of treatment.

Patients' evaluation of a video aimed at encouraging patient participation in healthcare

Davis, R.,* Massey, R., Warren, O., Davies, R., Vincent, C., & Darzi, A.; *Imperial College London, UK

Background: The P.I.N.K. Patient Safety Video empowers patients to be agents in ensuring their own safety in hospital. It has received critical acclaim, in both the HSJ and BUPA Foundation patient safety awards. This study evaluated the efficacy of the video from the patients' perspective.

Methods: Design: Within-subjects cross-sectional quantitative design. Participants: 80 patients from a London teaching hospital. Measures: Patients completed a questionnaire pre and post-screening of the video. Patients rated (on a seven-point scale) how willing they would be to participate in different aspects of their healthcare management. Analyses: Data were analysed using ANOVA's.

Findings: After watching the video patients' knowledge on how they could be involved in their healthcare and their willingness to participate significantly increased ($p < 0.05$).

Discussion: The video provides promising evidence on how patient involvement in healthcare could be improved. Health Psychology theories could offer further valuable insight into this much neglected area.

The role of the HBM and the TPB in predicting patient involvement in safety

Davis, R.,* Sevdalis, N., & Vincent, C.; *Imperial College London, UK

Background: To date the role of the HBM and TPB in predicting patient involvement in preventing medical errors (i.e. safety-related behaviours) has not been considered. This study addresses this current gap in the literature.

Methods: Design: Within-subjects cross-sectional quantitative design. Participants: 80 patients from a London teaching hospital. Measures: Patients completed a questionnaire which used the constructs of the HBM and the TPB to measure patients' views on their involvement in preventing 3 types of medical errors: Hospital-acquired infections; medication errors; and patient misidentification. Analyses: Data were analysed using Multiple Regression models.

Findings: Patients with higher levels of perceived susceptibility to medical errors and those that felt more in control of preventing medical errors in hospitals had higher intentions to participate in safety-related behaviours ($p < 0.05$).

Discussion: The HBM and the TPB provide valuable insight into why patients may or may not participate in safety-related behaviours.

The interaction of illness beliefs with distress and coping in patients with diabetic foot ulcers

Dawe, K.,* Searle, A., Wetherell, M., Weinman, J., Campbell, R., & Vedhara, K.; *University of Bristol, UK

Background: Distress and confrontational coping predict poorer outcomes in patients with diabetic foot ulcers, apparently via independent pathways. This study examined whether perceptions of the ulcer impact on distress or coping style.

Methods: 116 patients with a new foot ulcer completed the Brief Illness Perception Questionnaire (IPQ), scales measuring distress, and the Medical Coping Modes Questionnaire. Clinical outcome was determined 24 weeks later.

Findings: Correlation analyses revealed that distress was associated with consequences ($r = 0.35$, $p < 0.001$), identity ($r = 0.30$, $P = 0.001$), timeline ($r = 0.27$, $P = 0.003$), concern ($r = 0.35$, $P = 0.01$) and emotions ($r = 0.54$, $p < 0.001$) on the Brief IPQ. Confrontational coping was correlated with

consequences ($r=0.317$, $p<0.001$), identity ($r=0.32$, $p<0.001$) and treatment control ($r=0.19$, $P=0.041$).

Discussion: Belief in treatment utility may reduce distress, but is associated with adoption of a more aggressive coping style. This study underscores the need for an intervention that addresses the psychosocial impact of these chronic wounds on this rapidly expanding patient group.

Building upon existing models of food choice; can temperamental personality variables explain individual differences in sour and sweet taste preference?

Day, C.J.,* McHale, S., & Francis, J.; *Sheffield Hallam University, UK

Background: Existing models of food choice invariably build upon individual difference factors as a key influence of food preference, yet relationships between personality and taste preferences are rarely examined in non-clinical populations.

Methods: Data is reported for 3 studies, aimed to assess the extent to which temperamental, heritable personality traits may explain preference for the basic taste domains of sweet and sour. Study 1 asked individuals to reflectively rate their sweet and sour taste preference and complete the Tridimensional Personality Questionnaire (Cloninger 1987). Studies 2 and 3 examined hedonic ratings of sweet and sour taste samples, personality traits (measured by the TPQ) and eating behaviour (Three Factor Eating Questionnaire, Messick & Stunkard 1985).

Findings: Significant relationships were revealed between temperamental personality measures and sweet taste preference. Regression analysis was employed to develop models of best fit.

Discussion: Overall, individual differences in personality reflected differences in ratings of sweet and sour preference across the studies, confirming previous findings.

Is the MacNew a useful diagnostic and evaluation instrument for cardiac rehabilitation

De Gucht, V.,* Maes, S., Goud, R., Hellemans, I., & Peek, N.; *Leiden University, The Netherlands

Background: The MacNew quality of life questionnaire is used as the standard for psychosocial assessment in Dutch cardiac rehabilitation centres. This study investigates its sensitivity (differentiating capacity between diagnostic disease categories, gender and age) at entry (T1) and at the end (T2) of cardiac rehabilitation as well as the responsiveness of the MacNew during this period.

Methods: Data was used from 6288 cardiac rehabilitation patients at T1 and 1654 at T2.

Findings: Results show that the total MacNew as well as the three (physical, emotional, social) subscales have high internal consistencies, and differentiate well and in the expected direction at T1 between diagnostic groups (heart surgery, acute coronary syndrome, stable angina, internal cardio defibrillator (ICD) and heart failure patients), gender and age. The MacNew also proves to be an adequate evaluation instrument for cardiac rehabilitation, since all scales are responsive enough to capture changes over this period. At T2 however, the MacNew loses some of its sensitivity, partly because of ceiling effects.

Discussion: It is suggested to complement the assessment of the MacNew both at T1 and T2 with a brief anxiety and depression measure, which is valid, sensitive and responsive for cardiac rehabilitation patients.

Self-control in health behaviour: A meta-analysis

De Ridder, D.,* Finkenauer, C., & Lensvelt, G.; *Utrecht University, The Netherlands

Background: Self-control (the ability to inhibit unwanted responses in the perspective of a long-term goal) is considered to be an important predictor of a wide range of positive outcomes including health-related behaviours. The present study sought to investigate this claim using the recently published self-control scale by Tangney and colleagues.

Methods: A meta-analysis was conducted using 25 empirical studies that examined the relationship between self-control and a variety of health-related outcomes.

Findings: Results give credit to the assumption that self-control is a good predictor of health behaviour involving the inhibition of unwanted responses (e.g., less binge eating and alcohol abuse). However, relationships were much weaker when objective behavioural measures (instead of self-reports) were assessed.

Discussion: Our results bear important implications for the study of self-control in health as they show that high correlations between self-control and health-related behaviour may be flawed by a positive bias of one's behaviour.

Intercorrelations between cognitions, intentions and multiple health behaviours

De Vet, E.; Vrije University Amsterdam, The Netherlands

Background: To examine interrelations between cognitions, intentions and health behaviours for equal level actions (study 1: Fish, fruit and vegetable intake), hierarchical actions (study 2: Walking, total physical activity, weight control), and sequential actions (study 3: Buying, preparing and consuming vegetables).

Methods: One survey study based on the Transtheoretical model with two measurements with one-week in between among adults (Study 1 $N=1055$). Two cross-sectional studies based on the Theory of Planned Behaviour among adults (Study 2 $N=709$) and undergraduates (Study 3 $N=587$).

Findings: Fish, fruit, and vegetable intake were weakly related (Study 1). Study 2 showed that cognitions and intentions for walking were strongly interrelated with general physical activity, but weakly with weight-control. Study 3 showed that vegetable consumption was associated with preparation practices. Preparation in turn was associated with buying practices.

Discussion: Interrelations were less profound for equal level actions than for sequential and hierarchical health behaviour.

Depressive symptoms as predictors of mortality in patients with COPD

De Voogd, J.N.,* Wempe, J.B., Koëter, G.H., Postema, K., Van Sonderen, F.L.P., Ranchor, A.V., Coyne, J.C., & Sanderman, R.; *University of Groningen, The Netherlands

Background: The present study investigated the association of depressive symptoms with mortality in COPD patients.

Methods: 121 COPD patients, 78 men, mean age 61.5 (± 9.1) years, and mean FEV1%pred 36.9 (± 15.5) participated. Data included body mass index (BMI), FEV1 and exercise capacity (Wpeak). Depressive symptoms were assessed using the Beck's Depression Inventory (BDI). Survival time

ranged from 88 days to 8.5 years (Median = 5.3 years). At the end of the study 76 (63%) patients had died. The Cox proportional hazard model was used to analyse the data.

Findings: Depressive symptoms (odds ratio, 1.93; 95% CI 1.12–3.33) were associated to mortality in COPD patients, independent of sex, age and exercise capacity.

Discussion: This study provides evidence that depressive symptoms are markers for mortality in stable COPD patients. The possibility that the association is due to confounding effect of overall disease burden needs to be ruled out.

Computer tailoring on lifestyles: Differences between SES groups?

De Vries, H.,* Kremers, S., Smeets, T., & Eijmael, K.; *Maastricht University, The Netherlands

Background: Purpose – To examine the differences between LSES and HSES adults in the satisfaction with and effectiveness of a computer-tailored intervention addressing smoking, physical activity, and fruit, vegetables and fat intake.

Methods: A RCT tested the effects of computer tailoring. At baseline 2827 adults participated. For this purpose we analyze the differences in satisfaction with the computer tailored program and the behavioural effects among participants of the experimental condition by comparing the LSES ($N=382$) and HSES adults ($N=386$).

Findings: The results indicate that both groups evaluated the computer tailoring positively, but that the LSES group were more positive than the HSES group with regard to several characteristics of the computer tailoring and evaluated the letters as more interesting ($p<0.001$), novel ($p<0.001$), relevant ($p<0.002$), reliable ($p<0.03$). Additionally they indicated to recognize their own situation better ($p<0.04$) as well as their own ideas ($p<0.02$). The overall evaluation was also better ($p<0.001$). The results showed significant changes between the experimental and control group with regard to fruit and vegetable consumption and physical activity. The LSES and HSES groups do not seem to differ in the amount of change concerning smoking, fat consumption and fruit consumption. With regard to vegetable consumption the results suggest more change towards the recommendations for vegetable consumption in the HSES groups.

Discussion. Computer tailored lifestyle information although mainly text delivered is at least as attractive for LSES groups then HSES groups, and does not seem to contribute to increasing health behaviour disparities.

The effect of written emotional expression on adolescents' health: The moderating role of gender

Dean, S.* & Rotenberg, K.J.; *Keele University, UK

Background: Written emotional expression has been found to produce benefits in adults' health (Pennebaker, 1997) and it has been suggested that males can benefit more than females (Smyth, 1998). This research aims to discover whether adolescents benefit from written emotional expression.

Methods: 121 adolescents aged 12–13 completed standardised measures of psychological health (e.g. Strengths and Difficulties Questionnaire) and physical health (e.g. Youth self-report somatic symptoms scale) at baseline, post-test and a two months follow-up. Participants were allocated to a factual writing or an emotional writing condition, with writing tasks done for 15 minutes a week for three weeks.

Findings: The results show that there was an interaction between gender, writing condition and time for negative affect ($F(2, 172)=10.01$, $p<0.01$), SDQ scores ($F(2, 180)=3.80$, $p<0.05$) and YSR

scores ($F(2, 216) = 3.08, p < 0.05$). Contrasts indicate that emotional writing may be more beneficial for males than females.

Discussion: These findings could be used to target writing interventions more effectively.

Undertaking systematic reviews of correlational studies in health psychology: The problems

Dempster, M.* & McGowan, L.; *Queen's University Belfast, UK

Background: A systematic review was undertaken to identify the cognitive variables that are associated with eating behaviour. The aim of this research is to assess the usefulness of the electronic databases at assisting with identifying relevant literature.

Methods: A total of 2279 citations were retrieved from the Web of Science, PsychInfo and Cinahl databases and assessed for relevance (by independent reviewers). Rater agreement and the precision and sensitivity of the databases were calculated.

Findings: Of the 2279 citations retrieved, 70 articles were deemed eligible for the systematic review. Web of Science had the highest score for sensitivity but the lowest for precision. The opposite was true for PsychInfo. The reviewers disagreed most often about the information provided in PsychInfo. PsychInfo appears to contain the most relevant material but the abstracts of articles can be uninforming or misinforming.

Discussion: A move to structured abstracts in psychological journals is required to facilitate reviews of this nature.

The patient's perspective on adjustment to living with multiple sclerosis

Dennison, L.,* Devereux, A., Moss-Morris, R., & Yardley, L.; *University of Southampton, UK

Background: Multiple Sclerosis (MS) is a chronic, disabling neurological disease which usually strikes in early adulthood and can have a profound effect on diverse aspects of life and psychological adjustment.

Methods: 30 people were interviewed about their experiences of living with MS, difficulties encountered in various life domains, and strategies for dealing with these issues. Interviews were audio-taped, transcribed, and analysed using Thematic Analysis.

Findings: Emerging themes include; inadequacy of information and formal support immediately post-diagnosis, difficulties gaining appropriate support from friends and family, social isolation, living with an invisible disability, maintaining a positive mental attitude, finding new ways to engage in activities, and ambivalence about others with MS.

Discussion: Findings complement the large body of quantitative research on adjustment to MS by adding rich, detailed insights into phenomena. Study findings and interview quotes have been used to develop a manualised CBT intervention for adjustment to MS.

The state of mind and the state of mood: Cognitive function and depression in old institutionalized people

Despot Lucanin, J.,* Lucanin, D., & Havelka, M.; *University of Applied Health Sciences, Croatia

Background: Epidemiological studies found that depression was associated with subsequent risk of cognitive decline (Sephton et al., 2003; Andel, Hughes & Crowe, 2005). The nature of this association remains unclear, as incipient AD may be a risk factor for depression. The aim of this study was to determine the possible association between depression and cognitive impairment in old institutionalized people of both sexes and different ages.

Methods: Subjects were 300 older people, residents of 11 older people's homes in Zagreb, of both sexes, aged 65–90 years, grouped in four 5-year range age groups. Beck's Depression Scale and Cognitive Function Scale – CAPE were administered. Subjects' objective health status, self-perceived health and functional ability were controlled for.

Findings: Results showed different correlations between depression and cognitive impairment in different age groups.

Discussion: The implications of these findings are interesting in terms of intervention and better identification of groups particularly susceptible to cognitive decline.

Psychological responses to cardiac diagnosis: Changes in illness representations following coronary angiography

Devcich, D.A.,* Ellis, C.J., Gamble, G., & Petrie, K.J.; *The University of Auckland, New Zealand

Background: Coronary angiography is a commonly used diagnostic test for ischaemic heart disease. Despite this, little is known about how undergoing the procedure impacts on the ways in which individuals perceive their illness.

Methods: We sought to explore patients' changes in cognitive and emotional illness representations following coronary angiography. The Brief IPQ was administered to patients ($N = 57$) before and immediately following their angiogram. Changes in illness representations were then compared between patients diagnosed with diseased arteries and patients with normal arteries.

Findings: We found that illness identity, illness consequences and illness emotion decreased for patients receiving normal results but remained unchanged for patients receiving results showing diseased arteries. Illness concern decreased significantly for both groups.

Discussion: The results suggest that patients cognitively prepare themselves to receive an unfavourable diagnosis, and the pattern suggests those receiving normal results modify their perceptions in a positive direction in comparison to those receiving an unfavourable diagnosis.

Reliability and validity of a survey measure of attributional style in people with multiple sclerosis

Dewar, S.* & Kneebone, I.; *Surrey NHS Primary Care Trust, UK

Background: Measures of attributional style are key to the examination of the reformulated theory of learned helplessness. The current study examined the psychometric properties of an attributional style measure that can be administered remotely, with people who have MS.

Methods: 495 people with MS were recruited. Participants completed the Attributional Style Questionnaire-Survey (ASQ-S), and two comparison measures of cognitive variables via postal survey on three occasions, each 12 months apart. Internal reliability, test re-test reliability and concurrent validity were considered using Cronbach's alpha and Pearson's correlations.

Findings: The internal reliability of the ASQ-S was good ($\alpha > 0.7$). The test re-test correlations were significant, but failed to reach the .7 required. The concurrent validity of the ASQ-S was established compared to both measures.

Discussion: The psychometric properties of the ASQ-S indicate that it shows promise as a tool for use with populations such as those who have MS.

The psycho-social effects of living with neurofibromatosis type 1: An interpretative phenomenological analysis

Dheensa, S.* & Williams, G.; *Nottingham Trent University, UK

Background: Neurofibromatosis Type 1 (NF1) is a genetic disorder, causing disfiguring tumours, bone abnormalities and neuro-psychological impairments. Qualitative research regarding psycho-social effects for affected adults is limited. The aim of this poster was to examine how adults perceive, cope with and adapt to NF1.

Methods: Semi-structured telephone interviews were conducted with six affected adults. Following transcription, Interpretative Phenomenological Analysis was employed.

Findings: Five themes were identified: Lack of information provision by healthcare professionals; being judged by society and ability to influence judgement; social comparisons to others with chronic conditions; positive appraisal and response shift; transience of coping strategies. Themes reflected problems associated with the lack of awareness surrounding NF1 and how the unpredictable progression of the condition affected coping and adaptation.

Discussion: Adaptation to NF1 would be aided by improved communication and support from healthcare professionals along with cognitive-behavioural and existential therapies to encourage positive coping.

A systematic review of psychosocial variables which may predict physical recovery after stroke

Dhiman, P.,* Myers, L.B., & Parton, A.; *Brunel University, UK

Background: Stroke is the third leading cause of death in the developed world, after heart disease and cancer, and causes 10% of deaths worldwide. Therefore, it is important to be able to identify psychosocial variables that may predict physical recovery after stroke. This is the aim of the current systematic review.

Methods: Three search strategies (electronic databases [1990-March 2008], hand searching journals, inspection of reference lists) were employed. Only five studies fulfilled the inclusion criteria.

Findings: In 4 out of the 5 studies, depression was a significant predictor of poor recovery. No other psychosocial variables were measured in these studies.

Discussion: This review has highlighted a lack of studies in this area. Future research needs to investigate other potential psychosocial variables which may predict recovery after stroke, e.g. stress, coping and social support.

A research study about supervision effectiveness

Di Falco, G., Giunta, S., Pruiti, F.C., Ferraro, A.M., Giannone, F., Di Blasi, M., & Lo Verso, G.; *Università degli Studi di Palermo, Italy

Background: The study aim to analyse the effectiveness of supervision on a group of social workers in a Therapeutic Community for psychiatric patients. The main research hypothesis is that supervision impacts on burnout levels, and personal and group self-esteem. It also might improve social workers' perceived self-esteem and, indirectly, patients' quality care.

Methods: The research evaluated outcome variables (Burnout, Professional qualities, Personal Self-Esteem, Group Self-Esteem) and process variables (Group Cohesion, Supervision Aptitude, Main Group Theme) within two different social worker groups (only one of these make use of supervision), and two different inpatients groups. The data has been analysed with the assistance of SPSS.

Findings: On the basis of results it should be possible to infer that Supervision reduces the daily difficulties experienced by social workers in their job.

Discussion: Moreover data should confirm that supervision also has an effect on social workers wellbeing, and thereby on the quality of their work.

Decision making in Homeopathy

Dibb, B.,* Burch, A.L., & Brien, S.; *Brunel University

Background: The number of people seeking treatment from complementary therapists is growing rapidly yet few studies have investigated how complementary practitioners, such as the homeopath, reach their remedy decisions.

Aim: To explore how homeopaths make decisions during their consultations.

Method: In-depth, semi-structured interviews were carried out with fourteen homeopaths. Interpretative phenomenological analysis (IPA) was used to analyse the data.

Results: Themes which emerged from the analysis included the use of pattern recognition (P), hypothetico-deductive reasoning (H) and intuition (I) which led to a precise remedy match (R-M). These themes are described in terms of a decision-making model, the PHIR-M, which shows how homeopaths make their clinical decisions.

Conclusions: The PHIR-M shows homeopathic decision making to be strongly evidenced based, selectively intuitive, and dependent on the therapeutic relationship.

Relationship between emotions, acceptance, illness perceptions and health status in chronic pain – a longitudinal study

Dima, A.,* Power, M., & Gillanders, D.; *University of Edinburgh, UK

Background: The relationship between illness perceptions, acceptance, and emotional experience in chronic pain sufferers requires more in depth research, particularly over time. We present preliminary results of a longitudinal study exploring this issue.

Methods: 147 adults with chronic pain completed validated questionnaires (e.g. Chronic Pain Acceptance Questionnaire, Basic Emotions Scale, Brief Illness Perception Questionnaire, Sickness Impact Profile Roland Scale), at two time points, separated by 4 months.

Findings: Over time, increases in chronic pain acceptance are associated with reductions in anger ($r = -0.22$, $p < 0.01$), sadness ($r = -0.23$, $p < 0.01$), and the use of internal dysfunctional emotion regulation strategies ($r = -0.26$, $p < 0.01$). Increases in acceptance are also associated with

participants appraising chronic pain as having less impact on their lives ($r = -0.34, 0.28, -0.35$, and $-0.42, p < 0.01$), and with reduced disability ($r = -0.34, p < 0.01$).

Discussion: These findings warrant the development of a more comprehensive model of functioning in chronic pain, potentially useful to pain management programmes.

Risk behaviours among Bulgarian school-aged children: How do socioeconomic factors matter?

Dimitrova, E.,* Todorova, I., & Kotzeva, T.; *Center for population studies at BAS, Bulgaria

Background: Family settings and socioeconomic factors play a key role in the physical, psychological and social development of children. We discuss the link between family wellbeing and the prevalence of various types of risk behaviour among Bulgarian school-aged children. Our hypothesis is that the changing family relations and the increasing social inequalities in Bulgaria strengthen the socioeconomic ingredient in children's healthbehaviours.

Methods: Data from the Bulgarian sample of the HBSC 2005/6 have been utilized. We constructed Family Affluence Scale and also use children's subjective perceptions of material wellbeing. We employ ANOVA tests and logit regression models.

Findings: The children from more affluent families in Bulgaria have higher risk for weekly drinking. They also tend to start their sexual life earlier than the children from the less affluent families. For smoking the association is the reversed – the odds for regularly smoking increases among the children from the poorer families.

Discussion: The study confirms the crucial importance of family wellbeing for children's health behaviours.

Aerobic exercise with relaxation – influence on pain and psychological well-being in female migraine patients

Dittrich, S.M.,* Günther, V., Franz, G., Burtscher, M., Holzner, B., & Kopp, M.; Innsbruck Medical University, Austria

Background: Pilot study to address the influence of an aerobic exercise program combined with relaxation on pain and psychological variables in migraine patients.

Methods: Controlled, randomised design with half of the group receiving an intervention and half of the group (control group) with standard medical treatment. Setting/Patients/Outcome Measurement: 30 female migraine outpatients completed a range of psychological questionnaires measuring sensational and affective dimensions of pain, body image, depression and quality of life.

Intervention: Exercise group ($n = 15$) was involved in a 6-week, twice weekly, indoor exercise programme (45 minutes of gymnastics with music and 15 minutes of progressive muscle relaxation).

Findings/Discussion: Program led to a significant reduction of self-rated migraine pain intensity. Although there was an improvement in depression-related symptoms within the active training group no significant differences in psychological variables between groups were found.

Predicating physical activity intention and behaviour using the TPB within students: Gender specific

Dodd, L. & Newman, S.; University College London, UK

Background: The study examined whether gender has an impact on the theory of planned behaviour (TPB) for predicting physical activity (PA) within students. The health benefits to be gained from being physically active are well documented. Despite this, it has been reported globally that physical inactivity has become wide spread within this population.

Methods: One hundred and fifty two students (76 male and 76 female), ages 18–28 years, completed a TPB questionnaire and, 7 days later reported actual PA behaviour. The data was analysed using multiple regressions.

Findings: The results indicated that for both male and female students PA intention was primarily a function of the TPB constructs ($p < 0.001$). However, intention and perceived behavioural control were direct determinants of PA behaviour in male students only ($p < 0.001$).

Discussion: Further investigation is required to assess what other factors would motivate female students to participate in PA, so that effective programmes can be developed which are gender specific.

Systematic development, application and refinement of an evidence- and theory-based behaviour change intervention tool

Dombrowski, S.U.,* Sniehotta, F.F., Avenell, A., Araújo-Soares, V., MacLennan, G., Comerford, C., Buchanan, N., & Penny, I.; *University of Aberdeen, UK

Background: The MRC framework states that complex behaviour change interventions should be based on reviewing relevant scientific literature and modelling. However, specific details on how this process should be undertaken are not provided.

Methods: We developed a behaviour change intervention tool based on a systematic review using a novel methodology to identify successful behaviour change techniques (BCTs). Intervention materials based on effective BCTs were subsequently incorporated into a previously existing NHS led behavioural-management programme consisting of 8 weekly sessions.

Findings: Various BCTs could be associated with more successful outcomes. Materials in the form of a weekly booklet containing various BCTs identified through the systematic review were developed and successfully included into the programme. Participants provided feedback on materials facilitating the improvement of translating theory and evidence into practice.

Discussion: We demonstrated a method of systematically translating formal theory and evidence into a deliverable behaviour change intervention based on published guidelines.

Personal factors as predictors of health-related quality of life (HRQOL) and depression after stroke

Donnellan, C.,* Hevey, D., Hickey, A., & O'Neill, D.; Trinity College Dublin, Ireland

Background: A longitudinal study examining the influence personal and clinical factors have on depression and HRQOL after stroke.

Methods: Patients ($n = 153$, 49% male, mean age 71 years ± 13.4) were interviewed within 4 weeks (T1) and 12 months (T2) after stroke. Personal factors were adaptive strategies (Selection, Optimisation and Compensation 15-item questionnaire), locus of control over recovery (Recovery Locus of Control questionnaire) and socio-demographics. Clinical factors were stroke severity (Orpington Prognostic Score) and functional ability (Nottingham Extended Activities of Daily Living). HRQOL and depression were assessed with the Stroke Specific Quality of Life Questionnaire and the Depression Subscale of the Hospital Anxiety and Depression Scale.

Findings: Multivariate analyses showed that socio-economic status (SES) ($\beta=0.21$, $p<0.05$) and HRQOL at T1 ($\beta=0.62$, $p<0.001$) were significant predictors of HRQOL at T2. Depression at T1 ($\beta=0.49$, $p<0.001$) was a significant predictor of depression at T2.

Discussion: HRQOL, SES and depression during the acute period after stroke are important factors in determining HRQOL and depression a year later.

Which negative emotion symptom(s)/traits predict increased cardiovascular risk?

Doyle, F.,* Conroy, R., McGee, H., & Delaney, M.; *Royal College of Surgeons, Ireland

Background: Negative affect (NA) states and traits are associated with increased mortality in acute coronary syndrome (ACS). Interventions for NA states have failed to reduce associated risk, yet there is evidence that specific symptoms are more cardiotoxic. In an ongoing study, we assess the underlying structure of relevant NA states/traits to isolate the most cardiotoxic symptoms.

Methods: ACS patients ($n=427$) completed questionnaires in hospital (depression, vital exhaustion, type-D personality). Non-parametric Mokken scaling derived underlying symptoms/traits. For 256 patients followed to date, logistic regression analysed cardiac endpoints (morbidity/mortality/cardiac readmission) at one-year.

Findings: Underlying dimensions found were: Fatigue-sadness, anhedonia, depressive cognitions, trait NA. Anhedonia and fatigue-sadness were associated with cardiac endpoints. In multivariate analysis, only fatigue-sadness was independently predictive.

Discussion: Fatigue-sadness is associated with increased cardiovascular risk, but other core depressive symptoms and trait NA are not. Detection and management of depression in ACS patients should focus on fatigue.

Effectiveness of an interactive e-learning intervention for alcohol and tobacco prevention in for primary schools

Drossaert, C.H.C.,* Pieterse, M.E., & Huurne, E.; *Twente University, The Netherlands

Background: In the Netherlands alcohol and tobacco prevention programs aimed at primary school students are largely lacking. A comprehensive school-based interactive e-learning program, including classroom assignments and a parent meeting was developed and tested.

Methods: In a quasi-experimental design with baseline and 4-week follow-up 700 students from 30 primary schools were allocated to the e-learning program or a non-intervention control group. Main outcome measures were self-reported past month prevalence rates and intentions.

Findings: The e-learning program showed for both behaviours a significant positive knowledge effect ($p<0.01$). No effects were found on behavioural measures, intentions, or other cognitive determinants as prototypes, attitudes, social influence, and self-efficacy.

Discussion: In general, the e-learning program failed to show consistent behavioural effects, partly due to an incomplete implementation. Also, a few small adverse effects on cognitions raise some concern about the benefit of substance use prevention at this age.

Evaluating the theoretical constructs and techniques used in a series of health-management sessions

Dutton, E.* & Mallia, P.; *Department of Health Promotion & Disease Prevention, Malta

Background: This study is a preliminary evaluation of the theoretical constructs and techniques used in a series of individual-based health management sessions with female clients recovering from an eating disorder.

Methods: The present report is based on 3 case-studies of clients who maintained healthy eating and exercise patterns at 3 months follow-up. Data is based on the psychologists' written entries taken during and exactly after the sessions as well as clients' feedback.

Findings: The study identified the Health Action Process Approach (Schwarzer, 1992) as being the main theoretical framework guiding the sessions. This was supported by techniques derived from Relapse Prevention Theory (Marlatt & Parks, 1999) and Self-Regulation Theory (Bandura, 1986).

Discussion: This study highlights the practical application of theoretical constructs and techniques in helping individuals successfully manage their health while recovering from an eating disorder, especially in settings where the support of a multi-disciplinary team is not always available.

Exploring the barriers to physical activity during pregnancy and the post-natal period

Edmunds, J.,* Atkinson, L., Baxter, A., & French, D.P.; *Coventry University, UK

Background: This study aimed to identify key barriers to physical activity during pregnancy and the post-natal period.

Methods: Focus groups were conducted with pregnant women (2 groups; $N=15$), women in the post-partum period (2 groups; $N=11$) and related practitioners (1 group; $N=8$), and analysed using thematic analysis.

Findings: The main barriers to physical activity among pregnant and post-partum women included lack knowledge, lack of/poor advice, lack of awareness of long-term consequences, lack of motivation, pregnancy constraints, safety concerns and lack of/inadequate service provision and advertising of services.

Discussion: Knowledge and motivation deficits are major barriers to physical activity among this group. The majority of women did not know what types of exercise they could do, or how this would benefit their/their child's health. In addition, most did not exercise prior to pregnancy, and thus, did not see the point in exercising during their pregnancy.

Quality of life issues in tinnitus sufferers: Prospective study on illness perception

El Refaie, A.,* Davis, A., Kayan, A., Baskill, J., & Owen, V.; *Bristol University, UK

Background: Tinnitus is a chronic condition which in the United Kingdom, it is estimated that it affects 10–20% of the adult population.

Methods: This study aims to answer three questions: (1) How the characteristics of tinnitus, its severity and its effect on various aspects of the individual's life change as a result of attending the tinnitus clinic. (2) How the SF-36 Aspects of Health scales scores change to reflect the attendance at the clinic (3) How attending the clinic can result in a change in the Quality of Family Life.

Findings: Results show a positive improvement in tinnitus annoyance, as a measure of severity, after attending the clinic. 52.6% of individuals found their tinnitus severely annoying, while on the waiting list to attend the clinic, compared to 35.1% after attending the clinic. We were able to show a significant improvement in the physical and mental health scales of the SF-36 Aspects of Health Questionnaire and the quality of family life questionnaire.

Discussion: A discussion on prospective studies towards individualized account of tinnitus sufferers including the role of illness perception and qualitative methodology in designing rehabilitative strategy will be a part of the presentation.

Health-related quality of life in haemophilia: Longitudinal effects of pain coping and pain acceptance

Elander, J.,* Robinson, G., & Morris, J.; *University of Derby, UK

Background: Bleeding into joints causes chronic arthritic joint pain in haemophilia. We tested the extent to which pain coping strategies and chronic pain acceptance added to and/or mediated the effects of pain frequency/intensity, social, demographic and clinical factors on health-related quality of life.

Methods: Pain coping strategies (CSQ), chronic pain acceptance (CPAQ) and other factors at baseline were used to predict health-related quality of life (SF-36) six months later among 140 individuals with haemophilia A or B.

Findings: Baseline CSQ and/or CPAQ scores made significant unique contributions to 6-month SF-36 scores independently of other factors (up to 26% additional variance accounted for). Tests of specific indirect effects showed partial mediation by affective pain coping (CSQ) (Sobel = 4.3, $p = 0.017$) and pain willingness (CPAQ) (Sobel = 2.1, $p = 0.003$).

Discussion: The findings extend understanding of the roles of coping strategies and acceptance in adjustment to chronic pain, with implications for interventions and further research.

Predictors of smoking relapse: A Delphi study

Elfeddali, I.,* Mesters, I., Wiers, R.W., & De Vries, H.; *Maastricht University, The Netherlands

Background: This study aimed at exploring expert opinions with regard to the most important factors for smoking relapse prevention and the working mechanisms of these factors. Additionally, differences between experts in the research field and experts working with smokers in practice were analyzed.

Methods: Participants ($N = 108$) were experts in the field of smoking cessation and relapse prevention. Researchers ($N = 47$) as well as experts working with smokers in practice ($N = 61$) were recruited. Participants were recruited using the networks of our advisory board and through inspection of the authors of relevant papers of the last three years. The opinions of the experts concerning the concepts important for successful relapse prevention were assessed by the Delphi Method.

Findings: The results showed to what degree consensus about the outlined factors was reached as well as the discrepancies in the expert opinions. Consensus was reached among others about the importance and working mechanism of action plans. Group differences were found.

Discussion: The factors revealed by this Delphi study should be incorporated in future research about smoking relapse and taken into consideration for future cessation interventions.

Cons of relapse, action plans and quitting within a group as important predictors of successful smoking cessation

Elfeddali, I.,* Bolman, C., Wiers, R.W., & De Vries, H.; *University of Maastricht, The Netherlands

Background: Results from Cochrane Review suggest that more research is needed to identify predictors of smoking relapse. We analyzed various predictors, including the role of action plans as identified in the I-Change Model. Additionally we assessed the effectiveness of a smoking cessation group on relapse prevention to individual smoking cessation without guidance and compared differences in predictors of relapse between the groups.

Methods: Adult daily smokers quitting within a smoking cessation course ($N=58$) and individual quitters ($N=83$) were recruited; the sample consisted of 141 smokers willing to set a quit date. Respondents received Internet-based questionnaires based on the I-Change model. Two pre-quit assessments and 4 post quit assessments (24 hours, 1 month, 2 months and 3 months) were taken. Effects were analyzed using logistic regression analysis. Additionally, e-dairy data were collected.

Findings: Relapse in the whole group was predicted by perceiving less disadvantages of relapse, making less action plans, low baseline self efficacy and perceiving more stress. There was significantly more relapse in the group of individual quitters. The e-dairy findings provided illuminating data for personal reasons for success.

Discussion: The role of action planning has not yet received much attention. Our data suggest that effective action planning may foster successful quitting and should be incorporated in future cessation strategies.

Adult attachment and symptom reporting: Does pain sensitivity and affect mediate the relationship?

Elkes, A.* & Sheffield, D.; *Staffordshire University, UK

Background: Insecurely attached adults report more symptoms than securely attached adults, but the underlying mechanisms are poorly understood. One possibility is that insecure adults are more sensitive or more willing to report unpleasant sensations.

Methods: Seventy undergraduate students (56 women; mean (SD) age = 23 (6) years) completed the Revised Adult Attachment Scale, Positive And Negative Affect Scale and the General Health Questionnaire-28. They were also asked to rate the intensity of cold and hot stimuli, and indicate warm sensation, hot threshold and hot tolerance.

Findings: Insecure participants reported more depressive symptoms ($\eta^2=0.19$), greater negative affect ($\eta^2=0.23$), and higher warm sensation ($\eta^2=0.11$). Attachment was not related to symptoms when negative affect ($\eta^2=0.05$), but not warm sensation, served as a co-variate in ANCOVAs.

Discussion: Insecure adults may be less sensitive and less willing to report unpleasant sensations. Pain sensitivity did not explain attachment-symptom relationships; negative affect offered the best explanation.

Service users' opinions of the use of physical activity as a therapy in mental health

Ellis, N.,* Davey, R., Grogan, S., & Crone, D.; *Staffordshire University, UK

Background: The benefits of physical activity for mental health are well documented. However, there has been little qualitative research examining the experiences of people experiencing mental health problems who are engaged in physical activity programmes. This paper reports findings from an investigation of how sport and walking groups impact on service users and implications for service provision.

Methods: Semi-structured one-to-one interviews were conducted with nine service users. Data were analysed using Interpretative Phenomenological Analysis.

Findings: Emergent themes included 'impact of mental health problems', 'impact on health and well-being', 'impact of the 'group'' and 'accessing facilities'. A model was developed to reflect the interactions between themes and sub-themes. Overall, physical activity programmes were viewed positively, increasing service users' ability to manage their mental health problems.

Discussion: A range of benefits of the physical activity programmes were identified by service users, with implications for service provision and exercise promotion within health psychology.

Discontinuity patterns and (PAPM) stage transitions of kidney screening kit uptake

Self-acceptance is associated with lower morning cortisol levels

Endrighi, R.,* Dockray, S., & Steptoe, A.; *UCL Psychobiology group, Dept of Epidemiology and Public Health, UK

Background: Positive psychological characteristics have been associated with favourable health outcomes, yet the biological correlates of dimensions of wellbeing have yet to be fully examined.

Methods: The association between self-acceptance, as a dimension of wellbeing and cortisol levels were examined in a sample of healthy women ($n = 100$). Self-acceptance was assessed with a nine item subscale of the Ryff's Scales of Wellbeing (1995). Levels of morning cortisol were measured on a work day. Hierarchical linear regression models were used to examine the contribution of self-acceptance to cortisol levels.

Findings: Preliminary analyses show a negative association between post-awakening cortisol levels and self-acceptance. This suggests that individuals who are more content with the self have lower levels of morning cortisol.

Discussion: The results provide some support to a model wherein biological pathways partly mediate the association between positive psychological traits and health. The results highlight the importance of a biopsychosocial approach to wellbeing.

Why people maintain their healthy behaviour change after a sudden trigger in their life?

Epiphaniou, E.* & Ogden, J.; *University of Surrey, UK

Background: Recent research indicates that sudden triggers in people's lives can enhance behaviour change and behaviour change maintenance.

Methods: Based upon their weight histories participants were classified as either successful ($n = 431$) or unsuccessful ($n = 592$) dieters and completed questionnaires relating to triggers and a number of factors that were hypothesised to promote weight loss maintenance.

Findings: Successful dieters reported a number of triggers and indicated reduced choice over their old diet and exercise behaviours, more benefits from the new behaviours and endorsed the effectiveness of behavioural solutions to their weight problem when compared to unsuccessful dieters.

Discussion: Sudden triggers can promote behaviour change for some individuals. This change is facilitated by a reduction in choice and reduction in the benefits over the unhealthy behaviours, and a belief that behavioural solutions will be effective.

Self-affirmation increases threat-related affect following a health message

Epton, T.,* Harris, P., & Webb, T.; *University of Sheffield, UK

Background: Although self-affirmation (SA) has been shown to reduce certain aspects of the defensive response to health-risk information, little is known about its effects on affect. The current study addressed this question.

Methods: Participants read health-risk information after completing an SA or control task. ANOVAs were conducted on self-discrepancy (e.g. dejection, agitation) and fear-related emotions (study 1, $N=93$), and on explicit and implicit self- and threat-related emotions (study 2 & 3, $N=68$).

Findings: In comparison to controls, SA participants reported more fear ($p<0.01$), and self-evaluative emotions related to accepting vulnerability to the threat ($p<0.05$), and displayed stronger implicit threat-related emotions ($p<0.05$) and marginally greater self-related emotions ($p=0.08$).

Discussion: The few studies of SA and affect have produced mixed findings. These studies suggest that SA boosts the affective threat response (e.g., fear and negative self-evaluation). This is consistent with lower fear control and greater danger control (e.g., Leventhal, 1970).

The psychopathology in the development of female coronary heart disease

Espnes, G.A.* & Byrne, D.; *Norwegian University of Science and Technology, Norway

Background: While coronary heart disease (CHD) for decades was understood as mainly a male disease group, it has through the last years become increasingly evident that it is now an important disease causing premature death also in the female populations throughout the Westernised world.

Methods: Present research is a literature study that has evaluated all available literature on female-CHD and the reports of sex and gender differences in the psychopathology or risk factor picture of CHD with an emphasis on female risk.

Findings/Discussion: It is concluded that the risk factor picture in females is, due to limited research, still far from clear, even if there are indications of sex differences in both the risk factors picture and the trajectories of the disease development.

Positive psychosocial health determinants and health outcome in an adolescent population

Espnes, G.A.,* Moksnes, U.K., & Ingebrigtsen, J.E.; *Norwegian University of Science and Technology, Norway

Background: The aim of this study was to scrutinize positive associations between psychosocial and behavioural factors and perceived good health. The study is therefore in line with new trends in positive health psychology; to look at the upside of health instead of the downside, to look at "risk" for good health instead of risk for disease. Positive childhood and adolescent health is of course important in its own right, but also for adult health. Present study investigates perceived good health and relation to positive emotions, behaviours and social skills in an adolescent population.

Methods: Totally 1367 (715 females and 652 males) from 6 municipalities in Norway were interviewed and included in the analyses.

Findings/Discussion: The preliminary results gives an indication of a pattern of that; the more frequent physical activity level, the better perceived health; the lower depression, stress and anxiety,

the better perceived health and the higher level cheerfulness and happiness, the higher perceived health score.

Promoting physical activity to aid smoking cessation: A qualitative perspective on multiple health behaviour change

Everson, E.S.,* Taylor, A.H., & Ussher, M.; *University of Exeter, UK

Background: Multiple health behaviour change research tends to focus on overlapping social-cognitive determinants. However, little is known about how one behaviour change impacts on another. We explored how smoking cessation advisors (SCAs) promote physical activity (PA) during quit attempts.

Methods: Semi-structured interviews with 11 advisors were analysed using thematic analysis.

Findings: Themes generated were: Issues in promoting simultaneous multiple health behaviour change (including pros and cons, timing, and diet); pros and cons of PA promotion while quitting; barriers and facilitators of PA promotion while quitting; how advisors promote PA in cessation; and SCA training needs.

Discussion: Prior SCA training focused on solely supporting a quit attempt, leaving practitioners with very varied approaches to promoting PA. There appears to be scope to primarily focus on promoting PA to replace other mood regulating behaviours (i.e., smoking, snacking). These findings have implications for developing multiple health behaviour change interventions and theory.

Walk-2-Quit: Translating theory and evidence to practice through collaborative action research

Everson, E.S.,* Taylor, A.H., & Ussher, M.; *University of Exeter, UK

Background: Physical activity (PA) experimentally reduces cigarette cravings. This study aimed to examine how such evidence can best be integrated into smoking cessation advisors' (SCAs) current practices.

Methods: Field notes and tape recordings were compiled during several sequential phases of observation, reflection, planning, implementation, and re-evaluation, involving 11 SCAs in two NHS Stop Smoking Services.

Findings: Maudsley-trained SCAs initially rarely promoted PA in group clinics as a cessation aid. PA promotion progressed from a researcher-led 15 min talk, at the end of each of the 6 weekly sessions, to a fully integrated programme delivered by SCAs. PA promotion as an aid became a prominent feature of the clinic from week 1. In the second phase, in another Service, a 36-page self-help guide (with pedometers and self-recording) was piloted, evaluated and refined in collaboration with SCAs.

Discussion: Walk-2-Quit reflects a theory-driven, practitioner-oriented intervention, which embeds PA promotion in gold-standard NHS Services.

How psychologically distressing is participating in clinical research perceived to be compared to everyday hassles?

Faasse, K.,* Notman, T.A., Fuhrmann, S., O'Carroll, R., & Petrie, K.J.; *University of Auckland, New Zealand

Background: Ethics committees must judge the likely distress incurred through participation in medical research. There is little available research on which to base these decisions. This study aimed to provide numerical data allowing the comparison of subjective distress caused by common medical research procedures to everyday hassles.

Methods: 147 first year health science students from the University of Auckland completed an 80 item questionnaire rating distress caused by common events such as “missing the bus” and medical research experiences including “answering a questionnaire about your health.” Items were rated from 0 “not distressed at all” to 10 “extremely distressed.” Non-medical item data was then subjected to internal consistency analyses, and poorly performing items removed. The revised questionnaire was given to 100 participants from the general Scottish population.

Findings: In both the student and general population samples, medical items had a mean of 4.0 or less. The student sample rated “giving a stool sample” ($M = 3.6$) as most distressing of the medical items, while the general population sample rated “taking part in an in-depth telephone interview about your health” ($M = 4.0$) as most distressing.

Discussion: Medical items were rated as causing relatively little distress by both the student and general population samples when compared with commonly experienced life hassles. This research suggests that participants perceive medical research to be less distressing than researchers or ethics committees may believe.

When emotional expression is interfering with adjustment to distressing event

Fantini, C. & Pedinielli, J.-L.; Université de Provence, France

Background: Difficulties to express or identify feelings (alexithymia) is actually considered either as a personality trait or as a state reaction. Our purpose is not to debate about this controversy but rather to evaluate the consequences of such inabilities on adjustment strategies. Alexithymic individuals are prone to experience state-trait anxiety which are associated with emotional coping strategies. These last are, in particular circumstances, sometimes considered as dysfunctional or deleterious to well being in front of distressing events. But how could we conceptualize the relations between alexithymia, trait anxiety and coping strategies? Could we hypothesized that alexithymia is a vulnerability factor leading to misuse adaptive strategies? We hypothesize that trait anxiety is a mediating factor explaining the relations observed between coping and inability to express feelings.

Methods: 77 participants who have obtained a genetic result for familial colonic cancer predisposition, have accepted to fill in questionnaires. We have measured trait and state anxiety (STAI), coping strategies (WCC) and alexithymia (TAS-20) both before the genetic counselling than 15–30 days after the genetic test result announcement.

Findings: Alexithymia could not be considered as a coping strategy since its relationship with emotion focused coping are completely explained by trait anxiety. If we have observed that alexithymic individuals were prone to use emotional coping, it was just because these subjects were characterized by an anxiety personality trait. Trait anxiety seems to represent a core or a key factor to explain such particular relations never highlighted in the scientific bibliography.

Discussion: We will discuss psychological implication of such results both in a theoretical point of view than in a healthcare perspective.

Illness representations (IRs) in acute clinical presentations: Retrospective Illness Perception Questionnaire (IPQ-R) and real-time data compared

Farquharson, B.,* Johnston, M., & Bugge, C.; *University of Aberdeen, UK

Background: In acute illness, retrospective methods of assessing IRs are often the most feasible, but may be limited by distorted retrospective reporting. We compared retrospective IPQ-R reports relating to clinical consultations with 'real-time' recordings. RQ: How do IRs expressed during clinical consultations relate to those measured by IPQ-R within 14 days?

Methods: A content analysis of clinical presentations to the Scottish national telephone advice service. A random sample of 35 callers completed IPQ-R (<14 days). Responses relating to reasons for consulting were identified from recordings and coded using Leventhal's definitions of IR, then each construct compared with IPQ-R.

Findings: The identity subscale captured most symptoms mentioned (17/26). References to timeline, treatment control, coherence and emotion were generally consistent with IPQ-R score. References to cause, consequences and personal control were scarce but also consistent.

Discussion: Data suggest retrospective IPQ-R assessment gives a valid indication of IR's at the time of acute illness presentation.

Lifestyle, life-stage and social context: Patient perceptions of being 'high risk' of heart disease

Farrimond-Egenis, H.,* Saukko, P., Qureshi, N., & Evans, P.; *University of Exeter, UK

Background: Current NHS policy advocates screening in primary care to identify 'high risk' individuals for coronary heart disease (CHD). The aim of this research was to explore participants' understanding of their CHD risk.

Methods: Data is from a nested qualitative study within a CHD risk intervention randomised trial in primary care. 'Discovery' interviews were conducted with 38 'high risk' participants (mean age = 55) two weeks after intervention and analysed thematically.

Findings: Participants' sense of 'being at risk' was mitigated by social context, particularly relating to age and life-stage. Participants made downward social comparisons, comparing their lifestyle favourably with those of a similar age and class. Being at risk was normalised as part of the aging process. Lifestyles were also entrenched. Many participants had co-morbidities which made lifestyle change more difficult and lower on their agenda.

Discussion: Health psychology needs to account for risk within a wider 'life-stage' context if it is to effect behaviour change.

Effect of empathy on (traffic) risk behaviour

Feenstra, H.,* Abrahamjan, A., Foppen, R., Hestermann, D., Langenhorst, H., Senden, M., & Kok, G.; *Maastricht University, The Netherlands

Background: An identifiable risk group concerning traffic accidents are the inexperienced drivers. Besides lack of experience, developmental issues are assumed to be an underlying factor of this increased risk of adolescents. For instance, empathy has been shown to increase with age.

Methods: In the present study, we try to study the effects of empathy on risk taking. With half of 80 student participants empathy will be increased. Further, another half of participants will believe their actions on a computer task will influence another (non-existing) participant's score, thus creating 4 groups. The computer task includes choosing for risky or safe decisions.

Findings: It is hypothesized that the high-empathy/influence group will behave less risky on the computer task. Results will be discussed.

Discussion: Besides confirming the positive effect of empathy on risky behaviour, the results will also provide a basis for developing traffic education based on empathic manipulation.

Effectiveness of drug prevention program for university students according to mediators of substance use

Ferdinand, S.,* Ondrej, K., & Olga, O.; *PJ Safarik University in Kosice, Slovak Republic

Background: Drug prevention programs rely on change in mediating processes of substance use as the primary means for achieving effects. Changes in Mediators of Substance Use in group of psychosocial training participants were longitudinally compared to control group of non-participants.

Methods: 33 participants of 100 hours psychosocial training were compared to 55 non-participants (university students, 40.9% males; mean age 20.2). Data were collected before entering the training program (2004) and after the finishing the program (2006). Twelve Mediators of Substance Use as well as alcohol consumption, tobacco smoking and marijuana use were measured.

Findings: Significant correlation between substance use in 2006 and most of mediators measures in 2004 were found. Significantly higher increase in measures of Commitment, Goal Settings Skills, Social Skills and Assistance Skills was found among training participants compared to non-participants.

How should personality be used as a diagnostic risk factor for physical and psychosomatic health?: A taxometric analysis of type D personality, alexithymia and hypochondriasis

Ferguson, E.,* Williams, L., O'Connor, R., Bibby, P., & O'Carroll, R.; *University of Nottingham, UK

Background: Personality variables are increasingly used diagnostically to identify at risk cases for physical and psychosomatic illness. Taxometric theory suggests that identifying valid cutoff scores for caseness is predicated on whether the measure is dimensional or taxonic (identifies real cases). We apply taxometric procedures to three widely used personality measures in health psychology: Type D, Alexithymia and Hypochondriasis.

Methods: Three separate samples completed measures of: (1) Type D (DS14: $N=1012$), (2) alexithymia (TAS-20: $N=837$) and (3) Hypochondriasis (Whitely Index: $N=711$). MAMBAC, MAXEIGEN and L-Mode factor analyses were applied to these data.

Findings: For all measures there was no evidence for a discernable taxon – all measures were dimensional.

Discussion: This implies that: (1) current cutoffs may be incorrect, (2) new cut-offs should be developed from points of inflection and (3) theory development should be based models that predict dimensional (multi-causal) rather than taxonic (emergent) constructs.

Emotional state and illness representations predicts coping after surgery and during complementary treatments in Portuguese breast cancer patients

Fernandes, S.* & McIntyre, T.; *Lusiada University, Portugal

Background: Goal According to Leventhal's common-sense model, we tested illness representations and emotional state as predictors of coping in women with breast cancer, after surgery and during adjuvant treatments.

Methods: Participants were 74 newly diagnosed breast cancer patients, recruited in an Oncology Hospital (mean age: 50.6). Evaluation time points were before surgery, after surgery and at 4 months (during adjuvant treatments).

Findings: Multiple regression analyses showed that anxiety, depression or both were strong predictors of coping styles Anxious Preoccupation, Helplessness-Hopelessness, and Fighting Spirit, after surgery and during treatment (range of variance explained: 13 to 50%). Representations regarding illness coherence, duration, control and identity were significant but more modest predictors of coping (range of variance: 8 to 19%).

Discussion: The results support Leventhal's model in a Portuguese cancer sample and point to the need for early intervention directed at illness representations and reducing the impact of negative emotions during cancer treatment.

Autonomy and binge drinking in a late adolescence-young adulthood sample

Fernandes-Machado, S.,* Araújo-Soares, V., Sniehotta, F., & Soares, A.; *University of Minho, Portugal

Background: Binge drinking (BD) is common amongst males and young people. BD is associated with health-related problems (e.g. unsafe sex, accidents). A crucial point in the development of BD is the end of adolescence when more autonomy is gained and many leave home. This study examined the relationship between young people's emotional autonomy (EA) from parents and peers and BD.

Methods: 152 first year undergraduate students (70.4% male; mean age=19.22) completed a validated EA peer and parent scale and measures on alcohol consumption (AC), and BD.

Findings: Gender differences were found on the number of BD episodes ($p < 0.05$). AC was positively related with EA from parents ($p < 0.001$). However, the EA from peers and parents was not related with BD.

Discussion: Perception of EA from parents seems associated with more alcohol consumption but not with BD episodes. Autonomy does not seem to be key on the explanation of BD. Future studies should focus on the impact of behaviour theory constructs.

Towards a parsimonious and coherent model of cigarette smoking uptake

Fidler, J.* & West, R.; *University College London, UK

Background: Numerous predictors of smoking uptake have been identified. The challenge is to develop a coherent model of the causal mechanisms.

Methods: 1274 participants completed questionnaires annually from age 11–16. Measures of smoking, stress, dating behaviour, social influence, personality traits, deprivation, psychological well-being and pubertal stage were construed in terms of vulnerability factors measured at age 11 and trigger factors measured between 11 and 16. The independent associations between these variables and smoking at age 16 were assessed using multiple logistic regression.

Findings: Important vulnerability factors were; any past smoking, having a boyfriend/girlfriend, problems with peers, risk-taking and low task-orientation ($p < 0.001$ in all cases). Important trigger factors were; having friends or siblings who smoke, and high stress levels ($p < 0.001$ in all cases).

Discussion: The independent contributions of vulnerability and trigger factors are related to the PRIME Theory of motivation to arrive at a parsimonious individual-level model.

Patients' perceptions of hypertension: The role of beliefs and choice of treatment

Figueiras, M.J.,* Marcelino, D., Cortes, M.A., & Claudino, A.; *Instituto Piaget – APDES, Portugal

Background: Within the common-sense model framework, this study aims (1) to investigate what are the illness perceptions of hypertensive patients and their relationship with beliefs about medicines; (2) to identify whether different illness schemata are associated with the choice of treatment.

Methods: Cross-sectional study in which 191 hypertensive patients, (59% female) completed a questionnaire measuring beliefs about medication (BMQ-specific), illness perceptions (Brief-IPQ), choice of treatment (generic vs. brand medicines) and socio-demographic variables. Statistical analyses were performed using correlations, cluster analysis and chi-square.

Findings: Patients seem to have a well defined common-sense model of their illness which is associated with their beliefs about medicines. Three clusters were identified. Patients with more serious illness schemata are more likely to choose a brand medicine ($R^2 = -7.9$; $df = 2$; $p < 0.05$).

Discussion: Patients have specific beliefs about their treatment, and their illness schemata may influence beliefs about treatment choice, as well as to have implications for compliance.

Predictors of intention to adopt preventive behaviours for HIV/AIDS: An exploratory study in Portuguese teenagers

Figueiras, M.J.,* Marcelino, D., & Ferreira, M.; *Instituto Piaget – Almada, Portugal

Background: Within the social cognition framework, this study aims to investigate the extent to which the dimensions of the health belief model and the theory of planned behaviour are predictive of the adoption of preventive behaviours for AIDS in healthy teenagers.

Methods: Cross-sectional study in which 546 Portuguese healthy teenagers, (50% female), completed a questionnaire measuring individual beliefs about HIV/AIDS, and socio-demographic variables. Statistical analyses were performed using linear regression analysis.

Findings: Perceived vulnerability and risk to HIV/AIDS were low. There was a positive attitude towards the adoption of preventive behaviours, and strong beliefs concerning the intention of adopting preventive behaviours, perceived control over behaviour, benefits, and clues for action. There were significant gender differences in the predictors of intention to adopt preventive behaviours.

Discussion: Gender seems to have an effect in the way teenagers cognitively process information concerning AIDS, which may have implications for the adoption of preventive behaviours.

Illness perceptions do not mediate the effect of anxiety and depression on QoL in COPD

Fischer, M.,* Scharloo, M., Kaptein, A., & Weinman, J.; *Leiden University Medical Centre, The Netherlands

Background: This study investigates whether illness perceptions mediate the relationship between anxiety and depression and Quality of Life in patients with Chronic Obstructive Pulmonary Disease (COPD).

Methods: Patients ($N = 136$) filled out a questionnaire which included the Hospital Anxiety and Depression Scale (HADS) and the IPQ-R. QoL was assessed with the Chronic Respiratory Questionnaire.

Findings: In a first regression analysis anxiety and depression (R^2 change = 0.38, $p < 0.01$) turned out to be significant predictors of QoL. In analysis 2 illness perceptions 'Emotional representations' and 'Consequences' were also predictive of QoL (R^2 change = 0.26, $p < 0.01$). These illness perception subscales were in turn significantly related to anxiety and depression. In a final regression analysis with four predictors entered, anxiety and depression remained significant predictors of QoL, whereas illness perceptions became non-significant.

Discussion: Anxiety and depression are strong predictors of QoL. This relationship is not mediated by patients' perception of their illness.

Self-rated health and damaging behaviour of students from Lithuania and USA

Fleming, J.S.,* Gostautas, A., Flagstad, L.L., Seibokaite, L., & Pilkauskiene, I.; *Black Hills State University, USA

Background: Self-Rated Health (SRH) is an important motivational factor that can influence positive change in health-risk behaviour in adults. The purpose of this study was to disclose relationships between SRH and the use of legal and illegal drugs and suicidal tendencies in students from USA and Lithuania.

Methods: A self-report questionnaire about health-related behaviour was used for students 6th through 12th grades: 1352 from Kearney, USA and 7191 from Ukmerge, Lithuania.

Findings: Students who smoke, who have tried alcohol and other drugs, and who exhibit suicidal ideation, regardless of gender, belong to the greatest-risk category identified on the Self-Rated Health questionnaire ($p < 0.001$). The relationship between alcohol use and Self-Rated Health was not found in the Lithuanian boys group.

Discussion: These results do not confirm findings commonly observed in adults, and as such, the individuals of greatest-risk, those who smoke and drink, self-rate their own health as worse than those who do not smoke and drink. These findings suggest that psychological mechanisms, which relate to Self-Rated Health and damaging behaviour are different in adults and adolescents.

Characteristics of memory during pregnancy and after birth: A systematic review

Foley, S.; University of Sussex, UK

Background: This review summarises evidence on memory function in pregnancy and after birth.

Methods: Databases were searched using memory-related terms (e.g. memory, recall) and birth-related terms (e.g. birth, pregnancy) to identify studies of memory during pregnancy and after birth. Non-English language and qualitative studies were excluded.

Findings: Seventy-five studies were included, with 25,269 participants in total. Studies were categorized into (i) memory impairment (35 studies); (ii) accuracy of recall for birth-related events (35 studies); (iii) memory and postnatal psychopathology (5 studies). Results found memory deficits during pregnancy and the postpartum period do exist, although not for all types of memory. Memory for birth events is accurate for key interventions or events. Over-general autobiographical memory, negative memory, and impaired working and explicit memory are associated with postnatal depression.

Discussion: Pregnancy can affect memory performance, although women's memory of birth is generally accurate. The importance of this in psychological wellbeing is explored.

Practitioners' accounts of the parent-practitioner relationship in the care of children with leukaemia

Forsey, M.,* Young, B., & Salmon, P.; *University of Liverpool, UK

Background: This study aimed to examine practitioners' accounts of their relationships with parents of children with leukaemia, their goals during interactions with parents, and their views of parents' needs.

Methods: Thirty one practitioners across 6 different paediatric oncology treatment centres took part in audio-recorded qualitative interviews. Field notes and recorded consultations between parents and practitioners were used to add context to the interviews. Data analysis was interpretive and informed by the constant comparative method.

Findings: Initial analyses suggest that practitioners in different roles adopt very different strategies for dealing with parents' intense emotional needs. There is considerable variation in how doctors and nurses perceive their role in parents' psychological functioning and their responsibilities towards forming partnerships with parents.

Discussion: The study suggests that some practitioners may benefit from support in recognizing and responding to diversity in parents' needs and has implications for medical training.

Associations between health behaviours, the theory of planned behaviour, influenza vaccination uptake and intentions in British individuals over the age of 65

Forster, A.; University College London, UK

Background: The aim was to investigate associations between demographic and health-behaviour variables, the Theory of Planned Behaviour (TPB), influenza vaccination intentions (IVI) and influenza vaccination status (IVS) in British individuals age 65+.

Methods: A case-control between-participants study was conducted. 37 individuals responded to a 'Flu Vaccination Questionnaire' that assessed TPB, demographic and health-behaviour variables. IVS was elicited objectively. Data was analysed using parametric tests of difference and regressions.

Findings: Women and health service 'under-users' were less likely to intend to be vaccinated. 68% of the variance in IVI was explained, with only health service use contributing significantly. 24% of the variance in IVS could be explained by IVI; PBC could not explain IVS. IVI and PBC could not simultaneously predict IVS.

Discussion: Although underpowered, the results suggest that individuals who under-use health services are less likely to receive the influenza vaccine. This group should be targeted to increase vaccination uptake.

Exploring self management following active treatment for cancer

Foster, C.,* Roffe, E., & Scott, I.; *University of Southampton, UK

Background: Many people report continued problems following active treatment which can have an impact on daily life. The end of treatment can be a challenging time and people may find it difficult to resume 'normal life', experience physical, psycho-social and practical difficulties as a result of their cancer and its treatment, feel uncertain what the future holds and may miss regular contact with healthcare professionals. This cross sectional qualitative study explores the strategies people used to manage problems experienced 6–12 months after active cancer treatment has ended.

Methods: Participants were recruited through local media. 30 people participated in semi-structured interviews. Transcripts were analysed using thematic analysis.

Findings: The findings contribute to our understanding of how and why people self manage problems associated with cancer, the types of strategies they use to manage such problems, benefits of managing problems themselves and provide insights into how people can be supported.

Discussion: Research and practice implications will be discussed.

Experiences of UK mobile cancer information and support centres

Foster, C.,* Scott, I., Rogers, A., Kerr, C., & Addington-Hall, J.; *University of Southampton, UK

Background: Evaluate visitors' experiences of attending Mobile Cancer Information Units (Mobiles) to obtain information and/or support about cancer.

Methods: Semi-structured qualitative interviews were conducted with 42 visitors 20–69 years (9 male) during their visit to the Mobiles. 34 of these participated in follow-up telephone interviews. A Framework Approach was used to analyse the data.

Findings: Most were satisfied with the information and support they received during their visit. Three areas of unmet need were identified: (i) "emotional support" (ii) "talking about cancer" (iii) "cancer experts".

Discussion: Emotional support and support in talking about cancer were important to people affected by cancer. The long term information and support needs of cancer survivors or those with rarer cancers should be met where this is not currently the case. Further research is needed to determine why these needs are not being met and who should be supporting these people.

Acceptability and usefulness of the HOPE Programme: An interpretative phenomenological analysis

Fotiadou, M.,* Turner, A., & Barlow, J.; *Coventry University, UK

Background: Help to Overcome Problems Effectively (HOPE) is a group health behaviour coaching programme developed/delivered by health psychologists and peer educators. HOPE is underpinned by social cognitive theory and hope theory. HOPE aims to enhance participants' ability to self-manage aspects of a physical and/or mental health condition through building on the critical role that hope plays in establishing and maintaining weekly goal motivation and planning. The aim of this study was to establish the acceptability and usefulness of the HOPE programme.

Methods: Nine participants (mean age, 42 years; 6 women) took part in semi-structured interviews 4 months after attending HOPE. Interviews were analysed using interpretative phenomenological analysis.

Findings: Participants reported that weekly goal setting and feedback in a supportive environment were instrumental in helping them manage their physical and mental health problems.

Discussion: The HOPE programme shows promise as a method of delivering simple health behavioural change techniques to groups of patients living with physical and mental health conditions.

When GP's are patients: A phenomenological study

Fox, F.,* Taylor, G., Rodham, K., Harris, M., Robinson, B., Scott, J., Sutton, J., & Maslen, C.;
*University of Bath, UK

Background: Anecdotal accounts from GPs suggest that those who experience significant illness subsequently change the way in which they practice. Few evidence based papers have been published which explore this issue. This exploratory study aims to study GP's experiences of illness, their interaction with healthcare providers and the influence that this has had on their practice.

Methods: Semi-structured interviews with 20 GPs from 3 PCT's who have experienced a significant illness are being conducted and analysed using Interpretative Phenomenological Analysis.

Findings: Preliminary analysis indicates several emerging themes: The illness experience: Self management: 'getting it right or wrong'; Shifting roles: Taking charge or handing over; The patient experience: Priority treatment: Professional courtesy or pragmatism? The impact on practice: The role of self disclosure.

Discussion: Understanding how illness impacts on GP practice will be of interest to health professionals but is also likely to have implications for the training of GPs.

Predicting behavioural simulation from standard rating versus 'direct estimation' measure of intention, for transfusion behaviour

Francis, J.J.,* Stockton, C., Johnston, M., Eccles, M.P., Stanworth, S., Cuthbertson, B.H., Hyde, C., Timmouth, A., & Grimshaw, J.; *University of Aberdeen, UK

Background: Predictive models of behaviour are limited unless behaviour is measured. We used simulated behaviour (BS) in response to scenarios as a proxy measure of behaviour to study transfusion practice in intensive care (IC). There is evidence that 'Direct Estimation' (DE) is a valid intention measure.

Methods: Questionnaires were completed by 119 IC consultants throughout Britain. Items measured constructs in Theory of Planned Behaviour. Three clinical scenarios presented nine opportunities to make a clinical decision (watchful-waiting versus transfusion). Intention was measured using standard rating measures and DE ('...for how many out of the next 10 patients...').

Findings: Perceived behavioural control (PBC) and Intention explained 3.8% variance in BS scores. Neither was a significant individual predictor. PBC and DE explained 7.1% variance in BS scores. DE was the only significant predictor (beta = 0.2).

Discussion: Intention measurement is a methodological challenge. DE may be superior to standard rating methods. Theory-based reasons for using BS and DE are discussed.

The triangle paediatrician-parent-child: Which space for psychological intervention?

Freda, M.F.,* Gleijeses, M.G., & Martino, M.L.; *"Federico II" University of Naples, Italy

Background: This work, based on a psychodynamic prospective of the intervention, propose to study ties and resources of the relation between paediatrician-child-parent and psychologist into the hospital from the point of view of the pediatricians.

Methods: Fifty narrative interviews have been led with paediatricans to gather the relation between ways to intend psychological function, type of pathology and different modalities of relation with

parent or child. Texts have been submitted to a multidimensional, quail-quantitative, analysis (cluster analysis/multiple correspondence).

Findings: The analysis points out that the relation paediatrician-parent and paediatrician-child is organized on the basis of the dynamic proximity/distance that, in the case of parent is managed or through the power of medical knowledge and a exclusive collaboration with the neuropsychiatrist or through the management of the emotions implicated in the relation, it's delegated to the psychologist. Into relation with child, this dynamic seems to be managed through the fusion/confusion of child or with parent or with the sick organ.

Discussion: The led analysis formulates a hypothesis of the use of the psychological function to support a useful relation between paediatrician-child-parent.

Impact of self-monitoring of blood glucose on illness perceptions and behaviour: A randomised controlled trial

French, D.P.,* Wade, A.N., Neil, H.A.W., Kinmonth, A.L., & Farmer, A.J.; *Coventry University, UK

Background: The DiGEM (Diabetes Glycaemic Education and Monitoring) trial aimed to determine whether self-monitoring of blood glucose (SMBG) leads to changes in illness perceptions and self-care behaviours in people with non-insulin treated type 2 diabetes.

Methods: An open, parallel group trial. Patients ($n=453$) were randomised to usual care, less-intensive self-monitoring and more-intensive self-monitoring. Changes in diabetes illness perceptions, beliefs about SMBG, and self-reports of self-care behaviours (diet, exercise, medication adherence), were analysed at 12 months using ANCOVA with adjustment for baseline values.

Findings: IPQ-R Consequences scale scores decreased in the control group and increased in the two self-monitoring groups ($p=0.004$). IPQ-R Control scores did not differ between groups. There were between-group differences in self-reported diet, but this was not mediated by illness perceptions.

Discussion: Despite many predictive studies showing that illness perceptions predict patient behaviour, there are still no experimental studies showing that changes in illness perceptions mediate behaviour change.

Self-regulation in cardiac patients

Fteropoulli, T.* & Kalavana, T.; *University College of London, UK

Background: The aim of the study is to examine self-regulation and family environment factors influencing the accomplishment of health goals and health behaviours in cardiac patients using the Motivational Systems Theory (Ford, 1992).

Methods: The design is longitudinal and includes 53 adults (mean age = 53.5). The main measures include the Goal Elicitation Procedure (Little, 1983), the Self-regulation Skills Battery-Scale I & II (Maes et al. 2005), and the Family Environment Scale-FES (Moos & Moos, 2002). Linear regression and ANOVA were conducted in order to explore associations.

Findings: The results indicate that the stronger predictor of goal accomplishment and healthy behaviours is the existence of self-regulation skills ($\beta=0.42$, $p<0.001$, $\beta=0.33$, $p<0.05$). Family environment factors are related directly with the health goal accomplishment as well as indirectly through the self-regulation skills ($\beta=0.39$, $p<0.05$).

Discussion: The most important implication of the present study is that interventions should not focus only in cardiac patients ignoring the family environment.

The psychosocial impact of flash flooding: A qualitative study with residents in the UK Midlands

Furnell, G.* & Percy, C.; *Coventry University, UK

Background: This study investigated the lived experiences of people whose homes were affected by flash flooding in the UK Midlands in 2007. The psychosocial impact of flooding was explored, together with the effect of perceived social support on coping.

Methods: Interpretative phenomenological analysis was conducted on semi-structured interviews with 8 people whose homes were flooded.

Findings: The direct effects of flood damage to residents' homes included a sense of shock, overwhelm and threatened personal identity. This was compounded by a sense of injustice at feeling neglected by institutions from which support was expected. Social comparison and community social support were reported as important contributors to coping.

Discussion: Residential flooding was a significant source of distress. The experience was further complicated by the unexpected nature of the event, and by institutional and community responses. Theoretical concepts from health psychology may facilitate understanding of the psychosocial outcomes of future adverse environmental events.

Increase in self-esteem is related to alcohol drunkenness and smoking: A longitudinal study

Gajdosova, B.,* Orosova, O., Salonna, F., Kalina, O., & Van Dijk, J.P.; *PJ Safarik University in Kosice, Kosice Institute for Society and Health, Slovakia

Background: We examined change in Self-esteem among university students with respect to gender, alcohol drunkenness and smoking over a three-year period.

Methods: 195 university students (41.0% males) participated in longitudinal data collections in 2004 (baseline; 20.25 mean age) and 2006 (follow-up). The Rosenberger Self-esteem scale measured changes in global self-esteem scores from baseline to follow-up among students who had experienced (25.3%) and had not experienced (74.4%) episodes of drunkenness during the previous month (baseline); among non-smokers (74.2%) and heavy smokers (13.1%) who had smoked 16 and more cigarettes a day during the previous week (baseline).

Findings: A significant increase in self-esteem was found from baseline to follow-up among female (not male) students, as well as among students who were heavy smokers and those who had experienced drunkenness.

Discussion: The development of self-esteem and self-reflection in coping strategies are important in terms of health promotion.

Parents of children with intellectual disabilities mount a poorer response to pneumococcal vaccination

Gallagher, S.,* Phillips, A.C., Drayson, M.T., & Carroll, D.; *University of Birmingham, UK

Background: Older spousal caregivers show a poor antibody response to vaccination. This study examined whether younger parental caregivers of children with intellectual disabilities would also exhibit an impaired vaccination response.

Methods: Thirty parents of children with intellectual disabilities and 29 parents of typically developing children completed standard measures of depression, perceived stress, social support, caregiver burden, and child problem behaviours, provided a blood sample, and were vaccinated with pneumococcal polysaccharides at baseline. Further blood samples were taken at 1- and 6-months.

Findings: Care-givers mounted a poorer antibody response to pneumococcal vaccination than controls at both follow-ups. This appeared to be partly mediated by child problem behaviours.

Discussion: The negative impact of caregiving on vaccination response is also evident in parents of children with intellectual disabilities. The behavioural characteristics of the care recipients may be a key consideration in whether or not immunity is compromised in this context.

Development of a method for studying decision-making about evidence-based healthcare in Guideline Development Groups

Gardner, B.,* Davidson, R., McAteer, J., & Michie, S.; University College London, UK

Background: Healthcare quality is promoted by implementing evidence-based recommendations developed by multidisciplinary guideline development groups (GDGs). There is little evidence about best practice for GDGs. This study aims to develop a method for analysing the processes by which GDGs translate evidence into recommendations.

Methods: Thematic analyses of interviews with seven GDG members defined discrete problem areas to guide the selection of excerpts from meeting transcripts for in-depth analysis. A six-hour GDG meeting transcript was used to develop a Framework Analysis, informed by theories of decision-making, social influence and group processes.

Findings: This method has proved feasible in studying GDG decision-making in the face of: Differing conceptualisations of 'evidence'; lack of consistent evidence; differing multidisciplinary perspectives; tensions between evidence-based practice and 'common-sense'; marginalisation of 'users'.

Discussion: This method is currently being applied to study three GDGs covering acute physical health, mental health and public health (a total of 45 full-day meetings).

Smoking household and impact on smoking cessation: Applying extended theory of planned behaviour

Gate, L.* & Myers, L.; *University College London, UK

Background: The Theory of Planned Behaviour (TPB; Ajzen, 1991) has been extended to include; moral norms, identity and past behaviour (i.e. Moan & Rise, 2005). Forming the framework of self-regulatory process (Bandura, 2001), proposed as an outcome of societal influence and facilitator of self-efficacy, crucial in addiction treatment (Shadel & Cervone, 2006).

Methods: The extended TPB was applied to identify a psychological process of social influence (household smoking) on smoking cessation. A longitudinal design. 76 users of an NHS Stop Smoking Service. Carbon monoxide verified smoking status.

Findings: Hierarchical Logistic Regression, Mann-Whitney U and Chi Squared. Smoker identity and past quit attempts were greater in non-smoker households ($p < 0.01$). Extended TPB enhanced variance accounted for in quitting intention, 20–29% ($p < 0.01$) and variance in internal ($p < 0.01$) and external ($p < 0.05$) self-efficacy respectively. Abstainers had greater external self-efficacy ($p < 0.05$).

Discussion: Smoking cessation programmes should recognise household influence on smoker identity and consequential behaviour change.

Implementation intentions and alcohol reduction among student association members

Gebhardt, W.A.,* Van Empelen, P., Messchaert, E., & Kingma, L.; *Leiden University, The Netherlands

Background: We investigated whether implementation intentions (IMPS) are effective in reducing alcohol intake.

Methods: 121 female and 86 male members of student associations were assigned to an alcohol reduction IMPS condition ($n = 39$), an alcohol refusal IMPS condition ($n = 45$), a coping plans IMPS condition ($n = 63$) or an information only condition ($n = 60$).

Findings: At the one-month follow-up the interventions appeared overall effective in reducing alcoholic consumption (Greenhouse-Geisser $F = 14.92$; $p < 0.001$; $\eta^2 = 0.09$) and in the number of binge-drinking occasions (Greenhouse-Geisser $F = 6.57$; $p < 0.001$; $\eta^2 = 0.12$). In addition, a three-way interaction between time, condition and gender occurred. For females the information only and reduction IMPS were most effective, while for males coping plans IMPS yielded the best results.

Discussion: In short, IMPS appear effective in reducing alcohol consumption, but females and males vary with respect to the type of IMPS that is most beneficial.

Psychosocial determinants of risky behaviour among Slovak and Czech adolescents

Geckova, A.M.,* Tavel, P., Van Dijk, J.P., & Reijneveld, S.A.; *PJ Safarik University, Kosice Institute for Society and Health, Slovakia

Background: Adolescents' risky health and social behaviour might be seen as a way of coping with stressful events that is more prevalent among subjects with particular personalities and in particular social environments. Our aim was to test this model in different cultural settings.

Methods: A cross-sectional-questionnaire-based survey was done in Slovakia and the Czech Republic ($n = 501$, mean age 14.5, $STD = 1.0$). We assessed the effect of hopelessness, affectivity (PANAS), and social support from mother and father on adolescents' risky behaviours (smoking, binge-drinking, lack-of-exercise, delinquency) using logistic regression adjusted for age, gender, and highest education of parents.

Findings: Higher scoring in negative affectivity (binge-drinking and lack-of-exercise in Slovakia), and lower scoring in positive affectivity (lack-of-exercise in both countries), social support from father (smoking in the Czech Republic and lack-of-exercise in Slovakia) increased the probability of risky behaviour among adolescents.

Discussion: Personality and social environment both significantly contributed to adolescents' risky behaviour.

Imbalanced between attentional and emotional system in social phobics processing social relevant stimuli

Gentili, C.,* Gobbini, M.I., Ricciardi, E., Vanello, N., Pietrini, P., Haxby, J.V., & Guazzelli, M.; *University of Pisa, Italy

Background: Social phobia (SP) patients dread social events, and are very sensitive to others' judgement. Little is known about SP patients processing of social stimuli as faces. We used fMRI to study brain response to facial expressions in patients affected by SP.

Methods: Eight patients with SP (according to DSM-IV-TR) without psychiatric comorbidity and naive to treatment and seven controls were enrolled. Brain response to face perception was measured with fMRI while participants performed a working-memory task.

Findings: Results demonstrated significantly increased activity in patients vs controls in response to faces in areas playing relevant role in appraisal of intentions as amygdala, insula and superior temporal sulcus. Controls showed higher activation in areas devoted to attention and perception as prefrontal cortex and fusiform gyrus.

Discussion: We suggest that an imbalance between emotional and attentive-perception systems during social relevant stimuli perception is a neurobiological correlate of SP.

Dispositional prediction of placebo response in real-life contexts

Geraghty, A.* & Hyland, M.; *University of Plymouth, UK

Background: The placebo effect is notoriously inconsistent. We tested whether it was possible to predict placebo response based on consistency between personality dispositions and the placebo ritual. This relationship may be mediated by response expectancy or task engagement. Dispositional gratitude was matched with a placebo treatment, gratitude sleep therapy.

Methods: Two hundred and twenty two members of the public with self-reported sleep difficulties completed baseline measures of expectancy and dispositional gratitude. Participants received 'gratitude therapy' or a control intervention and completed outcome assessments over 3 nights of the study.

Findings: Dispositional gratitude significantly predicted outcome following gratitude sleep therapy, but not in a control condition, independently of expectancy ($\beta=0.23$, $p<0.05$). Ease of task completion mediated the relationship between dispositional gratitude and sleep outcome.

Discussion: Personality dispositions consistent with a placebo context can be used to predict placebo outcome. This research has implications for the individualisation of therapy in health contexts.

Women's experiences of cardiac disease and cardiac rehabilitation

Giermer, C. & Sheffield, D.; Staffordshire University, UK

Background: To investigate the impact of cardiac disease and attitude towards cardiac rehabilitation.

Methods: Focus groups were used to explore womens cognitions and feelings. Participants: Thirteen women who had suffered a myocardial infarction and/or had undergone cardiac surgery. Method of data collection: Three focus groups. Data analysis: Interpretative Phenomenological Analysis was used to develop themes.

Findings: Main themes include: (1) Difficulty in understanding and accepting their cardiac illness. (2) Belief that cardiac disease was a man's disease. (3) Heart disease was a stigma. (4) Cardiac rehabilitation was key in facilitating adjustment. However, several felt marginalised and vulnerable.

Discussion: Cognitive constructs from the IPQ-R were used to aid interpretation. 'Emotional representation' and 'illness coherence' were reflected in the accounts and have been associated with

perceptions of control. Data was obtained through focus groups rather than individual interviews. This provided more detailed and naturalistic information.

Changing attitudes to breastfeeding: Designing an intervention for school children

Giles, M.,* Connor, S., McClenahan, C., Mallett, J., Stewart-Knox, B., & Wright, M.;
*University of Ulster, UK

Background: The aim was to design an intervention based on the Theory of Planned Behaviour to promote positive perceptions of breastfeeding in school children.

Methods: Findings from a series of 6 semi-structured focus groups with 48 young people informed the design of a questionnaire which was subsequently administered to 2021 year 10 pupils from 36 post-primary schools in Northern Ireland.

Findings: The relative weights of all predictor variables were significant (except perceived control) and the associated mean scores left some room for improvement. Subjective norm produced the strongest influence (females: $\hat{a}=0.42$, $p<0.01$; and males: $\hat{a}=0.35$, $p<0.01$) with particular importance attached to the role of one's partner and mother. The intervention has therefore been designed specifically to provide information about (1) others' approval and (2) the consequences of breastfeeding.

Discussion: A cluster randomised controlled trial involving 50 schools is being implemented across Northern Ireland. Following evaluation, the intervention will be available as a teaching resource for schools.

Experiences of adding health psychology to public health initiatives targeting oral-health behaviours in nursery-aged children

Gilinsky, A.; NHS Tayside, UK

Background: Despite being preventable, rates of dental decay amongst children in Scotland are notoriously high. There is limited understanding of how cognitions in parents and nursery staff act to promote and maintain positive oral-health related behaviours.

Methods: The Scottish Government's Dental Health Action Plan targets nursery-school children through a wide-ranging strategy, including supervised toothbrushing. A literature review and focus groups were conducted by an NHS funded Stage 2 trainee to explore development of an intervention strategy drawing on relevant behaviour change theories and methodology.

Findings/Discussion: Health psychology can contribute to a better understanding of the barriers to preventative oral-health care amongst children in a practice-based context. This may help NHS Boards meet the Health Improvement Target (2007): "60% of 5-year old children will have no signs of dental disease by 2010". There are opportunities and challenges in working in a novel way to engage stakeholders from Education and Public Health Departments.

Quality of life in a healthy adolescent sample: Investigating response shift to normative developmental change

Gillison, F.,* Skevington, S., & Standage, M.; *University of Bath, UK

Background: Assessments of child and/or adolescent quality of life (QoL) assume the construct to remain stable in the absence of significant health threats. Via the application of a response shift (RS) model, this study tested whether adaptation to the developmental challenges of adolescence instead triggers changes to the basis for QoL judgements.

Methods: 356 mid-adolescents completed the Kidscreen HRQoL measure on two occasions, one year apart. Both research-design techniques and structural equation modelling were employed to assess three types of RS; recalibration, reprioritisation and reconceptualisation.

Findings: Small but significant recalibration effects were found for two QoL domains; bullying, and autonomy ($d > 0.2$). No evidence was found for reprioritisation or reconceptualisation RS.

Discussion: The conceptualisation of QoL appeared stable during mid-adolescence in a healthy adolescent sample. However, researchers and clinicians should be aware of, and account for, potential recalibration effects of some life domains when interpreting QoL data in non-clinical, in addition to clinical, populations.

Quality of life differences between haemodialysis and inflammatory bowel disease patients: Investigating anxiety effects

Ginieri-Coccosis, M.,* Theofilou, P., Vlachos, I., Synodinou, C., Nokolopoulou-Stamati, P., & Papadimitriou, G.; *University of Athens, Greece

Background: To investigate QoL differences in haemodialysis versus inflammatory bowel disease patients and examine the effect of anxiety on QoL.

Methods: 84 haemodialysis (HD) and 58 inflammatory bowel disease patients (IBD) were assessed with WHOQOL-BREF and State-Trait Anxiety Inventory. Analysis investigated possible differences between the groups with the use of Independent-Samples T Test. Regression analysis was performed investigating the contribution of state-trait anxiety on WHOQOL-BREF domains.

Findings: HD patients reported lower QoL in social relations ($p = 0.50$), environment ($p = 0.46$) and overall QoL/health ($p = 0.27$), as well as in state ($p = 0.00$) and trait anxiety ($p = 0.02$). Somatic, psychological, social and environment WHOQOL domains were affected by state anxiety, while overall QoL/health and psychological domain by trait anxiety.

Discussion: HD patients have a more compromised QoL in specific domains. IBD patients however reported a higher level of anxiety. There is evidence that state anxiety affects more negatively patients' QoL.

Relationship of suicidal tendencies with health related risky behaviour in adolescence

Globe, E.* & Gostautas, A.; *Vytautas Magnus University, Lithuania

Background: The aim of the study is to disclose the relationship of Suicidal tendencies (ST) with self-rated health (SRH), use of noxious substances and experienced violence in adolescence.

Methods: The total 1434 female and 1130 male students (16–18 years) were investigated in 1999–2006 in cooperative project with Kaunas region municipality. The questionnaire included items about ST, SRH, use of tobacco, alcohol, drugs (TAD) and experienced violence.

Findings: The score of ST was significantly higher for females. Female and male ST significantly decreased from 1999 to 2006 ($p < 0.05$). The significant correlation was found between female and male ST and SRH, TAD and experienced violence ($p < 0.05$).

Discussion: Female and male Suicidal tendencies are significantly related to self-rated health, use of noxious substance and experienced violence in adolescence.

One-year evaluation of a theory-based intervention to enhance adherence to activity recommendations in rehabilitation patients

Goehner, W.,* Mahler, C., Seelig, H., Kraemer, L., & Fuchs, R.; *Katholische Fachhochschule Freiburg, Germany

Background: The intervention program MoVo-LISA (based on MoVo-Model developed by Fuchs 2006) aims to enable inactive orthopaedic patients to maintain physical activity after discharge in the long run.

Methods: MoVo-LISA consists of three group sessions plus two after-care contacts, containing explication of plans, identification of barriers, and applying strategies of barrier management. 220 inactive patients were subsequently assigned to an intervention group (standard care plus MoVo-LISA) or a comparison group (standard care). Measurement by questionnaire took place at five time points (t1: Before rehabilitation, t5: One year after discharge) and included psychological mediating variables and duration/frequency of exercise. A 2 × 5 repeated measurement design was applied.

Findings: Results revealed that the intervention group self-reported to exercise 32 min longer per week at t5 than the control group ($p < 0.05$).

Discussion: Especially important seems the successful lifestyle change for patients with orthopaedic problems who do not have the urgent need (i.e., heart attack) to change their lifestyle.

Changes of quality of life in depressive women during three years follow-up

Gostautas, A.* & Pauliukeviciute, K.; *Vytautas Magnus University, Lithuania

Background: Positive changes of health related quality of life (QL) happens during the one year treatment of patients with depression. Objective of this study was to check up remaining improvement of QL of depressive women after three years.

Methods: 64 women out of 155 initially screened (SCR) in outpatient mental health department were investigated trice by using WHOQOL-100 questionnaire.

Findings: Patients score on physical and autonomy domains of QL decreased ($p < 0.05$) in comparison with second SCR, but remained positive ($p < 0.05$) in comparison with QL data at initial SCR. Scores reflecting psychological, environmental and social functioning on second SCR didn't change. Score on spirituality scale was lower than it was at initial SCR.

Discussion: Improvement of QL in depressive women achieved after one year outpatient treatment is still kept after three years but on lower level. The remaining question is whether the worsening of QL in depressive women will continue in the future.

Attitudes and behaviours in English hospitality businesses following the introduction of smoke free legislation

Gotz, N.,* Wallace, L.M., & Wareing, H.; *Coventry University, UK

Background: The study examines attitudes and behaviours in hospitality businesses one month before and after the introduction of the English Smokefree legislation.

Methods: A survey drawing on concepts of the HBM, TPB and Becker's Deterrence Model to assess expected and reported behaviours and attitudes was administered to cross-sectional samples of business owners ($N=116$), employees ($N=351$) and customers ($N=387$) in 60 venues across England one month before and after the law change.

Findings: Compared to their expectations in June, owners reported in August that customers were compliant (100.0%) ($X^2=10.69, p<0.01$). Perceived risk of smoke exposure, attitudes towards the legislation and perceived probability of detection remained unchanged.

Discussion: Public health legislation can aid behaviour change despite perceived barriers and low perceived behavioural control.

Negotiating the 'good parent': Parental talk about their child's ADHD diagnosis

Gray, C.; Queen Margaret University, UK

Background: ADHD is a contemporary and contested public health area, with rising diagnoses predicted in European contexts due to increased use of American classification. Parents are important in the diagnostic process and care for childhood ADHD and their own health key.

Methods: Parental talk about ADHD was analysed using 'critical discursive psychology' (Edley, 2001), from semi-structured interviews in Scotland.

Findings: Two contradictory interpretive repertoires were deployed including: A Biological repertoire which accounted for difficulties as constitutional versus an Environmental repertoire which accounted for the difficulties in parenting terms. This tension for parental accountability was resolved through the accomplishment of a 'good parent' identity construction, in talk about diagnosis.

Discussion: The findings showed how current health policy as ADHD was socially produced in parental talk, highlighting limitations with ADHD constructions. The work is relevant for critical health psychological debate over the medicalisation of children's difficulties and the implications for parental well-being.

Implicit and explicit attitudes toward complementary and alternative medicine (CAM) and conventional medicine

Green, J.A.,* Hohmann, C., Lister, K., Albertyn, R., O'Sullivan, R., & Johnston, C.; *University of Otago, New Zealand

Background: Lay perceptions of medicines influence treatment-seeking behaviour, but have typically been assessed using explicit surveys. This study sought to contrast implicit measures of safety, efficacy and overall attitudes with explicit measures, and to assess which measures best predict future use.

Methods: 152 university students completed a questionnaire on their anticipated future use of different treatments, and their perceptions of safety, efficacy and overall attitude toward CAM and conventional medicine, followed by Implicit Association Tests of those same domains.

Findings: Confirmatory factor analysis suggested a single underlying attitude, rather than specific domains such as safety and efficacy. Implicit and explicit measures were also associated, but at a moderate to low level ($r_s=0.16-0.40$). Future use was best predicted by a combination of implicit and explicit measures.

Discussion: Attitudes towards conventional medicine and CAM can be assessed successfully with implicit measures, and explain unique variance in anticipate future use.

Assessing perceptions of safety: Using a sorting task to compare perceptions of different groups

Green, J.A.,* Curtis, K., Edwards, R., Jih, C., & Thorn, D.; *University of Otago, New Zealand

Background: This study investigated the perceived safety of both medical and non-medical drugs, using a novel sorting task.

Methods: 100 participants (30 pharmacy students and 70 non-health science students) free sorted 17 substances, including herbal and prescription medicines, and legal and illegal drugs into groups based on how safe they considered them to be.

Findings: Sorting data were analysed for each group of students using multidimensional scaling. Resulting configurations showed that pharmacy and non-health science students had similar perceptions of safety (RV Coefficient of 0.92 between MDS solutions), with perceptions of safety driven by legal classification.

Discussion: Sorting tasks may present a more intuitive method for assessing concepts such as safety than the use of Likert scales. New multivariate methods such as DISTATIS (Abdi et al., 2005) may also allow the study of sorting data at an individual level.

A longitudinal investigation of illness and treatment cognition pre to post kidney transplantation

Griva, K.,* Dr Davenport, A., Harrison, M., & Newman, S.; *National University of Singapore, Singapore

Background: End stage renal disease entails treatment transitions through dialysis and transplantation. This study explored illness and treatment cognitions pre- to post- kidney transplantation.

Methods: 41 clinically stable renal patients were assessed on dialysis and at 6 months following kidney transplantation on the IPQ, illness and treatment effects questionnaires, and the SF-36.

Findings: Post kidney transplantation, patients expressed lower chronic timeline beliefs, reported less symptoms associated with ESRD ($p < 0.01$), fewer consequences, stronger control beliefs ($p < 0.001$), and lower illness and treatment disruptiveness ($ps < 0.01$). Quality of life (QoL) improvements were significantly associated with changes in identity, consequences and disruption beliefs. Multiple regressions indicated that treatment disruptiveness and consequences change scores accounted for 31.8% to 39% of the variance in QoL.

Discussion: Study demonstrates that changes in clinical state and treatment bring about changes in illness and treatment beliefs that explain QoL improvements.

Implicit and explicit self-schema as predictors of exercise behaviour

Grove, R.,* Banting, L., & Dimmock, J.; *University of Western Australia, Australia

Background: We investigated two different forms of exercise self-schema as potential moderators of the relationship between intentions and behaviour.

Methods: Regular exercisers ($N = 98$) completed a questionnaire measuring explicit exercise self-schema and exercise intentions. They also completed an exercise-specific version of the Implicit

Association Test to measure implicit exercise self-schema. Self-reported exercise behaviour was assessed 1–2 weeks later.

Findings: Correlations indicated that implicit exercise self-schema and explicit exercise self-schema were semi-independent constructs ($r = 0.22$). Together, they accounted for 13% of the variance in exercise adherence, with both variables making a significant contribution. When combined with intentions to predict amount of exercise, both schema measures again made significant contributions to the prediction equation (adjusted R^2 for intentions alone = 0.55; adjusted R^2 for intentions + schema measures = 0.62).

Discussion: We will focus on the value of considering both implicit and explicit exercise self-schema when attempting to understand and predict exercise behaviour.

Hope and depression. Coping after myocardial infarction

Gruszczynska, E.* & Kroemeke, A.; *Warsaw School of Social Psychology, Poland

Background: To verify the influence of depression and hope on coping after myocardial infarction (MI).

Methods: Hope, depression and coping strategies were assessed three times among 173 cardiac patients: A few days after first MI, then one and six months later.

Findings: The mixed model procedure was used. Task-oriented coping was significantly positively realated only to hope. For emotion-oriented coping interactional effect hope \times depression was revealed. Namely, among patients with lover values of depression intensity of emotion-oriented coping decreased with hope, whereas the opposite relationship was observed for patients with higher values of depression. All these effects were adjusted for between- and within-subjects variance.

Discussion: During serious illness hope seems to be necessary to promote task-oriented behaviour, irrespectively of depression level. Contrary, emotion-oriented coping is rather evoked by emotional incongruence as a reaction to illness.

Preparing for the smoke-free legislation: The experiences of England's stop smoking services

Hackshaw, L.E.; University of Bath, UK

Background: Smoke-free legislation can lead smokers to quit, often through NHS stop smoking services (SSSs). This research (May 2007) examined the anticipated impact of smoke-free legislation on English SSSs, in relation to the theory of preventative stress management in organisations.

Methods: This quantitative, internet based, national survey obtained information regarding the structure of SSSs, preparation for legislation and its expected impact. A pilot study preceded the survey of 132 English SSS coordinators. Descriptive statistics, correlation and regression analysis were conducted.

Findings: Findings provide an overview of SSSs before the ban's implementation, highlighting whether co-ordinators felt able to cope with increased patient numbers e.g. 59% felt they would cope very well with a 25% increase, however only 13% felt they would cope very well with a 100% increase.

Discussion: By understanding the impact of the ban, SSSs can be continually supported in encouraging positive health behaviour change.

Gender and age effects in social physique anxiety

Hagger, M.* & Stevenson, A.; *University of Nottingham, UK

Background: Social physique anxiety (SPA) is an individuals' perceived concern with the presentation of the physique in situations in which others are perceived to be evaluating them. SPA is important because individuals reporting high levels of concern regarding the physique often have relatively low levels of physical activity and physical self-esteem. Research has shown that SPA is particularly high among adolescent females. This study tested the generalizability of factor and latent mean structure of the social physique anxiety scale (SPAS) across gender, age, and gender by age.

Methods: High-school and university students aged 12 to 22 years ($N = 1286$) completed the SPAS.

Findings: Confirmatory factor analysis (CFA) was used to test the adequacy of an 8-item version of the SPAS in the full-sample, and separately by gender, age-group, and gender by age-group. The CFA models satisfied multiple criteria for goodness-of-fit with the data in almost all individual samples. Tests of the invariance of the factor pattern and structural parameters for both models across gender, age-group, and gender by age-group revealed few decrements in fit across these groups. Latent means analysis revealed that females had consistently and significantly higher levels on the SPAS than boys with 11–13 year-old males also exhibiting higher SPA levels than other male age-groups.

Discussion: Present results support and extend previous findings that females have higher levels of SPA than males by showing these gender differences are consistent across age groups.

Using Leventhal's common sense model to explore patients' and relatives' perceptions in epilepsy – implications for adjustment and quality of life

Hall, K.,* Isaac, C., Harris, P., & Rowe, R.; *University of Sheffield, UK

Background: This study investigates whether level of agreement in patients' and relatives' perceptions of epilepsy affects their psychological adjustment and quality of life.

Methods: Using a cross-sectional design, 75 participants with epilepsy each with a relative (47 partners), completed Kemp's (1999) semi-structured illness perceptions interview for epilepsy. Adjustment and quality of life were assessed using the HADS and QOLIE-89. Median splits were used to calculate agreement scores for each patient-relative dyad, creating three groups for each dimension (shared positive, shared negative, conflicting).

Findings: Shared negative perceptions were associated with greater anxiety and depression in patients (identity, cause, self-illness relationship), and greater depression in relatives (identity, consequences). Shared negative perceptions were also associated with poorer quality of life in patients: Identity ($p < 0.001$), consequences ($p = 0.024$) and self-illness relationship ($p = 0.004$).

Discussion: Agreement in patient-relative perceptions of epilepsy has implications for the adjustment of both individuals and affects quality of life.

Maintaining dignity at the end of life: The views of older people in care homes

Hall, S.,* Longhurst, S., & Higginson, I.J.; *King's College London, UK

Background: Loss of dignity for people reaching the end of their lives is associated with high levels of psychological and spiritual distress and the loss of the will to live. An empirical model of dignity has been developed from interviews of people with advanced cancer.

Aims: To explore the generalizability of Chochinov's dignity model to older people in nursing homes.

Methods: Qualitative research methods were used. Semi-structured interviews were carried out with 18 residents of nursing homes in London. Interviews were recorded and transcribed verbatim. A content analysis was conducted, based on a priori themes from Chochinov's dignity model and emergent themes arising from residents views.

Findings: The three major themes the dignity model were replicated: (i) dignity conserving repertoire; (ii) illness related concerns and (iii) social dignity. However, in contrast to Chochinov's dignity model, themes relating to death were not evident. An important emergent theme for residents was a sense of loss.

Discussion: Dignity therapy, which has been developed from the dignity model, may be adapted to help restore a sense of dignity in older people in care homes.

Adolescents' experiences of daily living with a food allergy

Hamp, A.* & Knibb, R.C.; *University of Derby, UK

Background: Very little is known about adolescents with food allergy, despite the knowledge that this group is most at risk of severe reactions. There is a need to understand adolescents' experiences of day to day living with food allergy.

Methods: Semi-structured interviews with ten families including 8 teenagers (13–17), an interpretative phenomenological approach was used for data analysis.

Findings: Three categories emerged from the data, socialising, lack of understanding and management of daily issues. Examples from these categories include the independence that teenagers need from their parents; the need by teenagers to feel the same as their friends which may prevent them from asking about food ingredients in restaurants or carrying medication which is too bulky and difficult to disguise.

Discussion: The issues identified could be placing teenagers at risk of having a potentially serious accidental reaction to food. Ways in which risk can be reduced need to be addressed.

Socioeconomic status and psychosocial mechanisms of lifestyle change among women

Hankonen, N.,* Absetz, P., Haukkala, A., & Uutela, A.; *Finnish National Public Health Institute, Finland

Background: We examined how educational level influences women's ($N=278$) psychosocial responses to a lifestyle intervention and whether associations between psychosocial determinants and behaviour vary according to educational background.

Methods: The GOAL Lifestyle Implementation Trial was based on social-cognitive and self-regulation theories and aimed to increase exercise and improve diet. Measurements of self-efficacy, planning for healthy lifestyle, and social support as mediators; and of exercise and healthy eating as outcomes were conducted pre-intervention, and at 3 and 12 months.

Findings: Psychosocial determinants at baseline and their changes over time were mostly similar across educational groups. Self-efficacy and planning predicted behaviour change at $p<0.05$, and tested interactions between educational group and predictors were not significant in relation to outcome variables.

Discussion: Educational level does not determine how much and through which psychosocial mediating mechanisms women benefit from a lifestyle intervention. Enhancing self-efficacy and planning is similarly effective despite educational level.

A qualitative investigation into the impact of PEGs

Harding, S.A.; Derriford Hospital, Plymouth, UK

Background: Reduction in Quality of Life due to treatment is usually measured by questionnaire, but patients specific areas of concern are overlooked. Aim: Explore the views of patients in relation to Percutaneous Endoscopic Gastrostomy (PEG) feeding tubes.

Methods: Ten patients were recruited prior to treatment for Head and Neck Cancer. They participated in semi-structured interviews prior to treatment then 1, 3, and 6 months post treatment. Data was interrogated using content analysis.

Findings: Participants with a PEG had issues with clothing, activities, and sex, which were not apparent in non-PEG participants. All rationalised the use of PEGs, but expressed a desire for the PEG to be removed to more freely socialise. Patients needing new dentures prior to removal of the PEG reported feeling 'abandoned' by the hospital.

Discussion: This research showed benefit from interview patients in understanding patients needs. It reveals adverse psychological effects of PEGs and need for better communication between patients and professionals.

Self-affirmation promotes health behaviour change

Harris, P.* & Epton, T.; *University of Sheffield, UK

Background: Evidence shows that self-affirmation has a positive effect on message acceptance and other variables that motivate health behaviour change; however, this has not been translated into actual behavioural change. The current study is designed to test whether a self-affirmation manipulation can increase a health-promoting behaviour (fruit and vegetable consumption). It also explores the extent to which efficacy variables mediate the self-affirmation/behaviour relationship.

Methods: Women ($N=93$) were randomly allocated to a self-affirmation or control task prior to reading a message regarding the health-promoting effects of fruit and vegetables.

Main Outcome-Measures: Response-efficacy, self-efficacy and intention measures were taken immediately after message exposure, followed by a 7-day diary record of fruit and vegetable consumption.

Findings: Self-affirmed participants ate significantly more fruit and vegetables than the control group (approximately 5.5 portions more over the week). This effect was mediated by response-efficacy.

Discussion: Self-affirmation interventions can successfully influence health-promoting behaviours.

Assessment of the effects of job on the mental health of the mother – Child

Hatami, M.; Tarbiat Moallem University, Iran

Background: The present study aims to evaluate life stress in working (nurse & teacher) and non-working (housewives) mothers according to the mother – child traits; Adaptability, Acceptability,

Demandingness, Mood, Hyperactivity/Distractibility, Reinforces, Depression, Attachment, Restrictions of role, Sense of competence, Social isolation scale, Relation ship with spouse, Parental health, and the relation of the traits with each other.

Methods: In this way, 228 working and non-working mothers matched on age, level of education, income, number of children, physical health, having no experience of traumatic stressful event during the last year, and they were evaluated using “parenting stress index” and “occupational stress index”. In order to analyze the data, via the basic statistical methods such as mean and standard *T*-test, Pearson correlation and regression analysis (step by step) were applied.

Findings/Discussion: The result of this study showed that: (1) There was significant difference between working mothers and non-working mothers as well. It means that the level of over all stress of nurses was higher up than teachers and these two groups of working mothers were at a high risk of stress in comparison with non-working mothers. (2) The traits of stressor in expanding of the level of stress in mothers had different effect. While, demandingness and relationship with spouse in nurses, demandingness and restrictions of role in Teachers and demandingness and depression in non-working mothers had more contribution in these subjects. (3) the result of this study indicated that there was significant difference between groups on some traits of stressor.

Work stress and coping strategies among Finnish hospital nurses

Haybatolahi, S.M.; University of Helsinki, Finland

Background: This study was the first attempt in the literature of attribution theory that the term ‘Organizational Locus of Control’ (OLC) is used because of significant results from a rather comprehensive analysis of causal dimensions in attribution theory (Weiner, 1986). The study examined the moderation effects of causal dimensions on the relationship between three work stressors i.e., work overload, responsibility, and physical environment, and the cognitive coping strategies i.e., problem-solving and emotional-focus coping.

Methods: In this study, the effects of chronic work stressors on nurses’ strategies to cope with were assumed to be partly moderated by their OLC. The sample consisted of 934 Finnish hospital nurses in supervisory and non supervisory positions in 2007.

Findings/Discussion: The results, in general, supported the significance of such processes moderation effects of OLC. Thus, inline with the attribution theory and the expectations of the model, work stressors and OLC had significant interaction effects on nurses’ coping strategies. The result of both moderation and mediation analyses of the path for work overload -> externality -> problem-solving coping yield much stronger association $r = 0.15, p < 0.01$). However, Simple slope analysis of three-way interaction indicates significant moderation effects for supervisory position ($\beta = -0.11, p < 0.01$).

Coping and decision-making in the course of breast cancer treatment – a longitudinal study

Helmes, A.* & Vogel, B.; *University of Freiburg, Germany

Background: Patient participation is widely advocated because it enhances patient control, however, we do not know whether all women wish to participate or how their preference relates to their coping strategies. We also do not know if this changes over time.

Methods: Breast cancer patients ($N = 135$) were approached within a week of either surgery or the beginning of neo-adjuvant chemotherapy. Women completed a self explanatory questionnaire with the Brief Cope and the Control Preference Scale at baseline and six month follow-up.

Findings: Women who wished to participate in decision-making showed more supportive coping compared to women who wished to share the decision or let the physician decide ($F = 3.54, p = 0.032$). Over the course of treatment women used less evasive coping strategies ($F = 45.29, p < 0.001$). There was no interaction effect between decision-making preference and coping style over time.

Discussion: Not all women wish to be involved in decision-making concerning their breast cancer treatment.

Illness schema activation and encoded coping behaviours

Henderson, C.J.,* Orbell, S., & Hagger, M.S.; *University of Essex, UK

Background: Relatively little research has directly addressed the schematic nature of illness representations proposed by Leventhal et al.'s (1980) Common Sense Model. Two experiments tested the hypothesis that coping information is schematically encoded within the representations of a specific illness.

Methods: A 2 (primed versus control) \times 2 (past user of coping strategy versus non past user) design was utilized for both experiments. A subliminal prime activated a common cold schema.

Findings: In each experiment, analyses revealed a significant interaction of prime \times past use ($F(1, 41) = 6.52, p < 0.05$, and $F(1, 55) = 6.89, p < 0.05$, respectively). Participants in whom the common cold schema was activated who also reported past strategy use demonstrated attentional bias to the name of a popular common cold remedy.

Discussion: Activation of a schematic illness representation may automatically activate information related to coping, encoded in memory with the illness.

Perceived control over the cure of breast cancer: Correlates and adaptiveness

Henselmans, I.,* Sanderman, R., De Vries, J., Smink, A., & Ranchor, A.V.; *University of Groningen, The Netherlands

Background: This study examines (1) what characteristics are related to perceived control over the cure of breast cancer and (2) if perceived control over cure is maladaptive when disconfirmed by disappointing news after surgery.

Methods: Women with breast cancer ($n = 144$) were assessed before and after surgery. Questionnaires included distress, anxiety, worries over cure, perceived control and personality. The prescription of chemotherapy was used as an indicator of disappointing news after surgery.

Findings: Women with a high sense of control over cure were younger, more optimistic, had lower scores on neuroticism and higher scores on mastery. Control over cure was not related to educational level, disease stage or control desirability. Changes in distress, anxiety and worries after receiving bad news were independent of perceived control over cure.

Discussion: Personal control over cure seems to reflect a 'resilient' personality and does not have maladaptive effects when disconfirmed by disappointing news.

Trialling a new stop smoking training program for health professionals in Camden primary care trust (PCT)

Herberts, C.,* Kalhar, R., & Cain, S.; *Camden Primary Care Trust, UK

Background: The stop smoking training program for health professionals was redeveloped to increase stop smoking activity levels.

Methods: Suitable candidates were screened in the application process and a pre-training learning component was added. This allowed for a greater focus on skills development and confidence building on the training day. Advisor activity data pre (2006/07) and post (2007/08) the new training program was assessed.

Findings: In 2006/07, 2% of advisors saw clients within 1 month of training and 7% within 5 months of training. In 2007/08, 25% of advisors saw clients within 1 month of training and 31% within 5 months of training. Within 5 months of training, 25 clients were seen in 2006/07 and 129 in 2007/08. Statistical analysis could not be performed due to small numbers.

Discussion: It appears the new training program has positively influenced advisor activity levels. Client success rates will be evaluated in the future.

Enhancing employment for persons with HIV/AIDS

Hergenrath, K.,* Rhodes, S., Turner, A., Barlow, J., Bardhoshi, G., & Cowan, C.; *The George Washington University, USA

Background: Self-management Behavioural Coaching (SBC) is a strengths-based, health behaviour coaching intervention using cognitive behavioural principles and Hope theory (Snyder, 1994). The study aim was to determine if the SBC program increases self-efficacy, medical adherence, job-seeking skills, decrease anxiety and depression, and set and attain achievable goals.

Methods: Seven unemployed African American males with a co-disability of substance abuse and HIV/AIDS ($m = 46.8$ years; $m = 19.5$ years HIV+) in Washington, DC USA completed an 8 week SBC program with 3-month follow-up. Participants completed 12 assessments and qualitative surveys at baseline, post-course, and 3-months.

Findings: Results identified improvement in anxiety, depression, self-image, satisfaction with life, medication adherence, coping, health distress, hope, and job-seeking skills. All participants reported they wanted to work. 3 enrolled in job-training programs.

Discussion: The results suggest the utility of SBC to improve participant decision-making skills, cognitive restructuring, health management skills, adherence to medications, job-seeking behaviour, and set achievable goals.

Approach-inhibition disposition moderates the effects of framing skin cancer information on affective responses

Hevey, D.* & Dolan, M.; *University of Dublin, Trinity College, Ireland

Background: Positively or negatively framed health information influences decision-making. The present study examined the effects of motivation (approach vs avoidance behavioural orientation) on responses to positively or negatively framed skin cancer information.

Methods: 360 Irish adults completed the Behavioral Approach System (BAS) and Behavioral Inhibition System (BIS) scales. Attitudes towards skin cancer and intentions towards future sun-protective behaviour were assessed before and after receipt of randomly assigned positively or negatively framed information. Mixed factorial ANOVAs examined the effects of frame and disposition.

Findings: Motivation moderated the effects of frame on changes in perceptions of danger ($F(1, 350) = 5.9, p < 0.05$) and seriousness ($F(1, 352) = 8.7, p < 0.005$) of skin cancer. Negative framed information had the strongest effect for those BIS dominant whereas positively framed information had the strongest effect for those BAS dominant.

Discussion: Results are considered in light of motivation and information processing theories and implications for health education are highlighted.

Knowledge of stroke risk factors and warning signs in the older general population

Hickey, A.,* Horgan, F., McGee, H., & O'Neill, D.; *Royal College of Surgeons in Ireland, Ireland

Background: General population awareness of risk factors and warning signs for stroke are essential in prevention and rapid action to manage stroke. This study sought to identify the understanding of stroke risk factors and warning signs in older community-dwelling Irish adults.

Methods: Randomly selected community based older people (age 65+) ($n = 2,033$; 68% response) were interviewed.

Findings: Less than half of respondents could identify established risk factors for stroke (e.g., hypercholesterolaemia), hypertension being the only exception (identified by 74%). Similarly, less than half identified established warning signs (e.g., weakness), with slurred speech (54%) as the exception. Poorest levels of awareness were evident in those aged 75+.

Discussion: Many older adults may not recognize early symptoms of stroke in themselves or others and thus may lose vital time in presenting for medical attention. Lack of public awareness of stroke warning signs and risk factors must be addressed to reduce mortality and morbidity from stroke.

Community-based stroke care in Ireland: The Irish national Audit of Stroke Care (INASC)

Hickey, A.,* Horgan, F., McGee, H., & O'Neill, D.; *Royal College of Surgeons in Ireland, Ireland

Background: The extent of stroke-related disability typically becomes most apparent after patient discharge to the community. A national survey was conducted of community-based allied health professionals (AHPs) and public health nurses (PHNs) which aimed to document availability of community stroke services.

Methods: The survey was conducted in three phases: Interviews with regional managers for stroke services ($N = 7$); disciplinary managers ($N = 25$); and frontline staff ($N = 97$).

Findings: The response rate was 85%. Results indicated a lack of formal, structured community-based services, with no designated posts for stroke care across disciplines nationally. Considerable inequity was identified in access to services for patients with stroke, with greater access, where available, for older people (>65 years).

Discussion: Services for stroke in the community were very limited, with complete absence of some disciplines in some areas. There is an absence of psychological services for people with stroke both at hospital and community level in Ireland.

Cloninger's temperament traits and preclinical atherosclerosis: The cardiovascular risk in young Finns study

Hintsanen, M.,* Pulkki-Råback, L., Juonala, M., Viikari, J.S.A., Raitari, O.T., & Keltikangas-Järvinen, L.; *University of Helsinki, Finland

Background: Cloninger's psychobiological model of temperament has recently raised interest as a risk factor for CHD. However, there are no studies that have examined the associations of Cloninger's temperament traits with atherosclerosis.

Methods: The subjects were 398 men and 657 women (mean age 31.7 years) participating in the Cardiovascular Risk in Young Finns Study. Linear regression analyses were used to examine the cross-sectional associations between temperament traits and preclinical atherosclerosis. Preclinical atherosclerosis was measured with carotid intima-media thickness ultrasound.

Findings: Higher novelty seeking and reward dependence and lower harm avoidance were associated with preclinical atherosclerosis ($p=0.007$, $p=0.013$, $p=0.012$, respectively). No association for persistence was found.

Discussion: The present findings imply that examining wider range of temperament and personality factors may offer new information that can help explaining the between individual variation in atherosclerosis and CHD morbidity.

Punjabi Sikh women's experiences of living with and self-managing arthritis: A qualitative exploration

Hipwell, A.,* Turner, A., Barlow, J., & Adebajo, A.; *Coventry University, UK

Background: This exploratory study aimed to describe 10 Punjabi Sikh women's experiences of living with and self-managing arthritis.

Methods: Interviews with 10 purposively sampled Punjabi Sikh women were conducted in English or Punjabi, translated where necessary and transcribed in English. Qualitative analysis used Interpretative Phenomenological Analysis.

Findings: No participant had attended a psycho-educational self-management intervention, yet all were using self-management techniques to better manage their life with arthritis. Themes include physical symptom management, including medication and complementary/alternative medicine (CAM) use; psychological symptom management, including familial and religious sources of psychosocial support; and facilitators and barriers to self-management education, including cultural and logistical considerations.

Discussion: This study adds a cross-cultural dimension to existing knowledge about medication adherence/concordance and the use of CAM in arthritis, and to the experience of living with and self-managing arthritis, from the perspectives of Punjabi Sikh women.

Testing the causal structure of the Theory of Planned Behaviour (TPB) in physical activity behaviours

Hobbs, N.* & Dixon, D.; *University of Stirling, UK

Background: The causal structure of the TPB is unclear. This study employed an n-of-1 design to examine the causal relationships between TPB constructs and exercise and walking behaviour.

Methods: A new gym recruit completed TPB and physical activity measures (duration and intensity of workout, and step count) twice daily for 12 weeks. Time series analysis was applied to the data.

Findings: In the first 3 weeks, all current physical activity behaviours were significantly related to intention, controllability and self-efficacy beliefs measured up to 12 hours earlier when serial dependence within each series was controlled for. TPB beliefs correlated with duration and intensity of workout (r -values above 0.5) and with step count (r -values above 0.4).

Discussion: The association between TPB beliefs and subsequent physical activity behaviours dissipates over a period of 24 hours. Therefore, assessment of physical activity interventions targeting TPB beliefs should include a measure of immediate behaviour change.

An experimental analogue study of the psychological impact of the feedback of images of body fat distribution

Hollands, G.J.* & Marteau, T.M.; *King's College London, UK

Background: Limited clinical research indicates that visual feedback of medical imaging scans may motivate behaviour change beyond verbal health risk information.

Methods: Using an Internet-based experimental design, 901 participants were randomly allocated to one of two conditions in which they received a brief written intervention focusing on cardiovascular risk (a) with or (b) without an image of their predicted body fat composition (based on reported physical activity and gender).

Findings: Whilst physical activity intentions increased in both groups, there was a main effect of group, with the increase greater in the image condition ($F(1, 898) = 4.259, p < 0.05$). The level of belief in the results was also greater in the image condition ($t = -2.14, p < 0.05$). Multiple regression analyses and exploratory structural equation modelling were used to explore the possible variance structure of the data.

Discussion: Condition, gender, baseline intention, coherence between threat and behaviour, belief in the results and worry all had significant total effects on intention post-intervention.

Disclosure and psychological health in couples

Horn, A.B.,* Molina, L., Rieder, S., Reicherts, M., & Perrez, M.; *Fribourg, Switzerland

Background: Emotional disclosure has been proven to be linked with health. One discussed mechanism behind is its impact on interpersonal processes. Researching the associations of self reported disclosure in couples on mental health was the aim of this study. Furthermore, the question whether this association is mediated by relationship quality and partner's affect was addressed.

Methods: 67 young couples reported own disclosure and how they perceived their partner's disclosure, positive and negative affect (PANAS), and psychological health (SF12) cross-sectionally.

Findings: Own reported disclosure and perceived partner-disclosure was related with psychological health. This association was partly mediated by relationship quality. Partner's positive affect was not a mediator but explained additional variance while partner's negative affect showed no significant associations with own mental health.

Discussion: Disclosure seems to be associated with intra- and interpersonal emotion regulation processes and parts of its health effects might be explained by its impact on psychological intimacy and relationship quality.

Matching the solution to the problem: The importance of a common-sense fit between representations of illness and treatment

Horne, R.* & Weinman, J.; *University of London, UK

Background: The paper will examine interactions between illness and treatment beliefs in explaining levels of treatment adherence across three long-term medical conditions: Asthma, HIV/AIDS and end stage renal disease.

Methods/Findings: Data from a large cohort study of preventer medication adherence in patients with asthma provided a first test of our theoretical model linking illness representations, treatment beliefs and adherence. The HIV/AIDS study confirmed these associations and extended them by looking at changes in adherence over time, and by emphasising the critical role of symptoms in these processes. Finally, a study of patients with ESRD will explore the extent to which illness and treatment beliefs can be modified by a relatively simple psycho-educational intervention designed to provide the patient with a clearer representation of their problem and the rationale for their treatment.

Discussion: We will identify directions for future theoretical development and the potential, which this can offer for innovative interventions.

Opioids use in chronic joint pain management: Osteoarthritis patients' knowledge and attitudes

Horwood, J.* & Dieppe, P.; *University of Bristol, UK

Background: Osteoarthritis is the leading cause of chronic pain in older people. Recent concerns around the safety of COX-2 inhibitors and coproxamol have reduced GP's analgesic options. The use of opioids for the treatment of chronic nonmalignant pain is much debated. We undertook a qualitative study to explore osteoarthritis patients' knowledge, attitudes and acceptability of opioid use.

Methods: In-depth interviews were conducted with twenty-three patients diagnosed with osteoarthritis (age range 55–84 years) who reported between 1 and 7 years of pain. Interviews were audio-recorded, transcribed and anonymised. The data were analysed thematically using the constant comparison technique.

Findings: Emergent themes from the data were more than the traditional concerns of addiction, tolerance and side-effects. Participants also raised issues around their personal sense of control of pain and the severity of their condition.

Discussion: This study highlights the role of osteoarthritis patients' views and opinions on the acceptability of opioids for chronic pain.

The role of alexithymia factors in glucose control of children with type 1 diabetes

Housiaux, M.,* Luminet, O., Van Broeck, N., & Dorchy, H.; *Catholic University of Louvain (UCL), Belgium

Background: The study examines the respective contribution of demographic characteristics, diabetes duration and a psychological variable (alexithymia) that was recently found to be associated with poor glycaemic control in an adult population (Luminet et al., 2006).

Methods: The study included 45 type 1 diabetic children (8 to 12 years). Mean HbA1c, number of severe hypoglycemias and of hospitalizations for hyperglycemia were collected for the previous 12 months.

Findings: Each child completed the TAS-20-C A hierarchical regression confirmed that demographic variables predicted HbA1c ($p < 0.05$), as well as the duration of diabetes ($p < 0.05$). Importantly, one alexithymia factor (Difficulty to Describe Feelings) was found to be an additional predictor over and above them, ($p < 0.01$).

Discussion: Confirming results already observed for adults, the present findings indicate for the first time that children who have difficulties expressing their feelings to others are more at risk for glucose control.

‘Which illness perceptions are important in the development of panic attacks in chronic obstructive pulmonary disease?’

Howard, C.,* Dr Hallas, C., Dr Wray, J., & Dr Carby, M.; *Royal Brompton & Harefield NHS Trust, UK

Background: Anxiety and panic are common psychological issues in respiratory disease, in particular related to dealing with difficult symptoms such as breathlessness. To date the cognitive-behavioural model of panic has been utilised to help explain and manage panic in respiratory disease. This cross-sectional study investigated the relationship between illness perceptions and panic in chronic obstructive pulmonary disease (COPD) within Leventhal’s self-regulatory framework of adaptation to physical illness.

Methods: Fifty-nine participants with COPD completed questionnaires measuring illness perceptions, anxiety and depression, frequency and severity of panic attacks and impact of disease on daily life and well-being. The percent forced expiratory volume in the first second (FEV1%) was used as an objective measure of lung function.

Findings: High levels of clinical anxiety and depression were reported (35% and 19% respectively). Sixty three percent of participants reported experiencing a panic attack during the previous year and of these 51% during the previous month. Panic was unrelated to level of disease severity. The majority of patients that had experienced a panic attack during the previous year had borderline general anxiety levels. The half that had also experienced a recent panic attack (within the previous month) had shifted from borderline to clinical anxiety levels. This particular group reported stronger illness perceptions relating to perceived consequences, illness identity, timeline beliefs and emotional representations of illness, compared to those that had not experienced a recent panic attack.

Discussion: The results highlight the importance of assessing illness perceptions within the framework of the self-regulatory model to help prevent the development of panic in chronic respiratory disease.

‘Being at the centre of a balance’ – ‘Living with respiratory disease and panic-like episodes’

Howard, C.,* Dr Wray, J., Theadom, A., & Dr Carby, M.; *Royal Brompton & Harefield NHS Trust, UK

Background: The multidimensional components of breathlessness are now recognised with anxiety, fear and panic being commonly associated with this symptom. This research study aimed to explore the experiences of living with respiratory disease, within a self-regulatory framework of adaptation to illness with particular focus on experiences of breathlessness and panic-like episodes.

Methods: 12 semi-structured interviews were conducted with respiratory disease patients on a lung transplant waiting list at a tertiary centre in the UK. Interviews were transcribed verbatim, analysed

by two researchers using interpretative phenomenological analysis (IPA) and validated by a third researcher.

Findings: The overall theme that emerged was 'being at the centre of a balance' relating to adjustment to illness and specific experiences of panic-like episodes. Controlling emotions and the environment for fear of negative consequences if not in control was important. Participants described 'not wanting to cross a threshold' and 'bringing oneself back from the brink' when describing what appeared to be an experience of being on the verge of a panic attack. Other interesting themes that emerged related to conceptualisation of disease, impact on quality of life, the social world and continual efforts to manage.

Discussion: Participants distinguished between experiencing a panic-like episode and moving along a continuum into a full panic attack. Interventions to support patients to understand and manage panic-like experiences at an early stage may help prevent a panic attack occurring. Further analysis of the descriptions of panic attacks and how the experience relates to managing different aspects of the illness trajectory would be beneficial.

The illness perception among patients with diabetes, hypertension and hyperlipidemia

Hsiao, C.,* Chen, C., & Chang, C.; *Far Eastern Memorial Hospital, Taiwan

Background: Diabetes, hypertension and hyperlipidemia are the most common and comorbid diseases in Taiwan. Most researches focus on compliance and health education, little known about how patients perceived their illness. This study aimed to investigate the illness perception on patients with diabetes, hypertension and hyperlipidemia.

Methods: The participants were recruited from an out-patient clinic of a medical centre, and their illness conditions and comorbidity were considered. In-depth interviews were conducted. There were 23 patients, and data analysed by content analysis.

Findings: Participants perceived the severity according to the effect of illness on their daily life, and diabetes was thought to have worse progress than others. Participants with asymptomatic hyperlipidemia or hypertension wouldn't see themselves as patients even if they were regularly taking medication.

Discussion: Better understanding for patients' perception would be helpful for developing a more patient-centred and effective way for doctor-patient communication.

Type D personality and haemodynamic responses to laboratory stress: Implicating Type D in cardiovascular pathogenesis

Hughes, B. & Howard, S.; NU Galway, Ireland

Background: Previous research has established the prognostic value of the Type D personality construct in cardiac patients. This study aimed to look at a possible direct pathway that may be implicated in the Type D-illness relationship, by examining cardiovascular reactivity to stress (CVR).

Methods: Ninety female college students underwent laboratory-based stress during which CVR was examined. Type D personality was assessed using the DS16. Data were submitted to mixed-factorial ANOVA. Findings: ANOVA indicated significant time \times Type D interactions for both cardiac output ($p < 0.05$) and total peripheral resistance ($p < 0.05$), implying a haemodynamic variation across Type D and non-Type D groups that was not manifest in superficial blood pressure patterns.

Discussion: This between-group difference in haemodynamic patterns of reactivity suggests that CVR is influenced by Type D status, supporting this physiological pathway as a plausible direct mechanism of effect.

South Asian community views about individuals with visible differences

Hughes, J.,* Williamson, H., Williams, E., Naqvi, H., Johnson, M., Charlton, R., & Saul, K.;
*On behalf of the Appearance Research Collaboration, UK

Background: There is a paucity of research exploring the views of different cultural and ethnic groups about those with visible differences. This research is a priority given that issues of disfigurement, stigma and shame may be particularly bound to cultural and ethnic membership (Papadopolous et al., 1999). The paper examines the views of South Asian, UK communities towards visibly different individuals.

Methods: Nine focus groups ($N=63$), characterised by age, gender and ethnicity, were facilitated by community members in order that questions and topics were culturally relevant. Discussions were held in the language of the group (Johnson, 2007). Transcripts were analysed using template analysis.

Findings: Key themes highlighted a sense of family burden and shame limiting marriage and social opportunities of the individual; culturally specific beliefs regarding the causation of visible differences; the misinformed association of visible difference with mental and physical disability and a lack of knowledge of support services.

Discussion: This paper offers a unique insight into views held by South Asian communities which could inform future interventions.

Cancer-related stress: Is Lazarus's transactional model sufficient?

Hulbert-Williams, N.,* Neal, R., Wilkinson, C., & Morrison, V.; *University of
Wolverhampton, UK

Background: Despite being one of the most cited socio-cognitive models of stress, few validation studies of Lazarus's Transactional Model include samples undergoing major life event stress. This paper explores the validity of hypothesised relationships between different components following the cancer diagnosis.

Methods: 160 newly diagnosed breast, colorectal, prostate and lung cancer patients (male $n=63$; female $n=97$) completed Smith and Lazarus's (1993) questionnaire measures of appraisal components (ACs), core-relational themes (CRTs), and emotion themes (ETs). Comparative contributions of cognitive antecedents for each emotion were compared between theory-driven (forced entry regressions) and data-driven (stepwise regressions) analyses.

Findings: Both ACs and CRTs were required to best explain emotion. In 11 out of 12, data-driven analyses (R^2 range = 14.9 to 52.0) outperformed theory-driven analyses (R^2 range = 0 to 38.3). Longitudinal analyses will also be discussed.

Discussion: These analyses question the unique patterns of cognitive antecedents for each emotion. Further validation in other stressful situations is required to enable refinement of this theory.

Participant experiences of an incentive scheme to promote physical activity in Sandwell, West Midlands

Hurst, G.,* Davey, R., Grogan, S., Clark-Carter, D., Stevens, D., & Manford, L.; *Staffordshire University, UK

Background: Public health interest in reducing early mortality and preventing morbidity through developing behaviour change interventions has increased. Motivating sedentary individuals to become active must be addressed; simply being healthier is not enough of an incentive on its own. There is growing interest in the possibility that providing direct incentives can encourage individuals to adopt healthy lifestyle behaviours. This study reports findings from a qualitative, post-intervention, evaluation of the 'Walk to Beijing' programme implemented by Sandwell PCT. The lived experiences of participants are explored with the aim of informing future service provision.

Methods: 12 semi-structured interviews were conducted and analysed using Interpretative Phenomenological Analysis.

Findings: Emerging themes included 'initial motivations', 'impact of incentive', 'outcomes', 'barriers to intervention implementation' and 'future intentions'. Overall, the intervention was viewed positively.

Discussion: The impact of an incentive scheme to promote physical activity and considerations for its promotion in health psychology are discussed.

Parental perceptions influencing children's lifestyle to prevent the development of Type 2 diabetes among South Asians

Ikram, F.* & Pattison, H.; Aston University, UK

Background: Type 2 Diabetes Mellitus (T2DM) is a serious condition with high prevalence amongst young South Asians in Britain (Diabetes UK, 2006). This study examined parental perceptions of T2DM and their relationship with parental feeding styles.

Methods: An adapted version of the B-IPQ (Broadbent et al., 2006) and the Parental Feeding Style Questionnaire (Wardle et al., 2001) were administered to 52 South Asian mothers. Results were analysed using Multiple Regression.

Findings: The only significant association between T2DM perceptions and feeding styles was Treatment Control ($\beta = 0.528$, $p = 0.009$), which influenced Encouragement Feeding ($F = 2.695$, $p = 0.013$), mediated by Consequence ($\beta = 0.392$, $p = 0.005$). However the 3 most commonly mentioned causes of T2DM were bad diet (22.8%), too much sugar intake (13.5%), and genetics (10.3%).

Discussion: Overall a non-significant relationship was found between parental illness perceptions and feeding styles even though parents recognised dietary and genetic factors cause T2DM. Further research is needed to develop preventative measures in this high-risk group.

Conscientiousness and behavioural regulation of preventive health behaviour

Ingledeu, D.; Bangor University, UK

Background: This study extends previous research (e.g., Ingledeu & Markland, in press; Tucker et al., 2006) suggesting that some effects of conscientiousness on health behaviours may be mediated by behavioural regulation.

Methods: 236 working adults completed measures of preventive behaviour, personality (five-factor), external, introjected, identified, and intrinsic regulation (from self-determination theory), and direct and indirect social control (from Tucker et al.). Analysis was by structural equation modelling.

Findings: According to the modelling, identified regulation positively influenced behaviour. Conscientiousness positively influenced behaviour, indirectly through identified regulation, and also directly. Behaviour positively influenced intrinsic regulation and negatively influenced direct social control. Direct social control positively influenced external regulation and, to a lesser extent, other forms of behavioural regulation.

Discussion: Engagement in preventive activities is facilitated by identified regulation. Conscientious individuals find this identification easier. Once engaged in the activities, individuals may find some pleasure in them, and be comparatively free from pressure.

Determinants of family physician's genetic counseling activities

Islam, R.,* Ramsey, C., Grimshaw, J., Francis, J., Carroll, J., Allanson, J., Wilson, B., Blaine, S., Permaul, J., & Meschino, W.; *Ottawa Health Research Institute, Canada

Background/Methods: During a randomised trial to improve family physicians' (FPs) genetic counseling activities, we undertook a baseline assessment of determinants of three behaviours (taking a family history, assessing genetic risk and referring for genetic counseling) of FPs. Cross sectional survey based on the Theory of Planned Behaviour (TPB) was sent out to 125 Canadian FPs participating in the trial. TPB surveys were constructed using standard approaches. Internal reliability of TPB subscales was assessed.

Findings: Regression analyses explored the relationship between predictors (attitude, subjective norm and perceived behavioural control) and dependent (behavioural intention) variables. The TPB predictor variables explained 33% of the variance in intention to take family history, 81% of variance in intention to make assessment of genetic risk, and 74% of variance to make referral to the genetic services.

Discussion: An explicit use of TPB allowed us to understand factors that could improve the delivery service of genetics into family medicine.

Surgical management of morbid obesity: The case for psychological involvement

Jackson, S.,* Morris, M., Lilley, K.T., & Johnson, A.B.; *University of the West of England, UK

Background: Depression is a common patient response to chronic illness. This study was undertaken to assess the psychological status of morbidly obese individuals presenting for bariatric surgery.

Methods: 30 participants were recruited (20 with type 2 diabetes, 10 without; age range: 25–58; mean BMI 51.8 kg/m² ± 9.07). Participants completed a battery of psychological scales including HADS, WHOQoL-Bref, and DAS-24.

Findings: Comparisons with clinically relevant normative populations revealed study participants had increased social anxiety (63.33 ± 16.10; norm = 29.54 ± 12.39), general anxiety (9.53 ± 4.93; norm = 6.14 ± 3.76) and depression (9.37 ± 4.35; norm = 3.68 ± 3.07). Twenty (66%) participants had clinical levels of depression requiring treatment. Pearson's correlations indicated increasing BMI associated with increased depression ($p < 0.04$) and anxiety ($p < 0.04$) and reduced psychological quality of life ($p < 0.006$).

Discussion: Morbid obesity significantly raises levels of social anxiety, general anxiety and depression. While bariatric surgery can assist patients in their weight management goals, psychological interventions are strongly recommended to improve psychological wellbeing.

Assessing the long-term benefits of surgical intervention in adults with strabismus

Jackson, S.,* Rumsey, N., Morris, M., & Harrad, R.A.; *University of the West of England, UK

Background: Long term assessments of the effectiveness of strabismus surgery in adults are rare and very limited in focus. Consequently, this study was designed to consider the psychosocial status of adults eighteen months post surgery.

Methods: A repeated measures design, 25 participants were seen 6-week pre-operatively (T1), at 3-month (T2) and 18-month (T3) post-operatively. Participants completed a battery of psychological scales including HADS, WHOQoL-Bref, DAS-24 and Visual Analogue Scales (VAS).

Findings/Discussion: At T3, some study measures were showing continued improvement (social and environment domains – WHOQoL-Bref) and social anxiety and avoidance (DAS-24). A one-way ANOVA showed significant effects across time for social anxiety (DAS-24), and all VAS scales. Post-hoc tests showed significant changes occurred from T1 to T2 and T1 to T3.

Evaluating the implementation of new health trainer role

Jackson, S., Morris, M., Hancock, J., & Donovan, L.; UWE, Bristol, UK

Background: Since January 2006, UWE has registered 24 Health Trainers (HT) for a 12-week education programme. The training was new to UWE, the HT role new to the NHS. HTs are tasked with helping people in disadvantaged communities live healthier lives by facilitating behaviour change. This project's aim was to evaluate the impact of the education programme and role implementation.

Methods: A qualitative evaluation, data consisted of pre and post-training HT focus groups plus semi-structured one-to-one interviews with 20 HT clients and 20 stakeholders. Data were transcribed verbatim and analysed using thematic content analysis.

Findings: Through training HTs view of behaviour change shifted, from an understanding of the limiting factors to an appreciation of its complexity. Clients and stakeholders valued the new HT role and their working practices.

Discussion: Training equipped the HTs with the skills necessary for working with clients. Stakeholders recognised and clients responded to a more facilitative, holistic practitioner. For these study participants, adjustment was a long-term process, with some study measures showing greater improvements at eighteen months post-operatively than at three months post-operatively.

A six-month evaluation of a tailored behaviour change programme for a highly educated study sample

Jacobs, N.,* Claes, N., Thijs, H., Dendale, P., & De Bourdeaudhuij, I.; *Hasselt University, Belgium

Background: To examine if a tailored behaviour change programme is more effective in changing behaviour (physical activity, diet, smoking) than a minimal intervention in a highly educated study sample.

Methods: The participants ($n=314$) were allocated at random to a minimal intervention group (MIG) ($n=106$) and a maximal intervention group (MAG) ($n=208$). Behavioural outcome measures were reported at baseline ($n=287$) and at 6 months. Repeated measures ANOVAs were used to examine differences between the groups and differences due to a different intervention/surfing intensity for the MAG.

Findings: There was no difference between the MIG and the MAG. Time effects were found for different outcome measures (e.g. BMI and total energy from fat). Furthermore, significant interaction effects were found for intervention and surfing intensity, independent of baseline stage of change.

Discussion: Since more intensive interventions were more likely to provoke behavioural change in this study, it could contribute to future intervention development.

The Self-Medicating Scale (SMS): Development and relationship to self-care behaviours in response to acute pain

James, D.H.* & French, D.P.; *Cardiff University, UK

Background: Little is known about how people make decisions about self-treatment in response to everyday symptoms. We describe the development of a measure of people's beliefs about self-medication and how it relates to self-care behaviours in response to acute pain.

Methods: A nine item 'Self Medicating Scale (SMS)' was developed following one-to-one interviews exploring self-medicating beliefs with 10 people. Next, 304 undergraduate pharmacy students completed the SMS, along with reports of analgesic use and other forms of pain relief tried.

Findings: A three factor structure for the SMS was found: 'Reluctance', 'Don't think twice' and 'Run its course' (all with Cronbach alphas over 0.7). 93% reported experiencing pain over the past month and 74% had self-medicated with analgesics. Statistically significant associations were found between SMS scores and analgesics use, number of doses taken and use of non-pharmacological remedies.

Discussion: The SMS possesses good internal reliability, content and predictive validity.

Stress in Eastern European students: A pilot study

Janicova, M.* & Rout, U.; *University of Bedfordshire, UK

Background: While stress amongst students has been extensively studied, little is known about stress experienced by overseas students. The aim of this study was to identify the sources of stress in Eastern European students and to examine the relationship between perceived stress and mental health.

Methods: The investigation was carried in two phases. Phase 1 involved in-depth semi-structured interviews. Phase 2 involved using a package of questionnaires measuring stress and mental health. Of the 155 participants, 73.5% were women.

Findings: Fifteen items were identified as the main stressors. Factor analysis of the Stressors questionnaire generated four underlying factors. The most stressful situations involved: Speaking in public, finding right English words and joining a conversation. There was a positive correlation between the stressors and mental health (i.e.: Depression and anxiety).

Discussion: There may be substantial benefit in providing a support network system for the students who suffer from stress.

Development of a behavioural self-regulation intervention to improve employment, autonomy and self-esteem in ESRD patients

Jansen, D.,* Heijmans, M., & Rijken, M.; *NIVEL, Netherlands institute for health services research, The Netherlands

Background: The aim was to develop a psychological intervention for ESRD patients and their partners aimed at maintaining/widening patients' daily activities including work, and increasing patients' autonomy and self-esteem.

Methods: The intervention was based on self-regulation theory, social learning theory, self-determination theory and results of a cross-sectional study on the role of illness/treatment perceptions, and social support/overprotection in perceived autonomy, state self-esteem and employment in dialysis ($N=166$) and predialysis ($N=109$) patients. Spring 2008 the intervention was pilot tested for primarily feasibility in three dialysis centers.

Findings: The empirical study showed that beliefs about personal and treatment control, the impact of the illness and treatment and overprotection are important determinants. These results as well as the components of the intervention and findings from the pilot study will be presented.

Discussion: Focussing on patients' beliefs, by means of an intervention, might contribute to a greater sense of autonomy, self-esteem, and social participation in general.

The impact of national healthy eating campaigns on primary school children's experiences: A qualitative analysis

Jenkins, L.; Loughborough University, UK

Background: Diet has been identified as one of the key behavioural determinants of obesity, which presents one of the greatest challenges to adult and child health. A number of national health promotion campaigns and changes within schools have been implemented; however there is little evaluation of their impact.

Methods: Four activity-based focus groups with 19 children aged 7–11 years provided opportunity to share stories of healthy eating. Transcripts were analysed using Interpretative Phenomenological Analysis (IPA).

Findings: Despite current health messages children experienced unhealthy eating to be an essential component of a balanced diet. Although this was consistent across ages, experiences of the consequences of healthy choices change as the children get older.

Discussion: This raises concerns about concepts within children's experiences that contradict national health messages, and leads to concrete recommendations for future intervention development in terms of understanding developmental changes in health experiences.

Helper distress: Does personality matter?

Jin, L.,* Van Yperen, N., Sanderman, R., & Hagedoorn, M.; *University of Groningen, The Netherlands

Background: Findings related to the impact of supportive behaviour on the helper are contradictory. This study examined whether unmitigated communion (UC), defined as over involvement with others to the exclusion of self, moderates the association between helping behaviour and psychological distress in helpers.

Methods: Study 1 examined the moderating role of UC using 286 undergraduates. Participants completed questionnaires assessing UC, supportive/unsupportive behaviour, and psychological distress [CES-D]. Study 2 tested the consistency of the UC moderator effect with an experimental design.

Findings: Supportive behaviour was associated with less distress, but only for low UC helpers. High UC helpers could not benefit from helping others. Unsupportive behaviours predicted more distress, and this association was stronger for low UC helpers than for high UC helpers.

Discussion: Personality helps to understand individual differences in helping-related distress. Results provide information to enhance theories and clues as to identify support providers who are more at risk for psychosocial problems.

Living as the partner of someone with Type 1 diabetes: A case study

Johnson, E.C.,* Gillibrand, R., & Morris, M.; *University of the West of England, UK

Background: This case study explores the experience of 'Maggie', 60, the wife of 'Trevor', who developed Type 1 diabetes in 1973. During a semi-structured interview 'Maggie' was asked to talk about what it is like living with 'Trevor' since he developed diabetes, the ways in which she supports him with his management and to reflect on how life has changed since he initiated the insulin pump in 2004.

Methods: The interview, which lasted 80-minutes, was audio-recorded, transcribed verbatim and data was analyzed using Interpretative Phenomenological Analysis.

Findings: Three superordinate themes emerged from the analysis: The shifting focus of diabetes in the partnership and daily life; The sharing and shifting responsibility of diabetes and her experience of health care and support.

Discussion: 'Maggie's' experiences highlight that healthcare professionals should remain mindful of partners' unique knowledge and expert status, recognize their experiences and invite them into the 'diabetes team'.

Illness representations about stroke: Do health professionals hold the same representations?

Joice, S.,* Jones, M., & Johnston, M.; *University of Dundee, UK

Background: Leventhal's Common Sense Self-Regulation Model suggests individuals represent a health threat cognitively and emotionally. Do these representations differ between stroke survivors and their formal care-givers?.

Methods: Design: Questionnaire study. Participants: Stroke care health professionals (HP) ($n=90$) and a random selection of stroke survivors (SS) ($n=90$). Measures: Adapted Illness Perception Questionnaire (Revised) (IPQ-R) to assess HP beliefs about stroke considering the last stroke patient seen and the original IPQ-R assessing beliefs for stroke survivors. Analyses: *T*-tests and chi square.

Findings: HP and SS reports did not differ in terms of age, gender or affected side. HPs represented stroke as having greater identity, duration, consequences and emotional impact but less treatment control than SS ($p<0.01$). HPs attributed stroke to behaviour-related causes ($p<0.01$).

Discussion: Discrepancies in illness representations between HPs and stroke survivors may affect patient response to rehabilitation.

Personality moderators of positive emotions induction – implications for external validity of health research

Kaczmarek, L.; Adam Mickiewicz University, Poland

Background: Positive emotions are beneficial for health. Inducing positive emotions in laboratory settings can be regarded as an external emotion-regulation process. As such, those individuals who are open to regulating their affective states should react more intensively. Results of an experimental research on positive emotions will be analyzed to support the hypothesis.

Methods: 72 men and women (age 21–30) solved an arithmetic task. Next they viewed either positive or neutral pictures (IAPS). Personality traits measurement included Berlin Social Support Scales, Mood Regulation Questionnaire, Ego Resiliency Scale and Stress Appraisal Questionnaire.

Findings: As in line with external emotion-regulation hypothesis, those individuals who have high need for social support in stress situations ($r=0.31$, $p=0.001$) and who tend to stay passive in response to challenge ($r=0.47$, $p=0.002$) reported the highest positive stimuli valence.

Discussion: Investigating the role of positive emotions on health one should expect that those individuals who are sensitive to external emotion-regulation contribute mostly to the revealed effects.

Symptoms of depression and anxiety among a sample of South African patients living with a chronic illness

Kagee, A.; Stellenbosch University, South Africa

Background: Little systematic epidemiological research has been conducted into the prevalence, incidence and duration of psychiatric disorders among South African populations in general, and among medical populations in particular.

Methods: The present study reports on a survey conducted among 119 patients receiving treatment for diabetes or hypertension at community health care clinics in the Western Cape, South Africa. Participants in the study completed the Hopkins Symptom Checklist (HSCL) and the Beck Depression Inventory (BDI), two self-report instruments designed to measure mood disturbance.

Findings: The mean score of the sample on the HSCL was 43.64, which was non-significantly different from the commonly used cutpoint of 44 for clinically significant distress; 38.5% of the sample scored in the elevated range on this measure. On the BDI, 19.8% of the sample fell in or above the moderate range for depression.

Discussion: The results suggest that a considerable proportion of the sample may be experiencing significant psychiatric difficulty, for which they may not be receiving treatment.

The effects of different tasks within expressive writing on a sample of Romanian college students

Kallay, E.* & Baban, A.; *Babes-Bolyai University, Romania

Background: Emotional expression through Expressive Writing (EW) has proven its positive effects on different aspects of functioning. The main purpose of this study was to investigate the possible effects on emotional life of different tasks within EW on a sample of Romanian College students.

Methods: Consequently, we randomly grouped students with subclinical levels of depression (BDI), and trait anxiety (STAI) in 3 groups. Afterwards, we applied the EW technique: The first experimental group was asked to write for four consecutive sessions about stressful life events, the second group about stressful events and personal strengths that might help them overcome such events, and the control group about trivial events.

Findings: At the 6 week follow-up, compared to the control group both experimental groups showed significantly lower levels of depression (BDI), and lower levels of negative affectivity (POMS), while the second experimental group also showed significantly higher levels of positive emotions (POMS).

Discussion: The obtained results encourage the use of EW both for its positive effects and cost-effectiveness.

Sexual behaviour of Slovak adolescents

Kalina, O.,* Geckova, A.M., Orosova, O., Van Dijk, J., & Reijneveld, S.A.; *Kosice, Slovakia

Background: This study monitors adolescent's sexual behaviour aiming to fill the information gap in this part of health related behaviour among Slovak adolescents.

Methods: Data regarding sexual behaviour were collected (ever had sex, age, number of sexual partners, condom use, relationship length, sex under the drugs/alcohol influence) among Slovak adolescents ($n=4774$, 49.3% males, mean age 14.3).

Findings: More than 12% of the respondents reported having had sex, of those 41% reported early sexual intercourse; 44% reported more than 2 sexual partners; 60% used condom during first/last intercourse; 38% reported intercourse under the drugs/alcohol influence. Moreover, significant gender differences were found. The incidence of having sex and condom use during first sex is lower than in Europe (HBSC). Even Slovak adolescents had sex less frequently than their European peers, the occurrence of condom use was lower.

Discussion: Considerable proportion of risky sexual behaviour indicates the need to place sexual education programme already in early adolescence.

Estimation of adaptation resort of moderate mental retardation and normal children 6–8 years old

Kamenskaya, V.* & Nikiforova, S.; *Herzen State Pedagogical University, Saint-Petersburg, Russia

Background/Methods: The assumption was the following: Mental retardation subjects have both bad neurological health and low adaptation resort compared to normal children. Three groups of children were participants: Moderate mental retardation children ($n=30$) with diagnosis F.70, F.80.0, F.90; socially neglected children with the same diagnosis but without organic brain diseases ($n=30$) and a control one ($n=40$). Association test under heart rhythm record (nonlinear stochastic RR-interval analysis) was used.

Findings/Discussion: Children of the first group made Raven's test and association test significantly worth than normal and socially neglected ones. The adaptation resort level of the first group children was significantly low, and heart regulation was less mature than of the 2d and the 3d groups. Their mobilization processes were distorted, they showed high parasympathetic influence. Our assumption was confirmed.

Greek-Cypriot adolescent smokers and non-smokers: A comparison of smoking-related attitudes and behaviours in their families

Kapsou, M.,* Karekla, M., Symeou, A., & Tsangari, H.; *University of Cyprus, Cyprus

Background: In Cyprus, little evidence exists regarding the family's impact on adolescent smoking, although it is often assumed to be crucial.

Methods: This study compared smoking-related attitudes and behaviours in the families of Greek-Cypriot adolescents who smoke and those who do not. Students ($N=1955$, 980 female, 273 smokers, $M_{age}=14.66$) from randomly selected middle and high schools, completed questionnaires which included questions on the family's smoking-related attitudes and practices.

Findings: Smokers reported more favourable parental attitudes toward smoking. Compared to non-smokers, they were more likely to report smoking being allowed without restrictions and cigarettes being easily available at home, parents who smoke, and frequent contact with relatives or friends who smoke, and were less likely to have a parent talk to them about the dangers of smoking.

Discussion: Results indeed highlight the family's role in adolescent smoking, and point to the need for family-directed interventions. However, factors outside the family environment should also be considered.

"I am a believer": Health beneficial or detrimental? Findings from a sample of greek inpatients

Karademas, E.* & Petrakis, H.; *University of Crete, Greece

Background: Many studies have demonstrated a positive link between spirituality and health. However, cultural differences are often disregarded.

Methods: The purpose of this study was to examine the association between intrinsic religiousness and perceived health, illness acceptance, illness perceptions and coping in a sample of Greek inpatients suffering from diverse diseases ($N=128$, $M_{age}=58.02$, $SD=12.40$).

Findings: After controlling for demographic and illness-related variables, religiousness was related to illness acceptance, but in a negative way. It was unrelated to psychological symptoms and self-rated health. Also, religiousness was uncorrelated to illness perceptions. Contrariwise, modest positive correlations were noticed with two coping strategies (emotional preoccupation and palliative strategies), which in turn mediated the relationship between religiousness and perceived health.

Discussion: Overall, results suggest a weak, indirect and, surprisingly, negative relation of intrinsic religiousness to inpatients' well-being. Cultural differences in religiousness might underlie the discrepancy between these findings (although not unprecedented) and research supporting the health benefits of religiousness.

Psychological correlates of disordered eating in Greek-Cypriots: Depressed restrainers and stressed overeaters?

Karekia, M.,* Kapsou, M., & Anderson, D.; *University of Nicosia, Cyprus

Background: Disordered eating is often found to co-occur with other forms of psychopathology, such as anxiety and depression. Such comorbidity may specifically relate to certain forms of disordered eating.

Methods: Seventy-five adults (50 women, $M_{age}=39$, $SD=15.4$ years) and 170 college students (153 women, $M_{age}=20$, $SD=3.9$ years) completed self-report questionnaires assessing eating patterns, perceived stress and depression.

Findings: Students and adults reported comparable levels of perceived stress and depression. While students scored higher than adults on eating scales measuring restrained eating patterns, adults scored higher on scales measuring overeating. High levels of depression correlated with restrained eating in both samples. Perceived stress correlated with uncontrolled eating in the adult sample and with emotional eating in both samples.

Discussion: Findings suggest that different psychological states may need to be targeted when considering interventions for disordered eating. Interactions between psychological states and individual differences such as age and sex need to be examined further.

Determination of hardiness by psychosocial and behavioural variables in a representative Czech population sample

Kebza, V.* & Šolcová, I.; *National Institute of Public Health, Czech Republic

Background: The study aims to gain knowledge concerning some relationships of the hardiness level, and selected life style variables in a representative sample of Czechs.

Methods: The empirical survey was conducted in two waves (1999–2000, $N=2638$; 2004–2005, $N=1685$) using a random quota sampling. Respondents completed the set of questionnaires (hardiness – PVS, basic personality characteristics – EPI, self-rated health, social support, life events, locus of control, selected behavioural variables and socio-demographic data – age, sex, level of education, income). Basic statistical analysis was followed regression analysis (FSM) using SPSS, version 7.0.

Findings: Hardiness is determined by the wave of survey, age, education., self-rated health, physical activity, contacts with friends, contacts with family, anticipated, and received social support.

Discussion: Our results showed (1) tight link between hardiness and self-reported health, (2) importance of social resources for formation of hardiness, (3) importance of physical activity for mental resilience, and (4) importance of education for formation of mental resilience.

Risk perceptions and communication of DCIS among UK health professionals

Kennedy, F.,* Harcourt, D., & Rumsey, N.; *University of the West of England, UK

Background: DCIS is a non-invasive breast cancer. Previous research suggests that patients' views of DCIS can differ; and the perceptions of, and terminology used by, professionals may contribute to these beliefs and the psychosocial impact. This study aimed to explore the risk perceptions, and communication, of DCIS among health professionals'.

Methods: 295 breast care health professionals completed a mixed-methodology survey exploring their communication and perceptions of DCIS.

Findings: Diverse beliefs emerged; oncologists were less likely to view DCIS as cancer ($p=0.022$). Nurses, surgeons and oncologists considered DCIS to be less serious than radiologists and pathologists. Various terms were used to communicate DCIS to patients and 51.6% reporting more difficulty explaining DCIS than invasive cancer to their patients.

Discussion: The nature and impact of these variations should be clinically recognised and warrants further exploration to facilitate interventions to improve the communication process, perceptions and psychosocial adjustment of newly diagnosed patients.

Poorly controlled type 2 diabetes: Patient and family member perceptions and their relation to outcomes

Keogh, K.M.,* White, P., Smith, S.M., McGilloway, S., Gibney, J., & O'Dowd, T.; *Trinity College Dublin, Ireland

Background: The degree of congruence between the illness perceptions of patients with type 2 diabetes (T2D) and family members, and its relation to outcomes, was examined.

Methods: Patients ($n = 56$) with poorly controlled T2D ($HbA1c > 8.0\%$), and their closest family member, completed The Brief Illness Perception Questionnaire. Congruence between perceptions was assessed using a classification system based on the median score on each subscale for both groups. This gave four classifications; (1) similar positive perceptions, (2) similar negative, (3a) conflicting (patient negative, FM positive), (3b) conflicting (patient positive, FM negative).

Findings: There were no significant differences between groups in biological ($HbA1c$, BMI, BP) or self-management outcomes. However, there were significant differences in psychological well-being and non-supportive family behaviours (e.g. nagging, criticism).

Discussion: In patients with poorly controlled T2D congruence between patient and family member illness perceptions is related to psychological well-being and non-supportive family behaviours, and may be a useful target for intervention.

Psychological mechanisms of action of an internet intervention for patients with Coronary Heart Disease

Kerr, C.,* Murray, E., Noble, L., Morris, R., Bottomley, C., Patterson, D., & Nazareth, I.; *University College London, UK

Background: Evidence suggests Internet Interventions (IIs) benefit patients managing chronic conditions, however their mechanism of action is unclear. This study aims to test potential mechanisms of an II for Coronary Heart Disease (CHD) patients by using constructs from health psychology theory.

Methods: Cohort study of 175 primary care CHD patients using an II. Participants complete measures of potential mechanisms (self-efficacy, illness perceptions, social support) at baseline, 3 and 9-months. Multiple regression analysis predicts change in mechanisms from measured overall II use and use of its component services (information, behaviour change, support).

Findings: Analysis predicting early change in mechanisms will be conducted in March 08 when 3-month data collection finishes (follow-up rate 80% February 08). II use in the first 3 months ranged 0–35 logins (mean 4.68, sd 7.12), 72% logged in at least once.

Discussion: The potential of health psychology theory in explaining mechanisms of II for patients with CHD.

Comparing long-term expectations of physical function between individuals with rheumatoid arthritis (RA) and their rheumatologists

Kidd, T.,* Kirk, A., Shipley, M., & Newman, S.; *University College London, UK

Background: Patients' expectations can influence health outcomes (Mondloch et al., 2001). Little is known however about concordance of expectations between doctors and patients (Berkanovic, 1995). We compared future health expectations and outcomes of rheumatologists and individuals with RA at baseline and one year.

Methods: 50 individuals with RA and their rheumatologist completed questionnaires at baseline on current and expected pain, stiffness and physical function and 1 year later.

Findings: Repeated Measures ANOVA showed that at baseline rheumatologists were more negative about future pain ($p < 0.01$), stiffness ($p < 0.01$) and poorer physical function ($p < 0.01$) than the patients. At 1 year rheumatologists' expectations proved more accurate for patient reported pain ($p = 0.04$) and physical function ($p = 0.02$) than did patients' expectations.

Discussion: Individuals with RA have more optimistic and less accurate expectations of disease effects over the following year than do their rheumatologist. This raises questions about how to discuss future prospects during early consultations.

The shared experience of epilepsy

Kilinc, S.* & Dr Campbell, C.; *The University of Teesside, UK

Background: Epilepsy is the most common neurological condition in the UK (The National Society for Epilepsy, 2002) and research focusing on helping people live with epilepsy is growing. However, the impact on the partners of those diagnosed with epilepsy has been paid limited attention. The current study therefore aimed to explore the phenomenon of living with a partner who has epilepsy.

Methods: An Interpretative Phenomenological Approach (Smith, Jarman, & Osborn, 1999) was used with ten people with epilepsy and their partners.

Findings: The results indicate a shared experience does exist in relationships where a partner is diagnosed with epilepsy. Furthermore, the impact on the partner could be argued to be as profound as the person diagnosed with epilepsy.

Discussion: By focusing on people who were with their partners when the epilepsy diagnosis was made, this research can be used to effectively inform support services, from diagnosis onwards, for the partners of those with epilepsy.

Which psychosocial factors determine treatment seeking for sexual problems: Results from the HOPES

Kirana, P.S.*, Nakopoulou, E., & Hatzichristou, D.; *Aristotle University Of Thessaloniki, Greece

Background: To identify psychosocial factors associated with treatment seeking for sexual problems.

Methods: HOPES is a health survey investigating psychosocial factors, symptoms and health perception in hospitalized patients. The sample ($N = 454$) included equal numbers of subjects by age (18–80y) and gender. Sexual functioning was measured by SCSF and treatment seeking by a single question. Psychosocial factors were measured using 25 instruments categorized as: (1) personality characteristics (2) self and health beliefs, (3) social support, (4) well-being (5) lifestyle and demographics. Analysis included loess significance tests.

Findings: Within men and women reporting a SP, 72.4% and 77% respectively had not sought treatment. Treatment seeking was ($p < 0.05$) associated with high sense of coherence, relationship

satisfaction, general life satisfaction, and negative affect, as well as poor perceived physical and mental health.

Discussion: Out of a broad range of psychosocial factors, this study identified that only certain dimensions are associated with treatment seeking.

Berlin stays fit: A 6-months intervention-study to improve cognitive fitness in the elderly

Klusmann, V.,* Evers, A., Schwarzer, R., Dimeo, F.C., Reischies, F.M., & Heuser, I.; *Charité Universitätsmedizin CBF, Germany

Background: The study examines the differential effects of physical and mental activity on cognitive performance and well-being in the elderly.

Methods: 252 healthy women (70–93 y) were randomly assigned to two 6-months intervention-groups – a fitness training and a computer course (90-minutes sessions, three times weekly) – and a passive control group. Pre- and post-measures include cognitive tests for executive control and speed of processing (Stroop, Trailmaking A & B), episodic memory (RBMT Subtest 6, FCSRT) and verbal fluency, as well as interview-applied questionnaires to assess well-being (e.g., PGCMS, GDS, SWLS, PANAS).

Findings: Preliminary results of 3×2 two-way ANOVAs reveal differential positive effects of the interventions: Computer course participants significantly outperform controls on RBMT and Trailmaking while sports participants perform significantly better on FCSRT than controls.

Discussion: The implementation of new activities in elderly people's lives provides a promising chance to prevent cognitive decline.

Anxiety and depression in parents with food allergic children before and after food allergy diagnosis

Knibb, R.C.* & Semper, H.; *University of Derby, UK

Background: Children's food allergy is associated with psychological distress in parents. It is unknown whether this is present prior to clinical diagnosis. We aimed to assess this in parents before and after attending food allergy clinic to have their child assessed.

Methods: 102 parents completed a study-specific questionnaire and the Hospital Anxiety and Depression Scale at 2 allergy clinics; 47 parents completed these 3 weeks later.

Findings: 35% of parents had mild to severe anxiety before their clinic visit; 19% had mild depression. Post-clinic 36% had mild to severe anxiety; 14% had mild or moderate depression. There were no significant differences in anxiety ($p = 0.34$) or depression scores ($p = 0.09$) pre and post the clinic visit.

Discussion: Anxiety and depression is present in parents prior to diagnosis of food allergy; this does not reduce after the clinic visit. Communication of allergy information should be investigated to see if we can reduce distress.

A self-regulation oriented meta-analysis of psychological treatments for irritable bowel syndrome

Knittle, K.,* Maes, S., & DeGucht, V.; *Leiden University, The Netherlands

Background: To gauge the effectiveness of psychological interventions for irritable bowel syndrome (IBS) over the last 15 years, and to examine if the application of self-regulation principles within various psychological treatments contributes to treatment gains.

Methods: Before entering the meta-analysis, randomized controlled trials were sought, selected, and assessed for methodological quality and the presence of five key self-regulation principles (goal-setting, planning, self-monitoring, feedback, and relapse prevention).

Findings: 20 trials met the inclusion criteria and significant effect sizes (Cohen's d) were found for four outcomes: Abdominal pain (0.27), constipation (0.24), diarrhea (0.20), and depression (0.50). Sensitivity analyses revealed that diarrhea is improved more by interventions including relapse prevention ($p = 0.05$), and that interventions reflecting self-regulation theory more effectively reduce abdominal pain ($p = 0.05$).

Discussion: As a class, psychological treatments mildly effect primary IBS symptoms, and abdominal pain is more effectively reduced by interventions utilizing the cornerstone principles of self-regulation based intervention.

The effect of ethnicity and parents' education on risky behaviour among Roma and non-Roma adolescents

Kolarcik, P.,* Geckova, A.M., Orosova, O., Van Dijk, J.P., & Reijneveld, S.A.; *P.J. Safarik University, Kosice, Slovakia

Background: Studies reported alarmingly high prevalence of smoking and drinking among Roma adults, however relevant data on Roma adolescents are scarce. The aim is to investigate the effect of ethnicity and socioeconomic status on adolescents' risky behaviour.

Methods: In a cross-sectional study in Roma ($N = 330$; mean age = 14.50; interview) and non-Roma adolescents ($N = 722$; mean age = 14.86; questionnaire) ethnicity, parents' education and adolescents' smoking, binge drinking, drug use and physical activity was measured. Data was analyzed using logistic regression, controlled for gender and social desirability.

Findings: A significant effect of ethnicity, but not of education on risky behaviour was found (OR's from 0.14 to 0.60). Smoking, binge drinking, drug use as well as physical activity were less frequently reported by Roma in comparison with non-Roma adolescents.

Discussion: Although our findings are contradictory to previous studies they contribute to the explanation of the correlates of health of the largest Europe minority.

Relationships of eating behaviours, self-control and self-efficacy with obesity

Konttinen, H.,* Haukkala, A., Sarlio-Lähteenkorva, S., & Silventoinen, K.; *University of Helsinki, Finland

Background: In modern societies, self-control has a central role in the regulation of body weight. The aim was to examine the associations of eating behaviours, self-control, and self-efficacy with BMI level.

Methods: Finnish 25–74-year-old men ($n = 2,325$) and women ($n = 2,699$) participated in the national health survey (FINRISK) conducted in 2007. Three Factor Eating Questionnaire R-18, Self-control Scale, and Action and Coping Self-efficacy Scales for Nutrition and Exercise were used. Analyses were done with analysis of variance.

Findings: Overweight and obese subjects had higher mean restrained, uncontrolled and emotional eating scores than normal weight subjects in both genders (for all, $p < 0.001$). In contrast, the mean scores for self-control as well as action and coping self-efficacy for diet and exercise were highest among normal weight males and females (for all, $p < 0.001$).

Discussion: Results indicate that overweight and obese subjects need training in behavioural skills to maintain a healthy diet and exercise habits.

Assessment of work stress in patients undergoing cardiovascular catheter examination

Kopp, M.,* Ritelli, C., Pfaffenberger, N., & Pachinger, O.; *Innsbruck Medical University, Austria

Background: To assess level of work stress in patients with cardiovascular diseases at the beginning of clinical care.

Methods: We performed clinical interviews and asked 77 patients who underwent catheter examination for completing questionnaires (Areas of Worklife Survey AWS, Maslach-Burnout-Inventory, MBI) to assess workload. After interviews the level of job strain was rated in 3 categories (low $N=27$, moderate $N=26$, severe $N=24$) and we performed 2-tailed correlations (Pearson) using subscale scores of the instruments (SPSS 15.0).

Findings: Highest correlations between interview and AWS were found for the dimensions workload ($r=-0.536$) and community ($r=-0.509$); followed by fairness ($r=-0.355$) and reward ($r=-0.386$). In the MBI we had the highest correlation with the interview rating for exhaustion ($r=0.536$), followed by cynicism ($r=0.367$) and efficiency ($r=0.329$, all mentioned correlations were significant on the 0.01 percent level).

Discussion: High correlations between a clinical interview and the AWS and MBI in cardiovascular patients seem to justify the development of a (computer-adaptive) questionnaire screening method for selecting patients with high job strain in routine clinical care.

A digital smoking cessation intervention evaluated as an information system

Kraft, P.* & Brendryen, H.; *University of Oslo, Norway

Background: Happy Ending (HE) is a 12-month, theory-based, multi-channel, digital smoking cessation intervention. Two RCTs has testified to the effectiveness of HE. The effect of HE has been demonstrated to be partially mediated via targeted psychological processes; self-efficacy and coping planning.

Methods: In the present article (data from two RCTs; $n=396$ and $n=290$, and a cross-sectional survey, $n=301$), we applied the Information systems success model to evaluate HE as an information system.

Findings: Results showed that adherence to specific HE program components was related to cessation outcome. Key drivers of HE use was its perceived efficacy, seriousness of the program, and convenience. As compared with the a self-help booklet, HE (at 1, 3 and 6 months) received significantly higher (appr. 30%) utility evaluations.

Discussion: The most useful components of HE was found to be the most interactive parts of the intervention: The IVR log-on and log-off procedures, the SMSs, and the web-based therapeutic diary.

The influence of Lavender scent on levels of dental anxiety: A randomised control trial in a private dental setting

Kritsidima, M.,* Asimakopoulou, K.G., & Newton, J.T.; *King's College London, UK

Background: Dental anxiety adversely affects patients' uptake of oral health services. We report the findings of a randomised controlled trial examining the effects of lavender scent on patient anxiety.

Methods: In a between participants design, patients' ($N = 340$) anxiety was assessed while waiting for a scheduled dental appointment, either under the odor of lavender or with no odor. Current anxiety, assessed by the brief State Trait Anxiety Indicator (STAI-6), and generalised dental anxiety, assessed by the Modified Dental Anxiety Scale, (MDAS) were examined.

Findings: Analyses correcting for age, gender and type of dental procedure showed that although both groups showed similar, moderate levels of generalised dental anxiety (MDAS: $F(1, 334) = 2.104$, $p > 0.05$), the lavender group reported significantly lower current anxiety (STAI: $F(1, 334) = 76.96$, $p < 0.001$) than the control group.

Discussion: Implications for the measurement of anxiety in dental settings and the use of Lavender for reducing levels of state anxiety in such settings are discussed.

Attentional bias in smokers and non-smokers using an emotional Stroop paradigm

Kyranides, M.N.,* Demetriou, A.G., & Avraamides, M.N.; *University of Cyprus, Cyprus

Background: Much research has shown that individuals exhibit an attentional bias to stimuli related to their concerns or pathologies. A modified emotional Stroop task was used to measure the extent to which smoking-related words disrupt performance on participants reaction time.

Methods: Smokers ($N = 43$) and non-smokers ($N = 42$) were asked to name the color of incongruent color-words. The experiment followed a 2x4 mixed factorial design. Reaction time for correct responses was analyzed using a repeated-measures analyses of variance (ANOVA) with word category (smoking-related vs. positive, negative, neutral words) as within-subject factor and group (smokers vs. nonsmokers) as a between-subject factor.

Findings: Findings indicated no significant attentional bias to be present in smokers compared to non-smokers.

Discussion: We argue that attentional bias was not present in smokers because they did not abstain from smoking. Attentional bias may tap an important component of dependence and should be taken into account when developing smoking cessation treatments.

The role of emotional competences on social and psychological problems among children suffering from asthma

Lahaye, M.,* Luminet, O., Van Broeck, N., & Bodart, E.; *Université catholique de Louvain, Belgium

Background: We examined the role of emotional competences of children suffering from asthma on their social and psychological functioning.

Methods: The study included 50 children and adolescents (9 to 16 years) and their parents. Children completed a questionnaire about emotional competences (the EAQ; Rieffe et al., 2007) and parents assessed social and psychological problems of their children using the CBCL.

Findings: Pearson-moment correlations showed that the global score of emotional competences were positively associated with social activities ($p < 0.05$) and school activities ($p < 0.01$). Negative associations between the global score of emotional competences and externalizing (delinquent and

aggressive) behaviours ($p < 0.05$), withdrawn behaviours ($p < 0.05$), and attention problems ($p < 0.01$) were found to be significant.

Discussion: These preliminary findings support the hypothesis according to which emotional competences of children suffering from asthma could have a protective impact on their social and psychological functioning.

Preconceptional ancestry-based carrier-couple screening for CF and hemoglobinopathies: Intention to participate or not to participate

Lakeman, P.,* Plass, A.M.C., Henneman, L., Bezemer, D., Cornel, M.C., & P ten Kate, L.;
*Vrije University Medical Center, The Netherlands

Background: The aim was to investigate why people do or do not intend to participate in preconceptional ancestry-based carrier couple screening for cystic fibrosis (CF) and hemoglobinopathies (HbPs).

Methods: 9,453 individuals were offered carrier-testing, which was conditional on survey-participation. Eligible for test-participation were invitees who were planning a pregnancy with their partner. A structured questionnaire, based on the TpB, was completed by 418 survey-participants: 171 “offer-acceptors”, and 247 “offer-decliners”.

Findings: Both offer-acceptors and offer-decliners had a positive attitude towards test-participation, and perceived high behavioural control. Offer-decliners, however, had a less positive attitude, and perceived less control in terms of the time and effort needed for participation, than offer-acceptors. Still, 68% of offer-decliners intended to participate in the future if the screening would be offered routinely.

Discussion: Ancestry-based preconceptional CF and HbPs carrier screening was evaluated as positive and desirable. The effort and time needed for participation was an important reason for declining participation.

Illness perceptions and emotional responses to ovarian cancer screening in high risk women

Lancastle, D.,* Brain, K., & Phelps, C. on behalf of the PsyFOCS Study Management Group;
*Cardiff University, UK

Background: Ovarian cancer is known as the “silent killer”. A prospective psychological evaluation study (PsyFOCS) is underway in partnership with the UK Familial Ovarian Cancer Screening Study, which aims to determine the clinical effectiveness of ovarian screening for high risk women.

Methods: Prior to screening, 991 women completed the Illness Perception Questionnaire (adapted for ovarian cancer risk), Impact of Event Scale (IES), and Hospital Anxiety and Depression Scale.

Findings: Over one third of women were moderately or highly distressed about their risk according to IES scores. Hierarchical multiple regression showed that negative emotional representations ($p < 0.001$), higher anxiety ($p < 0.001$), stronger ovarian cancer screening control beliefs ($p < 0.01$), and past ovarian cancer screening recall ($p < 0.05$) were associated with higher pre-screening distress.

Discussion: The association between ovarian cancer screening control beliefs and distress suggests that more distressed women may place greater faith in screening as a means of controlling genetic risk.

Under the white coat: On physicians, coping with death

Laronne, A.* & Jacoby, R.; *Tel-Aviv Yaffo Academic College, Israel

Background: Physicians, unlike most of the population, are constantly exposed to illnesses and death. Earlier studies have shown this exposure to cause stress, which leads to distress and burnout. The current study examines the ways in which physicians cope with this exposure.

Methods: 12 in-depth interviews with hematologists, who treat patients suffering from life threatening diseases, were conducted. The interviews were recorded; transcribed and analyzed in accordance with the Interpretative phenomenological analysis approach.

Findings: Thematic analysis revealed four central issues representing the hematologist world: Professional aspects, personal aspects, patient-doctor relationship and death related issues.

Discussion: Analysis shows that physicians cope successfully with their stress at work using personal and social resources. "Terror management theory" (Greenberg, Pyszczynski & Solomon, 1986), "Patient centered medicine" approach and the "Stress and coping model" (Lazarus & Folkman, 1984) provided a theoretical framework for a model that shows the mutual relationship between fear of death, coping strategies and doctor-patient relationship.

Health related quality of life in patients with diabetes mellitus type 2 under hospital treatment

Lasaitė, L.,* Gostautas, A., Kazanavicius, G., Stankute, E., & Matijosaityte, I.; *Kaunas University of Medicine, Lithuania

Background: Multiple changes in health related life style occurs in patients with diabetes mellitus type 2 (DM2). Aim – To evaluate peculiarities of health related quality of life in women with DM2.

Methods: 43 patients (out of 76 proposed) from the Hospital Department of Endocrinology were investigated by using WHOQoL-100 questionnaire. Age- and sex-matched groups from the population study were used for comparison.

Findings: QoL in women with DM2 (individuality (10.9 ± 1.5 vs. 13.0 ± 2.9 , $p = 0.008$), spirituality (11.2 ± 2.2 vs. 13.4 ± 2.9 , $p = 0.021$)) was significantly worse than in women with other endocrine diseases, significantly worse (physical domain (10.5 ± 1.6 vs. 12.8 ± 2.6 , $p = 0.0001$), individuality (10.9 ± 1.5 vs. 13.4 ± 3.1 , $p = 0.0005$)) than in age-matched population women. QoL in men with DM2 is better than in women with DM2: Tendency in psychological domain (13.1 ± 0.8 vs. 11.9 ± 1.6 , $p = 0.073$).

Discussion: Results found confirm the data of other studies. Our data may be useful for health psychologists working with patients with diabetes.

Control or self-efficacy: Which is the better predictor of dietary quality in disadvantaged women?

Lawrence, W.,* Barker, M., & Crozier, S.; *Food Choice Group, University of Southampton, UK

Background: Bandura's social cognitive theory proposes that self-efficacy predicts behaviour. Recent qualitative research suggests control is better at explaining why some disadvantaged women eat better than others.

Methods: We interviewed 212 women of low educational attainment attending Surestart centres. The interview comprised reduced food frequency questionnaire, measures of general control (Bobak) and self-efficacy (Matthias), and other constructs from social cognitive theory.

Findings: A better quality diet was predicted by higher control ($r=0.29$; $p<0.0001$) and higher self-efficacy ($r=0.27$; $p=0.0001$), which were significantly related to each other ($r=0.37$; $p<0.0001$). With both in a linear regression model with other significant predictors of diet (social support, positive outcome expectancies and food involvement), self-efficacy no longer had a significant effect, whereas control remained significant ($p=0.03$).

Discussion: Control is a better predictor of dietary quality than self-efficacy. We are planning an intervention in Southampton to improve disadvantaged women's diets, partly by increasing their sense of control.

Association between expectations and perceived stress in university students: Preliminary data of a Portuguese sample

Leitão, J.* & Santos, E.; *University of Coimbra, IPCDVS, Portugal

Background: Perceived stress becomes relevant in academic expectations research as a measure of academic experience. This study aims to analyse the relation between expectations and worry in a Portuguese sample and to identify which variables predict the perceived stress.

Methods: 60 university students were assessed with the Penn State Worry Questionnaire, the Perceived Stress Scale and the Academic Involvement Questionnaire. Correlations and Regression were used to examine the predictive power of expectations and worry domains at perceived stress.

Findings: Results showed negative correlations between Credibility/AEQ domains ($r=-0.50$; $p=0.000$), and positive correlations between Expectancy/Perceived Stress ($r=0.57$; $p=0.000$), Resource Use ($r=0.38$; $p<0.05$) and Curricular Involvement ($r=0.34$; $p<0.05$). Vocational Involvement emerged as the best predictor of Perceived Stress (Adjusted $R\hat{A}^2=0.57$, $p=0.000$).

Discussion: Results highlight the value of expectations and stress in academic context, as a relevant source of information and intervention focus, beyond the study of academic (un)successful.

Testicular self-examination: An exploration of men's choices about self-examining

List, P.A.D.* & Trueman, M.; *University of Cumbria, UK

Background: This study aimed to examine testicular cancer worry, self-examination anxiety and perceived testicular cancer risk as potential predictors of testicular self-examination behaviour. It also aimed to elicit men's own reasons for deciding whether or not to carry out self-examination.

Methods: 127 men completed measures of testicular cancer worry, self-examination anxiety, perceived testicular cancer risk and self-examination behaviour. They also answered open-ended questions about their reasons for performing, or not performing, self-examination. Multiple regression analysis was utilised for the quantitative data, with thematic analysis employed for the qualitative data.

Findings: Both testicular cancer worry and self-examination anxiety were significant as independent predictors of self-examination behaviour ($p<0.05$). (Evidencing a positive and a negative association, respectively.) The thematic analysis found that regular self-examiners generally viewed self-examination as positive and beneficial.

Discussion: This study increases our understanding of factors that influence men's self-examination behaviour and could inform the design of interventions to promote testicular self-examination.

The importance of spiritual beliefs in coping with life-threatening illness

Llewellyn, H.W.L., Hallas, C., & Skevington, S.; *University College London, UK

Background: Life-threatening illnesses, like Cardiovascular Disease, often trigger a heightened awareness of death. Consequently, religious or spiritual beliefs may assume greater significance in coping by conferring a framework of meaning that offers sense of order and purpose to a person's existence and to death. This study explores this premise.

Methods: Semi-structured interviews about illness, coping and beliefs were conducted with eight cardiac patients. Verbatim transcripts underwent Interpretive Phenomenological Analysis (IPA) which seeks to understand a person's 'lived experience'.

Findings: Beliefs were diversely related to how participants made sense of and coped with their illness. Specifically, beliefs were associated with attributions of responsibility, existential questioning, sense of self, and hope. Some described a shift in beliefs which they ascribed to their illness experience.

Discussion: Findings implicate beliefs as complex and significant components of coping that relate to other established coping processes. They underscore the increasing recognition that patients' spirituality be taken into account in their healthcare.

Implicit and explicit emotional reactions to information about human papillomavirus

Lloyd, G.P.,* Marlow, L.A.V., Miles, A., & Wardle, J.; *University College London, UK

Background: Information about human papillomavirus (HPV) has been evaluated as worrying and complex in qualitative studies, partly due to the link between cancer and sexually transmitted infections. We hypothesised that reactions to affective information could vary by level of assessment, particularly with respect to implicit and explicit attitudes.

Methods: Participants ($n=96$) were randomised to receive information on HPV, breast cancer or recycling (a non-health control). Explicit and implicit attitudinal, emotional and behavioural outcomes were assessed.

Findings: HPV information, compared to other information types: Increased knowledge of HPV ($p=0.0001$), willingness to participate in screening ($p=0.03$), and was rated as more 'frightening' ($p=0.0001$); but there were no increases in implicit negative reactions to cancer terms ($p=0.03$), or evidence of increased anxiety ($p=0.20$).

Discussion: These results are encouraging in relation to wider public engagement with HPV and demonstrate the value of systematic, multi-dimensional assessments of health education materials over subjective evaluations.

Gender, sexual orientation, and sport practice are related to body dissatisfaction and disordered eating

Lombardo, C. & Pisanti, R.; La Sapienza University of Rome, Italy

Background: Female gender, male homosexuality and sport practice could be viewed as risk factors for eating disorders. The present study was aimed at evaluating the joint influence of these factors.

Methods: 384 participants (26% sedentary heterosexuals, 50% sport practicing heterosexuals, 23% sedentary gay) volunteered for the study.

Findings: Results of ANOVAs conducted on the Drive for Thinness scale of the EDI-2 with Group and Gender as factors showed significant main effects (respectively $F = 5.6$; $p = 0.004$; $F = 14.25$; $p < 0.001$); the same result was obtained with the Body dissatisfaction subscale (respectively $F = 9.1$; $p < 0.001$; $F = 22.22$; $p < 0.001$). With the Bulimia subscale only a main effect for Gender was found ($F = 6.7$; $p = 0.010$).

Discussion: Further analyses will consider a group of sport practicing homosexuals and will compare those practicing sport within a sport club to those who exercise on their own in order to assess whether the influence of sport practice is mediated by social factors.

Mental representation in cancer genetic test

López-Roig, S.,* Pastor, M.A., Aubalat, C., Belenchón, M., & Peris, P.; *Miguel Hernández University, Spain

Background: To describe mental representation of cancer genetic test results and emotional responses.

Methods: Semi-structured interviews before information of test results, including: Perceived Personal Risk; Information reminded; expected consequences and worries; HAD Scale. Random selection ($N = 160$).

Findings: The most important information: To detect family cancer (30.1%) and the importance of prevention (26.4%). Family inheritance information is underlined by 31% of sample: Subjects with cancer give importance to causal attribution aspects; non cancer people emphasize diagnoses process. Only 7% perceive higher risk than population. Difficulties to understand the estimated risk concept: "... test result could be positive or negative; so, I have 50%". Anxiety and depression levels appeared low (5.6 ± 4 ; 2.1 ± 3) without relations to information and risk.

Discussion: To include preventive dimension in mental representation will increase probabilities of adherence to recommended health behaviours. Risk concepts have to be clarified, overall in case of positive results.

Discovering a new identity after brain injury: A survivor's visual illness narrative

Lorenz, L.; Brandeis University, USA

Background/Methods: For a photo-elicitation study of lived experience with acquired brain injury (ABI), 11 adult ABI survivors took photographs of living with brain injury from their perspectives and talked about them with the researcher, who used narrative analysis methods to form visual illness narratives for 3 brain injury survivor case studies. Each visual illness narrative is a series of 4 or 5 images and their interview texts centered on a common theme and analyzed using structural, dialogic, and visual analysis methods.

Findings: The presentation shares one visual illness narrative, of a brain tumor survivor whose injury occurred 17 years ago. She relates a narrative of identity in which she speaks in a chorus of voices as chef, gardener, and brain injury survivor.

Discussion: Her visual illness narrative is an evocative portrayal that resists current medical models for rehabilitation from brain injury, engages us in her context, and makes us feel.

Re-establishing a sense of coherence: A typology of brain injury survivor stories

Lorenz, L.; Brandeis University, USA

Background: The life disruption of brain injury provides the conditions for creating stories to re-establish a sense of coherence and self.

Methods: A qualitative research study of lived experience with brain injury has suggested a typology of three brain injury survivor stories.

Findings: In the first story, the new (brain-injured) self dominates and feelings of hopelessness consume the teller. In the second, the new self and old self are in dialogue and both impairments and strengths emerge. In the third, a multiplicity of selves accepts each other and the teller narrates a range of selves, activities, and strengths as well as suffering.

Discussion: The suggested typology could support listeners as they give the gift of listening, and provide opportunities to note changes in the stories being told. Symbolic transformations of the typology provide simple visual models to support brain injury survivors as they reflect on their situations with support group leaders, clinicians, and peers.

Pines' measure of burnout components: Test-retest stability

Lourel, M.,* Mouda, F., Gueguen, N., & Deveaux, E.; Universite of Rouen, France

Background: The main objective of the present study was to test and re-test the psychometric properties of a French version of the "Burnout Measure Short version" (BMS).

Methods: The first sample is composed of 206 adult employees (aged 34.66 years, sd 12.12). The second sample included 31 undergraduates (for the test-retest). For all participants, job burnout was assessed by BMS scale (Malach-Pines, 2005), emotional exhaustion by Maslach and Jackson's subscale and professional life satisfaction was measured by scale derived of Diener and al. instrument (1985).

Findings: The confirmatory factorial analysis yielded only one factor. All the estimated parameters are significant (sample 1). The Cronbach alpha coefficient was 0.87 and 0.89 for the reliability (sample 2). The positive highest correlation was observed between Malach-Pines's scale and emotional exhaustion, and the lowest for job satisfaction.

Discussion: Methodological limitations of the study and future implications in occupational health psychology were discussed.

Work and home spillover and psychological burnout among French dentists

Lourel, M.* & Mouda, F.; Paltrier, Chevaleyre

Background: This study examined the relationship between work-home Interference (WHI) and job burnout among 95 French dentists (aged 43).

Methods/Findings: The regression analysis showed that the negative work-to-home spillover and negative home-to-work spillover was a strong predictor of emotional exhaustion (psychological burnout). The regression results indicated that a 36% of the variance of emotional exhaustion was explained by WHI. Discriminant function analysis indicated that the negative work-to-home spillover variables discriminate the three categories of burnout degree (low, medium and high).

Discussion: WHI is an important who explain higher levels of psychological burnout. Practical implications and methodological limitations were discussed.

Job burnout in organizational health psychology: Quantitative analysis of literature

Lourel, M., Guéguen, N., Chevalayre, Paltrier, & Mouda, F.; Université of Rouen, France

Background/Methods: This paper reports on the meta-analytic relationship between organizational individual variables and the three dimensions of job burnout (MBI scale) ($n = 12112$).

Findings: Our meta-analysis shows the negative correlations between reduced opportunities for career development, high psychological demand from work, lack of social support and the dimension of emotional exhaustion. Coping, lack of social support, absenteeism and turnover were associated with the dimension of depersonalization. Personal accomplishment is associated with quality of life outside work, high social support, engagement and career opportunities.

Discussion: The future implications and methodological limitations in occupational health psychology were discussed.

Development of disease-specific measures of social support, quality of life, and adherence in cardiac rehabilitation

Lowe, M.* & Parker, D.; *University of Manchester, UK

Background: This paper describes the development of disease-specific measures of social support, quality of life, and adherence during cardiac rehabilitation.

Methods: Semi-structured interviews with 27 cardiac patients, analysed using Interpretative Phenomenological Analysis (Smith, 1996), informed the development of questionnaires assessing social support, quality of life and adherence during cardiac rehabilitation. The measures were piloted in a survey of cardiac support groups ($n = 90$) and then applied in a hospital-based postal questionnaire study of cardiac rehabilitation patients ($n = 221$).

Findings: Exploratory factor analysis was used to determine the structure of the three new measures. The new measures showed reasonable reliability, with subscales producing reliability coefficients ranging from 0.62–0.91.

Discussion: Disease-specific measures have been developed that can help identify the differing aspects of social support and quality of life that are important to patient adherence during cardiac rehabilitation.

Exploring the effects of social support and quality of life on adherence during cardiac rehabilitation

Lowe, M.* & Parker, D.; University of Manchester, UK

Background: This paper describes an investigation to determine which elements of social support and quality of life play a significant role in patient adherence during cardiac rehabilitation.

Methods: 221 myocardial infarction patients attending cardiac rehabilitation clinics completed newly developed measures of social support, quality of life, and adherence in a postal questionnaire study.

Findings: Hierarchical regression analysis indicated that elements of social support and quality of life have differential effects on different types of adherence, although emotional quality of life and instrumental support had the most consistent impact.

Discussion: During cardiac rehabilitation different aspects of social support and quality of life appear to be important for patients' adherence depending upon the nature of the behavioural change

examined. This has clear implications for improving patient adherence during cardiac rehabilitation. The feasibility and potential benefits of targeting interventions to specific patients will be discussed.

Psychological characteristics contributing to young drivers' risk of sleep-related car crashes

Lucidi, F.,* Giannini, A.M., Mallia, L., Devoto, A., & Sgalla, R.; *University of Rome "Sapienza", Italy

Background: Young drivers as a group are more likely to be exposed to the risk of sleep-related accidents, but this does not mean that all young drivers are equivalent. Individual differences in driving habits, risk perception, and susceptibility to sleepiness contribute to crash risk.

Methods: At the aim to identify traits related to sleepiness episodes while driving a questionnaire was administered to 1008 young drivers (age = 18.33 ± 0.68). A cluster analysis was used to derive the number of subtypes within the novice driver sample and suggested a three clusters solution.

Findings: Cluster 1 was a relative high-risk group. The individuals in this cluster reported the highest level of driving anger, sensation seeking and normlessness. They also reported an higher external locus of control and resulted evening-types.

Discussion: Compared to individuals in the other two clusters, the cluster 1 individuals reported to have experienced sleepiness attack while driving more often.

Could family cohesion and parental alexithymia predict glycaemic control of children and adolescents with diabetes?

Luminet, O.,* Meunier, J., & Dorchy, H.; *Catholic University of Louvain, Belgium

Background: We examined if family cohesion and the parents level of alexithymia could predict children/adolescents metabolic control, after controlling for demographic variables.

Methods: The study included 45 type 1 diabetic children/adolescents (6 to 18 years) and their parents. HbA1c (mean, maximum, minimum), number of severe hypoglycaemias and of hospitalisations for hyperglycaemia were collected for the previous 12 months. Family cohesion (FACES-III) and parental alexithymia (TAS-20) were assessed with questionnaires.

Findings: Regressions analyses showed that family cohesion ($p < 0.05$) predicted the number of severe hypoglycaemias. Demographic variables ($p < 0.01$) and maternal alexithymia ($p < 0.05$) predicted the number of hospitalisations for hyperglycaemia. For glycaemic control (HbA1c), only two demographic predictors (marital and professional status) were found to be significant (respectively, $p < 0.01$ and $p < 0.05$).

Discussion: Family cohesion and maternal alexithymia have an impact on the glycaemic control of children and adolescents with diabetes.

Representational and behavioural aspects of premorbid active lifestyle in fibromyalgia patients

Luminet, O., Grisart, J., Masquelier, E., Desmedt, A., Scaillet, N., & Wunsch, A.; Catholic University of Louvain, Belgium

Background: Most fibromyalgia patients report an overactive premorbid lifestyle but studies do not make a distinction between a behavioural component (effective engagement in many activities) and a

representational component (one's own attitude towards activities in general). The aim of the study was to compare ratings of patients (P) and controls (C) on past and present behavioural and representational components of hyperactivity.

Methods: Twenty-four fibromyalgia patients (P) were recruited. A group of 24 control healthy participants (C) was matched with the fibromyalgia group for gender, age, educational level and type of profession.

Findings: P scored significantly higher on past representational hyperactivity, $p < 0.01$ but lower on current representational hyperactivity, $p < 0.01$. For past behavioural hyperactivity, P and C did not differ, except that P had less time devoted to resting activities, $p < 0.01$ and sleep, $p < 0.01$.

Discussion: The current results emphasize the need for a systematic assessment of both representational and behavioural components of hyperactivity.

Factors influencing implementation of health psychology approach for IHD patients during rehabilitation

Lukosiunaite, R.,* Gostautas, A., Glamba, V., Daukantaite, L., Intaite, G., Petrauskaite, D., & Ulvydaite, D.; *Abromiskes Rehabilitation Hospital, Lithuania

Background: Demographical and other factors influence health related behaviour of IHD patients during rehabilitation. The objective of this investigation is to disclose relationship among different health behaviours and rehabilitation outcomes.

Methods: TABP, behavioural factors and blood pressure correction procedures were assessed according to WHO program Kaunas MONICA-Psychosocial. The participants for our investigation were 107 IHD patients (54 male, 53 female) from rehabilitation hospital.

Findings: TABP was related with worse results of blood pressure correction procedures ($p < 0.05$). Better results were achieved correcting blood pressure within the groups having university educational level. Physical activity ratings were related with high education level ($p < 0.001$) and longer disease duration ($p < 0.01$). IHD men used more tobacco and alcohol than women ($p < 0.001$) and had shorter disease duration ($p < 0.05$).

Discussion: It was confirmed that multiply relationships exist among health related behaviours in IHD patients. It influences rehabilitation outcomes and rehabilitating work efficacy of health psychologists in rehabilitation hospital.

Exploring the intention-behaviour gap with beta regression

MacLennan, G.,* Araujo-Soares, V., McIntyre, T., Sniehotta, F., & Francis, J.; *University of Aberdeen, UK

Background: Health behaviour is often characterised by a constrained distribution with ceiling/floor effects. Ordinary least squares regression (OLS) may be sub-optimal, violate assumptions and consequently give low variance explained estimates. A better approach may be beta regression (BRM) which facilitates modelling both location and dispersion, explicitly allowing heteroscedasticity.

Methods: OLS and BRM compared using self reported exercise and theory of planned behaviour intention data from 287 Portuguese school children.

Findings: OLS estimate of intention was 0.248 ($p < 0.001$) with R -square 5.8%, but regression diagnostics showed assumptions not met. BRM estimates for location 0.544 and dispersion 0.496 were both significant, ($p < 0.001$) and R -square was 21.5%.

Discussion: BRM fitted this data better than OLS. Results show increased intention implies increased behaviour and increased variation in behaviour. One interpretation is intention is necessary but not sufficient to explain behaviour. BRM can be applied to range of health behaviour measurement where OLS is considered sub-optimal.

Integrative medicine: Paradoxes for a contested practice

Madden, H. & Chamberlain, K.; Massey University, New Zealand

Background: Integrative medicine is an emerging paradigm resulting from a move to amalgamate complementary and alternative medicine with orthodox medicine. This produces a number of paradoxes for the delivery and integration of treatments.

Methods: Review of written resources (research and theoretical articles, books, etc.) to determine arguments, discourses and paradoxes involved in underlying philosophy, establishment and acceptance, and delivery of integrative medicine.

Findings: Paradoxes for integrative medicine arise around the paradigm clash between treatment philosophies, issues of professionalism and the standardisation of treatments, power relationships and debates around dominance and subordination; and issues relating to patient autonomy and treatment responsibility.

Discussion: The meanings of these paradoxes and tensions for integrative medicine are discussed and their implications for research and practice in health psychology considered. It is also argued that the integration of complementary and alternative medicine with orthodox medicine enhances the biomedical processes of medicalisation and individualism in healthcare.

Autonomous motivation, life style change and quality of life in myocardial infarction patients

Maes, S.,* Liem, S., De Gucht, V., Schouten, R., & Schaleij, M.J.; *Leiden University, The Netherlands

Background: This study explored whether patients with autonomous motivation are more adherent to medical advice regarding medication and life style change and whether they report a higher quality of life. The study was an extension of the MISSION! project, a care programme developed to enhance adherence to medical advice by cardiologists.

Methods: At T1, T2 and T3, resp. 1, 3 and 6 months after MI, 94 patients completed questionnaires, measuring autonomous and coerced regulation, autonomy supportiveness, quality of life (MacNew) and physical exercise, smoking, nutrition and medication use.

Findings/Discussion: Hierarchical regression analyses showed that autonomous regulation and autonomy supportiveness at T1 predicted adherence and life style changes at T2 and T3, but not quality of life.

A comparison of coping styles of game dependent and non-dependent adolescents

Maher, F.* & Khodabakhsh, S.; *Azad University-Karaj, Iran

Background: The aim of this study was to compare coping styles of game dependent adolescents with non-dependents.

Methods: A sample of boys from Tehran (Iran), aged 11–20 ($N=300$), were selected by in-access sampling. 0.150 boys were game dependent and 150 boys were non-dependent. The dependency was determined by using Game Addiction Scale (a corrected form of Young's Internet Addiction Scale). They completed a demographic characteristics questionnaire and Ways of Coping Questionnaire (Lazarus-Folkman). Data was analyzed through independent t -test.

Findings/Discussion: Research findings indicate that there are significant differences between game dependent and non-dependent boys in three types of coping styles: Confronting coping ($p=0.001$, $t=4.43$), distancing ($p=0.001$, $t=3.47$), escape-avoidance ($p=0.001$, $t=6.61$), and they were not different in 5 coping styles: Self-controlling ($p=0.001$, $t=1.2$), seeking social support ($p=0.001$, $t=1.8$), accepting responsibility ($p=0.001$, $t=1.86$), planful problem solving ($p=0.001$, $t=2.11$), positive reappraisal ($p=0.001$, $t=1.84$).

Early adversity and trauma are predictors of health problems in adulthood

Maia, A.; Universidade do Minho, Portugal

Background: Research has shown how intense stress affects physiological and neurological systems, suggesting the relevance to study the impact of childhood adversity and other negative experiences on physical health in adulthood.

Methods: 250 college students; 100 professional school students, 200 adults in community, 350 colonial war veterans filled (1) Developmental history questionnaire; (2) PTSD scale; (3) BSI; (4) Health risk behaviors checklist; (5) RSCL.

Findings: Correlations between adverse exposure, psychopathology and health (symptoms, health risk behaviours, reported illness) were significant, and regression analysis showed that the variance of health variables is significantly explained by adverse experiences and psychopathology. PTSD is a relevant predictor of health complaints and reported illnesses after controlling other variables.

Discussion: Subjects with more adverse histories have worst health status. Interventions should take into account that health behaviours and problems must be understood in the totality of the life of those who are involved, and trauma history needs to be assessed.

Anxiety and impulsivity in latent classes of protective and risk behaviour

Mallach, N.* & Eid, M.; *Freie Universität Berlin, Germany

Background: Skin cancer prevention encompasses different types of behaviour, such as using sunscreen, wearing protective clothing, or avoiding the sun. Typological approaches (e.g. latent class analysis, LCA) take into account the configuration of risk- and protective behaviours, thus providing more information than separate analyses or behavioural indexes. The behavioural activation and inhibition system (BAS/BIS; Gray, 1981), indicated by anxiety and impulsivity may explain risk and protective behaviours.

Methods: Sun-related behaviours and BAS/BIS indicators were assessed in 344 individuals. Latent mixture models were used to identify classes and predict behaviour.

Findings: LCA identified 3 classes. Anxiety predicts membership in a high-protection class, impulsivity in a low-protection class. Membership in a class with mixed behavioural configuration was predicted by high anxiety and impulsivity scores.

Discussion: Typological approaches can identify relevant preventive behaviour patterns. Membership in these patterns can be explained by personality traits from the BAS/BIS system, which suggests tailored interventions.

Sleep related car crashes: Risk perception and coping with sleepiness at the wheel

Mallia, L.,* Lucidi, F., Safina, F., & Violani, C.; *University of Rome "Sapienza", Italy

Background: The study examined the factors associated with the risk perception to have night-time car crash and the strategies most commonly used by young drivers to counteract sleepiness at the wheels.

Methods: 1123 young drivers (41.8% males; mean age = 21.04, SD = 1.65), with driving experience >6 months completed a questionnaire evaluating (1) night-time driving and the related risk perceptions (2) previous experience of sleepiness at the wheels and about the strategies used to cope with it.

Findings: A linear regression analysis pointed out that males are less worried about night-time car crashes than females ($\hat{a}=0.07$). Such concerns decrease with the increasing of night-time driving ($\hat{a}=-0.12$), whereas the frequency of episodes of driving impaired by sleepiness increase the perception of this risk ($\hat{a}=0.14$). A logistic regression analysis showed that the risky decision to continue driving while impaired by sleepiness is positively and linearly related to the frequency of night-time driving (Wald = 15.40, gdl = 2; $p < 0.001$).

Attributional influences on staff responses to elderly care home residents' problem behaviours

Markiewicz-Anwar, P.* & Elander, J.; *Thames Valley University, UK

Background: Elderly people live increasingly in residential care, where staff perceptions can affect residents' hygiene and health. We extended attributional theories of helping behaviour to identify factors affecting staff responses to residents' problem behaviours.

Methods: Residential care staff ($n=58$) rated their willingness to help with personal hygiene for vignettes in which type (depressive-aggressive), cause (internal-external), and duration (long-short) of residents' behaviours were manipulated.

Findings: Willingness to help was greater for depressive ($F=18.7$, $p < 0.001$) and externally caused behaviours ($F=6.3$, $p=0.02$). Staff with frequent resident contact were more willing to help residents with aggressive behaviours ($F=8.7$, $p=0.01$). More qualified staff were more willing to help residents with short-term/internal and long-term/external problems ($F=5.2$, $p=0.03$).

Discussion: Staff responses to problem behaviours depend on multiple resident and staff characteristics. There are implications for theories of helping behaviour, care staff training, and the application of health psychology to residential care for the elderly.

Inequity of treatment in the workplace: Implications for cardiovascular health

Marsden, H.,* Wager, N., & Fieldman, G.; *Buckinghamshire New University, UK

Background: Previous research has demonstrated that employees who perceive their supervisor as treating them less favourably than their co-workers are at increased risk for anxiety and depression. This quasi-experimental field study explores the health implications of interpersonal inequity.

Changes in blood pressure between baseline and ambulatory readings in the workplace were examined to determine whether inequity is a significant risk factor for occult workplace hypertension.

Methods: 73 working people participated in the study. From questionnaire responses they were classified as experiencing; positive inequity, negative inequity or equitable treatment in relation to their co-workers.

Findings/Discussion: A MANCOVA, controlling for BMI revealed that workers who perceive negative inequity experienced significantly greater workplace elevations in both systolic and diastolic blood pressure in comparison to the 'equity' and positive inequity groups. Furthermore, 19.7% of the sample demonstrated occult systolic hypertension in the workplace. Logistic regression revealed that negative inequity presented a ten-fold risk for manifest workplace hypertension.

Do doctors who have various jobs suffer from burnout and physical problems more than those with just one job?

Martinez, F.,* Benavides, G., Solanes, A., Martin, B., & Pastor, Y.; *University Miguel Hernandez, Spain

Background: Significant differences in burnout and health condition between doctors with two different working conditions: (1) Various paid jobs, one of them in a hospital; (2) Just one paid job in a hospital.

Methods: Research included $n = 114$ doctors from four different hospitals in Alicante province. For evaluation purposes, MBI and SF-36 tests were distributed. The obtained data were analyzed using t -test for independent groups.

Findings: Significant differences were found in the scores obtained by the two groups in depersonalization, personal accomplishment, physical role and general health ($p < 0.05$).

Discussion: Doctors who handle various jobs informed about worse health condition, bigger effects of their health on their jobs and a highest depersonalization. However, this group also showed a high profile regarding feelings of personal accomplishment.

Evaluation of the validity and reliability of the Condom Use Self-efficacy Scale (CUSES) in Spanish college students

Martinez, F.,* Benavides, B., Pastor, Y., Martin, B., & Solanes, A.; *University Miguel Hernandez, Spain

Background: Condom use self-efficacy can be defined as self-perceptions about ability to use condoms under a variety of circumstances.

Methods: The aim of this paper is to study the factorial validity and reliability of the Spanish adaptation of the Condom Use Self-Efficacy Scale (Brafford & Beck, 1991) and its correlation with condom use frequency and beliefs in a sample of 253 Spanish college students. Principal components factorial analyses, internal consistency for subscales and Pearson's correlations with condom use beliefs and frequency were carried out.

Findings: Four factors emerged from the factorial analyses (Mechanical Skills, Partner Disapproval, Assertiveness and Self-Control in Difficult Circumstances). Cronbach's Alpha adopted values of over 0.70 (except for Partner Disapproval). The subscales presented significant negative correlations

with beliefs against condom use and positive correlations with pro-use beliefs. Condom use frequency only correlated positively with Self-Control Subscale.

Discussion: Condom use self-efficacy is therefore a relevant determinant of safe sex practices.

Influence of social support on health, well-being and the conduct of adherence in chronic patients

Martos-Mendez, M.J.,* Pozo-Muñoz, C., & Alonso-Morillejo, E.; *University Of Almería, Spain

Background: The present study aims at determinig, firstly, the influence of social support on health and well-being of chronic patients, as well as the adherence to therapy, and finally, to know the extent to which that compliance have impact on health of the patients.

Methods: The sample consists of a total of 100 chronic patients, aged between 21 and 67 years 72% of them are women and the remaining 28% are men. The instrument of information used is a structured interview consisting of various scales to measure the perceived social support, health, well-being and compliance.

Findings: The data indicate the social support of the couple predicts the well-being of patients. The social support of doctors is a good predictor of well-being and an adherence to therapy.

Discussion: In short, social support influences as on health and as on adherence to treatment, but we must continue investigating the relationship between health and the adherence to therapy.

Stage of change for diet and exercise predicts survival among Coronary Heart Disease (CHD) patients

Masters, K.S.,* O'Neill, R.M., & Jaffe, A.S.; *Syracuse University, USA

Background: The Stage of Change (SOC) model provides a useful framework for assessing intentionality regarding health behaviours. Further, initial SOC may predict health outcomes.

Methods: Fifty seven hospitalized patients with CHD were assessed at admission to determine their dietary (across three indicators) and exercise SOC. Survival status was documented seven to nine years later.

Findings: Logistic regression demonstrated that, after controlling for age and gender, dietary SOC predicted survival ($p < 0.05$). Those who intended to change their diet were more likely to survive than those who reported they already consumed a healthy diet prior to admission. Exercise SOC did not predict survival when entered into the regression but in a univariate analysis those who currently exercised or intended to were more likely to survive.

Discussion: The study suggests that future research should investigate the predictive value of SOC for health outcomes and determine what individual difference mechanisms may be salient for this relationship.

Gender moderates spirituality-health relationship in college students

Masters, K.S.,* Emerson IV, F.W., & Steffen, P.R.; *Syracuse University, USA

Background: Some recent research suggests a positive relationship between spirituality and health but identification of variables that moderate or mediate this relationship is generally lacking. The present study was designed to probe for these variables among college students in the US.

Methods: A sample of 854 students from three geographically and religiously diverse universities were assessed on spirituality and health as well as potential moderating and mediating variables.

Findings: Regression analysis demonstrated a significant model ($p < 0.001$) with significant main and interaction effects when health status was regressed on gender and spirituality. Gender moderated the spirituality/health relationship such that a mildly positive relation was found for females but for males increased spirituality predicted worse reported health. Examination of potential mediators (dimensions of empathy, religious orientation) within gender failed to demonstrate mediation.

Discussion: College students are in an early stage of spiritual/religious development and further research is needed to illuminate relationships with health outcomes.

Patient empowerment in clinical genetics services: A new model developed from qualitative research

McAllister, M.,* Payne, K., MacLeod, R., Donnai, D., & Davies, L.; *Nowgen (A Centre for Genetics in Healthcare) & The University of Manchester, UK

Background: Outcome measurement in clinical genetics is problematic, with little agreement about appropriate outcome measures. The aim in this study was to develop a theoretical framework that describes how patients may benefit from using genetics services.

Methods: A qualitative grounded theory approach was used. Seven focus groups and 19 interviews were conducted with patients, patient group representatives, and genetics clinicians.

Findings: Results suggest that patient benefits from using genetics services could be described by a unifying concept of empowerment. Empowerment includes dimensions of decision-making, knowledge and understanding, future-orientation and instrumentality. The concept of empowerment is similar to perceived personal control (PPC). A measure of PPC has been developed for use in evaluations of clinical genetics services. However, empowerment includes some benefits not captured by PPC related to empowerment of other at risk relatives, and future generations.

Discussion: These findings will contribute to identifying a core set of outcome measures to evaluate clinical genetics services.

Developing outcome measures for clinical genetics services: A triangulation approach

McAllister, M.,* Payne, K., MacLeod, R., Donnai, D., & Davies, L.; *Nowgen (A Centre for Genetics in Healthcare & Medical Genetics Research Group) & The University of Manchester, UK

Background: Outcomes from clinical genetics services are hard to measure. The aim of this research was to identify which outcomes, are valued by stakeholders.

Methods: Three methods were used: (1) A systematic review identified 67 validated outcome measures used, or developed, to evaluate genetics services. (2) A Delphi survey (115 genetics clinicians, 72 patients) identified the following outcome domains as useful: Knowledge, decision-making, perceived personal control, risk perception, satisfaction, meeting of expectations, coping, accuracy of diagnosis, quality of life. (3) A qualitative grounded theory study (7 focus groups, 19 interviews) with patients and clinicians explored valued outcomes, and resulted in construction of a model of empowerment.

Findings: Data triangulation clarified that the qualitative findings support those from the Delphi, but identified additional valued outcome domains not captured by available outcome measures: Empowerment of other relatives and future generations.

Discussion: In conclusion, triangulation is a useful approach to investigate complex areas, such as outcome measurement.

Development of a tool for measuring hand-hygiene behaviour in healthcare settings: The HHOT

McAteer, J.,* Stone, S., Fuller, C., Slade, R., Charlett, A., & Michie, S.; *University College London, UK

Background: A reliable, sensitive measure of hand-hygiene behaviour (HHB) is needed to evaluate interventions to improve hand-hygiene behaviour amongst healthcare workers (HCW). This study aimed to develop such a measure.

Methods: Observational study Participants: Four staff groups – doctors, nurses, healthcare assistants and other – at two NHS hospitals. Procedure: Clinical guidelines, previous measures and HHB observations informed observational categories. Three observers observed 1488 hand-hygiene opportunities (HHO) and HHBs to assess inter-observer agreement. One observer observed HHB for eight months on one ward to assess sensitivity to change. Analyses: Kappa, intra-class correlation, and time series modelling.

Findings: Good agreement was found for individual categories (HHB $k = 0.68$; HHO $k = 0.77$; HCW $k = 0.77$) and overall HHB ($r = 0.79$). A rise in compliance from 80% to 98% indicated evidence of sensitivity to change.

Discussion: The HHOT is a reliable, sensitive measure that can be used for audit, service improvement and research.

Family communication in genetic colorectal cancer: A qualitative study

McCann, S.,* McAuley, D., Barnett, Y., Bunting, B.P., Bradley, A., Jeffers, L., & Morrison, P.; *University of Ulster, UK

Background: Genetic testing and colonoscopy screening is recommended for people with a strong history of colon cancer. However, families must communicate so that all members are aware of the risk. The aim of this study was to explore family communication in people who have undergone genetic testing for Hereditary Non-polyposis Colon Cancer (HNPCC).

Methods: Interviews were held with 30 people with a high familial risk of colon cancer. The transcripts were transcribed and analysed using Interpretive Phenomenological Analysis (IPA).

Findings: Perceptions about family duties and responsibilities were important in motivating individuals to communicate with relatives about risk and in motivating people to have colonoscopy. Individuals felt a sense of duty and responsibility towards affected relatives and to their own children.

Discussion: Family context and the experience of the family history can have an impact on communication in HNPCC. Individuals might benefit from support in communicating with relatives about genetic risk.

Stress and coping in academics

McClenahan, C.* & Giles, M.; *University of Ulster, UK

Background: The aims of the present study were to examine (a) coping strategies employed by academics and (b) the relationships of these coping strategies with psychological distress as a measure of job strain.

Methods: Participants were 166 academics in a UK university. A principal components factor analysis was conducted on seven subscales of the COPE scale resulting in four factors: Active/planning; seeking support; behavioural and mental disengagement.

Findings: Active/planning ($r = -0.19$, $p3$) on the GHQ-12.

Discussion: Subjective perceptions of both active and avoidance coping should be considered in stress management interventions with this occupational group.

Understanding experiences of oesophageal cancer: An interpretative phenomenological analysis

McCorry, N.K.,* Clarke, C., & Dempster, M.; *Queen's University Belfast, UK

Background: Research conducted among people with oesophageal cancer suggests that patients experience a reduction in quality of life and suffer oesophageal-specific physical symptoms, resulting in psychological difficulties with adjustment. The current study is an exploration of the experiences of oesophageal cancer survivors.

Methods: Interpretative phenomenological analysis of interviews with 5 participants who had survived cancer from between 3 and 17 years were completed.

Findings: Participants portrayed positive and negative experiences. Coping mechanisms included avoidance of thinking about the illness and denial of the gravity of the illness. Losses included loss of identity and losses associated with eating. The importance of helping relationships was highlighted and a number of participants experienced personal growth and a new appreciation for life.

Discussion: Implications for clinicians include the usefulness of peer support in providing information and social comparison, and the importance of recognising the psychosocial needs of oesophageal patients during diagnosis and treatment.

Development of a measure to assess acceptance of the negative reinforcement explanation for smoking

McDermott, M.,* Marteau, T.M., & Hajek, P.; *King's College London, UK

Background: The aim of the current study is to develop a measure to assess the five core points reflecting acceptance of the negative reinforcement explanation for smoking which postulates that smoking is driven by the desire to remove or avoid adverse withdrawal states caused by adaptation to nicotine, and that the positive effects of smoking are primarily a misattribution of the relief of these withdrawal states. The measure (NRESS) will then be used to test the hypothesis that acceptance of this explanation facilitates smoking cessation.

Methods: 317 smokers completed questionnaires on two occasions.

Findings: Factor analysis revealed that a five-factor solution best described the data, reflecting the five core points of the negative reinforcement explanation for smoking and accounting for 59.72% of the total variance. One of the five factors failed the criteria for content validity.

Discussion: The NRESS provides a reliable and valid measure of four of the five core points of the negative reinforcement explanation for smoking.

Functional and psychosocial outcome in living kidney donors and recipients

McGregor, L.M.,* Swanson, V., Hayes, P.C., Lumsdaine, J., & O'Carroll, R.E.; *University of Stirling, UK

Background: Living donor kidney transplantation is becoming a more accepted treatment for those with kidney disease. This study is part of a longitudinal project assessing the transplant experience of donors and recipients. The data presented here constitutes the pre-transplant results comparison of donors and recipients.

Methods: Participants (19 donors and 18 recipients) completed measures of quality of life (WHOQOL-Bref and SF36) and mood (HADs). Neuropsychological tests of attention, concentration and memory were also completed (CANTAB). *T*-tests have been conducted on the data collected.

Findings: We found that recipients scored significantly lower than donors on self-rated physical functioning ($t(28.4) = 2.86, p < 0.01$) and significantly higher on levels of depression ($t(30) = -2.2, p < 0.05$). There were no significant differences on the neuropsychological tests.

Discussion: It may be that the neuropsychological measures were unable to detect subtle differences, or that dialysis protects these functions to the level of the healthy population. The results will be used as a baseline to compare results collected post transplant.

Involvement of children in healthcare consultations: A literature review

McPherson, A.* & Redsell, S.; *University of Nottingham, UK

Background: Research suggests that greater involvement in healthcare results in significant psychological and clinical benefits for children. UK policymakers have set targets for improving children's involvement but it is unclear whether healthcare professionals (HCPs) can deliver. There is considerable literature examining HCPs' consultations with adults and shared decision-making but very few UK studies have explored this with children.

Methods: To perform a literature review examining the involvement of children in healthcare consultations.

Findings: The dominant consultation model is between the HCP and parent as 'proxy'. Where children contribute, it is to provide information or engage with social conversation. HCPs are unlikely to discuss management issues or medical information, even with older children and adolescents.

Discussion: Evidence suggests that HCPs often do not involve children in all aspects of their treatment. Health psychologists can play a key role in preparing both children and HCPs for greater child involvement in consultations.

Obesity in children and adolescents: Stress-related eating and media use as coping strategies

Meier, S.,* Kohlmann, C.W., Eschenbeck, H., Groãÿ, C., & Layh, K.; *University of Education Schwãbisch Gmünd, Germany

Background: Differences between obese and non obese children and adolescents in response to an argument were analyzed. General coping strategies (social support, problem solving, avoidance, relaxation, anger) and the specific coping strategies stress-related eating and media use were assessed.

Methods: The study included 375 obese and 382 non-obese participants (8–14 years; 45% boys). Physician-diagnosed obesity (ICD-10) and participants' self-reports (weight, height) were used to categorize them into weight-groups: A. 'normal weight' ($n = 382$), B. 'pronounced illusionary normal weight' (physician-diagnosed obesity/self-reported normal weight, $n = 132$), C. 'moderate illusionary normal weight' (physician-diagnosed obesity/self-reported overweight, $n = 137$) and D. 'obese' (physician-diagnosed obesity/self-reported obesity, $n = 106$).

Findings: ANCOVAs with age, gender and school type as covariates revealed significant effects for social support, anger ($ps < 0.05$) and for stress-related eating and media use ($ps < 0.01$). Group A scored highest in social support whereas groups C and D reported highest levels of anger, stress-related eating and media use.

Discussion: Further research should extend the perspective to weight-related behaviours as coping strategies.

Family background, depressive humour and risk behaviours in late adolescence

Mendonça, L.,* Maia, A., & Ribeiro, F.; *Universidade do Minho, Portugal

Background: Risk behaviours in late adolescence and young adults are an important cause of death, and have a great impact on adult health. In this research family background (e.g. acceptance, affect expression, control, violence, abuse) and depressive humour were studied as predictors of health risk behaviours (e.g. food, tobacco, alcohol, drugs, sex), and self-destructive thoughts and behaviours.

Methods: 408 adolescents (mean age 17) filled Family Background Questionnaire, Children Depression Inventory and Risk Behaviours checklist. Logistic and linear regressions were run.

Findings: Different family dimensions account for different risk behaviours. Most behaviours and depression are significantly predicted by family characteristics. For example, parent's affect expression and responsiveness are significant predictors of tobacco; control predicts drugs; and support/acceptance and abuse predicts depression and self destructive behaviours.

Discussion: To understand adolescent's depression and risk behaviours it's important to take into account the family context, a known protective or risk factor for health.

Evaluation of a yoga-based support group for HIV positive, Zambian adolescents

Menon, J.A.,* Glazebrook, C., Campain, N., & Ngoma, M.; *University of Zambia, Zambia

Background: The study aims to evaluate the effectiveness of a 10 week yoga-based group support programme aimed at improving mental and physical health in HIV positive adolescents.

Methods: Participants aged 11–16 ($n = 34$) were randomized to twice-weekly support group with yoga, twice-weekly support group alone or waitlist control. CD4 count, self-rated physical health (SF12), mental health (SDQ) and perceived social support were measured pre-intervention, post-intervention and at 10 weeks follow-up.

Findings: Post-intervention, immune function, as measured by CD4 change scores, had improved in the yoga group compared to waitlist control ($Z = 2.35$, $p < 0.02$). Compared to control, the yoga group also had better self-rated physical health ($Z = 2.0$, $p = 0.05$) post-intervention and the support group had fewer emotional problems ($Z = -2.57$, $p = 0.01$). There were no differences between the groups at 10 week follow-up. Both the yoga and support groups were evaluated positively.

Discussion: A yoga-based group was an acceptable intervention associated with short-term improvements in health.

Psychological distress in long-term survivors of childhood cancer in Switzerland

Michel, G.,* Rebholz, C.E., Von Der Weid, N.X., Bergstraesser, E., & Kuehni, C.E.; *University of Sheffield, UK/University of Bern, Switzerland

Background: To evaluate the degree of psychological distress in adult childhood cancer survivors in Switzerland.

Methods: Childhood cancer survivors aged <16 years when diagnosed between 1976 and 2002, who had survived for at least 5 years and were currently aged 20+ years received a postal questionnaire including the Brief Symptom Inventory.

Findings: One-sample *t*-tests showed lower *T*-scores for somatization (mean $T=47.6$), anxiety ($T=48.4$) and the global severity index (GSI; $T=46.7$) in survivors ($N=467$) compared to the norm ($T=50$). Significantly more cases reported potentially relevant problems ($T\geq 63$) compared to the expected 10% for anxiety (13.3%) and GSI (13.1%), but not for somatization (7.1%). Women had higher scores for somatization, anxiety and GSI. Regression analyses showed higher *T*-scores in survivors reporting late effects and in CNS tumors, but no association for age.

Discussion: While childhood cancer survivors in average have less psychological distress a considerable proportion reports high psychological distress and may profit from psychological counselling.

Efficacy of psychological intervention in cardiac rehabilitation: A one month follow-up

Miglioretti, M.,* Nasorri, C., Baiardo, G., Conti, M., & Corsiglia, L.; *University of Milano-Bicocca, Italy

Background: This study explores the effect of psychological interventions in cardiac rehabilitation.

Methods: 95 cardiac patients filled in HADS and Brief-IPQ during their first week of rehabilitation and were then re-evaluated a month after discharge with the previous measures and SF-12. All patients had attended the same rehabilitation programs, but patients with critical scores on HADS (D or A > 8), also had two interviews with a psychologist.

Findings: 42.1% of patients (group 1) had a critical score on the HADS (D: 8.5 ± 3.6 ; A: 10.2 ± 3.4). They reported worse illness representations than other patients (group 2). During the follow-up, group 1 improved on depression (6.4 ± 3.3 ; $p=0.006$) and anxiety (6.5 ± 3.6 ; $p<0.001$) scores as well as illness representations. Group 2 maintained similar scores throughout all evaluations. The two groups of patients did not differ in quality of life.

Discussion: The data suggests that a brief psychological intervention improves emotional state and illness representations of cardiac rehabilitation patients.

Relationship between illness perception, anxiety, depression and fatigue in HCV patients

Miglioretti, M.,* Montali, L., Vecchio, L., Frigerio, A., Riva, P., Podda, M., Selmi, C., Cocchi, C., & Invernizzi, P.*; *University of Milano-Bicocca, Italy

Background: Many individuals with HCV suffer from fatigue and depression. The aim of this study is to investigate the link between illness perception, anxiety, depression and fatigue in these patients.

Methods: 152 HCV patients (age: 58.7 ± 13 ; M: 51.3%) were assessed by means of Brief-IPQ, Hospital Anxiety and Depression Scale and the Fisk Fatigue Severity Score.

Findings: 7.3% of the patients had critical scores for depression and 21.2% of patients had critical scores for anxiety. The depressed and the anxiety patients referred a significantly higher level of fatigue (85.4 ± 37.7 vs. 33.12 ± 28 , $p < 0.001$; 66.5 ± 39 vs. 29.2 ± 24 , $p < 0.001$). Dimensions of illness representation such as illness severity, symptom perception and emotional distress correlated with depression and anxiety scores as well as fatigue. Concern about illness correlated only with anxiety scores and fatigue.

Discussion: The data implies a relation between illness perception, anxiety, depression and fatigue and thus supports a psychological explanations of fatigue in HCV patients.

How do cancer specialists respond to patients' questions about the causes and consequences of a cancer diagnosis

Miles, A., Simon, A., & Wardle, J.; University College London, UK

Background: Members of the public often view medical professionals as providing health information that is accurate and can be trusted. The aim of this study was to assess reasons why cancer experts may be unable or unwilling to provide cancer information to cancer patients.

Methods: Semi-structured interviews were conducted with 20 cancer specialists, all of whom were part of the North London Cancer Research Network. The interviews focused on issues surrounding cancer communication. The interviews were content analysed by two of the authors.

Findings: The information medical professionals were least likely to want to convey were facts about cancer cause and prognosis. This reluctance stemmed mainly from the belief that patients would not want to know the answers to such questions, even when such information was explicitly requested.

Discussion: Concern about patient distress may inhibit cancer specialists from sharing their knowledge with patients. The impact this has on lay epidemiology will be considered.

The influence of family relationships on disease self-management in Japanese adults with type 2 diabetes

Minorikawa, N.* & Clark, M.; *University College London, Royal Free & University College Medical School, UK

Background: This study aimed to specify features of family life that are associated with disease management among Japanese adults with type 2 diabetes.

Methods: Using a cross-sectional design, three family life domains (structure/organization, world view, and emotion management) and three disease management dimensions (psychological, behavioural, and biological) were assessed in 79 Japanese adults diagnosed with type 2 diabetes.

Findings: Multiple linear regression indicated that family structure ($\beta = -0.276$, $p < 0.01$) and family organization ($\beta = -0.262$, $p < 0.05$), showed independent association with diabetes related quality of life. Family world view and family emotion management were not independent predictors of depression.

Discussion: By addressing specific aspects of family characteristics we may help patients to better integrate disease management skills into their life context.

The perception and experience of online support group use for individuals living with HIV/AIDS

Mo, P.* & Coulson, N.S.; *University of Nottingham, UK

Background: The proliferation of Internet provides an opportunity for HIV+ individuals to obtain support online. However, little is known about the how they use online support groups to cope with their disease. The present study aimed to explore the nature and experience of online support group use among HIV+ individuals.

Methods: 115 HIV+ online support group users completed an online questionnaire which consisted of open-ended questions about their experiences of and views towards online support group use. Responses were analysed inductively using thematic analysis.

Findings: Participants tended to use online support groups to address their information needs about HIV/AIDS. Online support group use appeared to reduce loneliness and fears associated with the disease, and help develop a more positive outlook.

Discussions: Our results suggest there may be a number of potential benefits of online support group use for HIV+ individuals. Future research should explore these using longitudinal design.

Supporting the positive development and well-being of children and young people who use prostheses

Mohamad, S.G.* & Donovan-Hall, M.; *University of Southampton, UK

Background: This qualitative study primary aimed to explore views of prosthetic limbs in children and young people with acquired or congenital limb absence. Specifically, the study aimed to investigate issues relating to appearance and choice of prostheses.

Methods: A total of 20 children and young people, aged from 11–18 years, were recruited via two NHS limb centres and four charities. Interviews followed a semi-structured format and data was analysed using thematic analysis.

Findings: It was found that participants had varying perspectives on their prosthesis (or prostheses generally) and this influenced which features of a prosthesis were considered important. The concept of choice was closely related to a participant's view, as it influenced the type of choices that were most pertinent.

Discussion: This study highlights the importance of communicating with children and young people to discover their individual views on prosthetic limbs to fulfil needs, increase satisfaction and aid adjustment.

Predictors of concern about food integrity in general and genetic engineering in food specifically

Mohr, P.* & Fairweather-Schmidt, K.; *CSIRO, Australia

Background: Commentaries on reactions to genetic engineering (GE) invoke diverse explanations of community resistance to GE content in foods. Although empirical studies have identified a number of correlates of GE acceptance, they are limited by their extensive reliance on bivariate analyses.

The present study presents a path model for the prediction of concern about GE in food from a range of sociodemographic and individual difference variables.

Methods: 686 Australian adults responded to a nationwide survey entitled Future Developments in Food and Health and including measures of sociodemographic, attitudinal, and value variables.

Findings: Concern about GE in food was mainly predicted by concern about food integrity, upstream predictors of which were self-transcendent values and environmental concern. Attitude to science had an additional direct association with GE food concern.

Discussions: Findings help demystify the nature of resistance to GE in food by locating it in the mainstream of concerns about health implications of foods.

The relation between stress and psychological health in Norwegian adolescents 13–20 years

Moksnes, U.K. & Espnes, G.A.; Sør-Trønderlag University College, Norway

Background: The experience of adolescent stress constitutes an issue of central importance to the understanding of adolescent health. Research has revealed that high level of adolescent stress is strongly associated with psychological health problems. The present research will present results from the investigation of the relation between stress and levels of depression, anxiety, self-esteem and health experience.

Methods: Participants – 1371 Norwegian adolescents, 13–20 years. Measures – The Adolescent Stress Questionnaire (ASQ), State Anxiety: (STAI, Spielberger, 1983), Self-esteem (Rosenberg Self-Esteem Scale) and depression, using a non-clinical depression scale (Byrne, Davenport and Mazanov, 2007). Health experience was measured by one question.

Findings/Discussion: Increasing age and higher stress level were significant predictors of more negative health experience. Depression increase with age, with higher stress level, and occur more often among girls. Stress shows a positive, linear association with anxiety. Self-esteem is significantly higher among boys and higher among those with low stress levels.

Affective and instrumental attitude exercise intervention using the theory of planned behaviour

Morris, B.,* Conner, M., Rhodes, R., McEachan, R., & Lawton, R.; *University of Leeds, UK

Background: The present study assessed the relative contribution of instrumental and affective imagery in a persuasive exercise intervention.

Methods: A questionnaire measuring components of the theory of planned behaviour (Ajzen, 1991) was administered to an opportunity sample of students. An exercise inventory (Godin and Shephard, 1985) recorded levels of exercise across time points. Groups receiving one of two messages targeting affect or one of two messages targeting instrumental attitudes towards exercise were compared with control.

Findings: Findings indicated that the affect condition lead to greater increases in frequency of vigorous/moderate exercise ($p < 0.005$) particularly for individuals high in need for affect and low in need for cognition.

Discussion: The assumption that messages can be enhanced by using affective imagery has implications for the design of future exercise interventions. Findings suggest a need to tailor interventions in accordance with affective and instrumental profiles.

Bariatric surgery: The last resort in the management of obesity for people with type 2 diabetes?

Morris, M.,* Jackson, S., Davis, A., Johnson, A.B., & Gunary, R.; *University of the West of England, UK

Background: Increasing numbers of morbidly obese people with Type 2 diabetes (T2DM) continue to challenge NHS resources. This research aimed to understand the expectations of these people considering bariatric surgery.

Methods: Fifteen participants were interviewed (10 women, 5 men; mean age=41; mean BMI 49.62 kg/m², \pm sd=6.90). Interview transcripts were analysed using Inductive Thematic analysis.

Findings: A number of themes emerged including descriptions (of gastric banding) and disordered versus controlled eating behaviour. Participants described surgery as “a last chance”; providing a method of self-control, the only way to regain control of their eating behaviour; and as a tool to expand their quality of life.

Discussion: Participants felt surgery would provide more than health benefits: It would aid a return to “normal”, with some feeling that weight loss would improve their self-image. This suggests bariatric surgery may have physical, social and psychological benefits, as well as conferring metabolic improvements.

Emotion-related attentional biases and pain: Are they related?

Mounce, C.,* Keogh, E., & Eccleston, C.; *Centre for Pain Research, University of Bath, UK

Background: An attentional bias to pain words has been found in chronic pain patients and in healthy individuals with high levels of pain-related fear (Roelofs et al., 2002; Keogh et al., 2001). The aim was to investigate any relationships between a number of commonly used emotional constructs, attentional biases and pain sensitivity.

Methods: 101 pain free individuals completed two computerized tasks measuring attentional bias, a cold pressor task, and completed a questionnaire pack containing commonly used emotion-based measures.

Findings: The illness sensitivity subscale of the Injury/Illness Sensitivity Index (ISI) significantly correlated with attentional bias to physical threat related words. ISI total significantly predicted pain experience. No relationships were found between attentional bias to physical threat words and pain experience.

Discussion: A person’s fear of injury and illness may be particularly important in pain perception and attentional bias to physical threat. This may have implications for the development and maintenance of chronic pain.

The effectiveness of school social work. A research on the impact on student’s well-being

Mueller, C.,* Fabian, C., Drilling, M., Schrott, B.G., & Egger-Suetsugu, S.; *University of Applied Sciences Northwestern Switzerland

Background: School social work is a dynamically growing and young field of action of youth welfare. The aim of the research project is the development of basic knowledge about the impact of school social work on students.

Methods: In a panel study ($N=456$, two treatment groups and one control group) with adolescents, we examined the impact of single-case counselling on the personal and social resources, coping strategies and well-being over a 14 month period. The inquiries are complemented by problem-centred interviews with 17 teenagers with continuing single-case counselling.

Findings: Results show that students who claim single-case counselling have a higher value of depression (ANOVA, $p<0.05$) and a worse state of self-rated health (ANOVA, $p<0.01$) before actually attending consultation. Furthermore, 14 months later they show a negative development despite counselling (ANOVAR, $p<0.01$).

Discussion: The range of effectivity of an individual intervention is to be discussed with regard to the results of the problem-centred interviews.

A thematic analysis of children's experiences of living with thalassemia major in Pakistan

Mufti, G.R.,* Cartwright, T., & Towell, T.; *University of Westminster, UK

Background: Thalassemia major, a haematological disorder, imposes major demands on children, however, we know very little about their lived experiences. This Pakistan based study aimed to identify the important areas constituting the children's illness experiences raised by the children themselves.

Methods: This phenomenological, qualitative study views children as social agents. Twelve children participated in two focus group discussions and two role plays. Data was subjected to semantic thematic analysis.

Findings: Six themes were identified: Illness burden, Coping, Different life, Illness Information, Parental support, and Relationship with healthcare professionals. The findings revealed some novel issues previously overlooked in thalassemia care e.g. distinction of self with regard to pre/post transfusion, self image of being "half-normal" and some gender and rural/urban differences e.g. increased use of religion in coping among girls.

Discussion: Understanding these experiences can maximize communication among children, parents and healthcare professionals, and is crucial in providing and improving thalassemia care.

Do mothers and fathers hold similar views about their child's arthritis?

Mulligan, K.,* Etheridge, A., Kassoumeri, L., Wedderburn, L.R., & Newman, S.; *University College London, UK

Background: Parents are often asked to provide proxy reports of their children's wellbeing. It is not known if mothers' and fathers' evaluations of their child's illness correspond. This study compared mothers' and fathers' views about their child's arthritis, treatment, symptoms and quality of life (QoL).

Methods: Parent dyads completed assessments of illness and treatment perceptions, paediatric QoL and symptoms.

Findings: 78 parent dyads completed the assessments. There was little difference between parents' means scores on symptoms, cognitions or QoL. However correlations showed considerable variability. Parents were in close concordance on most of the physical subscales of QoL but less so on psychosocial aspects of QoL (e.g. $r=0.240$ for child's worry about arthritis).

Discussion: While there is good agreement between mothers' and fathers' reports of their children's physical QoL, evaluations of psychosocial QoL are more variable. This suggests that agreement is higher on the more observable aspects of the child's functioning.

Psycho-education in phase iii cardiac rehabilitation

Murray, E.* & Sykes, C.; *London Metropolitan University, UK

Background: Depression and anxiety are common in patients with coronary heart disease (CHD) and represent a barrier to behavioural change and recovery. Reviews of psycho-educational programmes in cardiac rehabilitation (Dusseldorp, 1999 and Bennett & Carroll, 1994) indicate the effectiveness of group interventions using cognitive behavioural techniques (CBT).

Methods: In a randomised trial, a psycho-education, CBT-based session was delivered to CHD patients, with both didactic and individualised sessions compared. Outcomes were measured with HADS, Dartmouth COOP and a behavioural questionnaire pre and post session. A total of 93 patients completed both sets of questionnaires. Data were analysed using Wilcoxon Signed Ranks tests and correlations.

Findings: Anxiety and depression were reduced, health related quality of life improved and behavioural changes made in both groups. Patients reported high satisfaction levels for the intervention: 85% and 80% respectively.

Discussion: This project highlights the complexities of carrying out health psychology research in an NHS setting with limited resources.

Health education as a motivating factor for physical activity in psychosomatic rehabilitation

Mussgay, L.,* Stauch, T., Ohlert, J., & Rüdell, H.; *University of Trier, Germany

Background: The aim of this study was to assess for health education promoting physical activity, if (a) obligatory compared to voluntary participation, and (b) different types of lectures lead to an increase in motivation and/or actually observed behaviour.

Methods: Stages of Change (SoC) according to Transtheoretical Model (TTM) were assessed at the beginning and at the end of rehabilitation. 2 groups attended the 45 min health education course obligatory, 2 voluntarily. One of each subgroup was offered a school type lecture, the other subgroup took part in a presentation basing on the 10 strategies of change as defined by TTM. Actual physical activity was assessed by questionnaires and by clinic records.

Findings: Data of 134 patients (103 female) are available. Fewer patients took part in the voluntary groups ($p < 0.01$). An increase of motivation was observed, albeit independently of type of lecture. Higher motivation leads to more physical activity ($p < 0.05$). There was a tendency for more activity in those patients who attended voluntarily, however, confounding effects have to be considered.

Discussion: Health education seems to increase motivation for behavioural changes in physical activity.

Heart Rate Variability Biofeedback in Blood Pressure Reduction: The mediating role of Baroreflex-Sensitivity

Mussgay, L.,* Reineke, A., Domann, S., Gevirtz, R., & Raddel, H.; *University of Trier, Germany

Background: The study investigates the effects of heart rate variability (HRV) biofeedback (induced by slow breathing) in an experimental group (EG), compared to an attention placebo control (CG), as a treatment for essential hypertension.

Methods: All subjects met the criteria for stage 1 hypertension. Patients were assigned randomly. Both groups received 10 training sessions. During the 1st, 5th, 10th session, and at follow-up (3 month), blood pressure, HRV, and baroreflex-sensitivity (BRS) were collected. During the whole study period, both groups were asked to practice daily using the acquired intervention method.

Findings: 36 complete data sets were available (18 EG and 29 CG patients). Patients of the EG could substantially reduce the intake of antihypertensive medication. EG showed a stronger initial decrease in blood pressure compared to CG. In the further course of the study, however, these reductions subside until in the end, no group differences remain. BRS and HRV in EG increased markedly during the initial training phase.

Discussion: The observed adaptation process obviously counteracts the initial gains. Long term blood pressure reduction seems dependent on adherence to training.

The effects of social support and social control on cardiovascular reactivity during problem disclosure

Nagurney, A.,* Bagwell, B., Forrest, K., & Diehl, A.; *Texas State University – San Marcos, USA

Background: This study compared the physiological effects of social support with those of social control.

Methods: In a lab setting, participants ($n = 150$) disclosed a relationship problem to either a same-sex or an opposite-sex confederate who provided either supportive or controlling feedback.

Findings: Results indicated that males were typically more reactive in the short run to social control but demonstrated better long-term recovery from control relative to females. Those participants who were controlled by a male rather than a female confederate demonstrated a similar pattern of results. In general, males and females did not differ in terms of their reactions to receiving social support.

Discussion: This pattern of results is discussed in terms of a framework in which cardiovascular reactivity is predicted by the type of support received and by the sex roles of the interactants.

Low literacy patients: Enhancing physician communication skills

Nath, C.,* Sperry, J., & Bower, E.; *WVU School of Medicine, USA

Background: The care of patients with low literacy is sub-optimal due to physicians' limited training in communication. A competency-based curriculum was developed within a behavioural medicine framework to improve resident physicians' knowledge and attitudes about limited literacy and communication skills.

Methods: Eighteen residents in two training cohorts participated. Assessments tailored for the study measured knowledge, attitudes, and skill before and after the training. Wilcoxon signed rank and chi square analyses were performed to detect significant changes.

Findings: Changes in knowledge, attitude, and demonstrated communication skill, while generally improved, were not statistically significant ($p > 0.05$). Residents demonstrated understanding of how

to deliver good communication immediately after training. Lack of improvement may be due to ceiling effects, poor use of skills with real patients, or insufficient sample size.

Discussion: The curriculum is being refined to promote greater improvements in knowledge, attitudes, and skills. An emphasis will be placed on using the learned skills in real practice.

Reducing the resistance towards self-relevant health information: The role of concrete thought

Naufel, K.Z.; Georgia Southern University, USA

Background: People tend to resist health information when such information is self-relevant (Liberian & Chaiken, 1992). The present research investigated if thinking concretely (e.g. “How can I be healthy?”) lowered resistance more than thinking abstractly (e.g. “Why should I be healthy?”).

Methods: Fifty-three participants thought about their general physical health either concretely or abstractly. Then, participants read information regarding a specific health topic, infectious disease prevention, that was either self-relevant or not self-relevant. Finally, they completed a 3-item questionnaire measuring their resistance to that information.

Findings: A 2(self-relevancy) \times 2(thought type) ANOVA revealed an interaction, $F(1, 49) = 6.03$, $p = 0.02$. If the topic was self-relevant, participants who thought concretely showed less resistance to specific health information than participants who thought abstractly.

Discussion: Unlike previous research, these results suggest that self-relevancy can increase the receptiveness of health information, but only if people first think, “How can I be healthy?”.

“Stop giving me excuses” – Factors that seem to reinforce smoking-related disengagement beliefs among pregnant smokers

Naughton, F.* & Sutton, S.; *University of Cambridge, UK

Background: This study explored women’s experiences of smoking in pregnancy to inform the development of a tailored mobile phone texting-based intervention for pregnant smokers.

Methods: Women with experience of prenatal smoking ($N = 20$) were recruited through antenatal services. Semi-structured interviews were conducted. Data collection and analysis was guided by grounded theory.

Findings: Holding the belief that prenatal smoking can harm the foetus while continuing to smoke led to cognitive dissonance among many women. Disengagement beliefs in order to resolve dissonance, e.g. “one won’t hurt”, were common as a result. Several factors seemed to increase the endorsement of disengagement beliefs. These included risk uncertainty, the misconception of the mechanism of harm, and the lack of a clear quitting message received from health professionals.

Discussion: As disengagement beliefs predict quitting behaviour (Kleinjan et al., 2006), a greater understanding of the factors that may influence their adoption are important to inform smoking cessation interventions.

Awareness facts: The view and attitudes of faith based communities towards HIV positive and AIDS in Milton Keynes

Ncube, Z.* & Ertubey, C.; *University of Bedfordshire, UK

Background: The main purpose of this study was to investigate the future role of Faith Based Communities (FBCs) in promoting awareness of HIV or AIDS in Milton Keynes.

Methods: The data was collected with a self-report questionnaire. A total of 64 participants range with an average age of 34.5 (SD = 10.7) and ranging from 16–64 were recruited from five FBCs in MK. The study looked into the topic by using measures of knowledge (Goodwin, 2004), attitude (Larsen, Long, & Serra, 1998), shame and blame (Nyblade, 2005), empathy towards HIV positive/AIDS (Davies, 1994) and personality traits based on big five factor theory (Saucier, 1994). The analyses employed were: Pearson-Product moment correlations and *t*-tests.

Findings: Results showed that people who have knowledge about HIV positive/AIDS have positive attitudes towards the disease ($r = -0.47$, $p = 0.001$). The findings also suggested that personality traits measured with the big five theory play a significant role in positive attitudes and empathy towards people with HIV positive/AIDS. The correlations between Empathy and Conscientiousness ($r = 0.57$, $p = 0.001$) and Agreeableness ($r = 0.30$, $p = 0.02$) as well as Openness ($r = 0.35$, $p = 0.01$) were positive and significant. Gender wasn't a significant factor.

Discussion: In the light of this research we suggest that awareness of HIV positive and AIDS need to be increased among the FBCs in Milton Keynes. To be able to do these people who already have the skill for empathy can be useful mentors for those who have less empathy and awareness of the topic.

Social comparison, personality's characteristics and health outcomes in chronic patients

Neipp, M.C.,* Terol, M.C., Lledo, A., Martín-Aragón, M., Rodríguez-Marín, J., López-Roig, S., & Pastor, M.A.; *Miguel Hernández University, Spain

Background: Social comparison (SC) is an important construct to study in health psychology. In recent decades, the interest for personal and psychosocial variables in social comparison process has increased. The aim was to analyse SC process (upward-downward and contrast-identification) and their relationships with different personal, psychosocial aspects and health outcomes.

Methods: 202 patients with different chronic disease were collected, women answered different standard questionnaires to assesses SC dimensions, self-esteem, personality and well-being and quality of life. SPSS 14 was used to analyse the data.

Findings: The most frequently used dimension was the Upward-Identification) and Downward-Contrast. The Upward-Contrast dimension was negative related to health status, quality of life, and Positive-Self-esteem. However Downward-Identification dimension were positive related to social comparison orientation, Neuroticism and Negative Self-esteem.

Discussion: Social Comparison is an useful strategy for chronic patients in their diseases. Therefore, the use of social comparison can be influenced by self-esteem levels and neuroticism personal variables, as well as, perceived health status.

Fibromyalgia and cancer patients differences in social comparison, reference groups and content

Neipp, M.C.,* Lledo, A., Martín-Aragón, M., Pastor, M.A., López-Roig, S., & Rodríguez-Marín, J.; Miguel Hernández University, Spain

Background: Social comparison (SC) research focus on different aspects related to use of SC strategies: Reference groups (patients or healthy people), direction (upward or downward) and content (symptoms, emotional status, social and physical activities) of comparison.

Our aims were: To describe the use of SC dimensions, reference groups and content in chronic patients, and to assess the differences between groups.

Methods: We interviewed 239 women with cancer ($n = 100$) and with FM ($n = 139$). We used the Illness SC Scale and *ad hoc* questions for assessing reference groups and content of comparison. SPSS 14 was used to analyse the data.

Findings: FM patients used more frequently the Downward-Contrast dimension. However, cancer group used more frequently the Upward-Identification dimension. Regarding reference groups, both samples tend to compare themselves with patients with same pathology. In relation to content of SC, both groups make more comparisons focusing on emotional status and symptoms.

Discussion: The similarities obtained between groups, in content and reference groups, could indicate that chronic illness patient's when make social comparison focus more on closely aspects to their illness as emotions and symptoms.

Motivations and experiences of men and women attending commercial slimming clubs:

A qualitative study

Nelson, C.,* Upfield, E., & Percy, C.; *Coventry University, UK

Background: This study explored motivations and experiences of people attending commercial slimming clubs for weight loss.

Methods: Interpretative phenomenological analysis was conducted on semi-structured interviews with seven men and six women, aged 21–69 years, who attended slimming classes in a UK city.

Findings: While women typically cited appearance concerns as the primary motivator for weight loss, men cited physical health concerns. Both sexes reported a history of unsuccessful solo weight loss attempts in the past, and described the group format of slimming classes as beneficial. Both sexes reported feeling healthier and more confident following successful weight loss.

Discussion: While males and females may report different motivations for participating in commercial slimming clubs, they report similar benefits from the experience of attending the group. Given the large numbers of people participating in commercial slimming clubs, health psychology researchers might usefully make a more detailed study of their processes and outcomes.

Applying fuzzy trace theory to health behaviours: Fuzzy trace theory compared to social-cognition models

Neter, E.; Ruppin Academic Center, Israel

Background: Fuzzy Trace Theory (FTT) is a cognitive theory on representation and memory recently applied to decision making in health domains (Renya, 2007). It posits two processes/representations: 'Gist', which is bottom-line meaning of information, vague and qualitative, as opposed to 'Verbatim' representation which is the exact surface form (literal), precise and quantitative. The present study examined the predictive validity (in terms of explained variance) of FTT to health behaviours, and compared it to the predictive validity of established social cognitive models such as Theory of Planned Behaviour (TPB) and Information Motivation Behavioural Skills model (IMB).

Methods: Four separate studies were conducted, examining smoking, eating, using condoms, and lactation. Questionnaires tapping both the concepts of TPB or IMB, on the one hand, and gist and verbatim (of FTT), on the other hand, were administered.

Findings: The social cognitive models were better in terms of explained variance. There was high correlation between verbatim and knowledge (in the IMB model) and high correlation between gist and attitudes (ranged 0.4 to 0.6 across studies).

Discussion: The social cognitive models did better, as they included other elements than knowledge and attitudes, namely went beyond cognitive constructs.

Using the theory of planned behaviour to evaluate a childhood obesity programme: 'Family futures'

Newson, L.,* Tierney, J., Casson, A., Cross, J., & Povey, R.; *Knowsley PCT, UK

Background: Family Futures, a childhood obesity programme supports families with obese children by promoting healthier behaviours, attitudes and actions through small and sustainable changes to their lifestyles.

Methods: Using the theory of planned behaviour as a theoretical framework, interviews are conducted with families who meet inclusion criteria for the programme, and compares families who attend the programme to those who choose not to attend. Furthermore this research follows the families who attend (parents and children), through the programme and assesses how their attitudes, beliefs, and actions towards adopting a healthy lifestyle have changed.

Findings: Interviews are to be evaluated via IPA qualitative techniques.

Discussion: Evaluating the programme in this way, may highlight the reasons why some families choose not to attend an obesity programme, and therefore may help to develop strategies to tackle family engagement with lifestyle interventions. In addition this research incorporates the theoretical evaluation of health psychology into service evaluation and development.

Developing an NHS childhood obesity service using qualitative methods: What works?

Newson, L.,* Tierney, J., Povey, R., Casson, A., Cross, J., & Pennington, A.;
*Knowsley PCT, UK

Background: Showcasing 3-years of developmental work, this presentation will outline how action research has contributed to the development and evaluation of an NHS childhood obesity programme. These pilots aimed to support families with obese children by promoting healthier behaviours, attitudes and actions through small and sustainable changes to their lifestyles.

Methods: A number of pilot studies (2005–2007) collected qualitative data from families attending and also from the staff implementing the pilot programmes.

Findings: This work provides detailed information as to how to engage families, design interventions, and highlights both the advantages and disadvantages of running and attending a family based programme.

Discussion: This work highlights the need for a co-ordinated multi-disciplinary team to implement and offer a comprehensive programme which promotes self-confidence and self-esteem in children and also includes key elements of healthy eating, fun activity, and behaviour change advice for the family.

Identifying the factors and outcomes associated with upper limb absence: The patients' perspective

Ni Mhurchadha, S.,* Gallagher, P., MacLachlan, M., & O'Neill, B.; *Dublin City University, Ireland

Background: The aim of this study is to explore the factors and outcomes that users consider important in relation to upper limb absence.

Methods: Two focus groups with a total of seven participants were conducted with individuals who have upper limb absence and were analysed using thematic analysis.

Findings: The main factors identified were participants engaging in downward social comparison; being self conscious; having social support; issues with prosthetic material; and satisfaction with the prosthetic service. The outcomes were concerned with being independent; people not noticing limb loss; being happy to be alive; achieving goals; and satisfaction with prosthesis.

Discussion: Results have provided valuable insight into the factors and outcomes participants consider important. Understanding these factors and outcomes will have benefits to the patient, the health care staff, the reputation of the health care system as well as financial savings which can be reinvested in more suitable alternatives for patients with upper limb absence.

Family situation under punishment and reward and children's health

Nikolaeva, E.; Herzen State Pedagogical University, Russia

Background: The aim of the experiment was to describe the model of family discipline and reward influence on child's health. Three records of cardiac rhythm of children were made during conversation about family discipline.

Methods: 177 children (86 boys and 91 girls) were participants. To this variety of children's reactions the program "Surface" was used.

Findings: We found that vegetative reactions of children under punishment depend on their representations about their reward. And the child's thoughts that reward is not enough for him (her) lead to the absence of the heart rhythm under punishment.

Discussion: We propose, that the system of interaction of children and parents at which children believe, that they are not encouraged or seldom praised, promotes change of reaction both in a situation of reward and punishment as well when marked emotionality of the child is repressed and is not expressed in vegetative reactions. The suppressed emotional reactions lead to child's health change.

Medication beliefs predict adherence to medication in stroke survivors

O'Carroll, R.E.,* Hamilton, B.A., Whittaker, J., Johnston, M., Dennis, M., Sudlow, C., & Warlow, C.; *Stirling University, UK

Background: Little research has been conducted to identify factors associated with poor adherence to secondary preventative medication in stroke patients. This is crucial as poor adherence is associated with a significant increase in the risk of further stroke and MI.

Methods: 180 patients were interviewed, one year after their first stroke. Data was collected using semi-structured interviews and structured questionnaires. Measures of cognitive impairment (MMSE), illness and medication beliefs were used to predict self-reported medication adherence (MARS) using linear regression.

Findings: One third (34.3%) of the variance in medication adherence is explained by: Patients' high concerns about their medication, low belief in the benefits of taking their medication, younger age, and poorer cognitive functioning.

Discussion: The main finding that medication beliefs predict adherence provides a sound basis for future interventions aimed at altering patients' beliefs about their medication, so as improve adherence and ultimately reduce the risk of further stroke.

The impact of viewing a hysteroscopy on a screen on the patient's experience

Ogden, J.,* Heinrich, M., Potter, C., Kent, A., & Jones, S.; *University of Surrey, UK

Background: To date the impact on the patient of viewing the screen in outpatient procedures remains unknown. The aim of this randomised control trial was to explore how viewing the screen during a hysteroscopy procedure affects the patient's experience.

Methods: Women undergoing a hysteroscopy procedure were randomly allocated to see the screen ($n = 81$) or not ($n = 76$).

Findings: The results showed that patients who didn't see the screen were more optimistic about the effectiveness of their treatment and felt that the health professional was more receptive to them during the consultation compared to those who saw the screen. After controlling for the use of a local anaesthetic, those who didn't see the screen also reported a greater decrease in anxiety after the procedure. However, those who saw the screen described pain more positively compared to those who did not see the screen.

Discussion: Viewing a screen is not a benign addition to the patient experience.

Life expectancy and psychological immune competence in different cultures

Oláh, A.,* Nagy, H., & Tóth, K.D.; *Eötvös Loránd University, Hungary

Background: We have examined the psychological immune competence among young adults in 12 countries to look for relationship between life expectancy at birth, GDP/capita and psychological immunity. We supposed, that health promoting culture, and the material investment in health promotion influence the psychological immune competence of the youth growing in the given country, and this contributes to the increase of their life expectancy.

Methods: Psychological Immune Competency Inventory (PICI), 16 subscales measuring protective positive personality traits. Subjects: 3878 (between 18–24 ages). We computed correlations between the immune competence total scores, and the life expectancy at birth, and the GDP/capita.

Findings: Correlation between PICI score and life expectancy: 0.68 for men, and 0.71 for women. The correlation between PICI and GDP: 0.47 for men, and 0.42 for women.

Discussion: Our results prove that culture, which implants psychological immunity, contributes to life extension even more than material investment.

Multiple achievement goals, personality, well-being, sense of control, and grades in Swedish high school students

Ollfors, M. & Andersson, S.; Lund University, Sweden

Background: Students' well-being and grades have been found to be related to a variety of personality traits and achievement goals. The aim here was to investigate relations of this sort in Swedish high school students.

Methods: A group of 918 of the 1,145 students attending a high school in Sweden were tested by the Perceived Stress and Control Rating Scale (Ollfors & Andersson, 2007) and by well-established scales for measuring goals, personality and sense of well-being in school, were interviewed regarding possible biopsychosocial symptoms, and their final grades were recorded.

Findings: Personality traits predicted the separate achievement goals to 12–27% and predicted 9 of the 14 sense-of-well-being variables better than achievement goals did, two of these variables being equally well predicted by both. Support for both an additive and an interactive goal hypothesis was obtained.

Discussion: The importance of studying the interaction of multiple achievement goals is emphasized.

Self-esteem and the efficacy of psycho-social training

Orosova, O.,* Gajdosova, B., Salonna, F., Kalina, O., & Van Dijk, J.P.; *PJ Safarik University in Kosice, Slovak Republic

Background: Students' self-esteem was explored separately for gender and for psychosocial training participation.

Methods: Longitudinal data were collected (198 university students; 40.9% males; 18.2% psychosocial training participants) in autumn 2004 – spring 2005 (baseline; 20.25 mean age) and in winter 2005 – spring 2006 (follow-up). Rosenberger's Self-esteem scale was used to measure changes in Positive and Negative self-esteem, as well as in Self-liking and Self-competence from baseline to follow-up among the students who took part in the 100 hours psychosocial training as well as among those who did not.

Findings: Significant increase was found in measures of Self-liking and Positive self-esteem in women; as well as in Positive self-esteem among training participants. Self-liking among training non-participants was found to have increased significantly and Negative self-esteem decreased significantly among this group of participants.

Discussion: These findings have important implications for the development of gender-specific health promotion schemes for university students.

Pharmacological and psychological adjustments to drug-withdrawal: The self-medication hypothesis

Ottaviani, C.,* Nucifora, V., Borlimi, R., Cabrini, C., & Brighetti, G.; *University of Bologna, Italy

Background: Short-term methadone detoxification treatments have poor retention and high relapse rates. We explored the con-causes of this failure, according to the Self-Medication Hypothesis (SMH).

Methods: Twenty-five drug-dependents were tested at day 10 (t1) and 20 (t2) of hospitalization. The SCL-90, medications provided at request, and methadone dosage were recorded.

Findings: At t2 a reduction was found in methadone, $t=2.76$, Global Severity Index, $t=2.26$, Depression, $t=2.54$, Obsessive-Compulsive, $t=3.44$, and Phobic Anxiety, $t=2.88$ subscales. Notwithstanding, there were contemporaneous increases in benzodiazepines, $t=-2.8$ and sedative-hypnotics, $t=-2.15$ administrations. Accordingly, the SMH postulates that the abused substance is often used to relieve symptoms of anxiety.

Discussion: The progressive methadone reduction was followed by a subsequent augmentation in sedative medications' request. Therefore, psychological symptoms enhancements might be due to

medications and not to an effective improvement, explaining the lack of efficacy of detoxification treatments.

Impulsivity, affective and psychophysiological dysregulation as predictors of self-harm behaviour in personality disorders

Ottaviani, C.,* Maccaferri, E., Tugnoli, E., Nucifora, V., Borlimi, R., & Brighetti, G.;

*University of Bologna, Italy

Background: We tested the usefulness of considering impulsivity, or affective dysregulation in predicting self-harm behaviours in personality disorders (PD).

Methods: Twenty-five women and 25 men with PD, mean age 41.9 years underwent the Self Harm Inventory (SHI) and the Barratt Impulsiveness Scale (BIS) and were tested for emotion recognition abilities. Face stimuli were decomposed into their high (HF) and low spatial frequencies (LF) to evaluate subcortical and cortical processing. Pain sensitivity was obtained during the Cold Pressor Task. Heart Rate Variability (HRV) measures were computed by the spectral analysis of the ECG. Multiple linear regression analyses were processed.

Findings: Predictors for self-harm behaviours were mood instability, impulsiveness, and anger recognition. Predictors for pain sensitivity were vagal tone during the Cold Task, and SHI scores. About the 62% of the variance was predicted by the two models.

Discussion: Dimensional rather than categorical aspects of PD have to be considered in the prediction of self-destructive behaviours.

Consequences of ruminative thoughts on cardiovascular health

Ottaviani, C.,* Sgarbossa, M., & Brighetti, G.; *University of Bologna, Italy

Background: Recent studies suggest that the availability of a distracter after anger provocation reduces the negative effects of rumination on physiological recovery.

Methods: We aimed to predict cardiovascular recovery after an anger-recall task in 25 men and 25 women (mean age = 25 (4.7) years). The Cognitive Behavioural Assessment, State-Trait Anger Expression Inventory, and Irritability-Rumination Questionnaire were administered. Blood pressure (SBP, DBP), Heart Rate (HR), and Heart Rate Variability (HRV) were obtained before, during and after the task. Half of sample was randomly assigned to a distracter condition after the task.

Findings: Results showed an association between distraction and faster recovery ($p < 0.001$) for SBP ($F = 42.8$), DBP ($F = 35.9$), HR ($F = 24.7$), and HRV ($F = 33.7$). Multiple Regression Models were computed showing that HRV and SBP recovery could be predicted by hostility, anger, and distracter's presence ($R^2 = 0.34$ and $R^2 = 0.46$, respectively).

Discussion: Rumination seems a likely candidate moderating variable in the established relation between dispositional response styles and cardiovascular health.

Food hedonics and motivation to eat: The role of temptation and weight

Ouwehand, C.* & De Ridder, D.T.D.; *Utrecht University, The Netherlands

Background: We examined to what extent temptation and weight influence liking and wanting. Knowing what activates these two reward systems regulating food intake may explain why some individuals overeat while others do not.

Methods: Three experiments were conducted ($N=98,5975$ respectively) with temptation and weight as independent variables.

Findings: The first experiment showed that temptation affected wanting, but not liking. Interestingly, temptation caused a decrease in wanting, but only in normal-weight women. The second experiment replicated this finding for women, but found an opposite effect for men; their wanting increased after exposure to palatable food. In order to seek an explanation, the final experiment examined the role of sensory-specific satiety in the relationship between temptation and wanting. Results indicated that its moderating role is limited.

Discussion: It is possible that in women health-related goals are more easily evoked, which may remind them of the positive outcomes of not yielding into temptation.

Understanding diabetes-related distress: The importance of being able to ‘make sense’ of diabetes

Paddison, C.A.M.,* Alpass, F.M., & Stephens, C.V.; *University of Cambridge, UK

Background: This study used the Common Sense Model of illness self-regulation to identify cognitions that may contribute to psychological distress among people with type 2 diabetes in New Zealand.

Methods: Research participants ($N=615$) were randomly selected from a medical database. Data was collected through a mailed questionnaire and review of medical records.

Findings: Relationships between illness perceptions and diabetes-related distress were demonstrated ($r=0.37-0.51$, $p<0.001$). Multiple regression analyses (controlling for age, clinical characteristics, and mental health) showed illness representations accounted for 15% of differences in distress about diabetes and 21% of variance in treatment concern.

Discussion: Poor mental health and illness severity alone do not explain differences in diabetes-related emotional adjustment. ‘Making sense’ of diabetes may be central to successfully managing the emotional consequences of diabetes, and interventions that explore inconsistent illness beliefs may help promote positive emotional adjustment among people with diabetes.

Predictors of anxiety and depression among people attending diabetes screening: A prospective cohort study

Paddison, C.A.M.,* Eborall, H.C., Griffin, S.J., & Sutton, S.R.; *University of Cambridge, UK

Background: This study aimed to identify factors predicting anxiety and depression among people who attend primary care-based diabetes screening.

Methods: Participants ($N=3240$) were invited to screening as part of the ADDITION (Cambridge) trial. Primary analyses used hierarchical multiple regressions to identify predictors of anxiety and depression (measured using the Hospital Anxiety and Depression Scale (HADS) at 12 months post-screening).

Findings: Predictor variables explained 52% and 53% of the variance in HADS anxiety and depression scores, respectively. Screening outcome was not related to differences in anxiety and depression at 12-month follow up.

Discussion: Levels of anxiety and depression at the time of screening were the strongest predictors of anxiety and depression 12 months after screening. When controlling for this relationship higher number of self-reported diabetes symptoms was associated with high anxiety and depression,

suggesting screening messages that encourage over-vigilant scanning for symptoms of illness could be psychologically harmful.

What do you do with your patients? A clinical audit answers the question

Painter, L.* & Fontanilla, I.; *Auckland City Hospital, New Zealand

Background: Psychologists have been a part of the multidisciplinary teams for cardiac and respiratory patients for twenty years at Auckland City Hospital in New Zealand. An audit was undertaken to evaluate the psychological input for patients with Heart or Lung Transplants and those with ICDs.

Methods: A systematic peer evaluation of psychological case notes was undertaken for the last 5 years. The clinical audit recorded the following data: Number of patients seen, number of sessions received, and the types of psychological intervention.

Findings: It revealed that over two hundred patients has been seen, for between one and twenty sessions. The most commonly used psychological interventions were: Supportive psychotherapy for illness/health event adjustment, cognitive behaviour therapy for trauma, anxiety, panic disorder and techniques for symptom tolerance and reducing somatic hypervigilance.

Discussion: These findings demonstrate that psychologists are integral members of the team and the results contribute to the development of appropriate clinical pathways for these patients.

Assertiveness, students stress and perceived supervision support

Paiva, L.,* Pereira, A., & Mendes, A.; *Escola Superior de Enfermagem de Coimbra, Portugal

Background: The supervision on clinical training has been the subject of several studies, many from the perspective of students, where demands understand how they experience the clinical training and the levels of stress that are subject. There is, however, little literature targeted about how assertiveness influence the stress experienced by students and how may interfere with the perceived supervision support and interferes with student's performance.

Methods: We developed a quantitative research, descriptive-correlative type. It was applied a questionnaire to 161 nursing students of the 4th year in clinical training in hospitals.

Findings: Student's assertiveness has a negative relationship with their stress ($r = -0.372$; $p = 0.000$); stress has a negative relationship to their perception of supervision support ($r = -0.403$; $p = 0.000$) and students with less stress show better performance in clinical training.

Discussion: Our results highlight for the importance we must give to the interpersonal relationship in the supervision process.

Eating attitudes and alcohol, tobacco and illicit drugs consumption among secondary students

Pamies Aubalat, L.,* Quiles Marcos, Y., & Bernabé Castaño, M.; *Health Psychology Department. Miguel Hernandez University, Spain

Background: The aim of this study was to determine the relationship between disturbed eating attitudes and alcohol, tobacco and illicit drugs consumption in adolescents.

Methods: The sample was made up of 1388 pupils aged 12 to 18 (mean = 14, S.D. = 1.35) from secondary schools in Alicante (Spain). Students completed the Eating Attitudes Test (EAT-40) and a measure of engagement in the use of smoking, alcohol and illicit drugs (Spanish version of the Health Behaviour in School Children Inventory: HBDS; Wold, 1995; Balaguer, 2002).

Findings: Results showed slow positive relations between alcohol and illicit drugs consumption and eating disorders and the strongest relation was with the bulimia factor.

Discussion: These results suggest that bulimic symptoms could be associated with alcohol, tobacco and illicit drugs consumption.

Eating behaviours and eating disorders in adolescents

Pamies Aubalat, L.,* Quiles Marcos, Y., Núñez Núñez, R.M., & Pastor Ruiz, Y.;
*Health Psychology Department, Miguel Hernandez University, Spain

Background: The aim of this work was to analyze the relation between eating behaviour and eating disorder risk in adolescents.

Methods: 1388 students (630 males and 758 females; mean age = 14 years) completed the Eating Attitudes Test (EAT-40) and a measure of eating behaviour and diet (Spanish version of the Health Behaviour in School Children Inventory: HBDS; Wold, 1995; Balaguer, 2002).

Findings: Results evidence important relations between eating disorder risk and diet. Regression analyses suggested that diet behaviours were positive related to eating pathology. Worry about calories and grease was also positive related with eating disorder risk.

Discussion: The potential impact of dieting practices should be considered in programs focused on the prevention of eating disorders.

Study of the psychological factors implicated in medical professions with high risk levels

Pantelie, R.* & Vintila, M.; *West University of Timisoara, Romania

Background: This paper intends to assess the effects of occupational stress upon doctors in surgery and emergency units in Romania: The potential psychopathological developments, the stress coping mechanisms, its effects on couple relationships and on life quality.

Methods: We used 2 samples; 30 doctors employed in surgery and emergency units and 30 doctors working in family medicine. Test battery: GHQ28, COPE, SCL-90, Multidimensional Relationship Questionnaire and the Quality of Life Questionnaire.

Findings: The study indicated a higher level of distress of doctors in surgery and emergency units. There are significant correlations between active coping and the lower level of anxiety ($r = -0.38$; $p < 0.05$) and somatic complaints ($r = -0.46$; $p < 0.001$). The doctors in surgery and emergency units show a higher internal control of relationship.

Discussion: The higher levels of distress among doctors in surgery and emergency units requires psychological interventions to improve their quality of personal and professional life.

Ethnic variations in caregiver coping and use of social support

Parveen, S.* & Dr Morrison, V.; *Bangor University, UK

Background: This cross-sectional study compared type, amount and satisfaction with social support and the coping strategies employed by British Asian and Caucasian caregivers. The effects of gender and care-receiver diagnosis on these variables were also examined.

Methods: Using a between subjects design 45 Asian and 43 Caucasian caregivers completed a questionnaire consisting of the Social Support Questionnaire and the brief COPE.

Findings: Asian caregivers had lower levels of social support and were less satisfied with this support. They were also more reliant on religious coping and behavioural disengagement. Caucasian caregivers more often coped by use of humour, substances, emotional and instrumental support as coping methods.

Discussion: The findings of the study support the need for greater exploration of ethnic diversity in coping and caregiving research and may help inform further development of culturally sensitive services.

Predictors of familism in the caregiver role

Parveen, S.* & Morrison, V.; *Bangor University, UK

Background: High levels of familism have previously been associated with caregiver burden. The aim of this study was to investigate whether age, gender and ethnicity were predictive of familism in the caregiver role; and whether familism was associated with coping.

Methods: 45 British Asian and 43 Caucasian caregivers completed cross-sectional questionnaire consisting of demographics, the brief COPE and the Heller Familism Scale. Inferential statistics, partial correlation analysis and hierarchical multiple regression techniques were used to analyse the data.

Findings: Asian caregivers endorsed higher levels of familism than Caucasian caregivers. Familism tended to be lower among older caregivers and no gender differences were found. In the final model demographic variables, religious coping, humour, active coping, and instrumental coping explained 40% of the variance in caregiver familism.

Discussion: The findings suggest the need to consider familism values when developing or providing caregiver services in order to minimise potential negative impact of caregiving.

Religious orientation and health status: Predictors of adult attachment behaviours?

Pasquarelli, L.M.,* Knestel, A., Masters, K.S., & O'Neill, R.M.; *Syracuse University, USA

Background: Evidence suggests a relationship between religious orientation and attachment behaviour.

Methods: This study examined the relationship between religious orientation (intrinsic, pro-religious, and non-religious) and current health status on attachment behaviour, as measured on the Attachment Style Questionnaire (ASQ), in a sample of 131 middle-aged to older adults (ages 40–70).

Findings: A two-way between-groups ANOVA was conducted and a significant interaction effect of religious orientation and current health status on scores of discomfort and relationships-as-secondary were found. Pro-religious adults who reported 'fair' or 'good' physical health scored significantly lower on levels of discomfort with relationships than did those reporting a 'very good' health status. Non-religious adults reporting 'excellent' or 'good' health were found to score higher on relationships-as-secondary than did those reporting 'very good' health.

Discussion: These results provide preliminary evidence that attachment behaviours in adults may vary with respect to religious orientation styles and self-perceived health status.

General practitioners' mental representation about fibromyalgia

Pastor, M.A.,* Lopez-Roig, S., Campos, S., Gracia, R., & Daza, P.; *Miguel Hernandez University, Spain

Background: Health professionals develop their own beliefs mainly in uncertainty situations as Fibromyalgia. Aims – To study Fibromyalgia Mental Representation (MR) in General Practitioners (GP) and its relation to therapeutic behaviour.

Methods: 108 GPs completed ad hoc questionnaire; Brief IPQ; IPQ-R causes subscale. Differences, correlation and factor analyses; $p \leq 0.01$.

Findings: MR mean scores ranged from 3.9 ± 1.7 (“Personal Control”) to 9.1 ± 1.1 (“Timeline”). No gender differences. Four causal attribution factors (64% EV): “Psychological” ($\alpha = 0.85$), “Risk Factors” ($\alpha = 0.82$), “Social Influence” ($\alpha = 0.77$), “Bad luck” ($\alpha = 0.71$), “Behaviour” ($\alpha = 0.70$). Gender differences in “Bad Luck” ($t = 2.66$). MR was associated with referral for test or with other practitioners and not with evidence based prescriptions (r from 0.29 to 0.36). Causal attributions showed associations with evidence and not with evidence based prescriptions (r from 0.33 to 0.45).

Discussion: MR could be target in GPs educative training to improve therapeutic management of Fibromyalgia.

Perceived invulnerability to AIDS in Spanish college students

Pastor, Y.,* Martinez, F., Benavides, G., Solanes, A., & Martin, B.; *University Miguel Hernandez, Spain

Background: Perceived invulnerability to AIDS refers to a person's lower risk self-assessment of contracting the disease than peers. In this paper, we aim to describe invulnerability perceptions in Spanish college students and differences by gender, sexual orientation and relationship status. We also studied the influence of condom use self-efficacy on invulnerability.

Methods: A questionnaire with items covering these variables and the Spanish version of the Condom Use Self-Efficacy Scale (Brafford & Beck, 1991) was carried out on a sample of 253 Spanish college students. Frequencies, ANOVAs and Multiple Stepwise Regression Analyses were performed.

Findings: More than 65% of students perceived themselves as having a lower risk of contracting AIDS than peers. Female and heterosexual students and students in a stable relationship perceived themselves as more invulnerable ($p < 0.01$).

Discussion: Self-efficacy' subscale called Self-Control in Difficult Circumstances was revealed to be a significant predictor of invulnerability in girls but not in boys.

Use of self-tests and complementary and alternative medicine by coronary heart disease patients

Pattison, H.,* Greenfield, S., & Jolly, K.; *Aston University, UK

Background: Coronary heart disease patients learn to manage their condition to maximise quality of life and prevent deterioration. This study explored attitudes towards health in relation to the use of complementary and alternative medicines and therapies (CAM) and self-testing kits in UK patients.

Methods: Questionnaire given to 463 patients attending an assessment clinic one year after referral to cardiac rehabilitation.

Findings: 91.1% completed the questionnaire. 29.1% of participants used CAM and/or self-test kits for self-management, most (89.5%) entirely on their own initiative. Self-test kit use (77.2%) was more common than CAM (31.7%), with BP monitors being the most prevalent (80.0%). CAM was more often used for treating illnesses other than CHD. Predictors of self-management were post-revascularisation status and higher scores on 'holism', 'rejection of authority' and 'individual responsibility'.

Discussion: CHD patients are using technologies to monitor their own health, guided by beliefs about health management rather than clinicians' guidance.

The relationship between depression and cytokine activation in heart failure is not confounded by fatigue

Pedersen, S.S.,* Smith, O.R.F., Winter, J., & Kupper, H.M.; *Tilburg University, The Netherlands

Background: We examined (1) whether baseline depression predicts cytokine activation at 12 months, and (2) whether this link is confounded by fatigue.

Methods: 165 systolic CHF patients (75.8% males) completed the Beck Depression Inventory (BDI) and the Fatigue Assessment Scale at baseline. Cytokines (TNF-alpha, sTNFR1, sTNFR2, and IL-10) were assessed at 12 months. Associations between depression and immunological parameters were assessed using Pearson correlations. Multiple linear regression analysis was used to examine the independent effects of depression clusters on immunological parameters, controlling for demographic and clinical variables, and fatigue.

Findings: Baseline depression (total BDI score) was associated with higher levels of sTNFR1 ($r=0.20$; $p<0.05$) and sTNFR2 ($r=0.21$; $p<0.01$) but not TNF-alpha nor IL-10 at follow-up. Stratifying by BDI symptom clusters, only the cognitive/affective symptoms were associated with sTNFR1 ($r=0.25$; $p<0.01$) and sTNFR2 ($r=0.25$; $p<0.01$) but not the somatic symptoms. Stratifying further by CHF etiology, there was a significant relationship between the cognitive/affective symptoms and higher levels of sTNFR1 ($r=0.33$; $p<0.05$) and sTNFR2 ($r=0.37$; $p<0.01$) in non-ischemic but not ischemic patients. In adjusted analysis, the cognitive/affective symptom cluster was still a significant independent predictor of sTNFR1 (beta = 0.19; $p=0.04$) and sTNFR2 (beta = 0.26; $p=0.006$) at 12 months.

Discussion: The association between the BDI total score and sTNFR1 and sTNFR2, respectively, was driven by the association between the cognitive/affective symptoms and these markers. The relationship between depression and cytokines was not confounded by disease severity nor fatigue.

Does generic lay-led self management help women with polycystic ovary syndrome?: A qualitative evaluation

Percy, C.; Coventry University, UK

Background: This study explored the concerns of women with the common chronic endocrine condition, polycystic ovary syndrome (PCOS), and the extent to which a generic lay-led self management programme addressed their self management needs.

Methods: 16 women aged 24–43 years attended the course. Thematic analysis was conducted on qualitative interviews pre- and post-attendance.

Findings: Pre-course concerns included problems managing PCOS, dissatisfaction with treatment, lack of social support and concerns for longer term health. Benefits reported from attending included reduced social isolation, learning from others' experiences, and developing skills in problem-solving and health communication. Participants reported enhanced motivation to self manage, including changes to diet and physical activity, and an altered perspective on PCOS.

Discussion: Participants' health concerns and self management needs were largely addressed by the course. Developing a PCOS-specific programme may enhance support, and might also contribute to prevention of long term complications such as diabetes and cardiovascular disease.

Stroke-specific illness perceptions: A qualitative study prior to development of a condition-specific illness perceptions questionnaire

Percy, C.,* Baxter, A., Choudhry, K., & Chadwick, L.; *Coventry University, UK

Background: Illness perceptions about stroke may influence stroke preventive behaviour, patient and bystander behaviour in acute stroke, and patient and carer behaviour during rehabilitation. This study addressed recent suggestions that researchers should conduct qualitative research eliciting illness perceptions before developing condition-specific measures.

Methods: Thematic content analysis was conducted on transcripts of semi-structured interviews with 18 stroke survivors and 5 users of an NHS smoking cessation service.

Findings: Participants' beliefs ranged from the medically accurate to beliefs which might be classified as 'stroke misconceptions'. There was considerable variation in the extent to which stroke survivors had a sense of coherence about their stroke, and felt that recovery was possible.

Discussion: The stroke-specific illness perceptions elicited may be used to generate items for a stroke-specific illness perception questionnaire. Different versions of the questionnaire will need to be developed for people with no experience of stroke, for stroke survivors and for their carers.

Family variables, morbidity, PTSD and posttraumatic growth in adult children of oncological patients

Pereira, M.G.* & Teixeira, R.; *University of Minho, Portugal

Background: Cancer impacts patients' life and family members. This study assessed how adult children of oncological patients cope with stress associated with their parents' disease.

Methods: The study is cross-sectional. The sample was composed by adult children ($N=86$) of oncological patients who completed the following questionnaires: "Depression Anxiety Stress Scales" (Lovibond & Lovibond, 1995); "Impact of Event Scale-Revised" (Weiss & Marmar, 1997); "FACES IV" (Olson, Tiesel, & Gorall, 1996); "Burden Assessment Scale" (Reinhart & Horwitz, 1992); "Posttraumatic Growth Inventory" (Tedeschi & Calhoun, 1996).

Findings: A significant positive relation was found between psychological morbidity and posttraumatic growth ($p<0.05$), and a negative one between family burden and family functioning ($p<0.05$). Adults' children perception of parental dependence is related to posttraumatic growth. Traumatic stress is a significant predictor of family burden ($p<0.001$).

Discussion: The results underline the need for intervention programs towards adult children of patients with cancer. Implications for health are addressed.

Depression, distress, burden, social support and coping in informal caregivers of drug/alcohol addicts

Pereira, M.G.* & Soares, A.J.; *University of Minho, Portugal

Background: Drug/Alcohol addiction affects caregivers' general health. This study assessed depression, distress, burden, social support and family coping in that population.

Methods: 150 caregivers divided in 4 groups: (G1) addicts not in treatment, (G2) addicts abstinent less than 5 years, (G3) addicts abstinent for more than 5 years, (G4) control group. All participants completed: BDI (Beck et al., 1961), BSI (Derogatis, 1993), CRA (Pereira & Sousa, 2001), IESSS (Faria, 2000) and F-COPES (McCubbin et al., 1991).

Findings: G4 has the highest Social Support (Mean = 70.37; SD = 15.87) and the lowest Depression (Mean = 5.46; SD = 4.49) and Distress (Mean = 0.53; SD = 0.33). G1 has the lowest Family Coping (Mean = 90.43; SD = 14.37). Social support is positively correlated with Family Coping ($r = 0.309^*$) and negatively with Depression ($r = -0.397^*$) and Distress ($r = -0.539^*$). Caregivers' burden (range from $r = -0.253^*$ to $r = -0.566^*$) is associated with lack of social support ($*p = 0.01$).

Discussion: Caregivers need help dealing with the psychosocial impact of addiction. Implications for health are addressed.

Can studies of 'using ecstasy' inform interventions on 'starting ecstasy use' or 'ceasing ecstasy use'?

Peters, G.Y.,* Kok, G., & Abraham, C.; *Maastricht University, The Netherlands

Background: Studies of modifiable antecedents of drug use often measure beliefs and intentions to use a drug among users and non-users. However, interventions generally target related but distinct behaviours, like not initiating or ceasing drug use. We examined whether those determinants mainly predicting 'using ecstasy' predicted 'trying out ecstasy' and 'ceasing ecstasy use' to similar degrees.

Methods: We conducted a quantitative online survey measuring determinants of these three behaviours.

Findings: A survey of 1,951 participants found similar determinants amongst non-users for the behaviours of trying and using ecstasy (attitude-intention correlations of 0.67 and 0.68, respectively), but users' intentions to cease use was predicted by different factors than their intention to continue using (attitude-intention correlations of 0.39 and 0.57, respectively). Thus user status and behaviour specificity are crucial to identification of determinants.

Discussion: Research into drug use aiming to inform intervention development should target the specific behaviours that are intervention goals.

Psychological interventions for long term conditions in primary care: The case of chronic fatigue syndrome

Peters, S.,* Dowrick, C., Lovell, K., Cahill, G., & Graham, C.; *University of Manchester, UK

Background: An NHS emphasis on primary care management of chronic conditions coupled with a shortage of psychologists has led to an increasing use of nurses to deliver psychological interventions.

A recent trial examining nurse-delivery of two health psychology interventions for chronic fatigue syndrome provided an opportunity to examine the challenges non-specialist nurses face in delivering psychological treatments.

Methods: Perspectives of nurse-therapists ($n = 3$), their supervisors ($n = 3$) and patients ($n = 40$) were gathered using semi-structured interviews. Exploring data from different perspectives provides triangulation, hence increased trustworthiness, of the analysis. An iterative approach was used to develop conceptual categories from the dataset.

Findings: Analyses demonstrate that nurse-patient interactions frequently challenge each party causing tension and potential conflict, regardless of therapy type. For the nurses, using psychological interventions for chronic illness was novel and required communicating in unfamiliar ways with patients.

Discussion: If primary care is to develop psychological services in this way, nurses need to be adequately trained and supported.

What do patients choose to tell doctors? Qualitative analysis of barriers for managing unexplained symptoms

Peters, S.,* Morriss, R.K., Salmon, P., Dowrick, C., Gask, L., & Rogers, A.; *University of Manchester, UK

Background: Patients with medically unexplained symptoms represent approximately 20% of all GP consultations. Despite both parties often expressing dissatisfaction with consultations, these patients prefer to consult their GP rather than any other health professional. Training GPs to explain how symptoms can relate to psychosocial problems ('retribution') improves the quality of patient-doctor communication behaviour though not necessarily patient health.

Methods: As part of an MRC-funded GP training trial, in-depth interviews were conducted with 23 patients about their experiences of retribution. An iterative approach was used to develop conceptual categories from the dataset.

Findings: A core barrier to improving outcome was patients' judgements over how to convey the complexity of their illness model within the limitations of consultations; in particular they distrusted doctors with emotional information. Improving GP explanation of unexplained symptoms is insufficient to reduce patients' concerns.

Discussion: A role for health psychology exists to help GPs engage with patients' unexplained symptoms.

No perfect match: The differences in the illness perceptions of high risk newborns by their parents and clinical staff

Petrie, K.,* Brooks, S., & Rowley, S.; *University of Auckland, New Zealand

Background: The admission of a high risk infant to a neonatal intensive care unit can be a highly stressful experience for parents. Little is known about how parents view their infant's condition and whether these are in line with objective measures of severity and clinician perceptions of the same infant.

Methods: We examined the perceptions of parents and clinicians treating 102 infants admitted to intensive care at Auckland Hospital.

Findings: The results showed that parental perceptions of their infant's condition were significantly more negative than those of clinicians and of objective measures of illness severity. There were also strongly divergent views about the effectiveness of hospital treatment. Parental stress was related to illness perceptions of the infant but unrelated to objective measures of illness severity.

Discussion: The data provide important information about how divergent parents' and clinicians' views are during intensive care admissions and provide possible targets for improvements in communication.

Developing a cancer genetic-specific measure of coping

Phelps, C.,* Bennett, P., Jones, H., Brain, K., Hood, K., & Murray, A.; *Cardiff University, UK

Background: Generic measures of coping fail to capture the process of undergoing cancer genetic risk assessment. A coping matrix has been developed to provide greater specificity of measurement, by breaking the risk assessment process into 11 specific stressors and exploring 8 possible coping efforts used in response to each.

Methods: The current data are reported from 50 individuals completing the matrix whilst waiting for genetic risk information.

Findings: The top three stressors were worries about how family members would react if found to be at increased risk (60%); how they would cope if at increased risk (54%) and having to wait to find out their own risk (48%). The main coping strategies were social support, positive appraisal and acceptance, respectively.

Discussion: Participants reacted in different ways to different stressors. The completion rates for the matrix and specificity of responses provided suggests this coping matrix may be an acceptable measurement tool. Further data collection is ongoing.

An example of best practice in intervention development: The development and evaluation of a self-help coping leaflet in line with the Medical Research Council (MRC) framework

Phelps, C.,* Bennett, P., Jones, H., Brain, K., & Hood, K.; *Cardiff University, UK

Background: Around a third of individuals undergoing genetic risk assessment report high levels of distress and could benefit from psychological support. A self-help leaflet has been developed to help individuals cope whilst waiting for genetic information and was evaluated in line with the MRC framework for the development of complex interventions (MRC, 2000).

Methods: MRC Phase I: Focus groups with patients to explore the potential acceptability of the intervention (Phelps et al., 2005) MRC Phase II: An exploratory randomised controlled trial (RCT) with 157 patients (Bennett et al., 2007). MRC Phase III: A definitive fully-powered RCT (ongoing).

Findings: Phase I and II findings revealed preliminary support for the acceptability of the intervention in reducing worry. The MRC Phase III trial is evaluating the longer-term psychological impact of the intervention on a larger sample.

Discussion: The MRC framework helps ensure a sound continuum of increasing evidence regarding the validity and effectiveness of novel interventions. Such evidence may help secure future funding and increase the likelihood that interventions are implemented into practice.

Social support, social intimacy, sex, and cardiovascular reactions to acute psychological stress

Phillips, A.C.,* Gallagher, S., & Carroll, D.; *University of Birmingham, UK

Background: Exaggerated cardiovascular reactions to psychological stress are considered a risk factor for cardiovascular disease. Social support may reduce such risk by attenuating cardiovascular reactivity.

Methods: We examined the impact of: Active versus passive support, support from a friend versus a stranger, and the sex of the supporter on cardiovascular reactions to mental arithmetic stress in 112 healthy women.

Findings: Support from a friend rather than a stranger was associated with attenuated systolic blood pressure reactivity, but only when support was from a male friend. Active support was associated with reduced systolic blood pressure reactivity, but only when support was provided by a male friend or a female stranger. Associations with diastolic blood pressure or heart rate reactivity were not significant.

Discussion: The interaction between the effects of aspects of social support on cardiovascular reactivity to stress extends the research into social support effects on health risk factors.

From dialysis to transplantation, illness experience and patients' concerns about future: A longitudinal qualitative study

Piot-Ziegler, C.,* Szymanski, J., Ruffiner-Boner, N., Fasseur, F., Santiago, M., & Pascual, M.;
*University of Lausanne, Switzerland

Background: Transplantation is the treatment of choice when compared to dialysis. Long-term evolution of patients is rarely comprehensively described. Thirty end-stage renal disease patient's experience of illness was explored from registration for transplantation until twenty-four months after transplantation.

Methods: Longitudinal semi-structured interviews were conducted, and qualitative discourse analysis performed.

Findings: Before transplantation loss of quality of life (QOL), emotional fragility related to dialysis constraints were reported, and increased with waiting-time. Six months after transplantation, recovered freedom was described but acute rejection, and life-dependency to immunosuppressants generated concerns. After twelve months, long-term survival of the graft, and possible return-to-dialysis were mentioned. After twenty months graft's dysfunction, co-morbidities, immunosuppressants side effects rose concerns even though QOL persisted. Most patients report positive transformations after transplantation, which are related to graft survival and limited co-morbidities.

Discussion: As time passes, patients deal with changing illness constraints, and contemplate with anxiety possible new return to dialysis and/or transplantation.

Coping, but not social support, predicts acute stress disorder after a motor vehicle accident

Pires, T.* & Maia, A.; *University of Minho, Portugal

Background: Social support and coping strategies have been studied as predictive of adaptation after trauma, but there is no literature on their effect on motor vehicle accident (MVA) victims. In our

study, we expected MVA victims with more social support and direct coping strategies to have less ASD symptoms.

Methods: 51 males and 14 females (mean age 33), admitted to hospital, filled in Ways of coping questionnaire, Social support scale and Stanford acute stress reaction questionnaire 5 days after the accident.

Findings: ASD symptoms have significant negative correlation with Direct coping ($p < 0.01$); but there is no relation with social support. Direct coping accounts for 9.3% of ASD symptoms variance.

Discussion: When still in hospital, shortly after a MVA, coping strategies seem more important for adaptation than social support. Knowing that acute reactions predict PTSD, health psychologists can improve adaptation by working on active and direct coping strategies with these victims.

Psychometric properties of the coping inventory for stressful situations short-version among italian nurses

Pisanti, R.,* Lombardo, C., Lazzari, D., & Bertini, M.; *University of Rome, Italy

Background: Aim of the present study was to examine the psychometric properties of the Italian version of the Coping Inventory for Stressful Situations Short Form (CISS-SF), which consists of three dimensions (task-, emotion- and avoidance-oriented coping).

Methods: A sample of 1469 nurses completed the Italian translation of the CISS-SF and the subscales Depression and Anxiety of the SCL-90.

Findings: Consistently with previous reports (Cohan, Lang, & Stein, 2006) a four factor solution (avoidance was split into two: Contact a friend and treat oneself) showed a better fit than the original structure. The CISS-SF dimensions showed high internal consistencies, ranging from 0.82 to 0.89. Correlations between the resulting subscales and SCL-90 dimensions extended empirical support for the construct validity of the subscales.

Discussion: Overall, the results suggest that the Italian CISS-SF represents a valid and reliable adaptation of the instrument, which can be confidently used to measure coping strategies.

The role of social support and coping strategies in patients' emotional distress following kidney transplantation

Pisanti, R.,* Lombardo, C., Violani, C., Poli, L., Berloco, P.B., & Bennardi, L.; *University of Rome, Italy

Background: The objective of the present study was to examine the joint effects of stress, coping, and coping resources in predicting distress symptoms among Kidney transplantation.

Methods: In total, 101 participants who met the selection criteria were selected by purposive sampling from two transplant centres in Italy. The following instruments: Transplant Related Stressors Scale (TRSS), Coping Inventory for Stressful Situations SV (CISS-SF), Social Provision Scale (SPS), Anxiety and Depression scales of SCL-90 and standardized Questionnaire for Sleep Disorders were used for data collection.

Findings: Task-oriented coping and emotion-oriented coping both appeared to be directly related to distress symptoms. Furthermore, social support appeared to be related to the kind of coping strategies used. Respondents with higher social support used more task-oriented coping and less emotion-oriented coping.

Discussion: Recommendations for future research are provided, including suggestions to consider coping resource when studying stress-coping processes among renal transplantation patients.

Psychosocial consequences of developmental prosopagnosia: A problem of recognition

Pisarski, S.,* McDermott, L., Yardley, L., Duchaine, B., & Nakayama, K.; *University of Southampton, UK

Background: Developmental prosopagnosia (DP) is a lifelong inability to recognise faces, including close friends, family, and work colleagues. This study aimed to describe the consequences of DP for psychosocial functioning and occupational disability in order to determine what kind of professional intervention may be needed.

Methods: Telephone interviews were conducted with 25 individuals with DP. Data was analysed using thematic analysis.

Findings: All participants described social interaction difficulties caused by recognition problems, which provoked feelings of acute embarrassment, guilt, and failure, and could lead to chronic anxiety and avoidance of social situations. Long-term consequences included dependence on others, limited employment opportunities, and reduced self-confidence.

Discussion: Wider recognition of these problems could reduce anxiety about social interactions, by making it easier to explain and justify recognition problems to others. Greater professional awareness could facilitate detection and referral of those requiring support to cope with social situations.

The effect of urbanization on gender differences in substance use among adolescents

Pitel, L.,* Madarasova Geckova, A., Orosova, O., Van Dijk, J.P., & Reijneveld, S.A.; *P.J. Safarik University, Slovakia

Background: Our study focuses on the role of cultural and socioeconomic characteristics of an area as determinants of gender differences in substance use.

Methods: A cross-sectional questionnaire survey of adolescents ($N = 3493$; mean age = 14.33, Bratislava, Kosice, Zilina, small towns in Eastern Slovakia). The effects of gender and area and their interaction with substance use (smoking, binge drinking, marijuana) were analysed using a logistic regression model adjusted for age.

Findings: The main effects of gender and area and their interaction with substance use were significant ($p < 0.01$). The lower the urbanisation of the area, the deeper the gender difference, i.e. females in small towns behave less riskily. An exception was found in the case of binge drinking, as it seems to be associated more with cultural characteristics of the area.

Discussion: A more rural residential type appears to be connected with more traditional female roles, appearing to be a protective factor in substance use among girls.

Posttraumatic symptoms and quality of life among Polish child survivors of the World War II

Plichta, A.* & Lis-Turlejska, M.; *Warsaw University, Poland

Background: The aim of the study was to estimate posttraumatic stress disorder (PTSD) diagnosis, prevalence of posttraumatic symptoms and quality of life (QoL) among Polish child survivors of the World War II (WWII) as well as to investigate how PTSD diagnosis is associated with quality of life.

Methods: The sample comprised 211 participants between the ages of 64 and 79 years ($M=72.34$; $SD=4.21$). Measures: PDS, IES, BDI, GHQ-12, NHP, and a questionnaire with the items addressing exposure to different types of war related traumatic experiences.

Findings: 31.8% of subjects obtained PTSD diagnosis as measured with PDS. There is a significant difference in the mean scores in NHP and in all subscales between the group with PTSD diagnosis ($M=15.68$; $SD=6.03$) and without it ($M=7.77$; $SD=6.24$) ($t=-8.38$, $df=200$, $p<0.01$).

Discussion: The data shows that the prevalence of PTSD and posttraumatic symptoms in the group of Polish child survivors of the WWII is high. In this study PTSD is associated with reduced quality of life measured with NHP.

Correspondence between subjective risk perception and objective health parameters and its impact on intervention effectiveness

Pomp, S.* & Lippke, S.; *University of Muenster, Germany

Background: Do people perceive that they are at risk for developing diseases if they have objective risk factors? Is there a dependency of the intervention effects of subjective health over time on objective health?

Methods: Objective parameters were BMI, blood pressure, blood glucose, HDL and triglycerin. Absolute and relative risk perception served as subjective health data.

Findings: Correspondence between objective and subjective health was given in some but not in all parameters. Trends over time depended on the objective health status, indicating that individuals actually know that they are at risk. A motivational intervention affected only those at risk whereas individuals not at risk did not benefit from the intervention.

Discussion: It seems important to make people aware of their objective health risk. Effectiveness of a motivational intervention increases with higher risk perception in those objectively at risk. In further studies, the mediating role should be examined in more depth.

How do symptoms change? Accounts from participants attending a food intolerance clinic

Pope, J.,* Coyle, A., & Ogden, J.; *University of Surrey, UK

Background: This paper reports the findings from an interview study conducted with people who had attended a specialist food intolerance clinic running in four general practices in the UK. The aims of the interviews were to investigate the experiential accounts and meaning-making of people who had reported symptom improvement whilst attending the clinic.

Methods: Semi-structured interviews were conducted with 10 participants following clinic attendance. Interviews were analysed using Interpretative Phenomenological Analysis.

Findings: Analyses revealed five key themes: 'reported expectations of clinic intervention', 'reported symptom changes', 'reported implications of symptom change for personal social and emotional life', 'accounts of processes of change' and 'adherence and non-adherence to dietary regime'.

Discussion: Participants reported attending the food intolerance clinic to search for an explanation for the cause of their symptoms. The clinic seemed to work by helping participants to identify food related culprits thus bringing into line their beliefs about causes and solutions to their problem.

Diabetes and healthy eating: A systematic review of dietary interventions

Povey, R.* & Clark-Carter, D.; *Staffordshire University, UK

Background: The objective was to review the literature on healthy eating interventions within diabetes care.

Methods: The databases PubMed, Cumulative Index to Nursing and Allied Health Literature, and PsycINFO as well as some specific diabetes journals were searched for the terms healthy eating or dietary and intervention and diabetes in the abstracts. The total number of articles reviewed was 23.

Findings: Studies measuring outcomes of weight, fat intake, saturated fat intake, and carbohydrates demonstrated a tendency for successful interventions to include an exercise dimension and group work. Some outcomes were more likely to show significant changes in studies of longer duration (e.g. serum cholesterol); whereas others were more likely to show significant changes in studies of shorter duration (e.g. weight, fibre), suggesting that certain behavioural outcomes may be more difficult to maintain.

Discussion: Future interventions should be designed which focus on the maintenance, as well as the initiation of eating behaviour change.

Pain and activity limitations in people undergoing inguinal hernia surgery: A qualitative investigation

Powell, R.,* McKee, L., & Bruce, J.; *Aston University, UK

Background: Up to 54% of people report chronic post-surgical pain after inguinal hernia surgery. Fear-avoidance models propose fear of pain and avoiding future pain increase chronic pain risk. The surgical journey is explored from the patient's perspective, identifying pain coping strategies and perceived causes of activity limitations.

Methods: Seven participants undertook three semi-structured interviews: Before surgery and two weeks and four months after surgery. Ten participants experiencing chronic pain four months after surgery undertook a single interview. Topics explored included pain coping and impact of pain on activities. Interviews were analysed using IPA.

Findings: Pain coping strategies included movement and rest. Participants worried about unexplained pain; pain was otherwise seen as a natural aspect of surgery. Participants tended to limit activity to minimise damage rather than to avoid pain.

Discussion: Fear of pain had limited impact on activity restrictions. Participants avoided activities perceived to increase damage to the hernia site.

Ecological momentary assessment in investigating associations between negative affectivity and activity in people with osteoarthritis

Powell, R.,* Allan, J., Johnston, D.W., & Gao, C.; *Aston University, UK

Background: High negative affectivity (NA) has been associated with lower activity when analysed cross-sectionally or longitudinally over long periods. This exploratory study investigated the feasibility of examining this relationship over short periods, using multiple measurements.

Methods: Participants were 25 individuals with osteoarthritis who had received joint-replacement surgery. Activity was recorded on Vitaport 3 ambulatory monitors; computerised diary reports of

activity and NA were completed at 90–120 minute intervals throughout a waking day. Associations between NA and activity were analysed using multi-level modelling.

Findings: Analyses revealed that, throughout the day, activity did not predict NA but NA did predict changes in monitored activity and intention to be active over the following hour (beta = 36.38, $t = 2.19$ ($p < 0.05$); beta = 0.34, $t = 2.28$ ($p < 0.05$) respectively).

Discussion: Higher NA predicted increased activity over the next hour. Individuals may attempt to self-manage low mood by increasing activity. The methodology was found to be effective in investigating this research question.

Intentions and action in cancer screening

Power, E.,* Van Jaarsveld, C.H.M., McCaffery, K., Miles, A., Atkin, W., & Wardle, J.;
*University College London, UK

Background: We tested the hypothesis that social cognition variables predict intention better than action and life difficulty variables predict action better than intention in colorectal screening.

Methods: Participants from the UK Flexible Sigmoidoscopy Trial ($n = 2969$) were categorised according to their initial intention and their subsequent attendance at screening. Differences in factors related to life difficulty (SES, health, stress, social support) and social cognition variables were examined, and discriminant analysis was used to identify sets of variables that best differentiated the groups.

Findings: Social cognition variables were strongly associated with intentions but only weakly with action. Factors related to life difficulties were better predictors of action than intentions.

Discussion: Social cognition variables are important determinants of screening intentions. Other variables – which may be markers of barriers to implementing plans – appear to play an important role in action. To maximise screening participation, research is needed to identify a wider range of potential determinants of attendance.

Theory-based qualitative investigation of GPs' views on factors facilitating and conflicting evidence-based management of diabetes

Presseau, J.,* Sniehotta, F.F., Francis, J.J., & Campbell, N.C.; *University of Aberdeen, UK

Background: Investigated GPs' views on how concomitant pursuit of multiple goals facilitates and conflicts with their pursuit of evidence-based goals in primary care diabetes management.

Methods: Semi-structured interviews conducted with $N = 5$ GPs focussed on factors impacting pursuit of two focal goals: Providing physical activity advice (PA-advice) and prescribing to reduce blood pressure (BP-prescribing) in hypertensive patients with diabetes. Theory-based content analysis extracted themes based on particular a-priori identified and targeted constructs from goal theory and the theory of planned behaviour.

Findings: Goal conflict resulted from overall resource constraints (i.e., time), influencing prioritisation of focal goals. Goal facilitation resulted from overlapping pursuit strategies between particular goal combinations. GPs intended to pursue BP-prescribing more frequently than PA-advice. Control beliefs related to patient, GP, consultation and system factors for both focal goals.

Discussion: Qualitative evidence for how goal conflict and facilitation influence pursuit of particular goals highlights the impact that multiple goal pursuit may have on intention enactment.

A randomized controlled trial of implementation intentions and text message interventions to promote walking

Prestwich, A.,* Perugini, M., & Hurling, R.; *University of Leeds, UK

Background: The trial compared interventions that used text message reminders to cue either one's walking-related goals or implementation intentions (II) to facilitate brisk and fast walking.

Methods: Participants ($N = 149$) were randomly allocated to one of two interventions (II reminders; goal reminders) or a control group. Participants in both intervention groups formed implementation intentions related to their walking. They completed a previously validated self-report measure of walking at baseline and at four weeks follow-up. All study personnel and participants were blinded to treatment assignment. Data were analysed using 3 (intervention) \times 2 (time) mixed ANOVAs.

Findings: Although the two interventions did not differ in terms of efficacy [$F(1, 86) = 0.05$, $p = 0.83$], both outperformed the control group in increasing walking frequency [II reminders vs. control: $F(1, 88) = 4.27$, $p = 0.04$; goal reminders vs. control: $F(1, 94) = 4.88$, $p = 0.03$].

Discussion: The results suggest that combined implementation intention and text message interventions can be used to significantly change health behaviours.

Distress, personality and noncompliance in patients after kidney transplantation

Prihodova, L.,* Nagyova, I., Rosenberger, J., Van Dijk, J.P., Roland, R., & Groothoff, J.W.; *P.J. Safarik University Kosice, Slovak Republic

Background: Kidney transplantation is the best treatment modality for patients with end-stage renal disease although it is associated with lifelong medication. Identification of noncompliant patients may prevent graft-loss and consequently decrease in quality of life. We focused on the role of personality and distress in noncompliance.

Methods: From 135 kidney transplant recipients (64.4% males; 48.8 ± 12.2 years) we collected socio-demographic data (gender, age, education, socio-economical status), medical data (time from transplantation, albumin, glomerular filtration, Davies comorbidity index, immunosuppression) and psychological data (extroversion and neuroticism (EPQR-A), distress (GHQ-12)). Binary logistic regression was used to predict noncompliance.

Findings: The predictors of noncompliance were lower glomerular filtration (OR:0.2; 95% CI 0.02–0.97; $p < 0.05$), higher Davies index (OR: 0.1; 95% CI 0.03–0.39; $p < 0.005$) and higher distress (OR: 1.1; 95% CI 1.03–1.25; $p < 0.01$) after controlling for relevant variables.

Discussion: Psychological distress plays an important role in the prediction of noncompliance and is more important than personality traits. This can be applied in intervention programs aimed at decreasing noncompliance.

The influence of Time Perspective (TP) on university students' non-condom use

Protogerou, C.* & Dr Turner-Cobb, J.; *University of Bath, UK

Background: In light of criticisms (e.g., intention-behaviour gap, unrealistic description of decision-making process) placed upon the theories of reasoned action – TRA (Ajzen & Fishbein, 1975) and planned behaviour – TPB (Ajzen, 1985) two studies assessed the impact of undergraduates' non-conscious TP (present-oriented versus future-oriented) on non-condom use, in relation to attitudes, intentions, perceived behavioural control and norms.

Methods: A cross-sectional design was employed, wherein 342 participants were administered the Zimbardo Time Perspective Inventory (Zimbardo & Boyd, 1999) and a TPB questionnaire.

Findings: Results revealed that a fatalistic present TP: Provided a unique contribution to intended non-condom use variance ($\hat{a} = -0.23$, $p < 0.0001$); enhanced the predictive ability of the TRA (R^2 Change = 0.0.2, $p < 0.05$); moderated the attitude-intended behaviour path ($\hat{a} = 0.17$, $p < 0.05$).

Discussion: Findings support the notion of including non-rational factors in the study of sexual risk-taking, and demonstrate merits of including TP in safe-sex interventions.

Coping and eating disorders: A study-review

Quiles Marcos, Y.,* Terol Cantero, M.C., Pamies Aubalat, L., Martín-Aragón Gelabert, M., Quiles Sebastián, M.J., & Bernabé Castaño, M.; *Health Psychology Department, Miguel Hernandez University, Spain

Background: The aim of this work has been to review the role of coping in eating disorders and to know the relation of this concept with other psychosocial variables.

Methods: We have reviewed the empirical studies of the last 20 years about coping and psychosocial and clinical variables in eating disorders in these databases: Psyclit, Medline, Psycodoc, IME and ISOC. It was mixed coping and eating disorders keywords.

Findings: Results suggest that eating disorders patients compared to subjects without the disorder make more use of avoidance and emotion oriented coping, and are less likely to respond with active attempts to solve or problem-oriented coping mechanism. This type of coping is also more frequently in women with higher tendency to develop an eating disorder.

Discussion: Avoidance and emotion-oriented coping are associated with poorer psychosocial adaptation, whereas active and problem-oriented coping are associated with better health outcomes in these patients.

Relation between self-efficacy and burnout in physicians at medical urgencies services

Quiles, M.J.,* Quiles Marcos, Y., Terol Cantero, M.C., Bernabé Castaño, M., Martín-Aragón, M., Esclapés, C., & Pamies Aubalat, L.; *Universidad Miguel Hernández, Spain

Background: Recent studies show that Self-Efficacy could have an effect in the process to Burnout. We tested the relations between Self-Efficacy and Burnout at medical urgencies services.

Methods: The pilot study was composed by 40 physicians from different Spanish hospitals (Men: 60%), the mean age was 38.4 (DT: 8.39). Burnout measured by a Spanish Version of MBI-GS (Salanova & Grau, 1999) and Self-Efficacy was tested by General Self-Efficacy Survey (Schwarzer, 1996) validated to Spanish population (Martin-Aragon, 1997). We analyzed internal consistency and correlation between variables.

Findings: a-Cronbach's levels were high to all subscales: Emotional-Exhaustion (0.80), Cynicism (0.81) and Lack of Professional Efficacy (0.77) to MBI-GS, and to Self-Efficacy the scale level was high too (0.70). There are significant relations between Self-Efficacy and Emotional-Exhaustion ($R = -0.45$; $p = 0.005$) and Lack of Professional Efficacy ($R = 0.68$; $p = 0.000$).

Discussion: The results are in the line from other studies, low Self-Efficacy could be a good predictor to Burnout.

Patients' and relatives' perception of eating disorder: Differences and impact on patients' adjustment

Quiles Marcos, Y., Terol Cantero, M.C., Bernabé Castaño, M., Pamies Aubalat, L., Quiles Sebastián, M.C., & Martín-Aragón, M.; *Miguel Hernandez University, Spain

Background: The aim of this study was to examine the relation between the degree of dissimilarity in patients' and relatives' perception of eating disorder (ED) and patient adjustment.

Methods: Ninety-eight ED patients and sixty relatives were interviewed. They completed the Spanish version for ED of the Revised Illness Perception Questionnaire (IPQ-R).

Findings: Analysis suggested that patients who agreed with their relatives that their illness is highly distressing, a chronic condition and with high identity, showed higher psychological distress than patients who did not agree with their relatives. When patient and relative had fairly positive perceptions of illness controllability and curability, these patients showed lower levels of depression and anxiety.

Discussion: These results show the importance of the relatives' perception for eating disorders patients' adjustment.

Does the TPB predict behaviour in one individual? A single-case study

Quinn, F.,* Johnston, M., & Johnston, D.W.; *University of Aberdeen, UK

Background: TPB constructs are often assumed to influence individual behaviour, but have typically been tested in group-level studies. To really test the usefulness of this theory, one must also examine whether it applies in individuals.

Methods: One woman with chronic pain and resulting activity limitations participated. She kept a PDA diary of standard TPB items each morning for 60 days. Activity was measured continuously by accelerometer. Pre-whitening was used to remove autocorrelation, enabling multiple regression analysis.

Findings: Intention ($\beta=0.44$, $p<0.01$) and PBC predicted activity ($\beta=-0.33$, $p<0.05$). Only subjective norm significantly predicted intention ($\beta=0.48$, $p<0.01$).

Discussion: Intention predicted behaviour in this individual with activity limitations. However greater PBC was associated with less activity, contrary to the model. Furthermore, attitudes and PBC failed to predict intention at all. The applicability of the TPB model, or at least its measurement, at the individual level needs further examination.

Effectiveness of solution-focused approach in schoolchildren counselling

Rakauskienė, V.* & Gostautas, A.; *Vytautas Magnus University, Lithuania

Background: To evaluate effectiveness of solution focused brief counselling of schoolchildren.

Methods: Solution-focused three interventional sessions with a client were conducted using methodology described by De Jong & Berg, 1988; De Shazer, 1988. Initial semi-standardized interview was held with 178 schoolchildren aged from 16 to 18 years. By factorization of interview items, four areas of problematic behaviour were identified. 27 students were consulted while the others constituted two groups for comparison. The changes were evaluated by using ten point progress evaluation scale and by repeating the interview.

Findings: 85.2 per cent of consulted students and 27.3 per cent of the comparison group showed improvement on the progress evaluation scale ($p \leq 0.05$). The consulted students showed improvement in four areas of problematic behaviour evaluated by the repeated interview ($p \leq 0.05$). No significant changes happened in students within the group of comparison.

Discussion: The data confirmed that counselling of students in school setting based on solution-focused approach is an efficient method improving the students capacity for solutions. It appeared that significant improvement happened not only in the main area of consultation, but also in related areas of problematic behaviour.

Lifestyle interventions for people with severe mental illness (SMI): Views from key stakeholders

Rance, J.,* Lloyd, K., Aitken, P., Faulkner, G., McLeod, K., Rapport, F., Griffith-Noble, F., & Riley, R.; *Swansea University, UK

Background: Aim – To learn more about the perception and importance given to improving physical health among people with SMI by people with SMI, their carers and health professionals.

Methods: Qualitative data was collected from key stakeholders using focus groups and semi structured interviews. Data were analysed using a constant comparative method.

Findings: Key themes include: Concepts of health, choice and autonomy, roles and responsibilities; communication and collaboration and barriers to lifestyle behaviour change.

Discussion: Lifestyle related diseases often result in premature death for people with SMI (e.g. Thakore, 2005). There is a need to improve the physical health of people with SMI (DoH 2004). Previous interventions for people with SMI have focused on highly motivated volunteers who participate in studies led by enthusiasts (Wu, 2008). The current study has enhanced understanding of the issues that may inform the initiation and maintenance of lifestyle interventions for people with SMI.

Long-term survivors of gynaecological cancer are like other women in terms of pain and quality of life (QoL)

Rannestad, T.* & Skjeldestad, F.E.; *Sor-Trondelag University College, Norway

Background: The aim of this study was to investigate pain and QoL in long-term survivors of gynaecological cancer compared to the general population.

Methods: Cases were \geq five years' recurrence-free gynaecological cancer survivors ($n = 160$), whereas age-matched women selected at random from the general population served as controls ($n = 493$). Pain was measured by the item 'How often do you have pain?' and marks on a body chart indicating pain sites. QoL was measured by Ferrans & Powers' QLI. Chi-square test, unpaired *T*-test and logistic regression were applied.

Findings: There was no difference in the QoL or in the prevalence of pain between cancer survivors and controls. However, musculoskeletal disorders and low income were associated with pain. Pain showed a clear negative effect on QoL.

Discussion: Long-term survivors of gynaecological cancer are like other women in terms of pain and QoL.

Prevention of metabolic syndrome among middle-aged women

Rantanen, P.,* Julkunen, J., & Vanhanen, H.; *Rehabilitation Foundation, Finland

Background: Many women are unaware of their risk for heart disease, and current knowledge of the prevention and treatment of cardiovascular diseases (CVD) is still based on predominantly male study samples. The aim of this trial was to evaluate the efficacy of two preventive strategies to promote women's heart health.

Methods: A sample of high-risk women ($n = 126$) were randomized into two groups. Simple crossover design was used to evaluate the efficacy of personal feedback and health education as compared with feedback and group-based intervention programme. Follow-up's were completed at 6 and 12 months.

Findings: Significant positive changes in cardiovascular risk factors were observed in nearly all risk factors in both study groups at 6 months as well as 12 months.

Discussion: Results indicate that individually tailored counselling is as effective as a group-based intervention in producing health behaviour changes and reducing risk of CVD.

The experience of living with large breasts and breast reduction surgery

Reardon, R.* & Grogan, S.C.; *Staffordshire University, UK

Background: Breast reduction surgery is often restricted by health care purchasers because the procedure is frequently perceived as being primarily motivated by cosmetic concerns. This study aimed to explore the experiences and health implications for women living with large breasts and women who had undergone breast reduction.

Methods: Participants were recruited via an online forum concerned with breast related health. Participants were 32 women aged from 19 to 51 years, 13 who had undergone breast reduction. Semi-structured interviews were conducted by email. Data were analysed using Interpretive Phenomenological Analysis.

Findings: Six themes emerged illustrating various aspects of participants' experiences. These were Pain, Information, Choice, Social Interaction, Psychological Constructs and Hiding. Two core constructs emerged: Health and Psychosocial Functioning.

Discussion: These findings suggest that Health Psychologists should focus on assisting individuals to cope with pain more constructively, and on assisting health professionals to develop more efficacious communication skills when working with women seeking breast reduction surgery.

Psychological predictors of PTSD symptomatology for victims of motor vehicle accidents

Recchia, S.,* Steffgen, G., & Wampach, N.; *University of Luxembourg, Luxembourg

Background: Research findings demonstrated that Posttraumatic Stress Disorder (PTSD) symptomatology is associated with a higher level of anger and a lower level of Sense of Coherence (SOC, Antonovsky, 1987).

Methods: The present study tested these assumptions with 153 victims of motor vehicle accidents (58.8% men, mean age = 37.5 years, SD = 13.41) filling in a form including the IES-R, the STAXI, the SOC Scale, and questions about the degree of perceived burden.

Findings: Hierarchical regression analyses explained 45% of the variance of PTSD symptoms ($F(6, 133) = 19.97, p < 0.01$) by age ($\beta = 0.18$), gender ($\beta = -0.15$), anger ($\beta = 0.33$), SOC ($\beta = -0.17$), perceived burden ($\beta = 0.36$), and by the time elapsed since the traumatic event ($\beta = -0.13$).

Discussion: Considering these results, implications for treatment of PTSD are discussed.

Health risk behaviours and life satisfaction among victims of physical aggression

Recchia, S.,* Hoffmann, M., Steffgen, G., & Spitz, E.; *University of Luxembourg, Luxembourg/University of Metz, France

Background: The aim of the present study was to explore the impact of physical aggression on health risk behaviours among students.

Methods: The sample comprised an experimental group ($N = 158$, 58.2% male, mean age = 15.88, $SD = 2.18$) of victims of physical aggression that occurred during the last twelve months and a randomized control group ($N = 158$, 46.8% male, mean age = 16.53, $SD = 2.31$) of students that had no such experiences. Data were collected by means of anonymous questionnaires on health behaviours, coping styles, anxiety, and social support.

Findings: Significant differences between the two groups, were indicating that victimized students used more denial strategies, and reported higher substance consumption and poorer perceived health. For the experimental group, a structural equation model showed that 51% of the variance of the victims' life satisfaction was predicted by coping with substances ($\beta = -0.40$), anxiety ($\beta = -0.31$), and social support ($\beta = 0.51$).

Discussion: These findings corroborate the strong relation of aggression and personal health risk behaviours.

Lay models of how cancer is caused: The results of cognitive mapping study

Redeker, C., Miles, A., Simon, A., & Wardle, J.; University College London, UK

Background: People's awareness of risk factors for cancer are well documented but little is known about how people think such risk factors actually lead to cancer.

Methods: This study employed a cognitive mapping technique to examine people's causal beliefs in detail. Semi-structured interviews were conducted with 25 members of the general public.

Findings: Participants viewed the sun and chemicals as causing direct damage to cells in the body. However people thought alcohol and obesity caused cancer by overworking the body, and that diet and exercise prevented cancer by bolstering the immune system.

Discussion: People consider an 'excess' of alcohol and body fat is required for cancer to develop, rather viewing these relationships as linear; and whilst the immune system was frequently mentioned as important in cancer prevention, there was little awareness of the role it might play in fighting off oncogenic viruses. This paper will discuss how these differences between lay and biomedical models of cancer might be accommodated.

Promoting physical activity at work: How effective are stage-matched interventions?

Remme, L.,* Lippke, S., Wiedemann, A., Ziegelmann, J., & Reuter, T.; *Free University of Berlin, Germany

Background: According to stage theories, different social-cognitive variables are important at different stages of becoming physically active. Thus, theory-based health promotion programs should be matched to the stage of the individual. The objective of the present study was to evaluate the effectiveness of stage-matched interventions in promoting physical activity among blue-collar workers.

Methods: Participants ($N=742$) were randomized to stage-matched or standard-care treatments, and followed-up after one month. Multivariate analyses were performed.

Findings: The stage-matched interventions were superior to the standard-care intervention: Motivational individuals improved their goal-setting; volitional individuals showed a higher increase in behaviour.

Discussion: Stage-matched interventions are effective interventions to promote an active lifestyle. Stage theories serve as a valid theoretical backdrop when designing interventions.

International psychometric study of the adherence to antiretroviral treatment questionnaire

Remor, E.; Universidad Autonoma de Madrid, Spain

Background: To describe the psychometric properties of the Adherence to Antiretroviral Treatment Questionnaire (CEAT-VIH; Remor, 2002) in an international sample (Brazil, Colombia, Peru, Portugal and Spain).

Methods: 536 people-living-with-HIV has been assessed in order to study the psychometric properties of the CEAT-VIH (Spanish and Portuguese versions). The CEAT-VIH is a brief 20-items patient-report outcome (PRO), which is administered in only few minutes, and is easily to understand and score. The total score of the questionnaire allow us to classify the individual in low, insufficient, adequate or strict adherence level. A transformed total scores (0–100) can also be calculated.

Findings: Psychometric indicators by country was encouraging: Reliability (Chrombach's alpha range: 0.65 to 0.80), no floor and ceiling effects was detected, criterion validity with viral load levels was excellent (correlations range: -0.20 to -0.48), sensitivity (range: 70.3% to 79.2%) and specificity (56.8% to 57.1%) assessed by ROC curves.

Discussion: The CEAT-VIH is a valid and reliable instrument for assessing adherence to HIV-treatment.

Effects of relaxation training on anxiety and quality of life among patients with inflammatory bowel disease

Revah, M.,* Reicher-Atir, R., Levy, S., Israeli, E., & Goldin, E.; *Hadassah Hospital, Jerusalem/ Academic College of Tel-Aviv-Yaffo, Israel

Background: The purpose of the study was to evaluate the effects of a short individual intervention, focused on relaxation training with guided imagery, among patients with Inflammatory Bowel Disease (IBD).

Methods: Thirty-nine outpatients were randomized to either an experimental group ($n=18$) or a waiting list monitoring control group ($n=21$). Patients in the experimental group attended three individual sessions of relaxation training and received a 15-min set of disc instructions with background music for home practice. Assessment measures were collected pre-and post-treatment: State-Trait-Anxiety-Inventory, IBD-Questionnaire, Visual Analogous Scales and symptom monitoring diary.

Findings: Data analysis (time-by-treatment interaction) suggest that relaxation training intervention significantly improved the measures in the experimental group compared to the control group: State anxiety decrease ($F=8.291$; $p<0.01$); quality of life improved ($F=6.628$; $p<0.05$); pain, stress and mood improved ($p<0.01$).

Discussion: Although the study has yet to be replicated, current findings indicate that IBD patients can greatly benefit from incorporating relaxation training in their holistic care.

Maintaining subjective well-being in the context of multiple sclerosis (MS): An interpretative phenomenological study

Reynolds, F.; Brunel University, UK

Background: Previous studies show that cognitive strategies (e.g. positive reframing and reprioritising) assist coping and adaptation with chronic illnesses. This study explored the interplay between cognitive and other strategies in preserving subjective well-being in MS.

Methods: Twenty women participated, with >5 years experience of MS. Qualitative interview accounts were subjected to interpretative phenomenological analysis.

Findings: Participants described positive well-being as achievable despite 'slack days and black weeks'. In addition to cognitive strategies, participants derived well-being from expressing core aspects of self through positive daily activities. This depended upon discovering their passions and aspirations; cramming valued activities into 'good' days; using time well; finding fresh challenges to replace those lost to illness; using strengths (e.g. creativity); making a difference to others.

Discussion: MS is a challenging condition. Knowing how women with lengthy experience of MS achieve positive well-being may contribute to more effective support of those in the early stages post-diagnosis.

Effects of engagement in interventions on their outcomes: Evidence from a randomized controlled trial

Richert, J.,* Lippke, S., Schwarzer, R., & Ziegelmann, J.P.; *Freie Universität Berlin, Germany

Background: Investigating the relationship between engagement (time that participants spend on an intervention) and the effects of stage-matched interventions to promote physical activity.

Methods: $N=427$ participants were randomized to stage-matched, stage-mismatched or control treatments to promote physical activity. Multivariate analyses were used to assess changes in social-cognitive variables and behaviour after 4 weeks.

Findings: Only when the intervention was stage-matched, higher engagement was associated with better treatment outcomes ($M=30.03$ minutes physical activity).

Discussion: Interventions are most effective when they are stage-matched and when engagement is high. Health interventions should be designed to increase engagement and matched to the stage of the recipient.

Emotion recognition and alexithymia in females with sub-clinical eating psychopathology

Ridout, N.,* Thom, C., & Wallis, D.J.; *Aston University, UK

Background: The aim of this study was to establish if emotion recognition deficits observed in clinically diagnosed eating disorders generalise to sub-clinical eating psychopathology.

Methods: Females with high ($n=23$) and low ($n=22$) scores on the Eating Disorder Inventory (EDI) were assessed on their ability to recognise emotion from videotaped social interactions.

Findings: The high EDI group was significantly impaired in emotion recognition relative to low EDI participants. This deficit was related to the degree of self-reported alexithymia and scores on the bulimia subscale of the EDI. High EDI participants also showed a specific deficit in the recognition of anger. This was related to scores on the body dissatisfaction subscale of the EDI.

Discussion: In line with eating disorder patients, individuals with sub-clinical eating psychopathology exhibit impaired emotion recognition. However, the nature of this deficit is dependent upon the type of eating psychopathology and the degree of co-morbid alexithymia.

Cardiac valve replacement surgery: How illness representations and mood interact to affect outcome

Rimington, H.,* Chambers, J., & Weinman, J.; Cardiothoracic Dept, Guys & St. Thomas's Hospitals

Background: As cardiac valve surgery has become safer, interest is increasing in optimising postoperative outcomes, such as quality of life (QOL) and exercise tolerance, and in identifying preoperative psychological predictors of recovery.

Methods: A prospective longitudinal cohort study of 225 patients undergoing first time valve replacement. SF-36 questionnaire, Hospital Anxiety and Depression Scale, Revised Illness Perception Questionnaire and 6minute walk test were administered preoperatively and one year postoperatively.

Results: Baseline depression and illness perceptions were significantly correlated with one year physical and mental QOL and walk distance. Perceived Consequences, Control, Coherence and Emotional Representations were the most consistent predictors of outcome. Structural equation modelling was used to examine the different ways in which cognitions and mood interact to influence post-operative outcome.

Conclusion: The results provide strong evidence for the role of depression and illness perception in recovery from cardiac valve surgery, and indicate the potential for early intervention.

War experiences and war-related distress among post-war Kosovo Albanians

Ringdal, G.I.,* Ringdal, K., & Simkus, A.; *Norwegian University of Science and Technology (NTNU), Norway

Background: The primary objectives of the study were to examine the effects of war experiences on war-related distress among people in Kosovo in late 2003, about four years after the war ended in June 1999.

Methods: Face-to-face interviews were used in a representative survey of 1.000 Kosovar Albanians. The questionnaire included 15 items on war-related distress and 24 items on war experiences.

Findings: The majority (about 84%) of the respondents reported war-related distress symptoms and about 4% reported all 15 symptoms. Direct war experiences had a stronger impact on war-related distress than indirect war experiences. The strongest predictor among crucial single experiences was being held prisoner of war.

Discussion: The high levels of war-related distress even four years after the end of the war may indicate the presence of PTSD, which may require psychological treatment and follow-up for many years to come.

Art from sexual abuse victims: An Interpretative Phenomenological Analysis

Rivera, L.E.* & Lizardi, E.; *Carlos Albizu University, USA

Background: The aim of the present study is to uncover symbols and their meaning on the drawings of survivors of sexual abuse.

Methods: Seven participants from a Mental Health Clinic Sexual Abuse Program were asked to make a drawing and were interviewed about its meaning during the psychotherapy process. Data was analyzed using Interpretative Phenomenological Analysis (IPA).

Findings: Two principal themes emerged: Worries and hopes. The researchers based their analysis on Jung's Psychoanalysis in an attempt to view the survivor's spontaneous creation as an expression of the individual inner experience and awareness of the self.

Discussion: We report that art might encourage insight and emotional catharsis in sexual abuse victims which has a positive impact in their sense of well being and control.

'Analytic' and 'emotional' information processing: Implications for bowel cancer screening communications

Robb, K.* & Wardle, J.; *University College London, UK

Background: Dual Process Theory proposes that information is encoded by two systems – analytic/rational and emotional/experiential – with individual variation in the balance between the two. We tested the prediction that adults with different amounts of formal education would differ in use of analytic and emotional processing of cancer information.

Methods: Data were from the UK Flexible Sigmoidoscopy Trial. Adults ($n = 10,650$) aged 55–64 were mailed information about the screening test. We assessed demographic characteristics and beliefs about the test. Rational processing was defined as endorsement of statements on test outcomes and emotional responses as endorsement of test procedures.

Findings: People with no educational qualifications were more likely to believe that the test would be embarrassing, worrying and frightening (emotional beliefs) ($p < 0.001$). People with educational qualifications were more likely to believe the test would reduce risk of cancer and be positive for health ($p < 0.05$).

Discussion: Existing cancer information is typically directed towards 'analytic' processing, but some groups may benefit from more emotion-based information to counteract negative emotional reactions.

Social cognitive predictors of sunscreen use in a portuguese youth sample

Rodrigues, A.,* Araújo-Soares, V., & Maia, A.; *Universidade do Minho, Portugal

Background: Sunscreen use (SU) in adolescents is suboptimal. It is important to analyse the determinants of this behaviour in order to promote effective interventions. This study aims at analyzing the prevalence of SU and explores its social-cognitive predictors. The theoretical basis was the TPB, the Prototype/Willingness Model and post-intentional processes (Action Planning and Coping Planning).

Methods: In a cross-sectional study a sample of 177 adolescents (Mage = 16.4) completed a questionnaire, which included measures on behaviour and social-cognitive variables. Descriptive Statistics and Hierarchical Regression were used.

Findings: 57% of students were infrequent users. 35% of the variance explained on intentions to use sunscreen was predicted by attitudes, descriptive norms and prototype similarity. For SU, the model tested explained 42% of the variance and intention was the most consistent predictor.

Discussion: Promoting SU will depend on enhancing positive attitudes supported by significant others, and on increasing the willingness to acquire sunscreen users' characteristics.

An internet discussion forum as a self management resource for people affected by cancer

Roffe, L.* & Foster, C.; *University of Southampton, UK

Background: To better understand use of a discussion forum to inform development of support for people affected by cancer by: (A) Describing and categorising the content of posts to an internet discussion forum. (B) Exploring the use of the discussion forum as a resource for supporting self management (C) Exploring the benefits and challenges associated with accessing support online.

Methods: Qualitative, exploratory, cross sectional observation study, carried out in three phases: Phase I: Content analysis of 784 topic titles Phase II: Framework approach to analysis of 31 opening posts topics Phase III: Case study approach; thematic analysis of posts to one topic.

Findings: Contributors used the forum to contact others and to seek and share experiences, advice and support. Emotional, informational and instrumental social support was exchanged. Benefits included self expression, exchanging experiences and receiving support.

Discussion: Further research is necessary to develop and evaluate and self management through online resources.

Illness representations of HIV/Aids – A comparison between South-African and German patients

Salewski, C.* & Bleher, J.; *University of Applied Sciences Magdeburg, Germany

Background: The study aims at examining differences in illness representations of patients with HIV/Aids in South-Africa and Germany.

Methods: HIV/Aids-patients in South-Africa ($n=72$) and Germany ($n=62$) filled in an HIV/Aids-specific version of the IPQ-R. A new subscale, (positive) meaning of the illness was included. Before assessment in South-Africa, the questionnaire was validated in a focus group of African patients. Furthermore, illness duration and kind of treatment were assessed.

Findings: Mean illness duration was significantly higher in Germany than in South-Africa (72 versus 36 months). South-African patients scored significantly lower on symptom report, emotional representations, beliefs about consequences, coherence and control. German patients ascribed significantly more meaning to their illness. The two groups also differed significantly in illness attributions.

Discussion: Illness representations of the two groups showed considerable discrepancies which reflect cultural differences regarding the understanding of HIV/Aids as well as differences in access to effective treatments.

Psychological variables and quality of life in portuguese patients with Amyotrophic Lateral Sclerosis (ALS)

Sampaio, R.,* Poinhas, R., McIntyre, T., & Winck, J.C.; *Universidade do Minho, Portugal

Background: Psychological factors and variables seem to affect ALS progression, with greater psychological well-being associated with a reduced death risk and greater life expectancy.

Background: To investigate the relationship between the experience of suffering, anxiety and depression, and perceived Quality of Life in ALS patients.

Methods: Consecutive sample of 23 patients, 57.1% male (Mage = 57.9) recruited from a hospital in northern Portugal. The measures were Portuguese versions of the HADS, SF-36 and Subjective Experience of Suffering in Illness Inventory.

Findings: Data indicate significant levels of anxiety ($M = 10.43$), depression ($M = 9.70$) and perceived suffering ($M = 3.34$). The general health dimension of quality of life correlates with anxiety ($r = 0.71$), depression ($r = 0.55$), total suffering ($r = 0.61$), psychological ($r = 0.90$), existential ($r = 0.84$) and socio-relational suffering ($r = 0.68$).

Discussion: ALS patients present significant levels of anxiety, depression and illness related suffering, which appears to be associated with the subjective evaluation of quality of life.

Emotional processing and chronic pain

Santonastaso, M.,* Baker, R., Thomas, P., & Gremigni, P.; *Bournemouth University, UK

Background: The Emotional Processing Scale (EPS) measures aspects of input, experience and expression of emotions. It is based on Baker's (2000) development of Rachman's (1980) emotional processing (EP) model. This study hypothesises that chronic-pain patients process their emotions differently from healthy controls.

Methods: The EPS 25-item, TAS-20, and CBA-2.0 anxiety and depression subscales were administered to 140 chronic-pain outpatients (mean age 37, 33% male) and 140 controls (mean age 36, 36% male).

Findings: The chronic-pain sample had significantly higher mean scores on most of the 5 EPS subscales (total $p = 0.0005$, suppression $p = 0.53$, avoidance $p = 0.001$, unregulated $p = 0.0009$, unprocessed emotion $p = 0.01$, and impoverished emotional experience $p = 0.002$), and higher mean anxiety ($p = 0.008$) and depression ($p = 0.0002$). Higher mean scores on TAS-20 emerged only for the F1 factor ($p = 0.02$).

Discussion: The different EP styles between patients with chronic-pain and healthy controls may be useful in helping to direct psychological interventions in this group of patients.

Deficits in emotional processing and gastrointestinal disorders

Santonastaso, M.,* Gremigni, P., Baker, R., & Thomas, P.; *Bournemouth University, UK

Background: Specific deficits in emotional processing (EP) may be associated with medical and psychological conditions (Rachman 1980). The Emotional Processing Scale (EPS) (Baker et al., 2000) operationalizes this concept. The study aims to compare deficits in EP between gastrointestinal (GI) patients and healthy controls.

Methods: The EPS, a 25-item 5-factor scale, was administered to 95 GI outpatients (mean age 39, male 43%) and 122 healthy controls (mean age 39, male 46%). Anxiety and depression were also assessed.

Findings: GI patients showed worse EP than controls for most EPS subscales: Total ($p=0.009$); suppression ($p=0.48$); avoidance ($p=0.001$); unregulated ($p=0.02$); unprocessed emotion ($p=0.008$); impoverished emotional experience ($p=0.04$). Higher mean anxiety ($p=0.0002$) and depression ($p<0.0001$) also emerged in the GI group.

Discussion: Assessment of EP deficits may help to better understand the mechanism linking emotion to both physical and mental health and may provide information to be used within the psychotherapeutic process.

Pain self-efficacy, pain-related anxiety and attentional bias in chronic pain and control participants

Saunders, J.* & Tijou, I.; *Southampton Solent University, UK

Background: The influence of pain self-efficacy and pain-related anxiety on chronic pain and control participants' attentional bias was investigated.

Methods: The IVs were pain status (chronic pain (CP), control (C)); pain self-efficacy; and pain-related anxiety. The DV was attentional bias. 52 participants completed chronic pain self-efficacy scale (modified); pain anxiety symptoms scale; and a pain-related and neutral Stroop. Data was analysed using *t*-tests and regressions.

Findings: The mean pain-related anxiety for the control group was significantly higher than the chronic pain group ($t(50) = -1.71, p < 0.05$). Pain self-efficacy, pain-related anxiety and pain status did not predict attentional bias ($F(3, 51) = 0.18, p = 0.91, r^2 = 0.01$). Subscales of pain self-efficacy and pain-related anxiety did not predict attentional bias in either group (CP: $F(7, 20) = 0.82, p = 0.59, r^2 = 0.31$; C: $F(7, 30) = 1.42, p = 0.25, r^2 = 0.30$).

Discussion: Self-efficacy and pain-related anxiety did not predict attentional bias. Attentional bias may not be an efficacious target for chronic pain interventions.

Self-care activities in patients with chronic obstructive pulmonary disease

Scharloo, M.,* Kaptein, A.A., Schlösser, M., Pouwels, H., Bel, E.H., Rabe, K.F., & Wouters, E.F.M.; *Leiden University Medical Center, The Netherlands

Background: Patient behaviour plays a crucial role in the management of COPD, but there has been little systematic evaluation of the factors that influence the self-care strategies patients use. This study examines the role of patients' beliefs in determining self-reported behaviour.

Methods: In 171 COPD outpatients beliefs in the health benefit of self-care activities and actual self-care behaviour were measured. Regression analyses were conducted to evaluate the degree to which beliefs predicted variance in self-care behaviour.

Findings: Most patients (>70%) do believe that self-care activities are helpful in maintaining health. Self-care beliefs explain variance in most of the self-care activities (ranging from 8% for "giving up smoking" to 48% for "taking annual flu shot"). However, for some activities (e.g. "doing physical exercise" – 0%), the results suggest that convincing patients that these activities are important will not result in the actual performance of the behaviour.

Discussion: Additional factors suggested in previous research will be discussed.

The smokefree class. A randomised controlled trial of a classroom intervention to prevent smoking

Schmid, H.; University of Applied Sciences Northwestern Switzerland, Switzerland

Background: Early onset of smoking is the strongest single predictor for continued regular smoking. The Smokefree Class Competition (SFC) is a school-based smoking prevention project, with the idea that school classes who decide not to smoke for a period of six months can win a prize.

Methods: A total of 179 school classes with 3,295 7 and 8 graders participated. Classes were randomly assigned to a control and an intervention group. Indicators of smoking, well-being, passive and active violence, and classroom climate were collected from students and teachers at pre-, post-test and follow-up.

Findings: The desire to smoke is reduced and more information on smoking is given in intervention group compared to the control group. However, no differences in students smoking behaviour, negative peer pressure and violence were found.

Discussion: Prevention is especially indicated in classes who stopped participation in the competition because of too many students taking up smoking (17%).

Are craving, weight gain and increasing complaints barriers of maintenance of abstinence after stopping smoking?

Schoberberger, R.* & Zeidler, D.; *Medical University of Vienna, Austria

Background: Many smokers are often concerned that their craving for cigarettes will continue also after they have stopped smoking. Others have fear to gain weight and some have the feeling that physical complaints increase.

Methods: To find answers to that possible barriers for stop smoking the data of follow-up patients ($n=100$) and participants of regular monthly meetings ($n=180$) are analyzed. All the smokers had been classified as heavy nicotine dependent and therefore underwent inpatient smoking cessation treatment.

Findings: Craving is very significantly reduced among successful participants (ex-smokers) already during the first six months after therapy. Also a significant improvement concerning complaints is seen among ex-smokers and about 50% of ex-smokers do not have a serious problem with weight gain.

Discussion: Smokers in preparation phase could be motivated by presenting them the scientific proved results that physical complaints improve and craving is significantly reduced in the first half year after quitting. But it is to take into consideration that for some patients craving in certain situations could arise also after a longer period of abstinence and weight gain could also be a problem. For these patients we have to tailor the behaviour modification therapy as well as the nicotine replacement therapy for their certain needs.

Partner behaviour and self-management in patients with diabetes

Schokker, M.C.,* Sanderman, R., Links, T.P., Keers, J.C., Bouma, J., & Hagedoorn, M.;

*University Medical Center Groningen, The Netherlands

Background: Little is known about the influence of the partner on patients with diabetes. Therefore, in this cross-sectional study we examined associations between overprotective partner behaviour and patient outcomes. We tested whether these associations are mediated by patients' diabetes-specific self-efficacy (i.e., whether they feel competent to perform the required behaviours).

Methods: Two-hundred-and-seventy patients completed measures of diabetes-related distress, self-management behaviours, and diabetes-specific self-efficacy. Partners reported to which degree they engaged in overprotective behaviours.

Findings: Regression analyses revealed that patients with more overprotective partners reported less adherence to dietary recommendations ($r = 0.21$), less frequent blood-glucose testing ($r = 0.19$), and more distress ($r = 0.25$). These associations were mediated by diabetes-specific self-efficacy (Sobel tests, $p < 0.001$).

Discussion: The findings suggest that the partner's behaviour influences patient's self-management outcomes through cognitions. Therefore, diabetes interventions should perhaps take into account not only patients' behaviour, but partners' behaviour as well.

Designing theory of planned behaviour questionnaires: A priori selection of items with good psychometric properties

Schröder, C.* & Johnston, M.; *University of Aberdeen, UK

Background: Different operationalisation protocols for development of TPB questionnaires are used but do not guarantee good psychometric properties. This study investigates items that have been used repeatedly in terms of their contribution to internal consistency of the subscales.

Methods: Secondary analysis was performed on data using the TPB in 14 different samples ($N = 2355$), 5 populations of patients, 2 populations of general public, 7 populations of health professionals. The Cronbach's alpha of intention and perceived behavioural control (PBC) subscales were computed and the contribution to internal consistency of each item was investigated.

Findings: 16 intention and 30 PBC items were identified and assessed in 26 measurement occasions. Cronbach's alpha for intention subscales ranged from 0.26 to 0.93 and for PBC from 0.50 to 0.96.

Discussion: A preliminary bank of PBC and intention items was created. Items that are likely to produce measures of good internal consistency could be identified.

Quality of life, multimorbidity and personal resources: What you've got and what you may need

Schüz, B.,* Wurm, S., Warner, L.M., & Tesch-Römer, C.; *German Centre of Gerontology, Germany

Background: With increasing age, multimorbidity becomes a central health problem and jeopardises quality of life (QoL). There has been little systematic research on the role of personal and social resources for QoL depending on multimorbidity.

Methods: In a nation-wide, representative sample (German Ageing Survey, $N = 3,084$, age 40–85), Latent Class Analysis identified 4 classes of individuals according to illnesses: None ($n = 802$), musculoskeletal ($n = 1,719$), multiple cardiovascular/metabolic ($n = 338$) and multiple age-related ($n = 225$). Classes were examined as moderators of the resources-QoL relation in multiple group regression analyses.

Findings: The role of resources for QoL differed between classes: Self-esteem predicted QoL best for multiple cardiovascular/metabolic diseases ($\beta = 0.32^{**}$), in other classes, satisfaction with relationships (β s 0.11^{**} to 0.22^{**}) and living standard (β s 0.28^{**} to 0.38^{**}) predicted QoL best.

Discussion: Differential prediction patterns of resources suggest differential sources for QoL depending on multimorbidity. For interventions targeting autonomy and QoL, this implies different strategies according to multimorbidity status.

Social interaction moderates the relationship between depressive mood and heart rate variability: Evidence from an ambulatory monitoring study

Schwerdtfeger, A.* & Friedrich, P.; *Johannes Gutenberg-University Mainz, Germany

Background: Depressive mood is related to lower heart rate variability (HRV), thus increasing cardiovascular risk. However, little is known about situational factors that might moderate this relationship.

Methods: We conducted a 22-hour ambulatory monitoring study with 60 participants. Depression was assessed by questionnaire. ECG, physical activity and negative affect (NA) were recorded throughout one day via portable monitoring devices.

Findings: Depression was related to elevated NA and higher heart rate. Moreover, there was a tendency toward lower HRV in individuals with depressive mood. This association, however, was moderated by social context. When depressive participants were alone they evidenced lower HRV and higher NA but not when they were engaged in social interactions with a partner, family members or friends.

Discussion: These findings suggest that the relation between depression and cardiac autonomic control can be altered by social interaction, thus possibly buffering adverse health effects.

Emotion perception and activity limitations following stroke; A pilot study

Scott, C.,* Phillips, L., Johnston, M., MacLeod, M.J., & Whyte, M.; *University of Aberdeen, UK

Background: Emotion perception (EP), the ability to recognise and decode emotional cues from those around us, directly influences many aspects of daily life, including social interactions and communication with other people. This pilot studies investigates whether difficulties in EP following stroke predict greater activity limitations and participation restrictions.

Methods: 19 participants one year post stroke were recruited and assessed on various measures of EP, activity limitations (Modified Functional Limitation Profile mFLP), and social participation (mFLP and WHOQoL). Correlational analysis was conducted on the data.

Findings: Substantial correlations between EP and functional outcome were found. A dynamic measure of EP correlated highly with the physical and psychosocial domains of the mFLP ($r = -0.606$ and -0.642), and with psychological, physical and environmental domains from the WHOQoL, (rs from 0.572 to 0.774).

Discussion: These findings demonstrate that EP difficulties may have substantial implications for functional and social outcome in stroke survivors.

Information requirements about cancer through leaflet/booklet when attending mobile cancer information units

Scott, I.,* Foster, C., & Addington-Hall, J.; *University of Southampton, UK

Background: Evaluate visitors' information requirements about cancer through leaflet/booklet when attending Mobile Cancer Information Units (Mobiles).

Methods: Cross-sectional descriptive study. The number of visitors to the Mobiles was collected by staff using a headcount. At the end of each day staff conducted a stocktake which recorded leaflets taken.

Findings: In total 13,051 visited the Mobiles. 18,895 leaflets were taken by visitors, some took more than one leaflet. The most popular leaflets, taken by 8,696 visitors, fell into the category prevention/detection. The least popular leaflets fell into understanding/particular groups categories (Welsh, visually impaired, ethnic minorities) 1,810 collectively.

Discussion: Volume of prevention/detection leaflets taken illustrates that the Mobiles are helping in the fight against cancer. However low uptake of literature tailored to particular groups demonstrates that the information may not be accessible. Research implications: Further research is needed to determine how access to information can be improved for diverse audiences.

Encouraging early presentation of oral cancer in a high risk group

Scott, S.E., Gurk, M.M., Weinman, J., & Grunfeld, E.A.; King's College, London

Background: Fifty percent of patients with oral cancer are diagnosed with advanced stage disease. This study aimed to evaluate a theory-driven intervention to promote early detection of oral cancer.

Methods: Participants in a leaflet group ($n=30$) read written information on how to spot mouth cancer early. Participants in a one-to-one group ($n=30$) read the leaflet, were shown the procedure of mouth self-examination (MSE) and discussed ways of detecting oral cancer early. Participants completed pre-, post-, and 1-month follow-up questionnaires assessing intention and confidence to seek help for signs of oral cancer, knowledge of oral cancer, anxiety, self-efficacy and intentions regarding MSE.

Findings: Following the intervention, both groups demonstrated more accurate knowledge of oral cancer, increased intention and confidence seek help, and increased intention and confidence to perform MSE. Neither intervention raised anxiety.

Discussion: A brief, low cost intervention may be useful tool to encourage early detection of oral cancer.

The relationship between social intelligence and alcohol use among adolescents by gender

Sebena, R.,* Orosova, O., Van Dijk, J.P., & Gajdosova, B.; *PJ Safarik University in Kosice, Slovak Republic

Background: The aim of this study was to investigate how social intelligence contributes to alcohol use among young adolescents by gender.

Methods: 3630 adolescents (mean age 14.3, 49.1% boys) from elementary schools in Slovakia completed three subscales (social information processing, social skills, social awareness) of the Tromso Social Intelligence Scale. Health-risky behaviour was measured using questions about alcohol consumption and alcohol drunkenness in the previous 4 weeks. Logistic regression was calculated separately for gender.

Findings: Higher levels of social skills were associated with higher probability of alcohol consumption among boys ($p<0.05$) and girls ($p<0.001$) and also with alcohol drunkenness

among girls ($p < 0.05$). An inverse influence of social awareness on alcohol consumption was found among boys ($p < 0.01$) and girls ($p < 0.05$).

Discussion: Social intelligence seems to be related to drinking behaviour. In designing intervention programs it is important to be aware of this.

Are emigrants from Lithuania a special group of citizens: Differences of physical & mental health symptoms

Seibokaite, L.,* Endriulaitiene, A., & Buksnyte, L.; *Vytautas Magnus University, Lithuania

Background: The aim of this study was to compare the frequency of physical and mental health symptoms, subjective evaluation of health status, level of depression and stress between Lithuanian citizens and Lithuanian emigrants living in Ireland.

Methods: A cross-sectional survey with self administered questionnaire was conducted in a sample of Lithuanian adults living in a small urban regions of Lithuania (142 subjects) and Ireland (101 subjects). We used subjective health status measurement, health symptom checklist, Reeder stress scale, Beck's depression scale.

Findings: The results showed that Lithuanian citizens have poorer subjective evaluation of health status, higher levels of stress and depression, more physical and mental health symptoms than emigrants. More differences were revealed for female than male.

Discussion: The findings may reflect the poorer health care and life conditions in Lithuania or the threat that healthier citizens are more prone to emigration. Also emigration might be the coping strategy with difficulties of life and health.

Does consulting a health professional influence psychological distress in parents of severely food allergic children?

Semper, H.* & Knibb, R.C.; *De Montfort University, UK

Background: Food allergy in children can have a profound affect on psychological distress in parents. We aimed to assess whether seeing a health professional regarding food allergy was associated with reduced stress, depression or better coping skills.

Methods: In a cross-sectional study 157 parents of food allergic children (Anaphylaxis Campaign members) completed a study-specific questionnaire, the GHQ-12; COPE; and PSS.

Findings: There was no significant difference in stress levels ($p > 0.05$), or depression ($p > 0.05$) between parents who had consulted a health professional and those who had not. There was a significant reduction in maladaptive coping in parents who had consulted a clinical consultant ($F(1, 155) = 8.882, p < 0.05$).

Discussion: Consulting a health professional is not associated with reduced stress or depression in parents. Coping strategies were positively influenced only by visiting a consultant. Further examination of the communication of allergy information in consultations should be investigated to see if we can reduce this distress.

Physical disability, handicap and depression in patients with work-related accidents

Senra, H.,* Oliveira, R.A., Aleixo, M.J., Tavares, E., Laíns, J., Fragoso, M.J., Barbosa, F., & Silva, C.V.; *Instituto Superior de Psicologia Aplicada, Lisbon, Portugal

Background: The main aim of current work is to study health problems and social participation levels at patients with physical disability by suffered multiple work-related accidents.

Methods: We studied 514 patients randomly selected from ANDST database. The assessment covered: A general characterization of population using General Accident Related Questionnaire; 5 dimensions of social participation and handicap (Physical Independence; Mobility; Occupation; Social Integration and Economic Self-Sufficiency), using CHART Test; and depression levels using CES-D test.

Findings: Results show low levels of disability; most of patients had returned to the work, with high levels of handicap and low levels of social participation. 39% of patients show high depression levels. We also find a very significant and negative correlation between social participation and depression levels.

Discussion: These results disclose to the importance of psychological variables like self-perception of illness and disability at the recovery and rehabilitation process.

Depression levels in physical disability patients by work-related accidents

Senra, H.,* Oliveira, R.A., Aleixo, M.J., Tavares, E., Lains, J., Fragoso, M.J., Barbosa, F., & Silva, C.V.; *Instituto Superior de Psicologia Aplicada, Lisbon, Portugal

Background: The main aim of current work is to study Depression levels at patients with physical disability by suffered multiple work-related accidents.

Methods: We studied 514 patients randomly selected from ANDST database. The assessment covered a general characterization of population using General Accident Related Questionnaire, and depression levels using CES-D test.

Findings: Results show 39% of patients with Depression. In patients with permanent disability the depression levels were slightly higher than patients with temporary disability. Depression levels show no statistical differences between diagnostic type (one or more injuries suffered), as well as by time passed since injury. Although we found a very significant variance, at depression levels, between patients who searched specialized aid like psychotherapy, psychologist, group therapy, or psychiatrist.

Discussion: We concluded that depression seems like a chronic problem at disability patients, and the type of disability, as well as diagnostic type, has lower importance for depression levels than aid search behaviour.

Adding carbon-monoxide feedback to brief stop smoking advice – evaluation of cognitive and behavioural effects

Shahab, L.,* West, R., & McNeill, A.; *University College London, UK

Background: Smoking remains a major public health concern. Biomarker feedback may improve risk communication and increase the effectiveness of smoking cessation interventions. This study evaluated a novel intervention combining carbon-monoxide feedback with brief quit advice.

Methods: Smokers were randomized to receive brief advice ($N=79$) or brief advice and biomarker feedback ($N=81$). Beside demographic characteristics, cognitive measures (perceived threat and efficacy, quit intention) were assessed at baseline and after the intervention, one day later. Quit intentions and smoking status were assessed at 6 months follow-up.

Findings: The intervention increased perceived threat ($t(151)=2.3, p=0.023$) and quit intentions ($t(151)=2.9, p=0.004$) in the short but not long term. There were no group differences in cessation rates; however, log-linear analysis revealed a three-way effect between smoking, self-efficacy and intervention ($\div 2(1)=4.9, p=0.027$): The intervention increased cessation only among those with high self-efficacy.

Discussion: This study shows biomarker feedback can be effective, but its cognitive and behavioural impact is short-lived and modified by self-efficacy.

“If you delve into it too deeply ... you haven’t got a clue how to interpret it”: Accounts from health professionals and newly diagnosed patients with type 2 diabetes

Shaw, R.,* Ockleford, E., & Dixon-Woods, M.; *Aston University, UK

Background: We know information provision is crucial in health management but with growing sources available, e.g. the internet as well as family and friends, patients can become overwhelmed or unsure how to interpret what they find.

Methods: We conducted individual semi-structured interviews with 36 patients newly diagnosed with diabetes and 11 health professionals. Transcripts were analysed using the constant comparison method.

Findings: Two sorts of patients were identified: Those accessing multiple information sources – mavens; and those preferring one account only. Mavens were proactive, purposively seeking information independently. The one account only group reflected the traditional patient, preferring a didactic approach. Health professionals had experience of both groups but expected mavens to be younger and traditional patients older.

Discussion: Results indicate growing significance of the patient-as-consumer, actively seeking information from multi-media sources alongside the retained importance of health professional advice. These contrasting patient identities have clear implications for practitioner-patient communication, information provision and validity.

Implicit and explicit measures of optimism are differentially related to pain

Sheffield, D.* & Kirkman, A.; *Staffordshire University, UK

Background: Optimism has been related to peoples responses to pain. Recently, it has been argued that implicit measures tap automatic processes that are related to health indices including pain.

Methods: Thirty undergraduate students (22 women; mean (SD) age = 23 (6) years) completed Life Orientation Task-Revised (explicit optimism), an Implicit Association Test for optimism and a cold pressor task. Participants reported measures of pain intensity every 20 seconds; duration was also recorded.

Findings: Explicit optimism was only related to pain intensity at 20 seconds ($r=0.40, p<0.05$). Implicit optimism was related to pain intensity at 20 seconds ($r=0.40, p<0.05$) and 40 seconds ($r=0.43, p<0.05$), and to pain duration ($r=0.43, p<0.05$). Implicit and explicit measures of optimism were unrelated.

Discussion: Both explicit and implicit optimism were related to pain reporting but only implicit optimism was related to pain duration. This suggests that implicit processes are important determinants of pain behaviour.

Being 'at-risk' for developing cancer: Cognitive representations and emotional outcomes

Shiloh, S.* & Drori, E.; *Tel Aviv University, Israel

Background: This study investigated how cognitive representations regulate affective outcomes of being 'at-risk' for cancer.

Methods: Representations of vulnerability to cancer and causal attributions for cancer were measured in 4 groups: Women identified as carriers of mutations in breast/ovarian cancer genes BRCA1 BRCA2 ($n = 33$), habitual smokers ($n = 65$), x-ray technicians ($n = 66$), and an average-risk group ($n = 85$).

Findings: Group comparisons indicated that despite differences in awareness of their risk status and perceived vulnerability to cancer, the groups did not differ in health anxiety, cancer worry interference, and self-assessed health. Further findings from regression analyses suggested that motivated reasoning processes were potential strategies used by individuals at-risk to regulate levels of psychological distress. Denial and unrealistic optimism were found among smokers, and self-enhancement through self-assessments of health and defensive discounting of cancer causal attributions were found in the genetically susceptible group.

Discussion: These findings highlight the role of cognitive representations in adjustment to being at-risk for cancer.

Forms of childhood adversity and obesity: The relation between child abuse and PTSD

Silva, S.* & Maia, A.; *University of Minho, Portugal

Background: Adverse childhood experiences (child abuse, dysfunctional family, neglect) increases the vulnerability to physical and mental problems in adulthood. The aim of our work was to compare obese and non obese subjects and in the prevalence of child and adult adversity experiences and the relation between these experiences and PTSD.

Methods: Seventy-five bariatric surgery candidates and 78 non obese filled Social-demographic, Life History Questionnaire and PTSD Scale.

Findings: 73% of the obese participants report family dysfunctional, 60% child abuse and 60% neglect experiences. 17% non obese subjects report dysfunctional family, 16% child abuse and 11% neglect experiences. Obese subjects report significantly more childhood adverse experiences and traumatic events in adulthood, and have more PTSD. In obese dysfunctional family and child abuse were positively related with PTSD, explaining 36% of PTSD variance.

Discussion: These results should be taken in consideration in the treatment of this subjects and are an important argument to re-think prevention programs.

The importance of work characteristics and work-family conflict on nurses' health distress

Simões, C.,* McIntyre, T., & McIntyre, S.; *Minho University, Portugal

Background: This study investigates the relationship between family-work and work-family spillover on nurse's health distress. The role of coping confidence will also be explored.

Methods: The sample consists of 100 female hospital-based nurses, from northern Portugal. Participants were assessed by the "Work-Family Conflict" scales; the G.H.Q-12 to measure health distress and the Brief Personal Survey (BPS-R), to assess distress and coping.

Findings: Data show that work-family conflict (WFC) and family-work conflict (FWC) are positively correlated with health distress ($r_{WFC}=0.34$; $r_{FWC}=28$). WFC is also positively correlated with physical complaints ($r=0.33$) and pressure/overload ($r=0.29$). FWC correlates negatively with existential resources (-0.36). Coping confidence is negatively correlated with health distress (anger/frustration responses: $r=-0.43$; guilt: $r=-0.36$).

Discussion: These findings point to the importance of reducing work stress and making work demands more compatible with family life, which must be considered in occupational health promotion programs.

Cognition and mood in healthy older European adults: The Zenith Study

Simpson, E.E.A.,* Maylor, E., McConville, C., Rae, G., Stewart-Knox, B., Secker, D.-L., Andriollo-Sanchez, M., Polito, A., & O'Connor, J.-M.; *University of Ulster, UK

Background: To determine the relationship between positive and negative affect and cognitive function in healthy older European adults.

Methods: This is a multi-centre prospective intervention study looking at 387 healthy community based adults aged 55–87 years from centres in France, Italy and Northern Ireland. Baseline data will be reported here. Cognition was assessed using the Cambridge Automated Neuropsychological Test Battery (CANTAB), employing tests of visual memory, working memory, and attention. Repeated measures of Positive and negative affect were obtained using PANAS.

Findings: Pearson's bivariate correlations identified associations between mood and cognitive function. Age and Gender differences in these associations were examined.

Discussion: The implications of these results are discussed in relation to health quality of life in older adults.

Perceptions of support systems and barriers to diabetes management in British South Asians and Whites

Singh, H.,* Cinnirella, M., & Bradley, C.; *Royal Holloway, University of London, UK

Background: To explore support systems and barriers to diabetes management (DM) in a sample of British South Asian (BSA) and British White (BW) diabetes outpatients from Hillingdon Hospital.

Methods: Semi-structured interviews were conducted with 12 BSAs (men=6, women=6; Type 1=4, Type 2=8) and 8 BWs (men=4, women=4; all Type 2). Interviews were tape recorded and transcribed verbatim. Interpretative Phenomenology Analysis was conducted on the data.

Findings: Social stigma attached to diabetes and social pressures surrounding food were amongst the chief barriers for BSAs. Diet management and inconveniences surrounding insulin injections were reported as problematic aspects of DM by BWs. Close family constituted a primary support system for BSAs while BWs usually appreciated support from their hospital health-care teams more than other support networks.

Discussion: Understanding patients' experiences of managing diabetes will help to individualise diabetes management and is likely to improve diabetes outcomes.

Moderator effects of planning on the TPB-physical activity relationship over one academic year

Skår, S.,* Sniehotta, F.F., & Molloy, G.J.; *University of Aberdeen, UK

Background: This study examined whether action planning (AP) coping planning (CP) moderate the relationship between theory of planned behaviour (TPB) variables (intentions and perceived behavioural control [PBC]) and physical activity (PA) over one academic year.

Methods: 1418 students participated in an online longitudinal survey with baseline (October 2005), Time2 (November 2005) and Time3 (May 2006) measures. Participants completed TPB and planning constructs at baseline and Time2. PA was measured at all time-points (self-report). Hierarchical regressions with intentions/PBC (Step1), AP/CP (Step2), and interaction terms between intention/PBC*AP/CP (Step3) were performed.

Findings: Baseline AP and CP moderated the PBC-PA relationship ($R^2 = 0.008$; $p < 0.05$) at Time 2. However, AP and CP at Time 2 did not moderate PBC-PA or intention-PA relationships at Time 3.

Discussion: AP and CP can have a moderating effect on the relationship between PBC and PA in University students.

Vital exhaustion as a predictor of quality of life among cardiac patients

Skodova, Z.,* Van Dijk, J.P., Nagyova, I., Rosenberger, J., Vargova, H., Sudzinova, A., Studencan, M., & Reijneveld, S.A.; *University of PJ Safarik, Slovakia

Background: Vital exhaustion is a significant risk factor contributing to coronary heart disease, as well as a predictor of worse prognosis. The aim of our study was to explore the impact of vital exhaustion on health-related quality of life (HRQL) among cardiac patients.

Methods: We interviewed 409 patients referred for coronary-angiography. Mental and physical dimensions of SF36 were used for measuring HRQL, Maastricht interview for vital exhaustion, and GHQ28 subscale for depression. Functional status was assessed as a combination of NYHA and CCS. Data were analyzed using multiple linear regressions.

Findings: In the regression model (with age, gender, functional status, and depression as possible confounders), both mental and physical dimensions of HRQL were significantly predicted by vital exhaustion (total explained variance 34.4% and 29.7%; R^2 change for vital exhaustion 9.4% and 4.0% respectively).

Discussion: Vital exhaustion is a significant predictor of health-related quality of life among patients with coronary heart disease.

The development and validation of the Heuristic-Systematic Processing Questionnaire (HSPQ)

Smerecnik, C.M.R.,* Mesters, I., De Vries, N.K., & De Vries, H.; *Universiteit Maastricht, The Netherlands

Background: Although dual process models, such as the Heuristic-Systematic Model, are increasingly being used to understand risk perceptions, to date no validated questionnaire to measure systematic versus heuristic processing exists.

Methods: Experimental test-retest design in which type of processing (heuristic versus systematic) was manipulated for validation purposes with a two week interval for reliability purposes ($n = 100$).

Findings: After deletion of items with floor or ceiling effects, low item-total correlation or low discrimination indices, the HSPQ had adequate reliability (Cronbach's $\alpha > 0.68$; ICC's > 0.66 ; r 's > 0.58) and good construct validity (all hypothesized relations in expected direction p 's < 0.001).

Discussion: Although several issues, such as standardization of scores, should still be investigated, the HSPQ appears to be a valid and reliable scale to measure information processing. As such, it may be a valuable asset to future research into the effect of risk communications on risk perception.

A systematic review of patient satisfaction with care in gastrointestinal cancer patients

Smith, A.,* Sevdalis, N., Koutantji, M., & Vincent, C.; *Imperial College London, UK

Background: Examine patient satisfaction with care in gastrointestinal cancer patients and identify where quality improvement initiatives are essential to improve care quality.

Methods: The search strategy retrieved 543 papers. Two reviews independently reviewed each abstract and discrepancies were dissolved through discussions. 37 papers were selected. A quality assessment was conducted.

Findings: Quality assessment found study quality was generally high. Overall patient satisfaction with care was high. Papers were only included if they used a quantitative measure to assess patient satisfaction, this gave the opportunity to select a validated measure that we can use in the next phase of this project.

Discussion: This review provides the foundations to a larger project to measure patient satisfaction and identify areas where quality improvement initiatives are essential to improve care quality. We also aim to compare the disparity between patient satisfaction and provider satisfaction and compare reported/experienced complications with actual reported complications.

Safety skills training programme

Smith, A.,* Adams, S., Long, S., & Vincent, C.; *Imperial College London, UK

Background: Develop a safety skills training programme for healthcare professionals. The programme will help identify safety issues, raise safety awareness and teach error recovery techniques. The programme is adaptable for all healthcare professionals.

Methods: Through a literature review, focus group sessions and interviews we identified key patient safety issues within the care of the elderly and surgery domains. Vignettes/scenarios were created from this.

Findings: A preliminary training programme was developed and delivered to 100 final year medical students. The programme was delivered by a clinician and a human factor specialist in a half day session. Evaluation of the course was extremely high.

Discussion: The training programme will be adapted in response to the evaluation comments. We have received a large grant to develop this training programme and after another preliminary session the programme shall be implemented to healthcare professionals.

Limitations to the reasoned action approach in behavioural science: A full-factorial experimental test of the theory of planned behaviour

Sniehotta, F.F.; University of Aberdeen, UK

Background: The Theory of Planned Behaviour (TPB) is the leading theory of health behaviour, yet supporting evidence is exclusively based on correlational research. This study aims to test the TPB experimentally.

Methods: Design: 2(behavioural-belief-intervention (BBI) or not)*2(normative-belief-intervention (NBI) or not)*2(control-belief-intervention (CBI) or not) factorial. $N=659$ university students were randomised to receive persuasive messages addressing their salient beliefs elicited in a prior study. Primary outcome: 2-months objectively recorded attendance to university sports facilities; secondary outcomes: Post-intervention TPB measures.

Findings: Main effects of the BBI on attitudes and of the NBI on subjective norm, PBC, attitudes and intentions ($F(1, 564=4.980; p=0.026)$) not mediated by changes in cognitions.

Discussion: While findings support the TPB's assumptions on intention formation, behaviour change results are not in line with the TPB, thereby questioning its leading role in behavioural science.

Psychophysiological variables in informal caregivers of drug/alcohol addicts

Soares, A.J.* & Pereira, M.G.; *University of Minho, Portugal

Background: Drug/Alcohol addiction affects family functioning including caregivers' well-being and physiological stress response. This study assessed depression, family coping and cortisol levels in that population.

Methods: 150 caregivers divided in 4 groups: (G1) addicts not in treatment, (G2) addicts abstinent less than 5 years, (G3) addicts abstinent for more than 5 years, (G4) control group. All participants completed: BDI (Beck et al., 1961), F-COPES (McCubbin et al., 1991) and Cortisol kits (Sarstedt, Germany).

Findings: G1 have the highest scores on Depression (Mean = 17.74; SD = 6.145) and the lowest in Family Coping (Mean = 90.43; SD = 14.37). Control group had the lowest scores on Depression (Mean = 6.11; SD = 4.49). G2 and G3 have higher AUCg (Mean = 32.75; SD = 14.86; Mean = 37.52; SD = 9.13) than G4 (31.39; SD = 4.89).

Discussion: Caregivers need help decreasing Depression and increasing Coping skills. Caregivers coping with acute stress G1 produce lower levels of cortisol while G2 and G3 produce higher levels than G4. Implications for health are addressed.

Health literacy – a concept map

Soellner, R.,* Lenartz, N., Huber, S., & Rudinger, G.; *Freie Universität Berlin, Germany

Background: Within our research project 'Health competence: Model development and validation' a comprehensive model of the concept of health literacy, which so far has received but little theoretical backing, will be developed.

Methods: To provide an insight into the internal structure of health competence a two-tiered online expert survey was conducted using the concept mapping method (Trochim, 1989). Participants were experts from health-related domains (psychology, medicine, educational sciences) and researchers with expertise in the field of competencies. The experts ($n>80$) were first asked to generate statements regarding the question 'What abilities and skills are necessary for health competent behaviour?' These statements (>200) had to be sorted into meaningful categories in the second step.

Findings: The experts' sorting matrices ($n=40$) were aggregated and analysed using multi-dimensional scaling and cluster analyses resulting in a multidimensional model of the concept of health competence.

Discussion: This preliminary model makes substantial contribution to conceptual clarification.

Predictability of cardiovascular risks by psychological measures

Solcova, I.* & Kebza, V.; *Czech Academy of Sciences, Prague, Czech Republic

Background: In the framework of preventive health programme directed to cardiovascular risks, a question of relation between personality characteristics and physiological parameters was addressed.

Methods: A sample of 162 subjects completed the survey concerning burnout, TABP, type D personality, BDI and other measures. Heart rate (steady and load condition) and HRV were recorded, and total cholesterol, HDL and LDL cholesterol were assigned.

Findings: Burnout appeared to be age-dependent at men. Burnout correlates with depression in men, and with hostility in women. There is negative association of burnout and blood pressure at both sexes. D-personality correlates with hostility and interpersonal sensitivity in both sexes. At men the D-personality relates to triglyceride level, at women to LDL level. When the sexes are taken together, the D-personality relates to WHR.

Discussion: We found interesting relationships within the complex of cardiovascular somato-physiological indicators, burnout, and type D personality. The intra-psychological relations were described.

The influence of Type D personality on prognosis in cardiovascular diseases: A meta-analysis

Spek, V.,* Denollet, J., & Schiffer, A.; *Tilburg University, The Netherlands

Background: The aim of this study was to synthesize research findings on the influence of Type D personality (high negative affectivity and the tendency to inhibit self expression in social interaction) on prognosis in cardiovascular diseases.

Methods: A meta-analysis of ten prospective studies regarding the influence of Type D personality on prognosis in cardiovascular diseases.

Findings: In the included studies, we found univariate odds ratios for worse prognosis of 2.2 to 8.2. The pooled mean univariate odds ratio was 3.5 (95% CI=2.6–4.5; $p < 0.001$). We found non-significant heterogeneity ($Q = 9.4$; $I^2 = 3.8$).

Discussion: Type D personality has a significant adverse effect on prognosis in cardiovascular diseases. These findings suggest that we may need to pay more attention to personality factors in cardiac research and practice.

NYHA class and Type D personality independently predict vital exhaustion in chronic heart failure patients

Spindler, H.,* Larsen, M.L., & Pedersen, S.S.; *University of Aarhus, Denmark

Background: Chronic heart failure (CHF) patients frequently complain of fatigue. We compared the influence of NYHA class, EF and Type D personality as predictors of fatigue in CHF patients.

Methods: We used vital exhaustion (VE) as a broader measure of fatigue and included 115 CHF patients, who completed the Type D Scale (DS14) at baseline, and the Maastricht Questionnaire (MQ) at baseline, 3, and 9 months.

Findings: NYHA class ($F(1) = 7.97$, $p = 0.01$) and Type D personality ($F(1) = 27.46$, $p = 0.05$), or the interaction term NYHA class by Type D ($ps > 0.05$).

Discussion: These results show that in addition to disease severity, personality may also influence the level of vital exhaustion in CHF patients.

Social inequalities and correlates of alcohol abuse among young adults: A population-based questionnaire study

Spitz, E.,* Baumann, M., & Chau, N.; Lorhandicap Group *University of Metz, France

Background: Alcohol abuse is a public health problem. This study assessed social disparities in alcohol abuse among young adults and whether they were mediated by sex, low education, living alone, income, poor health, family support, personality traits, and disabilities.

Methods: 1,905 people aged 18–34, randomly selected in north-eastern France completed a post-mailed questionnaire. The data were analyzed via logistic models.

Findings: Alcohol abuse was common: 18.7%. Compared with upper/intermediate professionals, significant OR adjusted for sex were found for manual workers (1.59, 95%CI 1.05–2.42) and employees (1.55, 1.02–2.37) but not for other professionals, students, housewives, and unemployed people. Adjusting for all confounders did not reduce the OR for manual workers (1.48) and employees (1.56). The significant confounders were: Sex, living alone, poor health, hearing/cognitive disabilities, being not-sociable, aggressive, and low income (1.28 = OR = 4.25).

Discussion: There are social disparities in alcohol abuse among young adults, but they are slightly mediated by individual confounders.

Correlates of stress among French, Polish and Romanian students

Spitz, E.,* Chau, N., Ionescu, I., Bucki, B., Costantini, M., & Baumann, M.; *Metz University, France

Background: Stress is common among students. This study identified its correlates among university students from France, Poland and Romania.

Methods: In total 920 French, 477 Polish, and 190 Romanian students from the Universities of Metz, Iasi, and Silésie, completed a self-administered questionnaire. The data were analyzed using logistic models.

Findings: Stress affected 13.0% of French, 8.8% of Polish and 9.5% of Romanian students. It was significantly higher among the female (adjusted odds ratio ORa 2.30) and was strongly related to not-good health (ORa 2.04), fatigue (2.02), lack of sports activity (1.89), unsatisfied integration (1.76), lack of social support (3.14) and lack of knowledge (2.96). It favoured psychotropic medication (2.27). Financial difficulty was associated with a higher risk among the Polish and Romanian while unsatisfied integration among the Polish only.

Discussion: Health status, fatigue, sports activity, integration, financial difficulty, social support and knowledge influence stress and pressing remedial measures are needed.

Combining “lay” knowledge with “expert” knowledge in promoting health: Dialogues in context

Springett, J.; Kristianstad University, Sweden

Background: Lay expertise is, on the whole, seen as a means by which health-promotion interventions are contextualized at the delivery stage, rather than having any value as a source of

experiential practical knowledge for developing the interventions themselves. Notwithstanding the aims of health promotion to enable people to take control of their health there is still a culture in health care where by professionals do not accord value to the skills and experience of community members and ignore the everyday reality which forms the context in which people make decisions about their health behaviours. Moreover so called hard-to-reach groups are more likely to relate to the advice of those living in similar circumstances rather than a health professional perceived as an authority figure with different cultural norms and experience.

Methods/Findings/Discussion: Using empirical evidence from a smoking cessation initiative in Liverpool which uses “lay” advisors this paper explores the challenges in getting the right mix between facilitation and leadership in helping people adopt “healthy behaviours”.

Applying self-categorisation theory to understand subjective hearing loss in older people (2)

St Claire, L.,* Coyle, C., Dunkerley, K., El Refaie, A., & Syafira, W.; *Bristol University, UK

Background: Older people underestimate their hearing loss compared with audiometry. Self-Categorisation Theory (SCT) predicts older people who self-categorise as “older group members” conform to older age-group norms and hence show poorer subjective, but not objective hearing than those who self-categorise as “individuals”.

Methods: Participants $N = 58$, mean age 58 years. Design 2X2X2 mixed: Variables: Independent (2 levels between): Salient self-category, (individual/older group) Age, (below/above median) (2 levels within): Hearing, 2 levels within (subjective/objective) Dependent: Hearing difficulty Key Measures Hearing Handicap Inventory -Elderly (HHI-E) Average Hearing Threshold Level (HTL, in decibels).

Findings: Mixed ANOVA Findings Subjective measures were N.S. Participants aged >58 had poorer objective hearing, but a salient self-categoryXage interaction indicated increased difference under individual (Ms:58 = 17.5(1.6); compared with older group conditions (Ms:58 = 15.1(1.8); $F(1, 55) = 4.37, p < 0.04$).

Discussion: Unexpectedly, SCT influenced audiometrics, not subjective hearing of older people. Further research is needed to investigate its applications to audiological rehabilitation.

Applying self-categorisation theory to understand subjective hearing loss in older people (1)

St Claire, L.,* Coyle, C., Dunkerley, K., El Refaie, A., & Syafira, W.; *Bristol University, UK

Background: Older people underestimate hearing loss and demand little auditory rehabilitation. Self-Categorisation Theory (SCT) suggests preservation of self-esteem might cause this. Hypothesis:- older people who self-categorise as “individuals” have higher self-, but not group-esteem than those who self-categorise as “older group members”.

Methods: Participants $N = 58$; age 58.3 years. Design 2X2X2 mixed. Variables: Independent (2 levels between): Salient self-category, (individual/older group) Age, (below/above median) (2 levels within): Esteem, (self/group) Dependent Esteem score Measures Self-esteem; Group-esteem Analysis Mixed ANOVA.

Findings: Self- was higher than group-esteem (Ms: 39.88(5.99), 29.86(7.80), $F(1, 47) = 58.56, p < 0.0001$). For participants aged $>$ median, self- but not group-esteem increased when individual identities were salient and decreased under salient older group membership ($F(1, 47) = 10.88, p = 0.003$).

Discussion: As SCT predicted, salient older group membership challenged self-esteem of older participants. To preserve self-esteem in real life, older people might self-categorise as individuals. Consequently, reduced conformity to age-associated norms might explain underestimated hearing loss.

Examining the role of imagery as a source of self-efficacy in exercise behaviour

Stanley, D.* & Cumming, J.; *University of Birmingham, UK

Background: In line with Bandura's (1997) proposition that imagery is an important source of self-efficacy, this study tested a model examining the relationships between exercise imagery use, exercise self-efficacy, and self-reported exercise behaviour.

Methods: Exercisers (M age = 39.59 years; SD = 13.08; 176 female; 146 male) completed measures of the target variables.

Findings: Structural equation modelling analyses revealed both direct and indirect (via exercise self-efficacy) relationships between imagery and exercise behaviour. Task self-efficacy was positively predicted by use of technique imagery. Appearance imagery use was found to be negatively related to coping self-efficacy. Energy imagery use positively predicted both coping self-efficacy and scheduling self-efficacy, which in turn, positively predicted exercise behaviour. Energy imagery also had a direct relationship with exercise behaviour.

Discussion: These results indicate that certain types of imagery may be used to bolster one's sense of exercise self-efficacy, and in turn, increase one's exercise behaviour.

Coping with chronic neuropathic pain: Exploring the utility of two different measures of coping

Staples, V.,* Sheffield, D., Closs, S.J., Briggs, M., & Bennett, M.I.; *University of Derby, UK

Background: Neuropathic pain (NP) is a complex condition resulting from damage to the nervous system. Understanding how people cope with NP is important for those involved in its management. This study explores the utility of existing coping measures for capturing the experience of coping with NP from the narrative accounts of individuals living with NP.

Methods: A qualitative content analysis was performed on the transcripts of three focus group discussions. Coping strategies were categorised in accordance with the constructs contained within two validated coping measures (CSQ and COPE).

Findings: The analysis revealed that some examples of coping were not adequately captured by either measure. In addition the CSQ includes two items that may present specific challenges in the context of NP.

Discussion: Further research is needed to identify if existing coping measures are adequate for use in the study of NP or whether a NP-specific coping measure is required.

The loss of masculine identity in the context of chronic neuropathic pain

Staples, V.,* Montague, J., Closs, S.J., Briggs, M., & Bennett, M.I.; *University of Derby, UK

Background: Previous research has illustrated that for men the experience of chronic illness is one of de-masculinization (Charmaz, 1995). The study of men's experience of living with chronic

neuropathic pain (NP) offers an opportunity to examine the impact of this complex condition in relation to constructions of masculinity and the loss of masculine identity.

Methods: The accounts of four men, generated through two mixed gender focus groups, were analysed according to the principles of template analysis which draws on aspects of IPA and discursive psychology.

Findings: Three top level themes were identified describing the impact of NP on masculine identity in relation to men's responsibilities; men's relationships and men's bodies.

Discussion: The narratives were characterised by the themes of loss and vulnerability as a result of NP, pain-related disability, the inability to fulfil core gender roles and engage in a range of performative acts through which hegemonic masculinity is traditionally constructed.

Effects of family support and functioning on health and compliance among Thai parents with HIV

Stein, J.,* Rotheram-Borus, M., Lee, S.J., Jirapongsa, C., Khumtong, S., & Li, L.; *University of California, Los Angeles, USA

Background: It was hypothesized that social support and a well-functioning family with regular routines and positive relations would impact health, quality of life, and compliance with treatment regimens among HIV-positive parents.

Methods: A predictive structural equation model was tested among 382 HIV-positive parents in Thailand. Family function, social support, quality of life, and health were represented by latent variables constructed from multiple-item scales specialized for this population. Compliance was a single-item indicator.

Findings: Model fit was excellent (Comparative Fit Index = 0.95, RMSEA = 0.05). Family functioning and social support were significantly correlated (0.71). Better family functioning significantly predicted better quality of life, health (both $p < 0.001$), and compliance ($p < 0.01$). Social support significantly predicted better quality of life ($p < 0.001$).

Discussion: Results highlight the important role that a well-run family life can play in encouraging better health outcomes among HIV+ parents including compliance with HIV regimens.

Two dimensions of escapism: Self-expansion and self-suppression

Stenseng, F.; University of Oslo, Norway

Background: The present study tested a two-dimensional model of escapist behaviour in relation to leisure activity engagement ($N = 324$).

Methods: An item pool was created to tap into two dimensions of escapist motives: Escape in order to promote the facilitation of positive experiences (self-expansion) and escape to prevent activation of negative self-schemas (self-suppression).

Findings: Factor analyses supported a two-factor solution. The two factors explained a total variance of 68%. Self-expansion correlated positively with indicators of well-being, whereas self-suppression correlated negatively with well-being. Self-suppression was also associated with low self-control and trait emotion suppression.

Discussion: These findings indicate that activities can be approached to satisfy two different kinds of escapism, which in turn have different outcomes and determinants. The two-dimensional model of escapism may have implications for a broad range of health-related activity engagements.

Silver Surfers: Differences regarding health-related internet use and empowerment

Stetina, B.U.,* Lehenbauer, M., Pintzinger, N., & Kryspin-Exner, I.; *Vienna University, Austria

Background: The generation 50+ thrives online. The present study investigated the use of the Internet as health related information source of seniors in comparison with other age-groups.

Methods: A cross-sectional online-study was conducted surveying 1203 participants (aged between 13 and 87, $M = 28.91$, $SD = 10.80$) using self-developed questionnaires including health information sources and health status and the Making Decisions Scale (Rogers et al., 1997).

Findings: The 50+ participants had significant higher empowerment scores than the youngest age group ($F(4, 608) = 3.44$, $p = 0.009$). The seniors showed higher scores especially in the scales self-efficacy ($F(4, 608) = 3.43$, $p = 0.009$) and optimism vs. pessimism ($F(4, 608) = 3.70$, $p < 0.001$).

Discussion: Although it is conspicuous that silver surfers perceive the Internet as trustworthy information source it seems that the older participants online could benefit (e.g., prevention measures).

Changes in emotion regulation capabilities through animal-assisted training (MTI)?

Stetina, B.U.,* Turner, K., Handlos, U., Maman, T.L., & Kryspin-Exner, I.; *Vienna University, Austria

Background: The research question of the presented study was to find out if an animal-assisted competence training influences emotion regulation strategies.

Methods: In a pre-post design the intervention group of 19 first graders, aged five to seven, was evaluated in comparison to a control group. To measure emotion regulation the FEEL-KJ (Grob & Smolenski, 2005) was used at two test points. Statistical analysis included amongst others *t*-tests and Cohen's *d* as effect size.

Findings: The results for the intervention group demonstrated overall significant larger improvements in adaptive strategies than the control group [$d = 0.63$]. Especially regarding problem orientated action [$d = 0.94$], distraction [$d = 0.72$] and reappraisal [$d = 1.07$] significant and relevant results were found. In addition, the intervention group significantly enhanced the strategy "activation of social support" [$d = 0.65$].

Discussion: The generalisation process from human-animal-interaction to human-human-interactions seems to take place without additional intervention.

From theoretical domains to theory: Enhancing the selection of theory to understand clinicians' transfusion behaviour

Stockton, C.,* Francis, J.J., Johnston, M., Eccles, M.P., Stanworth, S.J., Cuthbertson, B.H., Hyde, C., Timmouth, A., & Grimshaw, J.; *University of Aberdeen, UK

Background: The profusion of psychological theories of behaviour change is a barrier to using theory since it is often unclear how to select appropriate theories. Psychological theories have been distilled into 12 theoretical domains (Michie et al., 2005) aiding identification of context-relevant constructs. We aimed to operationalise these domains in a clinical area where evidence for best practice is complex.

Methods: Semi-structured interviews based on the domains were conducted with 21 consultants regarding transfusion behaviour. Responses were content analysed and classified into relevant domains. Domain-relevance was measured by content and word-count.

Findings: Relevant domains for transfusion behaviour were: Beliefs about Capabilities; Environmental Context & Resources; Behavioural Regulation; Beliefs about Consequences; Social Influences; and Knowledge.

Discussion: The domains identified to be relevant to this clinical behaviour suggest that the Theory of Planned Behaviour and Social Cognitive Theory would be appropriate theories to select for a predictive quantitative study.

Implications of dimensions of organizational climate and individual emotional responses on employees' well-being

Sulea, C.,* Virga, D., & Zaborila, C.; *West University Of Timisoara, Romania

Background: The research's main objective aimed at identifying individual and organizational predictors for individual well-being in the organization, the mediating role of emotions and coping mechanisms and the moderating role of personality dimensions.

Methods: The study was conducted on 94 employees using an eclectic questionnaire, based on well-known instruments along with newly constructed instruments (for counterproductive climate and emotional responses). We have conducted regression analyses and structured equation models to test our hypotheses.

Findings: Our findings showed that organizational factors (e.g. role ambiguity, $r = -0.228$, $p < 0.01$) and individual factors (e.g. positive emotions $r = 0.475$, $p < 0.01$) have an important role in well-being prediction.

Discussion: The results also supported the proposed mediating and moderating relations. The discussion will also address the impact of individual well-being on psychological health, emphasizing the importance of healthy emotional responses.

Counterproductive climate in organizations – implications for individual empowerment, workplace attitudes and individual health

Sulea, C.; West University Of Timisoara, Romania

Background: Empowerment is a process through people gain greater control over decisions and actions and is considered to be essential for individual health, which is associated with people's degree of control. Counterproductive behaviours within organization, on the other hand, have a potential negative impact on organization and its members.

Methods: The present study aimed at identifying the relation between counterproductive climate and individual workplace attitudes and individual health and well-being.

Findings: The results revealed important correlations between variables under study (e.g. between counterproductive climate and individual empowerment $r = -0.315$, $p = 0.003$).

Discussions: The discussions over results highlight the factors that contribute to individual empowerment that in turn affect individual health.

How close are general practitioners' to patients' perceptions of illness in type 2 diabetes?

Sultan, S.; Université Paris Descartes, France

Background: Health care in medical general practice is based on the assumption that some agreement is effective between the professional and the patient. Medical care also calls for a certain degree of accuracy in the way doctors perceive people representations on their illness. The objective of this study was (1) to examine proximities of illness representations between type 2 diabetic patients and their GPs (2) to relate this proximity to adherence.

Methods: Twelve GPs and 90 of their asymptomatic type 2 patients were recruited. In doctors and patients we measured illness perception (IPQ-R), self-care behaviours (SDSCA), self-reported and doctor's adherence measures. For GPs modified instructions asked to respond as the patient did.

Findings: Results show GPs' perceptions are closer to actual patients' responses on reported symptoms and emotional consequences of illness than on the other dimensions of representation ($p < 0.05$). In regression models, distance between GP and patient on control, timeline, and consequences predicted self-reported adherence and self-care behaviours ($p < 0.05$).

Discussion: These results suggest that proximity of illness representation between health care providers and patients are important for self-care in diabetes. Interventions should focus on dimensions related to adherence in patients and doctors as well.

Getting health psychologists into the NHS: Adding value to the health improvement agenda in Scotland

Swanson, V.; University of Stirling, UK

Many health psychologists are currently 'lost' to the profession because they want to work in applied settings in the NHS where there are currently very few posts. Obtaining NHS funding for Stage 2 training is seen as a way of enabling health psychologists to train and establish careers in NHS settings. In Scotland NHS Health Boards are set annual targets for health improvement, and it is clear that achieving these targets depends very much on behaviour change, a clear area of expertise for health psychology. We have been fortunate in obtaining NHS funding for Stage 2 trainee posts in 3 Scottish NHS Health Boards, commencing in February 2008. This poster will outline this model of funded Stage 2 training in Scotland and explain how these posts are intending to contribute 'added value' to a range of health improvement projects in Scottish Health Boards.

Influence of family eating behaviours on the diet of disadvantaged children in Scotland

Swanson, V.,* Crombie, I., Brown, K., Irvine, L., & Power, K.; *University of Stirling, UK

Background: Poor diet is related to poor health outcomes in disadvantaged children. The family context of dietary provision can affect health. We investigated dietary knowledge and maternal predictors of eating breakfast, eating together as a family and cooking from scratch, using the theory of planned behaviour (TPB), and the relationship of these with diet.

Methods: Semi-structured interviews with a cohort of 300 mothers of children aged 2 years in disadvantaged areas (Dundee and Fife, Scotland) were conducted (81% response).

Findings: Knowledge of dietary recommendations was good. Not eating breakfast, poor maternal cooking skills and not eating together significantly predicted poor diet. TPB modelling showed

attitudes, norms and control significantly predicted intentions (57%, 66%, 64% of variance respectively) and behaviour (all models significant, $p < 0.001$).

Discussion: The role of maternal perceived control over dietary factors is discussed, together with recommendations for interventions to improve diet for disadvantaged children.

Psychological morbidity in women investigated for Postmenopausal Bleeding (PMB)

Tarling, R.,* Gale, A., & Dey, P.; *University of Central Lancashire, UK

Background: Women's concern about assessment for PMB is under researched. This study aimed to quantify their levels of psychological morbidity.

Methods: An exploratory questionnaire study involving 55 women, over age 44. Repeated measures design exploring anxiety (STAI-6), stress (IES) and depression (HADS) at baseline, four days (before hysteroscopy) and twelve weeks.

Findings: All scales means were high at baseline and 4 days reducing to population norms within 12 weeks. Those with cancer had higher anxiety at baseline and 4 days. Women without cancer (no hysteroscopy), had lower stress means at baseline and 4 days compared to the hysteroscopy group, but levels did not decrease by twelve weeks (baseline: 9.2 vs 12.3; 4 days 9.5 vs 13.4; 12 weeks: 9.9 vs 6.1).

Discussion: Psychological morbidity is similar to that observed in women undergoing assessment of breast lumps or cervical abnormalities. Results suggest interesting patterns in subgroups of women with PMB, warranting a larger longitudinal study.

Experiences of women investigated for Postmenopausal Bleeding (PMB): A focus group study

Tarling, R.,* Holmes, L., Gale, A., & Dey, P.; *University of Central Lancashire, UK

Background: Exploration of concerns, emotions and coping processes experienced by women during investigative procedures for PMB. Research has suggested that these women have high levels of psychological morbidity.

Methods: Semi-structured focus groups involving approximately 22 women over age 45, without cancer diagnosis. Three groups included women on Tamoxifen at referral (1); groups 2 and 3 divided by need for further investigation following transvaginal ultrasound. Audio tapes were transcribed and analysed using thematic content analysis.

Findings: Initial analyses suggested the majority of women were anxious about the investigative procedures largely due to lack of information provided at referral. Few had knowledge of risk for endometrial cancer. Wide variety of emotions and coping strategies were evidenced at different stages of investigation.

Discussion: Individual differences were evident in anxiety experienced and coping processes engaged in. Further exploration is warranted with the aim of developing interventions to alleviate psychological morbidity in women presenting for assessment of PMB.

Individual differences and mood predict simulator performance

Tatalia, C.,* Ferguson, E., Lawrence, C., Buttery, A., Baxendale, B., & Townsend, E.; *University of Nottingham, UK

Background: The study examined the reliable assessment of self and observer-ratings assessing non-technical skills, and how individual differences and mood predicts performance in patient-simulators.

Methods: A prospective repeated measures design was adopted. 150 Foundation Level-2 Doctors provided mood and personality assessments and were trained how to use the behavioural rating scales.

Findings: Factor analysis of the self-rating form produced 3 factors: Passive/Anxious, Active/Communicative, and Teamwork. Fear of failure, Self-deception (tendency to deceive one's self about one's skill) and anxiety related to increased self-reported incidents of passive/anxious behaviours. However, impression management (tendency to present one's self positively) related to increased incidences of passive/anxious behaviour in observer-ratings.

Discussion: Doctors presenting themselves in a positive light may receive lower scores due to a negative bias effect. This is important if peer measures are to be used in performance assessment, because regardless of their reliability those high in impression management will receive downgraded scores.

Interrelations among cognitive factors and healthy eating pattern: The relevance of Compensatory Health Beliefs

Taut, D.* & Baban, A.; *Babes-Bolyai University, Romania

Background: The objective of this study was to identify the role of cognitive factors in healthy eating behaviours, as well as the interrelation between compensatory health beliefs (CHB) and healthy eating. Participants: We investigated two samples: One in clinical setting ($N=57$) with patients diagnosed with coronary heart disease, and a control group ($N=60$).

Methods: Data were collected by using self-report measures of self-efficacy, types of motivation, implementation intentions, and CHB.

Findings: Hierarchical regressions revealed that CHB share a significant common variance with nutrition style in the cardiovascular sample (r square = 0.50). In both samples, nutrition style was associated with the integrated type of motivation (r square = 0.33 control sample, r square = 0.63 clinical sample).

Discussion: It can be inferred that a healthy nutrition style depends not only of risk perception, self-efficacy and implementation intentions appraisal but also of a compensatory health behaviour that may interfere with long-term health goals.

The effectiveness of stress management training on the appraisal of stressful life events in the students islamic azad university

Tavousi, M.; Azad University Of Tehran, Iran

Background: The purpose of the present study was identified psychological attributes or moderating variables in the evaluation of stress.

Methods: 100 female students of consulting were randomly selected from Azad University and Personal Views Survey (PVS; Kobasa & others, 1990), Inventory of Self-esteem (Coopersmith, 1967), and Cattell Anxiety Scale (Cattell, 1958) were administered to both experimental and control groups. Next, progressive relaxation training (Jacobson, 1934) were given to participants in the

experimental group. Then, Hassles and Uplifts Scale (DeLongis & others, 1982) was administered to both groups during to weeks.

Findings/Discussion: Findings show that progressive relaxation training influenced the appraisal of stressful life events in the experimental group, in spite of the moderators of the stress experience, ie the levels of self-esteem, hardiness and tension.

A Theory of Planned Behaviour resource to facilitate the communication of smoking cessation information

Taylor, J.,* Joy, L., Glazebrook, C., Coleman, T., & Thornton, J.; *University of Nottingham, UK

Background: (1) Development of a resource based on the Theory of Planned Behaviour (TPB) to guide medical students giving smoking cessation advice to simulated pregnant patients (2) Testing whether this is more effective in eliciting patient beliefs than a resource based on standard NHS information.

Methods: A pilot randomized controlled trial where 40 medical students gave smoking cessation advice, either using the TPB resource (intervention group) or the standard resource (control group).

Findings: There was no significant difference in the number of patient beliefs elicited by the intervention and control groups. However, the intervention group was significantly more likely to elicit a belief about social pressure than the control group (69% versus 22% respectively, $p=0.04$, one tailed Fisher's exact test).

Discussion: The TPB resource may have potential to elicit more patient beliefs if tested on a larger sample of students who are given longer to assimilate the information before interviewing.

Pregnant women's beliefs about NHS Stop Smoking services

Taylor, J.,* Glazebrook, C., Coleman, T., & Thornton, J.; *University of Nottingham, UK

Background: Using the Theory of Planned Behaviour (TPB) to investigate pregnant women's beliefs about NHS Stop Smoking services.

Methods: Semi-structured interviews were carried out with 18 pregnant smokers or recent quitters and 18 health professionals working in smoking cessation to elicit salient behavioural, normative and control beliefs. The data were subjected to thematic analysis.

Findings: Beliefs around the following themes were identified as influencing engagement with the services: Effectiveness of the service, acquiring information, receiving support, improving health, social pressure from family, health experts and friends, motivation, access to services, knowledge about services, fear of failure, and stigma.

Discussion: Concerns about being judged, not being able to quit, and not being able to access services contribute to a lack of engagement with Stop Smoking services in pregnancy. More effort needs to be made by health professionals to sell the services appropriately to overcome these barriers.

Development and validation of the Determinants of Physical Activity Questionnaire (DPA-Q)

Taylor, N.,* Lawton, R., & Conner, M.; *University of Leeds, UK

Background: To develop and validate a self-report scale for determinants of physical activity based on an adapted theoretical framework by Michie et al. (2005).

Methods: 130 males and females were recruited from a L1 class at a large university in England. Students completed the Determinants of Physical Activity Questionnaire (DPA-Q) to assess beliefs about physical activity and the Self-reported Walking and Exercise measure (SWET; Prestwich, Perugini, & Hurling, in press) to examine the questionnaire's predictive validity.

Findings: Analysis demonstrated acceptable reliabilities of each subscale (Cronbach's $\alpha > 0.6$) and the intercorrelations between subscales were not excessively high ($p < 0.05$). The overall scale was a significant predictor of exercise behaviour.

Discussion: Accurate assessment of individual determinants of physical activity through the DPA-Q will allow for tailored interventions that can address specific difficulties and needs of individuals. The next stage in this research is to test individually tailored interventions based on DPA-Q scores.

The efficacy of a computer tailored smoking cessation intervention: Men profit from action plan feedback

Te Poel, F.,* Bolman, C., Van Osch, L., & De Vries, H.; *Maastricht University, The Netherlands

Background: Efficacy trial comparing computer tailored smoking cessation intervention including (experimental group) tailored action plan feedback (goal setting theory) to similar intervention without action plans (control group) hypothesizing less quitting activity in the latter group.

Methods: Logistic regression analyses assessed effects of group on 24-hour and 7-day point prevalence abstinence after one (T1, $N = 659$) and six months (T2, $N = 445$).

Findings: Findings T1 No main effect of group. Moderation analyses revealed a beneficial effect of experimental intervention for men (24h pp: 48.3% quit versus 35.7%, $p < 0.05$; 7d pp: 42.2% quit versus 32.6%, $p = 0.058$). T2 No main effect of group (24h pp: 47.4% quit versus 44.8%, $p = 0.68$; 7d pp: 43.7% quit versus 41.8%, $p = 0.74$).

Discussion: Tailored action plan feedback seems profitable for men after one month. The effect disappears after six months. Encourage people to make coping plans might result in better cessation rates for smoking cessation maintenance.

Effects of sociodemographic factors on coping styles, social stress and sexual sensation seeking in Spanish adolescents

Teva, I.,* Bermudez, M.P., & Buela-Casal, G.; *University of Granada, Spain

Background: The aim of this study was to analyze the influence of age, gender and type of high school (public/private) on coping styles (solve the problem, reference to others and non-productive coping), social stress and sexual sensation seeking in adolescents.

Methods: A sample of 4,456 Spanish high school students participated. This is a cross-sectional study. A stratified random sampling procedure was used.

Findings: Males had higher scores in sexual sensation seeking, social stress and solve the problem coping style compared to females. Adolescents who were between 17 and 18 years old had the highest scores on sexual sensation seeking and non-productive coping. Private high school students showed a

higher sexual sensation seeking and a higher use of the three coping styles than public high school students.

Discussion: Considering the implications of sexual sensation seeking, coping styles and social stress on health and psychological adjustment, it is emphasized to assess these factor and to include them in health promotion programs focused on adolescents.

Precoital sexual behaviour in Spanish adolescents

Teva, I.,* Bermudez, M.P., Gutierrez-Martinez, O., & Mantas, L.N.; *University of Granada, Spain

Background: The objective of this work was to assess and to describe some characteristics of precoital sexual behaviours in adolescents.

Methods: Participants were 4,456 Spanish high school students whose ages were 13 to 18 years. A questionnaire about sexual behaviour was applied. It is a cross-sectional survey study. Participants were selected by means of a stratified random sampling.

Findings: Differences according to age and gender on characteristics of sexual behaviour before sexual intercourse debut were found. Males started in non penetrative sexual experiences at an earlier age than females, reported a higher number of sexual partners and to have had casual sexual partners.

Discussion: This kind of studies would allow the development of researches towards prevention of health risk behaviours when these behaviours are not founded yet. It is highlighted the need of working on sexual risk prevention since early ages.

When feeling attractive matters to women

Thøgersen-Ntoumani, C.,* Cumming, J., & Ntoumanis, N.; *University of Birmingham, UK

Background: Using Self-Determination Theory (SDT; Deci & Ryan, 1985) as an overarching theoretical framework, the purpose of this study was to explore the mediating role of appearance-contingent self-worth in the relationship between need satisfaction and a) disordered eating, b) excessive exercise, and c) self-objectified outcomes, controlling for age, Body Mass Index and global self-worth.

Methods: 220 habitual female exercisers (Mage=20.47; SD=5.07) completed questionnaires measuring need satisfaction, unhealthy weight control behaviours, exercise addiction, body shame, body surveillance, trait appearance anxiety, appearance-contingent- and global self-worth.

Findings: Hierarchical regression analyses using Baron and Kenny's (1986) steps for establishing mediation revealed that appearance-contingent self-worth partially mediated the relationships between competence need satisfaction and body surveillance ($z = -2.05$) and body shame ($z = -1.88$; $p < 0.05$ in both cases).

Discussion: The results indicate potential means by which psychological interventions could help young adult women who self-objectify.

Can narrative persuasion influence perceptions of binge drinking risk?

Thompson, R.* & Dr Haddock, G.; *Cardiff University, UK

Background: This study examined how narratives can influence health promotion behaviour. We hypothesized that the Transportation-Imagery Model underlies how individuals respond to general evaluative questions (e.g., is binge drinking risky?), while the Fiction as Cognitive and Emotional Simulation Model underlies how individuals respond to personal evaluative questions (e.g., is my own binge drinking risky?).

Methods: 100 Ps gave an indication of their own alcohol consumption. They then read a narrative on binge drinking, and completed measures of risk evaluation (with general and personal components) and transportation.

Findings/Discussion: Regression analysis indicated being transported into the narrative was positively predictive of the evaluation of binge drinking as more risky in general, and was negatively predictive of evaluations of binge drinking as personally risky. In contrast, previous drinking experience was predictive of evaluations of binge drinking as personally risky, but not predictive of evaluations of binge drinking as generally risky.

Promoting a more prudent use of antibiotics: How effective are patient-oriented interventions?

Thoolen, B.J.* & De Ridder, D.T.D.; *Utrecht University, The Netherlands

Background: Physicians often feel pressured to prescribe antibiotics despite evidence for their limited and adverse effects. This study evaluates interventions to promote patients' prudent use of antibiotics.

Methods: A meta-analysis evaluated patient-oriented interventions to reduce antibiotic use, based on 32 studies categorized by setting, target-group, interventionist, and strategy. Outcomes included prescriptions, antibiotic use, and attitudes.

Findings: Four interventions types were identified: Community programs, untargeted information provision in primary care, targeted information provision (e.g. doctor-patient) and delayed prescription. Delayed prescription was most effective in reducing antibiotic use, particularly when combined with targeted information provision, but patients' were not always satisfied with treatment. Untargeted provision and community programs had small effects on attitudes and marginal effect on antibiotics prescription and use.

Discussion: The majority of patient-oriented interventions, relying on information provision, are ineffective. Delayed prescription decreases antibiotic use, but may be sidestepping the issue of how to discuss negative aspects of antibiotics.

Adherence to physiotherapy: A systematic review

Tijou, I.* & Yardley, L.; *Southampton Solent University, UK

Background: To establish adherence rates to physiotherapy for musculoskeletal conditions and to examine any difference according to length of treatment, level of supervision and type of measurement. Further, to clarify factors associated with adherence.

Methods: Six databases were searched using the terms: ((adheren* or complian*) and (physiother*, physical therap* or exercis*). 45/3,016 papers satisfied inclusion criteria: Physiotherapy for acute injuries, chronic pain or osteoarthritis; reported adherence.

Findings: Adherence declined over time (treatment <6 months = 75.62% sessions completed, >6 months = 47.59%), did not differ according to level of supervision ($\chi^2 = 0.29$, $df = 1$, ns), or between

self-report and non-self-report measures ($\chi^2=0.92$, $df=1$, ns). Studies were too heterogeneous to conduct quantitative analyses on factors associated with adherence.

Discussion: Longer treatment poses greater problems to adherence (and therefore poorer outcomes). Partial supervision is as good as full in relation to physiotherapy adherence. Standardisation of measures of adherence would better enable comparison and combination of results.

Does rehabilitation increase well-being at work? Results from an intervention study

Tirkkonen, M.* & Kinnunen, U.; *University of Tampere, Finland

Background: This study compared effects of a rehabilitation intervention on work demands, resources and well-being among men ($n=37$) and women ($n=42$) who participated in an intervention lasting two weeks in a rehabilitation centre.

Methods: The participants filled in questionnaires at the beginning of the intervention and six months later when they had participated in this two-week rehabilitation period. The intervention consisted of procedures targeted at individual and individual/organizational levels.

Findings: The results showed positive changes both in perceived work demands and well-being both among men and women. Perceived work resources improved and need for recovery decreased among women. Work engagement, especially the dimension of absorption, increased among men. Women reported higher levels of psychological well-being and vitality.

Discussion: To conclude, so far women seemed to have benefited more than men from the rehabilitation. The follow-up study and the results of the control group will strengthen the reliability of these findings.

Health behaviour amongst young carers: A Q methodology study

Tod, J.* & Harcourt, D.; *University of the West of England, UK

Background: Recent research has reported poor psychological outcomes amongst children and young people who have a major caring role (Cree, 2003). However, there has been little consideration of the role's impact on young carers' physical health.

Methods: This study used Q method to explore 25 young carers' perception of their health behaviour.

Findings: Varimax analysis revealed 4 factors: Factor 1 presented a negative view of caring, participants were aware of the effects of unhealthy behaviours. Factor 2 reflected a positive view of the role, and respondents reported good health behaviour. Factor 3 focused on the practical demands of life. They appear to be indifferent to, their own health and health behaviour. Factor 4 appeared to be resilient; they were pragmatic about their caring role and health.

Discussion: This study highlights the need to identify those young carers who may benefit from interventions and support in order to avoid long-term health risks.

Adolescent abstainers, consumers and binge drinkers – do they differ in personality?

Tomcikova, Z.,* Madarasova Geckova, A., Orosova, O., Van Dijk, J.P., & Reijneveld, S.A.; *P.J. Safarik University Kosice, Slovak Republic

Background: The aim of this study was to describe how adolescent binge drinkers differ in selected personality and social characteristics from consumers and abstainers.

Methods: Adolescents ($N=3694$, mean age 14.5 ± 0.5 , 49.0% males) completed the following measures: Aggression Questionnaire, Ten-Item Personality Inventory, Tromso-Social-Intelligence-Scale, Perceived-Social-Support-Scale, General-Health-Questionnaire, Rosenberg Self-esteem Scale, stating whether they had drunk alcohol or had been drunk in the previous four weeks. The differences between all three groups were explored using GLM adjusted for gender.

Findings: There are significant differences between abstainers, consumers and binge drinkers. The more risky the pattern of alcohol consumption, the higher the scoring in aggression, extraversion, perceived social support from friends and negative self-esteem, and the lower the scoring in agreeableness, conscientiousness, social support from family and well-being.

Discussion: The existence of differences in personality and social characteristics between abstainers, consumers and binge drinkers could be of use in setting up specific prevention programs.

Lay beliefs on assisted reproduction technology in the UK and Greece: A repertory grid study

Triantafyllidou, A.,* Ardino, V., Asimakopoulou, K., & Chater, A.; *University of Bedfordshire, UK

Background: This study explored cultural differences in the attitudes of UK and Greek lay people towards Assisted Reproduction Technology (ART).

Methods: Using a Personal Construct Explanatory Model (Kelly, 1955) and Life Repertory Grids, we gathered data from $N=10$ Greek and $N=10$ British people. The majority ($N=17$) were female and 40% were 36–45 years old. Data were analysed through a Principal Components Analysis and a Content Analysis.

Findings: We found both similarities and differences between British and Greek people. Happiness, Control, Family, and Stress were among the main Components and Categories identified. The extent, however, to which the Components and Categories were identified in the two samples varied widely.

Discussion: Cultural influences play an important role in shaping people's views towards ART. It is argued that where Health Psychologists provide ART related consultancy or educational programmes, such activities may benefit from a culturally sensitive approach.

The effects of early psychological intervention on emotional well-being of patients following coronary bypass surgery

Trzcieniecka-Green, A.,* Michalak, A., & Truszczak, B.; *Medical University of Silesia, Poland

Background: The objective of this study was to assess the impact of relaxation-based psychological intervention, delivered in the early stage of hospitalisation after coronary artery bypass graft.

Methods: The study was a randomised controlled trial based on a sample of 68 fully informed and consenting patients after coronary bypass surgery. The patients were assigned to experimental (psychological intervention) and control (usual care) groups. Participants in the experimental group listened to a CD with recorded psychological intervention three times a day during their stay in a hospital (maximum of seven days). The instruments comprised of Hospital Anxiety and Depression Scale (HAD) and Emotional Questionnaire (EQ).

Findings/Discussion: Significantly greater improvement in emotional well-being ($p < 0.05$) as assessed by questionnaires, was achieved in the experimental rather than the control groups, and these improvements were confirmed at the 12-month follow-up.

The psychological functioning of hemodialysis patients

Trzcieniecka-Green, A.,* Sitnik-Warchulska, K., & Gawlik, M.; *Medical University of Silesia, Poland

Background: The object of this study was to compare the level of anxiety, depression and acceptance of illness of hemodialysis patients with those of primary hypertension patients, suffering from chronic disease less affecting their lifestyle.

Methods: 74 patients aged 30–80: 37 with end-stage renal disease undergoing hemodialysis (RD) and 37 patients with primary hypertension (PH) were assessed applying the Hospital Anxiety and Depression Scale (HAD) and the Acceptance of Illness Scale (AIS).

Findings/Discussion: Patients suffering from renal disease had a significantly higher level of depression (8.2 ± 4.6 versus 4.7 ± 3.3 ; $p < 0.05$) and a lower level of acceptance of illness (18.4 ± 7.3 versus 23.2 ± 7.4 ; $p < 0.05$) than hypertension patients. In both groups the level of depression was correlated with professional activity (RD: $R^2 = 8.09$, $df = 2$, $p < 0.05$; PH: $R^2 = 11.51$, $df = 2$, $p < 0.05$).

A health behaviour coaching programme for promoting hope: A feasibility study

Turner, A.,* Fotiadou, M., & Barlow, J.; *Coventry University, UK

Background: Help to Overcome Problems Effectively (HOPE) is a group health behaviour coaching programme developed/delivered by health psychologists and peer educators. HOPE is underpinned by social cognitive theory and hope theory. HOPE enhances participants' ability to self-manage through building on the critical role that hope plays in goal motivation and planning. The aim of this study was to test whether the HOPE programme increases hope and confidence and decreases anxiety/depression.

Methods: Eleven participants (mean age, 42 years; 7 women) with a range of physical and mental health conditions enrolled on the 6 week HOPE programme. Six participants completed baseline and post-course questionnaires.

Findings: Participants reported post-course improvements in hope ($p < 0.05$), depression and confidence.

Discussion: The results are encouraging as they suggest that participants found that the HOPE was useful for improving positive psychological strengths (hope, confidence) as well as reducing psychological distress (depression). Randomised controlled trials establishing the efficacy of the HOPE programme are planned.

Health-promoting lifestyle profile of psychologist university students in Mexico

Ulla Diez, S.M.,* Pérez Fortis, A., & Franco Franco, S.; *Universidad de Castilla-La Mancha, Spain

Background: To examine health behaviours in university students.

Methods: A cross-sectional study was conducted, using a convenience sample ($n=307$) from the Autonomous University of Puebla, México. Instruments used were the HPLP II (Walker & Hill-Polerecky, 1996), and a questionnaire to assess demographic and health information.

Findings: Only 34.2% of the students had a health-promoting lifestyle. The scores on some dimensions of the HPLP-II differed significantly ($P<0.05$) by gender, age, marital status, economic situation and parental educational status.

Discussion: University students have unhealthy habits which are influenced by their socio-demographical characteristics. These results provide information for health promoting interventions.

Health consequences of intimate partner violence

Ulla Diez, S.M.,* Notario Pacheco, B., Solera Martínez, M., Velázquez Escutia, C., Valero Caracena, N., & Olivares Contreras, A.; *Universidad de Castilla-La Mancha, Spain

Background: Intimate Partner Violence (IPV) is a major social and public health issue. The objective of this research was to analyse the influence of IPV over health symptoms and illnesses.

Methods: A randomized sample of 481 women was interviewed in a cross-sectional study. We used the Women Abuse Screening Tool and a list of illnesses and symptoms. Adjusted Odds Ratios were computed.

Findings: 87 (18.6%) of the random sample suffered IPV. IPV victims had a higher rate of risk for paresthesias (1.86; IC95% 1.14–3.04); migraines (2.33; IC95% 1.37–3.96); headaches (2.34 IC95% 1.42–3.85); loss of appetite (2.17; IC95% 1.07–4.41); abdominal pain (1.89; IC95% 1.1–3.27); diarrhoea, constipation (1.79; (IC95% 1.09–2.93) and arthrosis (1.96; IC95% 1.16–3.30).

Discussion: We found that close to 20% of the sample suffered or had suffered from IPV. IPV is a risk factor for somatic health symptoms, mainly in neurological and digestive conditions. Primary Health Care Systems would serve their constituency well by approaching this topic more compromisingly.

Emotional response to intimate partner violence

Ulla Diez, S.M.,* Velázquez Escutia, C., Notario Pacheco, B., Solera Martínez, M., Valero Caracena, N., & Olivares Contreras, A.; *Universidad de Castilla-La Mancha, Spain

Background: Intimate Partner Violence (IPV) is a risk factor for women's psychological well-being. Our objective was to analyze the psychological consequences found in IPV victims taken from a randomized sample.

Methods: 481 women from a randomized sample were interviewed in a cross-sectional study. We used the Women Abuse Screening Tool (WAST) and the Emotional Response to Violence questionnaire (REV). *T*-tests were computed to analyze differences between abused and non abused women.

Findings: The levels of depression, anxiety, anger, psychosocial adjustment and the total emotional score were worse in the women who suffered from IPV than in those who did not describe a pattern of IPV ($p<0.0001$). There were differences in physical health as well between the two groups. In IPV victims there was a higher frequency of smoking ($p<0.0001$), alcohol consumption ($p<0.0001$); antidepressant intake ($p<0.0001$); and tranquilizer and sleeping pill intake ($p=0.006$ and $p=0.004$, respectively).

Discussion: IPV is a clear risk factor for women's psychological well-being. Victims of IPV can also adopt harmful long term/short term health behaviours. Bruises, lesions and wounds are immediate health consequences of IPV victims. However, long term consequences of IPV are much more complex and need further consideration from policy makers.

Health-promoting lifestyle profile of psychologist university students in Mexico

Ulla Diez, S.M.,* Pérez Fortis, A., & Franco Franco, S.; *Universidad de Castilla La Mancha. Cuenca, Spain

Background: To examine health behaviours in university students.

Methods: A cross-sectional study was conducted, using a convenience sample ($n=307$) from the Autonomous University of Puebla, México. Instruments used were the HPLP II (Walker & Hill-Polerecky, 1996), and a questionnaire to assess demographic and health information.

Findings: Only 34.2% of the students had a health-promoting lifestyle. The scores on some dimensions of the HPLP-II differed significantly ($p<0.05$) by gender, age, marital status, economic situation and parental educational status.

Discussion: University students have unhealthy habits which are influenced by their socio-demographical characteristics. These results provide information for health promoting interventions.

Health-promoting lifestyle profile in spanish university students

Ulla Diez, S.M.* & Fortis, A.P.; *Universidad de Castilla La Mancha. Cuenca, Spain

Background: To evaluate health behaviours of university students.

Methods: A cross-sectional study was conducted, using a convenience sample of undergraduate Spanish students ($n=1238$) from the University of Castilla-La Mancha. Instruments employed were the Spanish version of the Health-Promoting Lifestyle Profile II (Walker & Hill-Polerecky, 1996) and a questionnaire to assess socio-demographic data.

Findings: Results indicated that 74% of the students did not have a healthy lifestyle. Specifically, 84% of them do not practice physical activity regularly; 68% do not keep a balanced diet and 91% do not maintain active health care behaviours. Also we found significant differences on their lifestyle ($p<0.05$) attending to some socio-demographical characteristics as socio-economical level and parent's level of education.

Discussion: These results show the influence of demographic factors on health behaviours and provide information for planning interventions in order to promote healthy habits in university students.

“Too few (too many) portions of fruits/veggies”: Shaping eating-related attitudes and intentions using frequency scales

Uskul, A.K.* & Demes, K.; *University of Essex, UK

Background: Frequency values on rating scales can provide comparative information regarding where one's behaviour falls in the general population. We varied the frequency of number of portions provided as response options on a rating scale to manipulate perceptions of one's daily

fruit/vegetable consumption compared to others and examined subsequent change in eating-related beliefs/intentions.

Methods: Students ($n=86$) and adults ($n=46$) rated their average fruit/vegetable consumption on either a low-frequency response scale (0 to 2 or more portions) or a high-frequency response scale (2.5 or less to 5 or more). Subsequently, they rated their beliefs regarding their current/future health and intentions to buy/eat more fruits/vegetables.

Findings: In the high-frequency condition participants evaluated their eating habits and their future health as less positive and exhibited greater intentions to consume fruits/vegetables compared to the low-frequency condition.

Discussion: Scale frequency manipulation may be used as an effective non-explicit method for attitude and intention change in a health domain.

Body image concerns and psychosocial adjustment following lower limb amputation

Uytman, C.L.* & Dr Fox, J.; *Queen Margaret University, UK

Background: An examination of the relationships between body image, prosthesis satisfaction and psychosocial adjustment in people with unilateral lower limb amputation based on theories of self and embodiment (MacLachlan, 2004; Rybarczyk & Behel, 2002).

Methods: 97 participants attending Westmarc prosthetics completed the Trinity Amputation and Prosthetic Experience Scale and the Amputee Body Image Scale by post. Logistic regression was used to explore the relationships between the variables.

Findings: Analysis revealed a significant association between Body image concerns, functional prosthetic satisfaction and psychosocial adjustment problems ($R^2(5, n=88) 41.886, p<0.001$). Body image and functional satisfaction concerns were associated with adjustment problems (Exp $B=10.531, p<0.01$, Exp $B=0.713, p<0.001$).

Discussion: These findings show the importance of examining Embodiment in individuals living with amputation. Health psychology has a vital role to play in enabling the completion of body image within this population.

Quality of life of adolescents with asthma: The roles of personality, coping, and symptom reporting

Van de Ven, M.O.M. & Engels, R.C.M.E.; Radboud University Nijmegen, The Netherlands

Background: This study examined relations between personality (Big-Five) and quality of life (QOL) in adolescents with asthma. Additionally, we tested whether these relations were explained (mediated) by coping with asthma and symptom reporting.

Methods: A cross-sectional survey study was conducted and 405 adolescents with asthma completed questionnaires on personality, coping with asthma, symptom reporting, and QOL. Direct and indirect relations were analysed using structural equation modelling (SEM).

Findings: Adolescents high on extraversion ($\beta=0.17$) and low on neuroticism ($\beta=-0.17$) had better overall QOL, while adolescents high on agreeableness had better QOL related to experiencing positive effects of asthma ($\beta=0.19$). The indirect model revealed that these relations were fully mediated by coping and symptom reporting.

Discussion: This study will help to understand what determines QOL in adolescents with asthma. Suggestions for coping skills interventions that could minimize the negative effects of asthma on the QOL of these adolescents are discussed.

Obesity: Sociometric status, perceived competence and emotional and behavioural problems in Flemish adolescents

Van den Berg, M. & Vanderfaeillie, J.; Vrije Universiteit Brussels, Belgium

Background: Obesity relates to psychosocial problems in clinical populations. In non-clinical populations this relationship remains unclear (Braet, Mervielde & Vandereycken, 1997; Erermis, e.a., 2004).

Methods: We examined the correlations between weight, sociometric status, perceived competence and psychosocial problems in Flemish adolescents. Out of a random sample of secondary schools around Brussels, 367 students were included (183 boys with an average of 18.2 ($s = 1.1$) years and 184 girls with an average of 17.6 ($sd = 0.8$) years). Psychopathology and perceived competence were measured by the Youth Self Report and the Perceived Competence Scale for Adolescents. Sociometric status was measured by a peer nomination task.

Findings: Results showed no correlations between weight and emotional and behavioural problems or sociometric status. Weight does not play a role in psychosocial adjustment in adolescents in the normal population. Overweight and rejected adolescents perceive themselves as less competent.

Discussion: The long term influence of a lower perceived competence needs further investigation.

Maternal anxiety in pregnancy and offspring depression: Developmental Origins of Health and Disease (DOHaD)-hypothesis confirmed?

Van Den Bergh, B.R.H.; Tilburg University, The Netherlands

Background: It is hypothesized that the level of anxiety experienced by a mother during pregnancy influences the subsequent health of the offspring.

Methods: In the adolescent offspring, depressive symptoms were measured with the Children's Depression Inventory; HPA-axis function was measured through establishing a saliva day-time cortisol profile.

Findings: Repeated measurements and ordinary least-squares regression analyses indicated that maternal anxiety at 12–22 weeks of pregnancy was associated with a diurnal cortisol profile that was attenuated due to elevated cortisol secretion in the evening ($p = 0.0463$). Moreover, in female adolescents this flattened cortisol curve was associated with depressive symptoms ($p = 0.0077$). Effects remained after controlling for covariates.

Discussion: Our results demonstrate the mediating role of HPA axis dysregulation in linking an adverse foetal environment to depressed mood. If our results can be replicated in future research they may lead to a re-orientation of the target of primary prevention and treatment of depressive symptoms in adolescence.

Workstress and employee body mass index: The moderating role of emotional eating

Van Der Doef, M.; Leiden University, The Netherlands

Background: Studies have found both decreased and increased eating in response to stress. This study examines whether emotional eating (the tendency to eat when experiencing negative emotions) acts as a moderator in the association between workstress and body mass index (BMI).

Methods: One hundred and nine health care employees filled in self-report questionnaires, assessing socio-demographic variables, workstress, emotional eating style, and current height and weight. Controlling for age and gender, the interaction between workstress and emotional eating was the only significant predictor of body mass index (BMI).

Findings: Among employees low on emotional eating, high workstress was related to a lower BMI. In contrast, among employees high on emotional eating, high workstress was associated with a higher BMI. Restricting the analyses to employees with longer tenures yielded more pronounced interaction effects.

Discussion: The findings suggest that emotional eating is a crucial factor determining the influence of stressful working conditions on employees' body mass index.

Job characteristics, self-regulatory skills, goal progress, and employee well-being

Van Der Doef, M.* & Volkova, A.; *Leiden University, The Netherlands

Background: According to the Job Demand-Control model active jobs (i.e. high demands combined with high control) enhance development of skills. This study examines whether job demands and job control relate to employees' self-regulatory skills and progress regarding their personal work goals. Furthermore, it is examined whether self-regulatory skills and goal progress act as mediators in the relationship between job characteristics and well-being.

Methods: Self-report questionnaires assessing job characteristics, self-regulation skills and goal progress, work satisfaction, job-related well-being, and work engagement were completed by 235 employees.

Findings: Only high skill discretion is related to higher self-regulatory skills and goal progress. High skill discretion, and to a lesser extent high decision authority and low demands, are directly related to well-being. Self-regulatory skills and goal progress mediate the relationship between skill discretion and well-being.

Discussion: The findings suggest that mainly skill discretion influences employee well-being, partly through its positive effects on self-regulatory skills and goal progress.

Patients' beliefs about their end stage renal disease are associated with mortality rates

Van Dijk, S.,* Kaptein, A.A., Thong, M., Scharloo, M., Boeschoten, E.W., Krediet, R.T., & Dekker, F.W.; *Leiden University Medical Center, The Netherlands

Background: Following the assumptions of Self Regulation Theory, the purpose of the current study was to explore whether illness perceptions of end stage renal disease patients (ESRD) predict mortality rates.

Methods: Between 2004 and 2005, 185 patients completed the Illness Perception Questionnaire (IPQ-R), which was tailored to ESRD-patients. With cox regression analyses we estimated all-cause mortality at August 2007.

Findings: The scale of 'perceived treatment control', was associated with mortality (HR=2.09, $P=0.002$). Mortality rates were higher among patients who believed that their treatment was less effective in controlling their disease. This effect seemed to be robust, as it remained stable when controlling for several sociodemographic and clinical variables (HR=3.06, $P=0.0002$).

Discussion: If we consider risk factors for mortality, physicians tend to rely on clinical parameters rather than on patients' cognitive representations of their illness. Nevertheless, the current study implies that simply addressing patients' beliefs provides a powerful predictor of survival.

Discontinuity patterns and (PAPM) stage transitions of kidney screening kit uptake

Van Empelen, P. & Van Grieken, A.; Leiden University, The Netherlands

Background: It was examined whether (1) stages and (2) stage transitions could be predicted for the uptake of a kidney self-screening kit.

Methods: In a prospective survey among 321 Dutch adults stages, knowledge, risk perception, subjective norm, pros, cons, precaution effectiveness and action planning were assessed. ANOVA with polynomial contrasts was used to examine discontinuity patterns. Furthermore, stage transition was examined.

Findings: The PAPM stages were collapsed into 4 groups: Unaware (stage 1), undecided (stages 2,3), decided not to act (stage 4) and action (stages 5,6). Trends were examined among three groups (excluding group 4). Linear trends were found for most predictors. Discontinuity patterns were found for pros, cons and action planning. Stage progression occurred in the unaware and undecided group. Stage transition could not be predicted by the predictors.

Discussion: Partial support was found for health-behaviour stages. Of importance, action planning differentiated actors from non-actors. Change mechanisms remain unclear.

Comparing the impact of two types of action planning in health protective versus health risk behaviour

Van Osch, L.,* Reubsæet, A., Lechner, L., & De Vries, H.; *Maastricht University, The Netherlands

Background: To compare the predictive value of two types of action planning in health protective behaviour versus health risk behaviour.

Methods: Two longitudinal datasets, focusing on fruit consumption ($N = 574$) and the restriction of high-caloric snack consumption ($N = 585$), were investigated using structural equation modeling. Comparative analyses were performed on the impact of preparatory action planning and 'when-where-how' planning on both types of behaviour.

Findings: Both types of action planning independently predicted fruit consumption, but not snack consumption. Including past behaviour rendered the impact of 'when, where, how'-planning on fruit consumption insignificant. Preparatory planning significantly influenced fruit consumption over and above the (non-significant) impact of 'when-where-how'-planning when simultaneously entered into the predictive model (total $R^2 = 60\%$).

Discussion: Action planning better predicts health protective behaviour than restriction of health risk behaviour. Both types of behaviour may call for distinct cognitive strategies. Preparatory planning may outperform 'when-where-how'-planning in the prediction of health protective behaviour.

From theory to practice: An explorative study into the practicability and specificity of implementation intentions

Van Osch, L.,* Lechner, L., Reubsæet, A., & De Vries, H.; *Maastricht University, The Netherlands

Background: To assess the behavioural impact of correctness and specificity of implementation intentions.

Methods: Participants in a smoking cessation contest were randomly allocated to a control group ($N = 802$) or experimental group ($N = 764$), in which they formed three implementation intentions on coping with difficult situations. Formulated plans were rated according to correctness (correct – incorrect) and specificity (non-specific – medium – highly specific). Smoking abstinence was measured seven months after baseline.

Findings: The planning intervention significantly increased continuous abstinence by 3%. Mere plan correctness did not affect abstinence. Plan specificity positively predicted smoking abstinence: Participants who made medium to highly specific plans had higher abstinence rates than those who made non-specific plans. Abstinence did not differ between medium and highly specific planning. Women, higher educated participants, and experienced quitters were more likely to formulate correct plans.

Discussion: Encouraging participants to furnish plans with sufficient detail may enhance implementation intention efficacy. Differential approaches may be beneficial for subgroups.

Environment as a mediator of effectiveness of computer tailored physical activity intervention among the over-fifties

Van Stralen, M.,* Lechner, L., Mudde, A., De Vries, H., & Bolman, C.; *Open University of the Netherlands, The Netherlands

Background: Few meditation studies have been conducted to determine the key-elements in tailored interventions and causal mechanisms underlying behavioural change.

Methods: The Active Plus Program exists of two tailored interventions, consisting of 3 tailored letters, delivered during 4 months to stimulate physical activity [PA] initiation and maintenance among the over-fifties. One intervention additionally tailored on environmental determinants. 1985 older adults participated and were assigned to one of the intervention or control groups. PA and PA determinants were measured at 3, 6 and 12 months.

Findings: 3 months results showed significant differences in PA between the intervention and control groups. A total mediation effect of environmental PA cues was found in the environment intervention condition only. Additional 6 months data will be presented.

Discussion: Environmental determinants mediate PA behaviour change when tailored to. More attention should be paid to enhance perceptions of PA possibilities in the environment in future tailored interventions.

Gain framed and loss framed messages offer distinct pathways to persuasion: The role of affect

Van't Riet, J.,* Ruiter, R., & De Vries, H.; *Maastricht University, The Netherlands

Background: Studies show inconsistent results with regard to the question whether gain framed or loss frames health promoting messages are more persuasive. In the present research, two studies investigated the mediating role of affective reactions to framed health messages.

Methods: In two studies (Study 1: $N = 131$; Study 2: $N = 172$), participants' reactions to framed health promoting messages were investigated.

Findings: In both studies, gain framed messages resulted in more positive affect than loss framed messages, whereas loss framed messages resulted in more negative affect. Both positive and negative

affect were positively associated with intention to perform the advocated behaviour, although the effect of positive affect was mediated by the attitude towards the advocated behaviour, whereas negative affect had a direct influence on intention.

Discussion: The results of these two studies suggest that both positive and negative feelings can contribute to the persuasion process, but in distinct ways.

A qualitative exploration of smoking relapse: The role of identity

Vangeli, E.,* Sykes, C., & West, R.; *University College London, UK

Background: NHS stop smoking treatments are quite effective in the short-term, but relapse rates are high. To design effective relapse prevention interventions we need to develop our understanding of the process.

Methods: This study explored the experiences of 10 long-term quitters and 10 relapsed smokers who had quit with an NHS Stop Smoking Service. Semi-structured interviews – guided by PRIME theory – were conducted and analysed using Interpretative Phenomenological Analysis.

Findings: Long-term quitters held a strong ‘non-smoker’ identity but retained a residual appreciation that smoking conferred benefits. Relapse was seen to be precipitated by a conflict between the ‘non-smoker’ identity and one that competed with it (e.g. ‘I’m not worth saving’ or ‘I am a good person when I am a smoker’).

Discussion: It may be unnecessary to aim for a total ‘non-smoker’ identity to facilitate long-term abstinence and identity conflict may be an important source of relapse.

Relationships with peers in obese and overweight adolescents

Vasileva, L.,* Alexandrova-Karamanova, A., Alexandrova, B., & Bogdanova, E.; *Bulgarian Academy of Sciences, Bulgaria

Background: The aim of the study is to investigate the links between peer relationships and obesity and overweight among adolescents participated in the first Bulgarian Health Behaviour in School-aged Children study 2005/2006.

Methods: A national representative sample of 4854 schoolchildren aged 11, 13 and 15 completed the HBSC international standard questionnaire. The results to be presented are based on descriptive statistics and Kruskal–Wallis test.

Findings/Discussion: Results indicate poorer relationships with peers in obese and overweight students. Obese and overweight students have been bullied ($\chi^2 = 33.586$; $p < 0.001$) and have participated in a physical fight more often ($\chi^2 = 18.521$; $p < 0.001$) compared to students with normal weight or underweight, but less often have communicated with friends through electronic media and participated in a number of peer group activities. At the same time overweight and obese students have more male friends compared to students with normal weight or underweight.

Identity and motivational factors regarding leisure time physical activity among high school students

Verkooijen, K.* & Vaandrager, L.; *Wageningen University, The Netherlands

Background: Past research has shown that identity and motivational factors regarding physical activity (PA) are related to adolescents’ participation in leisure time physical activity and

other health-related behaviours. This study aimed to explore gender and age differences in this context.

Methods: Participants were 212 Dutch high-school students (43% male) in the age of 11–19 years ($M = 15.2$, $SD = 1.95$). Participants completed a paper-and-pencil questionnaire including measures of leisure time physical activity, PA identity, PA motives, and smoking behaviour.

Findings: Boys and girls identified (equally) strongly with being a physically active person. While a stronger PA identity was not associated with higher participation in leisure time physical activity, it was associated with less smoking. PA motives differed by gender and age.

Discussion: Competition was important for boys, while girls attached more importance to improving health. With increasing age, enjoyment became a less important and appearance a more important PA motive.

Self-efficacy and self-regulation as predictors of the perception of risk-related behaviour among adolescents

Veselska, Z., Gajdosova, B., Madarasova Geckova, A., Orosova, O., van Dijk, J.P., & Reijneveld, S.A.; PJ Safarik University, Slovakia

Background: To assess whether self-efficacy and self-regulation predict the perception of risk-related behaviours among adolescents.

Methods: A total sample of 501 elementary-school students (mean age 14.7 ± 0.9 years, 48.5% males) from Slovakia and the Czech Republic completed the Self-efficacy Scale, including subscales for general and social self-efficacy, and the Self-regulation Scale, and answered questions about the perception of risk-related behaviour (thrill-seeking, rebellious, risky, antisocial behaviour). Data were explored with linear regression separately for girls and boys.

Findings: The perception of thrill-seeking, rebellious and risky was predicted by general self-efficacy among girls ($p < 0.05$) and by self-regulation among boys ($p < 0.001$). In contrast, the perception of antisocial behaviour was predicted by social self-efficacy among girls ($p < 0.05$) and general self-efficacy among boys ($p < 0.05$).

Discussion: Self-efficacy and self-regulation might not only influence the adoption of health promoting habits and the cessation of risk-related behaviours, but also influence the perception of such behaviour.

The quality of life of patients diagnosed with breast cancer

Vintila, M.* & Pantelie, R.; *West University of Timisoara, Romania

Background: The diagnosis of breast cancer affects the balance in the psycho-social homeostasis of the women.

Methods: We studied a group of 30 women diagnosed with breast cancer comparatively with 30 healthy subjects by using a battery consisting of: STAI, BECK, defense mechanisms –SEMCA, aggressiveness test (Buss and Perry) and a Quality of life Questionnaire (Cummins).

Findings: When analyzing the data related to the quality of life we found that there is a significant difference in the material well-being of the two groups, $t = 2.76$ at $p < 0.01$. As a result their productivity related to work, education, leisure time are being influenced, $t = 4.43$, $p < 0.01$. Intimacy is strongly altered at our subjects as a result of their disease, $t = 4.93$, $p < 0.01$, and they feel less safe than healthy subjects.

Discussion: Women diagnosed with breast cancer have a significantly lower quality of life manifested in their material and emotional well-being.

The life quality of couples diagnosed with sterility

Vintila, M.* & Pantelie, R.; *West University of Timisoara, Romania

Background: The diagnosis of sterility affects the balance in the psycho-social homeostasis of the diagnosed women and of the affected couple.

Methods: We studied a group of 30 women diagnosed with sterility comparatively with 30 healthy subjects by using the following battery: STAI, BECK, defense mechanisms – SEMCA, aggressiveness test (Buss and Perry), self-esteem (Rosenberg) and a Quality of life Questionnaire (Cummins), Multidimensional Relationship Questionnaire (Snell).

Findings: When analyzing the data related to the relationship, we observed significant differences regarding relationship consciousness, $t = 2.67$ at $p < 0.01$; and also significant differences in the levels of relationship motivation, anxiety and preoccupation. In the quality of life we found that there is a significant difference regarding the place in the community and emotional well-being these values being significantly lower in women with breast cancer.

Discussion: The diagnosis of sterility has a marked repercussion on the level of life quality and on the parameters of relationship.

Subjective sleep quality in workers with high and low burnout

Violani, C., Mallia, L., & Borgogni, L.; University of Rome, Italy

Background/Methods: The study assessed sleep quality and morning tiredness in social workers and in employees who completed the standardized questionnaires MBOI-GS and SDHQ. Subjective tiredness and sleep quality assessed with reference to workdays and days off by subgroups with Very Low (<10%), Low (11–20%), High (81–90%) and Very High (90–100%) scores in the MBOI-GS scales were analyzed through mixed ANOVAs 2×4 with days and subgroups as factors.

Findings: Results were the same among social workers and employees. Concerning tiredness there are main effects for days, ($F(1, 136) = 17.59$), with higher tiredness on the weekdays, and for groups ($F(3, 136) = 17.75$), with tiredness higher in the VH and lower in VL group, an interaction ($F(3, 136) = 4.65$) shows less tiredness on the days off for VH and H groups. Concerning sleep quality there are the same main effects but no interaction.

Discussion: A sleep impairment in the days off seems critical in the development of BO exhaustion only when strain in the workdays is high.

Parenting style and cognitive factors in relation to the intention of parents to prevent cyberbullying

Vollink, T.,* Dehue, F., & Bolman, C.A.M.; *Open University of the Netherlands, The Netherlands

Background: Literature reveals that cyberbullying can result in health problems, like depressive symptoms and stress. In a recent study we found that parents can influence their childrens cyberbullying behaviour by their parenting style (strictness, involvement and psychological control).

It was hypothesised that strictness and involvement and psychological control would be positively related to parents' intention to take preventive measures.

Methods: Data were collected ($N = 563$) from a panel survey consisting of parents from children aged between 10 and 15 years. A hierarchical linear regression analysis was used to test our hypothesis.

Findings: The results revealed that 18% of the variance in the intention to take preventive measures could be explained by involvement and 23% could be explained by specific cognitions (attitude, social influence and self efficacy) to prevent cyberbullying behaviour $F(8, 554) = 47.38, p = 0.000$.

Discussion: These results provide insights in important determinants of parents' intention to take preventive measures.

Optimism and health: The mediating effect of personal goals

Vollmann, M.* & Salewski, C.; *University of Konstanz, Germany

Background: Adaptive goal adjustment in the face of challenging or unattainable goals appears to mediate the beneficial health effects of optimism on health outcomes. However, this raises the question whether characteristics of current personal goals (importance, attainability, commitment) are also related to optimism and health outcomes.

Methods: Via questionnaires, dispositional optimism, goal characteristics of 40 personal goals and three health-related outcomes (life satisfaction, affect balance, self-rated health) were assessed in 111 participants in an occupational rehabilitation program.

Findings: In general, optimists reported a higher goal attainability than pessimists ($r = 0.43, p < 0.01$). Specifically, optimists regarded their important goals as more attainable and were more committed to attainable goals ($r_s > 0.28, p_s < 0.01$). Most importantly, goal characteristics in turn partially mediated the positive relationship between optimism and health-related outcomes.

Discussion: The effect of optimism on health seems to be influenced, at least to some extent, by the higher attainability of important personal goals.

Psychosocial factors in intensive care patients who fail to wean from mechanical ventilation

Wade, D.,* Hart, N., & Weinman, J.; *University College London, UK

Background: Failure to come off (wean from) mechanical ventilation is a significant problem in intensive care. The aim of this investigation was to identify psychosocial predictors of weaning outcome and sources of psychological distress.

Methods: Mixed methods were used. In a prospective pilot study, 28 weaning patients were assessed for mood, self-efficacy and social support. The primary outcome measure was days to wean. In a qualitative study, 6 patients who failed to wean were interviewed, using Interpretative Phenomenological Analysis.

Findings: Anxiety ($p = 0.020$), self-efficacy ($p = 0.022$) and positive emotion ($p = 0.030$) were significant predictors of weaning outcome. The master themes of the qualitative study were fear and danger; disorientation; loss and helplessness; inability to communicate; and provision of support.

Discussion: Ventilated patients in ICUs suffer distress exacerbated by communication difficulty. Delirium and anxiety may interfere with weaning from ventilation. Self-efficacy and support from staff are protective factors.

Choosing between CT colonography and colonoscopy: A study of patient preferences

Wagner, C.,* Halligan, S., Atkin, W., Lilford, R., Morton, D., & Wardle, J.; *University College London, UK

Background: This study explored preferences for two diagnostic bowel tests, colonoscopy and a new non-invasive technology, CT colonography.

Methods: Key test attributes were presented in a stepwise fashion during a series of semi-structured discussion groups to elicit test preferences and discussion in a non-patient sample of 26 asymptomatic volunteers (mean age 64 years). Group discussions were transcribed and analyzed thematically.

Findings: On the basis of minimal information, a majority of participants preferred CT colonography to colonoscopy (65% vs 11%), while 24% had no preference. However, once participants had received information on all aspects, this was reversed, with 80% of participants preferring colonoscopy compared with 8% preferring CT colonography. Thematic analysis showed that participants almost unanimously considered information about test sensitivity to be the most important feature, and perceived relatively modest differences in test sensitivity to be highly significant.

Discussion: The high value attached to test quality rather than comfort has implications for the development of educational materials supporting informed choice as well as the refinement of CT colonography.

Idiopathic environmental intolerance with attribution to electromagnetic fields: A grounded theory model of illness and coping

Wallace, D.,* Eltiti, S., Ridgewell, A., Garner, K., Russo, R., & Fox, E.; *University of Essex, UK

Background: Idiopathic Environmental Intolerance with attribution to electromagnetic fields (IEI-EMF) has no scientifically established cause. Sufferers typically report one or more generic symptoms which they associate with electromagnetic fields. The lack of scientific evidence prompted a qualitative approach to written accounts of sufferers to produce a model to uncover the dynamics of this condition.

Methods: Data from adults aged 18 to 80 was collected using a survey, medical history interviews, letters and text from internet chat rooms. Grounded Theory was used for analysis.

Findings: 'Body-focused coping in response to distress primed by objects and environments where EMFs are perceived to be present' was the main theme identified. A model with two components emerged: (a) illness development and (b) illness maintenance. Psychosocial factors identified included beliefs, emotions and social context and support.

Discussion: IEI-EMF and modern illnesses in general highlight the powerful role of social context, social support and individual differences. Our research raises an important issue for Health Psychologists: How to dispel the mis-conception that illness is exclusively physical or mental.

Patient involvement in safety: Are patients ready to help prevent harm in healthcare?

Wallace, L.* & Sembi, S.; *Coventry University, UK

Background: Worldwide around 10% of hospitalized patients suffer harm, which are largely preventable. We examined how prepared patients are to be vigilant partners in their healthcare.

Methods: 74 older adults completed a questionnaire containing 14 recommended safety actions (Agency for Healthcare Research and Quality), before and after reading five scenarios of adverse events experienced by UK patients. Repeated measures T tests were conducted.

Findings: Exposure to the scenarios had no effect on intended protective actions, nor confidence in healthcare. The most popular actions were to draw staff attention to medications, other treatments, allergies- i.e. clarification. Least popular were challenging actions e.g. asking professionals about hand washing. Recent inpatient care was associated with greater confidence healthcare staff and in personally taking preventive action.

Discussion: Patients are reluctant to challenge their carers, and may need mastery role models (e.g. DVD scenarios) to gain confidence to challenge and take responsibility for preventing harm.

Experiences of healthcare provision in adolescents with an altered appearance

Wallace, M.,* Harcourt, D., & Rumsey, N.; *University College London, UK

Background: Appearance assumes enormous significance during normative adolescent development. Experiencing a condition altering appearance poses a particular challenge for adolescents. Little research has examined the impact of this within the healthcare context. This paper will examine experiences of healthcare provision of 35 adolescents with cancer, meningococcal septicaemia, scoliosis and acne, in relation to associated appearance changes.

Methods: Interpretative Phenomenological Analysis (Smith, 1996) was adopted to provide an in-depth exploration of adolescents' experiences.

Findings: A key finding was the discrepancy between healthcare providers' and adolescents' perceptions regarding appearance changes, resulting in dissatisfaction with aspects of care. Adolescents emphasised the need for improved psychosocial aftercare, and where possible, preparation concerning appearance outcomes. Finally, the need for more adolescent-specific wards was raised.

Discussion: Findings highlight the need for increased education of healthcare professionals about appearance change. The role health psychologists can play in improved education and provision of psychosocial care will be discussed.

The role of illness perceptions and treatment beliefs in psychological adjustment and adherence to treatment in patients with Hereditary Hemochromatosis

Walsh, J.,* Jordan, P., & Lee, J.; *NUI Galway, Ireland

Background: The purpose of the study was to use an extended version of Leventhal's Self-Regulatory Model to predict psychological adjustment and adherence to treatment in patients with hemochromatosis.

Methods: Seventy four patients attending an out-patient clinic for treatment completed questionnaires assessing illness perceptions, treatment beliefs, adherence to treatment and adjustment.

Findings: Hierarchical multiple regression analysis revealed that illness perceptions accounted for almost 30% of the variance in psychological adjustment. Fewer perceived consequences ($t = -2.90$, $p < 0.01$) and greater perceived control over one's illness ($t = 2.01$, $p < 0.05$) were independently predictive of greater levels of adjustment to illness as was lower perceived stress ($t = -0.98$, $p = 0.05$). Older age and higher necessity beliefs were the only predictors of self-reported adherence.

Discussion: The findings suggest that hemochromatosis patients' perceptions of their condition can influence their adjustment and that patients' treatment beliefs can influence their adherence.

Social support buffers the effect of chronic conditions on life satisfaction

Warner, L.M.,* Schüz, B., Wurm, S., Ziegelmann, J.P., & Tesch-Römer, C.; *Freie Universität Berlin & German Center of Gerontology, Germany

Background: With increasing age, chronic conditions accumulate (multimorbidity), which is associated with decreases in life satisfaction. Evidence suggests that social support can attenuate detrimental effects of morbidity. This effect however might be distorted by depressive symptoms.

Methods: Life satisfaction was regressed on number of chronic conditions (NoCC) with structural social support as continuous moderator in a nation-wide representative sample (German Ageing Survey, $N = 3084$, age 40–85) while controlling for depressive symptoms.

Findings: Support moderated the effect of NoCC on life satisfaction after controlling for age, sex, marital status, region and depression. Simple slopes analyses indicate that high support buffers effects of morbidity on life satisfaction.

Discussion: Social support alleviates detrimental effects of NoCC on life satisfaction, independently of depressive symptoms. Interventions targeting the integration of elderly people into social networks or, more specifically, targeting their ability to search support may contribute to the maintenance of life satisfaction despite multimorbidity.

Medical providers' perspectives on family involvement in HIV treatment: Benefits, advantages, and challenges

Wendorf, A.R.* & Mosack, K.E.; *University of Wisconsin-Milwaukee, USA

Background: While research indicates the importance of the patient-provider relationship in HIV/AIDS treatment, family involvement in treatment planning has not been examined. This qualitative study examined medical providers' perspectives about family involvement in HIV/AIDS treatment planning.

Methods: Semi-structured interviews were conducted with U.S. health care providers (i.e., physicians, nurse practitioners, and nurses; $N = 11$) located in a mid-sized Midwestern city.

Findings: Grounded theory analysis revealed benefits, disadvantages, and challenges regarding family involvement. Perceived benefits of family involvement included emotional and treatment-related support to patients and informational support to patients and providers. Disadvantages included patient-family member conflict, family interference with treatment planning, and family member distrust of provider or treatment. Variable and unpredictable family support were cited as key challenges to family involvement in patient health care planning.

Discussion: Future research should examine which patient, family, and visit characteristics relate to improved patient-provider communication, patient adherence, and health outcomes.

Mixing your methods: The use of qualitative methods in randomised controlled trials

White, P.,* Keogh, K., & Smith, S.; *Trinity College Dublin, Ireland

Background: This study illustrates the use of qualitative methods in randomised controlled trials (RCTs). It reports on focus groups that were conducted to evaluate a family based intervention for people with poorly controlled type 2 diabetes.

Methods: Three focus groups were run with participants from the experimental arm of the RCT and were analysed using content analysis.

Findings: Overall, the trial was found to be acceptable to the participants. Analysis revealed that the elements of the RCT that the participants found helpful included; the number, location and duration of meetings. Participants' personal changes also emerged from the analysis, such as a shift in perceived control and an increased self-efficacy about managing diabetes successfully.

Discussion: Combining interpretative qualitative methods with structured RCT's is a novel approach in health psychology. It allows for comprehensively designed trials and the greater interpretation of results. Health psychologists are uniquely positioned to theoretically and practically carry out both.

Perceived patients' role, motivation to work and attitude to motivating patients in female medical specialists at Poland

Wilczek-Rużyczka, E., Czabanowska, K., & Górkiewicz, M.; Jagiellonian University of Cracow, Poland

Background: Intention to change health-related behaviour arises within patient but with strong influence from his environment. This study focused on medical environments part only.

Methods: Questionnaire survey with 20-item own questionnaire was made in $N = 245$ female medical professionals aged 22–77 years (mean 37.4; $SD = 9.3$) recruited from 7 medical professions. Scales' validation, ANOVA, Chi-square, regression were used properly.

Findings: Positive attitude to motivating patients and manifest aspiration to professional development, including motivating skills, were common in all professional groups, independently of age and town/country habitation. Motivation to work and attitude to motivating patients were highly correlated ($R = 0.37$; $p < 0.0001$) but including perceived patient's role in motivational processes (measured on 10-level Likert scale) improved this relation (change of Akaike' criterion $\Delta AIC = -8.1$). Perceived patient's role increases with age ($R = 0.17$; $p = 0.01$) and professional experience (ANOVA: $p = 0.002$).

Discussion: Importance of perceived patient's role and motivation to work was proved. This can be interested for public-health authorities and providers too.

Finding meaning in near-death experiences: An Interpretative phenomenological analysis

Wilde, D.J.* & Murray, C.D.; *University of Manchester, UK

Background: Near-Death Experiences (NDEs) have been reported by people who are verifiably near-death (e.g. after cardiac arrest) and people who perceive themselves to be near-death (e.g. during traumatic experiences). The aim of this study was to investigate the meaning and experience of having an NDE and its resultant after-effects.

Methods: Three women took part in face-to-face, semi-structured interviews which were recorded and transcribed. Interpretative Phenomenological Analysis was used to analyse the data.

Findings: Four themes emerged; Barriers and Facilitators to Sharing the Experience, Growing as a Person, Making Sense of It, and Being and Becoming: Life Post-NDE.

Discussion: By examining the experience and meaning of the NDE, psychologists and health care professionals will be better equipped to understand their clients' experiences and to help them with any potential personality transformations or psycho-spiritual crises that may arise after the event. Such understanding can in turn contribute to the physical rehabilitative process of near-death experiencers.

Children's responses to stress. The Dutch responses to stress questionnaire-abdominal pain: Reliability and validity

Willems, D. & Vanderfaeillie, J.; Vrije Universiteit Brussel, Belgium

Background: The reliability and validity of the Dutch Responses to Stress Questionnaire – abdominal pain, child and parent version, was examined. This measure examines responses to stress including voluntary coping responses as well as involuntary or automatic reactions.

Methods: The original questionnaire was translated using a back-translation procedure and presented to 210 children aged 9–12 years old and their parents.

Findings: Through confirmatory factor analysis, an adequate 5-factor structure was found. A distinction between coping and involuntary stress responses was made. Both consisted of an engagement and a disengagement factor. Engagement coping further consisted of primary and secondary control coping. Internal consistencies were adequate. Coping and involuntary stress responses of the child and parent version correlated small but significantly.

Discussion: The Dutch Responses to Stress Questionnaire – abdominal pain seems a reliable measure. Differences in perception on coping and involuntary stress responses of children and their parents have important consequences for the treatment practice.

Voluntary responses to stress and somatic complaints in children

Willems, D., Vanderfaeillie, J., & van den Berg, M.; Vrije Universiteit Brussel, Belgium

Background: The relationship between coping with abdominal pain and somatic complaints in children was examined.

Methods: Two hundred and ten children aged 9–12 years old filled in a Dutch Responses to Stress Questionnaire – abdominal pain and a Somatic Complaints List.

Findings: Primary control engagement coping (problem solving, emotion regulation and emotion expression) and disengagement coping (denial, avoidance and wishful thinking) are positively correlated to somatic complaints. Secondary control engagement coping (cognitive restructuring, positive thinking, acceptance and distraction) and somatic complaints are not associated. As expected, a relationship was found between voluntary stress responses and somatic complaints. More specifically we found that children adjusting to pain had less somatic complaints compared to children who tried to control the pain.

Discussion: This suggests that children using coping strategies like positive thinking, acceptance and distraction might experience less somatic complaints.

Type D personality predicts medication adherence and disability in post-MI patients

Williams, L., O'Connor, R., & O'Carroll, R.; University of Stirling, UK

Background: It is unclear how Type D personality leads to poor prognosis in cardiac patients. Accordingly, the current study investigated (i) the relationship between Type D and illness perceptions in myocardial infarction (MI) patients, and (ii) if Type D predicts medication adherence and disability post-MI.

Methods: In a prospective study, 191 MI patients completed measures of Type D, medication beliefs, illness perceptions, and mood, 3–5 days post-MI. Three months later, 131 patients completed measures of medication adherence and disability.

Findings: Type D patients differed from non-Type D patients on all illness perceptions. Hierarchical multiple regression analysis demonstrated that Type D predicts medication adherence and disability post-MI, after controlling for demographics and MI severity.

Discussion: Type D MI patients exhibit widespread pathogenic illness cognitions, and are less likely to take their medication compared to non-Type D's. These factors may explain, in part, the toxic effect of Type D on cardiac prognosis.

Perceptions of Type 2 diabetes mellitus (T2DM) among Chinese patients living in Scotland

Wilson, S.L.,* Shepherd, C.K., & Lawton, J.; *Glasgow University, UK

Background: Chinese migrants in Scotland have a higher prevalence of T2DM than the indigenous population and there is a need to explore how Chinese patients understand their illness as many of them are non-fluent in English.

Methods: Qualitative study using semi-structured interviews with 30 patients, conducted in Cantonese. Leventhal's model of illness representations was incorporated in the topic guide. Data analysed using interpretative phenomenological analysis and content analysis.

Findings: Perceptions of T2DM can be briefly summarised as follows: ● Primarily derived from traditional Chinese medicine ● Primarily derived from Western biomedicine ● fatalism ● "don't know". Other themes include: Centrality of food to Chinese health culture, the influence of collectivism and culturally inappropriate lifestyle advice.

Discussion: This study highlights the necessity of systematic exploration of individual beliefs about health and illness within different cultural groups within a multicultural society to facilitate the delivery of effective health care.

The predictive power of the Health Action Process Approach (HAPA) in a weight-loss trial

Wood, K.; University of Kent, UK

Background: This correlational study examined the value of the HAPA theory at predicting weight-loss in a weight-loss trial.

Methods: Participants ($N=22$) undergoing an 8-week weight-loss programme were recruited from a private hospital. Baseline questionnaires measured demographics, height, weight, self-efficacy, risk-perception, outcome-expectancies and intentions.

Findings: Questionnaires at 4 and 8 weeks measured weight-loss behaviours – physical activity, dietary variables, effort and weight. The HAPA was able to significantly predict weight-loss ($R^2=0.57$, $p=0.027$). Self-efficacy and risk-perceptions were significantly related to intention ($r=0.80$, $p<0.001$ and $r=-0.48$, $p<0.01$ respectively). Intentions were significantly related to

weight-loss behaviour ($r=0.72$, $p<0.01$), and weight-loss behaviour was significantly related to weight-loss ($r=0.73$, $p<0.01$). The study provides evidence for the predictive value of the HAPA at predicting weight-loss.

Discussion: Findings build on current knowledge of the cognitions and behaviours involved in successful weight-loss and may contribute to the development of interventions designed to increase weight-loss in the overweight and clinically obese population.

Facing up to the lived reality of menopause: A gap in current health information

Woolridge, L.* & Percy, C.; *Coventry University, UK

Background: This study explored women's views on menopause, with a particular focus on information needs.

Methods: Thirteen pre-, peri- and post-menopausal women aged 44–63 years took part in repertory grids and semi structured interviews to identify their expectations and experiences of menopause. Interview transcripts were analysed using thematic content analysis.

Findings: Women reported a dearth of good quality information. They felt that social taboos about women's bodies and ageing limited access to information. The only resources routinely available were medicalised and/or commercialised materials treating the menopause as pathological and/or undesirable.

Discussion: Rather than information on how to render the menopause invisible, some women want support to manage it positively as an integral part of their life experience, especially information on psychological aspects, such as identity and adjustment to ageing. The biopsychosocial approach adopted by health psychology has the potential to address gaps in public health information on the menopause.

Why is genetic risk information associated with increased perceptions of medication effectiveness? An analogue study

Wright, A.J.,* Whiteley, A., Whitwell, S.C.L., Hankins, M., Sutton, S., & Marteau, T.M.; *King's College London, UK

Background: When health problems have a genetic origin, medication is often perceived as more effective. However, the cognitive processes underlying this finding are unclear. This study tests how medication's perceived effectiveness is influenced by a health problem's severity and cause.

Methods: 647 adults read one of 24 vignettes in a 4(cause: Environmental/family history/genetic test/genetic test & family history) \times 2(severity: High/low) \times 3(problem: Depression/heart disease/obesity) design. The key outcome was perceived effectiveness of medication.

Findings: Perceived effectiveness of medication was stronger in the genetic test condition than in the environmental cause condition (main effect of cause: $F(3, 623) = 3.79$, $p = 0.01$). The main effect of problem was significant ($F(2, 623) = 86.05$, $p < 0.001$), medication perceived as more effective for heart disease than depression or obesity.

Discussion: Increased perceptions of medication effectiveness associated with genetic risk information apparently result from the nature of the problem's cause, rather than from genetic problems being perceived as more severe.

The contribution of psychology to renal clinical pathways: A first year clinical audit

Wynn, M.; Auckland City Hospital, New Zealand

Background: Well documented psychological needs of the renal population led to the appointment of a psychologist (0.3FTE) at ADHB in June 2007.

Methods: A scoping exercise was conducted aimed at identifying psychological needs within the renal pathways. It was hypothesized that this would inform design and delivery of interventions and contribute to needs-led service development and review. Service provision promoted the application of psychological models to the understanding of the care of renal patients, which included staff support. This was achieved through the provision of advice, consultation, therapeutic interventions, teaching and dissemination of relevant research where there was identified need. First year audit was conducted to determine whether implementation targeted identified need.

Findings/Discussion: The findings show that identified need was met within service capacity. In addition, findings highlight areas of additional and un-met need, which inform ongoing service development relating to the psychological care of the renal population at ADHB.

Using a combined motivational and volitional intervention to increase physical activity and health eating

Zhang, Y.* & Cooke, R.; *Aston University, UK

Background: This study tested the impact of motivational and volitional interventions to promote physical activity and healthy eating.

Methods: 84 participants were randomly assigned to either an experimental condition (motivational, volitional, combined motivational and volitional) or a control group. The motivational intervention involved reading health leaflets. The volitional intervention involved forming implementation intentions. Participants received the appropriate intervention/s then completed measures of cognitions and past behaviour. Four weeks later, behaviour was measured.

Findings: The motivational intervention increased healthy eating intentions ($F(3, 80) = 12.35$, $p < 0.001$) and physical activity intentions ($F(3, 80) = 12.07$, $p < 0.001$). The combined intervention increased physical activity ($F(6, 158) = 2.65$, $p < 0.001$) and fruit and vegetables consumption ($F(3, 80) = 4.26$, $p < 0.05$), compared to the other groups.

Discussion: These results suggest that motivational interventions are effective at changing cognitions but changing behaviour requires an intervention based on both motivation and volition.

Psychological resources in coping with different chronic diseases

Ziarko, M.* & Kaczmarek, L.; *Adam Mickiewicz University, Poland

Background: Chronic disease can be regarded as a stress situation characterized by different stressors and coping efforts depending on the type of illness. Diverse personal and environmental resources play a role in the coping with illness process. In the present study a global profile of resources was analyzed in clinical patients. It was hypothesized that different types of disease lead to mobilization of different resources.

Methods: 115 men and women suffering from oncological, rheumatoid or cardiovascular disease completed Resourcefulness for Recovery Inventory which measures 20 personal and environmental resources. Analysis of variance was performed.

Findings: Different patterns of mobilized resources emerged in respect to emotional competence ($F=12.24$, $p<0.000$), control and coping competence ($F=7.46$, $p=0.001$) and health beliefs ($F=16.03$, $p<0.000$). Cardiovascular patients reported the highest mobilization.

Discussion: Depending on the type of disease psychological interventions should target different areas. Oncological patients appear to be those with the highest deficits in psychological resources.

Intimacy and sexuality after breast cancer: preliminary results of a French survey

Bredart, A., Dolbeault, S., Besancenet, C., Flahault, C., Falcou, M-C., Savignoni, A., This, P., Asselain, B., & Copel, L.; Institut Curie, Paris, France

Background: This study aimed to describe body image, sexual activity and function in French early stage breast cancer women survivors.

Methods: 850 post-treatment patients randomly selected from a consultation list were solicited by mail. Upon agreement, they completed at home: the Body Image Scale (BIS), the Relation and Sexuality Scale (R&S) and the Sexual Activity Questionnaire (SAQ).

Findings: 53% patients agreed to participate over a 9-month recruitment period. Respondents (83%) were younger. Mean (SD) age was 53 (8.4); most women were married (65%); had been treated by breast conserving surgery (72%) or endocrine treatment (61%). Mean (SD) BIS scores were 7.2 (7.3). Sexual desire had disappeared in 55% of the women; 54% reported their relationship with their partners had remained emotionally close since the cancer diagnosis.

Discussion: A significant number of breast cancer survivors report body image and sexual problems in relation to cancer or its treatment; but no emotional distance from their partner.

Tactile perception, emotional responses and personality factors: a preliminary behavioural study

Danti, S.,* Ricciardi, E., Gentili, C., Guazzelli, M., & Pietrini, P.; *University of Pisa, Italy

Background: Experience is a complex combination of perceptual and emotional elements. Which sensorial characteristics influence emotions is however not fully clarified. The aim of this study is to evaluate feasibility of standardized methods for emotional rating in the tactile-haptic perception and the role of possible psychological factors influencing such experience. As further studies did not use standardized emotional rating, we hope to provide a useful paradigm for neurobiological and behavioural future studies.

Methods: Fifteen subjects were enrolled in a behavioural study. After a psychological evaluation volunteers were asked to tactilely explore and rate along the three dimensions of the Self-Assessment-Manikin emotional scale different devices modulating specific tactile-haptic features.

Findings: We found pleasantness was correlated with softer and smoother surfaces perception, psychological characteristics affects the strength of this correlation.

Discussion: Covariation of emotional scales and tactile-haptic parameters suggests the feasibility of this scale for this type of studies opening new insights in perceptive-emotive phenomena.

Factors associated with well-being at the end of life and good death

Echteld, M.A.*, Abarshi, E., Onwuteaka-Philipsen, B., Donker, G.A., Van den Block, L., & Deliens, L.; *VU Medical Centre, Netherlands

Background: Factors associated with well-being at the end of life and good death were explored in a mortality follow-back study.

Methods: General practitioners (GPs) within the Dutch Sentinel Network—a representative GP-based network—retrospectively registered all non-sudden deaths in their practices of patients 1y and older occurring in 2007 ($n = 267$). Diagnosis, patients' wishes regarding care, aim of care, symptoms and well-being in the last three days of life (0–10; worst = 10), and good death (0–10; worst = 10) were registered.

Findings: 73.8% of the patients had one or more symptoms of score 4 or higher. Worst symptoms were fatigue and lack of appetite (median = 8). Median well-being and good death scores were 6.5 and 2, respectively. Ill-being was associated with having diabetes and hospital deaths.

Discussion: A good death was positively associated with the number of GP contacts, palliative care aim, and absence of symptoms. Implications for care planning will be discussed.

Heavy drinking and life stage development: qualitative accounts from a ten-year longitudinal study

Rolfe, A.; University of Birmingham, UK

Background: The Birmingham Untreated Heavy Drinkers project is a longitudinal mixed methods study of a sample of heavy drinkers in the English West Midlands. It aims to chart the 'natural history' of untreated heavy drinking between 1997 and 2007.

Methods: In this paper, a life-span development approach is adopted in exploring the qualitative biographies of two subsets of participants. The first group ($n = 13$) were born in 1967–68, and have moved through young adulthood during the past decade. The second group ($n = 15$) were born in 1947–48 and have moved through middle adulthood over this time period. The biographies of these two groups are explored using qualitative interviews conducted in the final phase of the project, in which participants reflected on their lives over the past decade. These biographies have been analysed according to story 'types', which include success stories, tragedies, 'settling down' stories, and 'coming through adversity' stories. These accounts are supplemented by 'changes charts', recorded at two year intervals, which are a way of visually representing significant life events and changes in drinking.

Findings/Discussion: The relationship between drinking, life events, mental health and identity is explored through these biographies, and similarities and differences in the accounts of the two age cohorts are identified.