

Health Psychology

SPONSORED SYMPOSIUM

SPS10

Constructing lives in harmony: the power of resilience (Symposium sponsored by The Japanese Association of Health Psychology)

Organizers: *Kyoko Noguchi (1), Donald H Saklofske (2), Annamaria Di Fabio (3)* 1. *Bunka Gakuen University, Japan*; 2. *University of Western Ontario, Canada*; 3. *Department of Education and Psychology (Psychology Section), University of Florence, Italy*

Discussant: Fanny M Cheung

The Chinese University of Hong Kong, China
Session Abstract:

From a positive psychology perspective, how we successfully manage and address everyday challenges and even turn them to our advantage requires the development of protective factors in our everyday personal and professional lives. In this context resiliency is a fundamental human resource, allowing individuals to 'bounce back in the face of adversity' and even to thrive and flourish. For this reason, building strength and recognizing the value of resilience as a pillar of psychology underscores its significance in living our lives in harmony. In this symposium, we will describe the new Resiliency Scale for Young Adults, examine the relationship of resilience and career outcomes, focus on the importance of adaptation in avoiding negative emotions and stress, and explore the relationship between stressor and stress responses and the perceived well being. This preventive and positive psychology perspective argues that resilience is a strength needed to attain well-being in the 21st century.

Resilience and career outcomes for the 21st century

Annamaria Di Fabio *Department of Education and Psychology (Psychology Section), University of Florence, Italy*

This study, framed in a preventive and positive psychology perspective, examined the relationship of resilience and career outcomes. Italian university students (N=198) completed the following measures: Connor-Davidson Resilience Scale (CD-RISC, Campbell-Sill & Stein, 2007) Italian version (Di Fabio & Palazzeschi, 2012); the Big Five Questionnaire (BFQ, Caprara, Barbaranelli, & Borgogni, 1993); the Career Decision Self-Efficacy Scale (CDSES, Bez & Taylor, 2000) Italian version (Nota, Pace, & Ferrari, 2008); the Student Perceived Employability Scale (SPES, Rothwell, Herbert, & Rothwell, 2007) Italian version (Di Fabio & Palazzeschi, 2013); and the Resistance to Change Scale (Oreg, 2003) Italian version (Di Fabio & Bernaud, 2007).

Hierarchical regression analyses showed that resilience added 12% of incremental variance beyond personality in relation to career decision-making self-efficacy, 15% in relation to perceived employability and 19% in relation to resistance to change. These results underscore the importance of resilience, and suggest new research and intervention opportunities.

Japanese features of perceiving well-being and its effect on stress

Yoshiyuki Tanaka (1), Akira Tsuda (2) 1. *Kyoto Tachibana University, Japan*; 2. *Kurume University, Japan*

With exploring the results of a transtheoretical model (TTM)-based stress-management program, we will discuss the effect of Japanese perceived well-being on stress process with taking its role into account as resiliency. 455 university students participated in the program, and 67 students provided same assessment data without the program. Their subjective well-being (SWB) and psychological well-being (PWB) had been measured at the beginning. They answered questionnaires at every three-month during one year; consisted of stress, coping, stress-management behavior, and four basic components of TTM. An interactional effect was found on stress level depend on their SWB but not on PWB; which confirmed stress-buffering effect of SWB. Moreover, we found several interactions suggesting that SWB helps restrain unhealthy behavior and cognition, while PWB is useful to develop actual positive behavior. It might be very worthwhile to consider each of these broaden-and-build effects of perceived well-being for improving Japanese stress and resiliency.

The Resiliency Scale for Young Adults: Theory, research and assessment

Donald H Saklofske (1), Sandra Prince-Embury (2), David W Nordstokke (3) 1. *University of Western Ontario, Canada*; 2. *The Resiliency Institute of Allenhurst, United States of America*; 3. *University of Calgary, Canada*

Resiliency has been increasingly studied over the past few decades but still is in search of a psychometrically sound measure set within the framework of a research supported model. The Resiliency Scale for Young Adults (RSYA) is an upward extension of the child-adolescent version (RSCA; Prince-Embury, 2007). This study describes a three factor model of resiliency defined by mastery, relatedness, and emotional reactivity followed by the presentation of the 50 item RSYA derived from several pilot studies. Empirical support for the reliability, factor structure and convergent-discriminant validity of the scale was obtained from several studies with groups of university students.

Resilience and Positive Hedonic and Eudaimonic Well-Being

Maureen Kenny (1), Annamaria Di Fabio (2) 1. *Boston College, United States of America*; 2. *University of Florence, Italy*

The rapid rate of social, technological, and economic change occurring in recent years presents challenges for young people, which can threaten a state of well-being (Masten, 2014). While it makes sense that resiliency or the ability to adapt in the face of adversity would be related to well-being, the understanding of that relationship can be deepened by considering different forms of well-being. Hedonic well-being is understood as the prevalence of positive affect and life satisfaction over negative affect and dissatisfaction (Kahneman, Diener, & Schwarz, 1999), whereas eudaimonic well-being refers to the fulfilment of one's potential through personal growth, mastery attainment, and striving for meaning and purpose (Ryan & Deci, 2001; Ryff & Singer, 2008). In research with Italian high school students, resilience added significant incremental variance beyond fluid intelligence and personality traits in explaining both hedonic and eudaimonic wellbeing. The findings suggest further research and intervention opportunities for promoting well-being.

Psychological growth, Salutogenic Effect and adaptability in Antarctica

Gonggu Yan *Beijing Normal University, China*

Antarctica is the coldest, the driest and the windiest continent on the earth. The severe natural and psycho-social environment in Antarctica challenges the limit of personnel's physical and psychological adaptation. In the first study, 16 Winter-over people who worked at Chinese Antarctic Great Wall station and Zhongshan Station from 2012 to 2014 were interviewed with the in-depth semi-structured interview method. The transcriptions were analyzed by computer-aided qualitative analysis software. It was found that the positive adaptation could be contributed to four major factors: curiosity to the unknown, positive attitude to life, Enjoy the beauty of the nature, and Self-recognition after the polar night. In the second study, 138 people worked in Antarctica from 2009 to 2014 participated. It was found that psychological growth is significantly correlated with psycho-social adaptability, such as Life satisfaction. The implication of the findings were discussed.

INVITED ADDRESS

IA066

Psychological Principles in Therapeutic Interventions for Women Diagnosed with Breast Cancer: A Group-Based Intervention Model

Elizabeth Nair (1,2) 1. *Work and Health Psychologists, Singapore*; 2. *Singapore Psychological Society, Singapore*

A diagnosis of breast cancer is usually greeted with anxiety and often with fear that it is a death knell. What are evidence-anchored psychological principles that can be brought to bear as best practice in formulating therapeutic interventions for women diagnosed with breast cancer? A group-based intervention was formulated with the plan of building a long-term support network characterized by trust, understanding and caring behaviour. This paper will present the psychological building-blocks in this intervention that has led to its success in building resilience in the individual breast cancer patient ensconced within a diverse group, differing in age range, prognosis, religious affiliation and ethnicity. The six day workshop delivered over a three week period completed twelve Runs over a four year period. Evaluations across the Runs demonstrated that the objectives set out at the start were achieved. Research evidence validating the format of therapeutic intervention is discussed.

IA067

Health behavior change: Theory and digital interventions

Ralf Schwarzer (1,2,3) 1. *Freie University Berlin, Germany*; 2. *Australian Catholic University, Australia*; 3. *University of Social Sciences and Humanities, Poland*

Health-compromising behaviors are difficult to change, and motivation to change is not sufficient. Unforeseen barriers emerge, and people might give in to temptations. Good intentions need behavioral support to be translated into action. Advances in human-computer interaction, as well as eHealth or mHealth applications, open a promising agenda for precision behavior change. Studies will be reported that examine the role of theoretical constructs, mechanisms, and digital interventions in the initiation and adherence to health behaviors (e.g., physical exercise, dietary behaviors, hygiene, smoking cessation). The general aim is to examine the requirements and effects of web-based precision behavior change, based on various behaviors, time spans, and samples from different countries. The Health Technology Adoption and Maintenance (HTAM) model serves as one possible backdrop of the studies, making distinctions between (a) pre-intentional motivation processes that lead to a behavioral intentions, and (b) postintentional volition processes that lead to the actual health behaviors.

IA068

Changing pattern of treatment seeking behaviour in Bangladesh

Nafiu H Sufi *Bangladesh Varendra University, Bangladesh*

Treatment seeking behaviour of Bangladeshi people significantly changed nowadays from their behaviour existed in 1971. Earlier, each woman had seven children which have lowered down to two children. Life span has significantly increased due to immunization and better health care services. Qualified physicians, technicians, nurses and midwives increased, but not significantly compared to huge population. With the changes of medical services, the behaviour of the people also changed towards treatment seeking behaviour. Now, majority people don't depend on the faith healers or quacks. On the other hand, many well educated persons, especially the women, can not move out of the family house towards the hospital in emergency medical problems because of the family heads or the village leaders. The author investigated the awareness programs, achievements, attitude change and the drawbacks.

INVITED SYMPOSIUM

IS064

The Important Role of Engagement in School and Work Settings

Organizer: Belén Mesurado *National Scientific and Technical Research Council, Argentina*

Session Abstract:

Engagement is the presence of mental energy and effective connection with an activity. Initially, engagement was a construct only used in the work setting but gradually, educational researchers found it applicable to the academic setting as well. At present, employee and student engagement have become a top business and a top school priority for companies and educational institutions. The present symposium will discuss about the important role of engagement in different settings like scholar and organizational; the authors will present several empirical findings about promoters variables of engagement in Latin American, Chile and Argentina, and Asian countries, The Philippines and Malaysia.

Work Engagement and Job Burnout: The Role of Social Axioms in a Job Demands-Resources Framework

Marshall Valencia, Krishnan Hemalatha *University of Nottingham Malaysia Campus, Malaysia*

The Job Demands-Resources model predicts job burnout and work engagement through two independent processes: health impairment and motivational processes. We extended the model by incorporating social axioms as a mediator. Social axioms are people's general beliefs how the world functions. We considered two types, social cynicism and reward for application. We tested a moderated mediation model using a sample of 342 employees from Malaysia.

Results showed that social cynicism mediated the relationship between job demands and job burnout while rewards for application mediated the relationship between job resources and work engagement. Job demands did not moderate the job resources-engagement link. However, job resources moderated the job demands-burnout link. Job resources in the form of voice, performance feedback, and supervisor support significantly moderated the demands-burnout relationship. The findings are discussed in terms of the importance of individual social beliefs as underlying mechanisms in the links between workplace characteristics and work outcomes.

Relation between Personality Traits and Basic Psychological Need with Academic Engagement

María C Richaud, Belén Mesurado *Consejo Nacional de Investigaciones Científicas y Técnicas, Argentina*

Previous studies have suggested that individual difference variables can be used to explain not only variance in academic performance, but also the processes by which traits influence examination outcomes. Drawing on the Five-Factor Model of personality traits by McCrae & Costa, 2003 and Self-Determination Theory by Deci & Ryan, 2000, the present study examines whether personality traits and satisfaction of basic psychological needs are associated with academic engagement. One hundred seventy one Argentinean students (M age = 20.07; SD = 1.05; 70 males 40.94%) participated in this study by completing Ten-Item Personality Inventory by Gosling, et al., 2003, Ryan and Deci's Basic Need Satisfaction Scale, and Utrecht Study Engagement Scale by Schaufeli et al., 2002. We carried out Block lineal regressions to test our objectives. The results have shown that both personality traits and basic psychological needs are associated in a positive way with academic engagement explaining 23% of the variance.

Why Sense of Relatedness Promotes Academic Engagement in a Collectivist Setting: The Mediating Role of Academic Motivation

Nino Jose Mateo (1), Jerome A Ouano (1), Jesus Alfonso D Datu (2), Mantak Yuen (2) 1. *De La Salle University, Manila Philippines, Philippines*; 2. *The University of Hong Kong, Hong Kong*

Relatedness is known to play a role in many aspects of human development, and has been the focus of previous research. Very few of these investigations have examined the possible connection of relatedness with parents, teachers, and friends to his or her academic engagement in a collectivist setting. The study reported here, involving five hundred twenty seven Filipino secondary school students, helped to address this empirical gap.

The association of the sense of relatedness of students with parents, teachers, and friends with academic engagement and the mediating effects of academic motivation were also explored. Structural equation modeling revealed that sense of relatedness with parents and friends was positively associated with behavioral and emotional engagement due to the mediating impact of autonomous and controlled motivation. The findings are discussed in the context of developing culturally sensitive psychological interventions that may boost academic engagement in collectivist cultures.

Social Cultural influences on worker mental model: one organization, different minds

Ariel Quezada *Universidad Adolfo Ibáñez, Chile*

On 1991, Hazel Rose Markus and Shinobu Kitayama made the first formal description about how culture shapes the self of individuals on emotion, motivation and cognition, distinguishing two main points of view of the mind: Interdependent construal and Independent construal. Today research on Cultural Psychology is extended on several specific topics e.g. emotional expressions, cultural neuroscience, gene-culture interaction, etc. One of these topics is interested on comparisons across a variety of other social distinctions, including social economic status (SES) and educational attainment. Our research tries to show the differences and diversity of people who work together in an organization. Specifically, our data with military, hospital and mining samples show differences on mental model of people in the same workplace. This mental models are the key to understand different perceptions, emotions ideas and values, and give a conceptual framework to reach successfully plans on safety, training, career and well-being at work.

IS065

Personal factors in Mediating Health Recovery: Their qualities, antecedents and enablers

Organizer: Elias Mpofu *University of Sydney, Australia*

Discussants: Stephen D Edwards, Stephen D Edwards

University of Zululand, South Africa

Session Abstract:

Personal factors are important to health and wellbeing in that they are both the most closely related to both achieved and aspired health status beyond what is possible taking into account environmental influences alone. Yet, their assessment is "left to the user, if needed" (WHO, 2001, p. 19). This symposium proposes to address the evidence for the importance of personal factors for health recovery in a broad range of populations with vulnerability. The specific objectives of the symposium are to: 1) Characterize qualities of personal factors for health recovery. 2) Map the antecedents

and enablers of personal factors for health recovery across populations and contexts. 3) Operationalize key constructs for rehabilitation interventions for optimal health recovery premised on modifiable personal factors. 4) Apply ICF participation concepts to personal coping with environmental threats to health and wellbeing.

Post-stroke depression and anxiety: Influence on activities of daily living in a Singapore acute rehabilitation care setting

Elias Mpofu, Yihong Fang, James Athanasou *University of Sydney, Australia*

Objectives: This study is to explore the association between modifiable personal factor-activity of daily living and depressive symptoms or anxiety symptoms among stroke patients in an acute Singapore hospital. **Methods:** 197 patients admitted to an acute stroke unit within two weeks after stroke were screened, and patients with severe cognitive deficits ($n=60$) were excluded. The remaining patients ($n=137$) were then assessed for depressive and anxiety symptoms with the Hospital Anxiety Depression Scale and activity of daily living function using Routine Task Inventory- physical scale. **Results:** Patients with poorer activity of daily living function had higher chances of depressive symptoms ($r=-.397$, $p<.002$), but not anxiety symptoms. **Conclusion:** This study supported the view that activity of daily living function has a relationship with post-stroke depression rather than post-stroke anxiety. Activity of daily living personal function oriented interventions may have prospects as a treatment for post-stroke depression rather than anxiety.

ICF

Personal Factors and Determination of Success in Disaster Response and Large-Scale Deployments in Medical and Community Response Settings

Jeanne M Leblanc (1), Martin E Thornton (2) *1. American Academy Disaster Medicine, Canada; 2. American Academy Disaster Medicine, United States of America*

Objectives: Deploying to disaster and/or humanitarian settings impacts workers, psychologically. Pre-deployment preparation is the standard of care, but yet this does not seem to be sufficient for successful deployment. The aim of this research is to identify retrospectively observed personal factors of responders associated with positive and negative deployment experiences. **Methods:** Semi-structured interviews were conducted with workers and with individuals responsible for deploying volunteers to large-scale disaster or humanitarian missions. Data was analyzed using content

analysis. **Results:** Successful deployments are associated with goodness of fit between personal factors and the environment. Coping styles, individual psychological assets, and lifestyle were often cited as issues associated with both positive and negative outcomes. **Conclusion:** This study emphasizes the importance of considering personal factors when selecting, preparing, and deploying relief workers. Personal factors of the workers significantly impacts the effectiveness of the response, thus use of mental health professional throughout the deployment process is suggested.

Personal and Environmental Factors in Promoting Posttraumatic Growth: Risk Factors, Protective Factors, and Resilience

Lisa Lopez Levers *Duquesne University, United States of America*

Objectives: The literature regarding psychosocial impacts of trauma has grown immensely over the last two decades. Orientations toward integrative health-care interventions have emerged as accepted best practices, including participatory strategies like ICF. The purpose of this translational research is to illuminate recent contributions to the literature concerning Posttraumatic Growth (PTG) and integrative practices. **Methods:** This investigation reviews evidence related to an ecological perspective of psychosocial trauma, integrative trauma counseling practices, and intentional promotion of PTG and resilience. Trauma-related risk factors, protective factors, and resilience characteristics are examined, regarding personal and environmental considerations, to illuminate strategic pathways for promoting PTG. **Results:** Trauma-informed environmental mediation allows for integrative and participatory interventions, thus enhancing practitioner capacity for building client resilience and promoting PTG. **Conclusion:** This translational research examines, illuminates, and translates existing literature regarding integrative health care and PTG, suggesting that trauma-informed ecological mediation can enhance promotion of more resilient responses to trauma.

Immigrant and refugees: Their personal assets and vulnerabilities for health and wellbeing

David L Sam *University of Bergen, Bergen, Norway*

The recent refugee upheaval in Western Europe has brought immigrant health and welfare problem to the fore once again, and just like with the massive refugee movements post-second World War. The immediate concern of the receiving countries has been to provide shelter and the basic necessities of life. However, mental health supports for refugee immigrants are sorely needed in the wake of such crises. The objective of this presentation

is to highlight some of the mental health challenges that arise during the initial and settlement phases of the refugee experience, and discuss how personal assets for resilience may offset the vulnerabilities inherent in the experience of forced migration. The presentation is based on literature review, where preliminary analysis suggests that there are different factors at each phase of the refugee experience that may jeopardize or improve mental health outcome.

Individual resilience in the face of health compromising stressors: Evidence from Cross-Cultural Studies

Denise Catalano (1), John Keegan (2), Jun Yaeda (3), Nobuko Sunami (4)
 1. University of North Texas, United States of America; 2. Hunter University, United States of America; 3. University of Tsukuba, Japan; 4. Teikyo University, Japan

Objective. This study presents evidence for resilience as a personal resource in cross-cultural settings: Western and Asian. Taking into account cultural settings enables health policy makers to contour resilience resources for optimal human development in culturally diverse communities. Methods. Applying a realist review approach (Pawson, Greenhalgh, Harvey & Washe, 2005), evidence for resilience as a resource for health and wellbeing was examined across four ecological levels: individual, personal relationships, community and societal factors. A thematic narrative analysis was applied to construct resilience factor maps in Western and Asian society. Results. Findings from mixed methods studies of resilience as a resource for health and wellbeing led to the development of culturally meaningful concept maps for assessing resilience as defined by the following qualities: biculturalism acculturation, positive adaptation and coping skills. Conclusion. This presentation provides preliminary evaluation of evidence important to supporting resilience as a health and wellbeing resource across cultures.

IS066

Psychology and Disease Prevention

Organizer: *Mika Omori Ochanomizu University, Japan*

Session Abstract:

Successful and effective disease prevention programs must be theory-driven and supported by empirical studies. Psychology has contributed to health promotion by providing theoretical framework and empirical supports on preventive behaviors. The objective of the proposed symposium is to inform the audience the contribution of psychology in understanding health related behaviors, and to stimulate discussions on how theories should be

integrated into health promotion practices and interventions at individual, community and population-levels. The first speaker will introduce socio-ecological and psychological factors associated with child and adolescent health status & behaviors, minority health issues & health disparities from a public health perspective. The second speaker will address the need for integrating psychological perspectives with the prevention of TB. The third speaker will introduce the importance of behavioral health, illustrating eating behaviors and preventive practices. The fourth speaker highlights the role of risk perception and science literacy on preventive behaviors.

The Socioecology of Child Health: Rural and Minority Childhood Obesity Prevention in the US

Lisako J Mckyer Texas A & M University, United States of America

For many conditions, children's health status is highly contingent upon contextual factors. Children's interactions as biological and psychological entities, with their social and built environments heavily influences to their physical and psychological health outcomes. Inequities in meso- and macro-level ecological factors impact micro-factors (i.e., intra individual), and contributes to exacerbating child health disparities. This segment provides an overview of psychological theories' contributions to the socioecological framework (SEF) as applied toward public health issues and health disparities. A SEF-based research study on childhood overweight and obesity prevention will be presented. Parents (N=298) of racially diverse children in rural school districts were recruited to participate in a school-based study. Parent completed 197-item questionnaires related to physical activity (PA), food/nutrition preferences and behaviors, screen time, psychological and sociodemographic factors. Protocol details and key findings will be shared. Implications for psychology-based research and practice in SEF-based, context-specific, culturally-relevant public health approaches will be presented.

A psychological approach to TB prevention: A questionnaire survey with Japanese adults

Kiko Akishinonomiya Ochanomizu University, Japan

Tuberculosis (TB) is often described as "a disease of the past" in Japan. It remains an intractable public health issue, however, with a higher incidence in Japan than in most other developed countries. Substantial efforts are therefore needed, with effective prevention programs driven by empirically validated theories. This section reviews Japan's TB control and prevention programs, and presents a study that seeks to examine psychological factors affecting TB prevention behaviors, based

on key models of health behaviors. A random sample of 911 Japanese aged 20 and over responded to a range of questions covering their knowledge of TB, emotional reactions, underlying critical thinking disposition, and TB prevention intentions and behaviors. A hypothesized model, along with cognitive and affective factors as the proximal determinants of TB preventive behaviors, will be introduced, and other findings will be shared. The implications for effective programs to enhance TB preventive behaviors will be discussed.

The Use of Behavior-Change Theory in the Prevention of Body Image and Eating Disorders

Rachel Rodgers Northeastern University, United States of America

While diagnosable eating disorders are rare, subclinical and highly impairing disordered eating behaviors are prevalent, particularly among young women, and may result from the focus on slenderness in Western society. Such disordered eating behaviors, and other appearance-modifying behaviors including tanning or excessive exercise pose an important health-risk. Their effective prevention is thus a major challenge in westernized countries. Accumulating research over the last two decades has shown that theory-guided interventions are the most effective preventive strategies. In particular, interventions grounded in social cognitive theory, cognitive behavioral theory, and dissonance theory have been shown to be efficacious in changing attitudes and health-related behaviors. The theoretical underpinnings and mechanisms of action of interventions based in these frameworks will be described and illustrative examples of empirically supported programs grounded in each of these theories will be presented. Implications for both the field of eating disorders and the broader sociocultural context will be explored.

Health literacy and critical thinking for disease prevention

Takashi Kusumi Kyoto University, Japan

Health literacy refers to the ability of individuals to obtain and understand health risk information using critical thinking about ways in which to prevent disease. According to our studies, there are four components of health literacy: media, science, numeracy, and risk. Critical thinking skills and attitude support these components of health literacy. There are also four steps of critical thinking: clarification, examining the credibility of information, inference, and decision-making. I conducted several surveys among lay people, cancer patients, and the residents who lived both near to and far away from the site of the Fukushima nuclear plant disaster. My results suggested that educational experiences affected critical thinking attitude, which significantly contributed to science, media, risk, and health literacy; this, in

turn, improved psychological adaptation to disease or life satisfaction. I will integrate the topics of three speakers and argue the implications of psychological studies for preventive practices in health settings.

IS067

Theory-based approaches for promoting health behavior change

Organizer: Urte Scholz *University of Zurich, Switzerland*

Discussant: Ralf Schwarzer

Freie University Berlin, Germany

Session Abstract:

This symposium brings together research from different areas of health behaviour change emphasising the role of good practice characteristics for interventions as well as focusing on both individual regulation and social factors in the context of different health behaviors (physical activity, diet, HIV treatment adherence, and smoking). The first contribution from Aleksandra Luszczynska opens the symposium with introducing good practice characteristics for the development, evaluation and implementation of interventions for health behaviors. In the second contribution John de Wit will focus on individual self-regulation in the context of HIV treatment adherence. In the last two presentations by Gertraud Stadler and Urte Scholz, the importance of social regulation in health behavior change will be highlighted: Stadler will focus on companionship and Scholz on social control. An integrative discussion by Ralf Schwarzer will complement the symposium.

Frameworks for developing, evaluating, and implementing interventions promoting healthy diet and physical activity

Aleksandra Luszczynska *SWPS University of Social Sciences and Humanities, Poland*

This presentation provides an overview of existing theoretical frameworks and models informing the development of health-promoting interventions which are to be implemented in a real-world setting. The majority of frameworks is evidence-informed and focuses on the areas which need to be accounted for while designing, evaluating, and implementing an intervention. However, they may lack solid empirical foundations and specifications of key conditions which are essential for success or failure of an intervention in a real-world. Our proposal (see Horodyska et al., 2015; in: BMC Public Health) provides a list of good practice characteristics, grouped into three domains, derived from a proposal by World Health Organization: (1) main characteristics of intervention, referring to the design, targets, and participants, (2) monitoring and evaluation processes, and (3) implementation issues. The list of characteristics was developed using methods of a systematic review

of systematic reviews, aiming at identifying empirical evidence of good practice characteristics.

Using theory to increase understanding of the non-initiation of subsidized HIV-treatment: the interplay of motivational and volitional processes

John B De Wit (1,2), Limin Mao (2), Philippe Adam (2), Aron Cogle (3), Sean Slavin (4), Jeffrey Post (4,5), Edwina Wright (6), Michael Kidd (7) 1. *Department of Social Sciences, Utrecht University, Netherlands*; 2. *Centre for Social Research in Health, UNSW Australia, Australia*; 3. *National Association of People with HIV Australia, Australia*; 4. *Australian Federation of AIDS Organisations, Australia*; 5. *Prince of Wales Hospital and Clinical School, UNSW Australia, Australia*; 6. *The Alfred Hospital and Monash University, Australia*; 7. *Faculty of Medicine, Nursing and Health Sciences, Flinders University, Australia*

Accumulating evidence shows that the use of theory is associated with the efficacy of behavior change interventions. To date, there is limited theory-informed research regarding the factors that shape HIV-treatment behaviors to guide the development of effective health promotion interventions. Early initiation of HIV treatment benefits the health and wellbeing of people with HIV and reduces infectivity. In countries where HIV-treatment is widely available at no/limited cost, a minority of people with HIV is not currently on treatment. We report one of few studies to date of non-initiation of HIV-treatment, testing Home's Necessity-Concerns Framework of medication use in an online sample of 360 people with HIV in Australia. People who were not currently on HIV-treatment perceived more concerns than necessities; they also had lower HIV self-management scores. These findings underscore that successful behavior change interventions to promote initiation of HIV-treatment will need to address motivational as well as volitional processes.

Health Behavior Change From a Dyadic Perspective: Theory and Findings From Two Daily Dyadic Studies

Gertraud Turu Stadler (1), Riccio Matthew (1), Luescher Janina (2), Ochsner Sibylle (2), Knoll Nina (3), Hornung Rainer (2), Scholz Urte (2) 1. *University of Aberdeen, Scotland, UK*; 2. *Columbia University, USA, United Kingdom*; 3. *Freie Universitaet Berlin, Germany*

Background: While individual behavior change has been the focus in health psychology, most behavior change occurs within the

social network. We will present a theoretical framework for studying the influence of close others on behavior change and present evidence that positive interactions with close others facilitate behavior change over time. We provide evidence from two dyadic longitudinal studies for the important role of social support and companionship. Methods: Both partners of committed couples (Study 1: N=90, Study 2: N=99) filled out daily online diaries for one month. Findings: In both studies, companionate activities and support receipt occurred frequently. Daily fluctuations in companionship and support made independent contributions toward explaining emotional well-being and relationship satisfaction. In Study 2, companionship and support predicted health behavior change. Discussion: The findings underscore the need for studying health behavior change from a dyadic process perspective with suitable theoretical and statistical frameworks

Effects of social control on smoking, affect and behavioral outcomes in the context of smoking cessation: Results from two daily diary studies

Urte Scholz (1), Gertraud Stadler (2), Janina Luescher (1), Sibylle Ochsner (1), Rainer Hornung (1), Nina Knoll (3) 1. *University of Zurich, Switzerland*; 2. *University of Aberdeen, United Kingdom*; 3. *Freie Universitaet Berlin, Germany*

Social control is assumed to be beneficial for health-relevant behavior, but detrimental for affect, reactance and hiding the unhealthy behavior. The contextual model suggests that the associations might depend on relationship factors. In two studies, smokers completed daily diaries from quit date on to 21 days later. In the first study smokers whose partners were nonsmoking participated, in the second study dual-smoker couples with both partners trying to quit took part. Multilevel analyses focused on relapsers only. Positive control was rather beneficially related to number of cigarettes smoked, hiding smoking, reactance and affect, whereas negative control was rather detrimentally related to all outcomes on a daily basis. It did not make a difference whether smokers were in a smoker-non-smoker or a dual-smoker relationship. It is positive rather than negative control that seem to have the intended effects on behavior without resulting in emotional / behavioral costs.

IS068

Innovative and Responsive Health/Clinical Assessment/Interventions for Stigmatized Mental Health Conditions among Japan, Taiwan, and North America
Organizers: Akira Tsuda (1), Li-Fei Wang (2) 1. *Kurume University, Japan*; 2.

National Taiwan Normal University, Taiwan

Discussant: Satoko Kimpara
Miyazaki International College, Japan

Session Abstract:

Increasing scientific knowledge of the interrelationships among biological, behavioral, emotional, cognitive, and social factors in health conditions or physical diseases are noticeable. Yet, it is challengeable to develop evidence-based assessment/interventions for these bio-psycho-social factors in order to reduce problematic symptoms and to increase wellbeing. This symposium initially presents this scientific knowledge of interrelational factors and biomarkers of health/clinical conditions using a systematic research method. Subsequently, the symposium proposes innovative and responsive health/clinical assessment/interventions using a variety of models such as an ecological model of assessment for emotion regulation, an integrative model of transtheoretical interventions, and another integrative model of Systematic Treatment Selection interventions for adults with mental health conditions. These results clearly demonstrate particular promising assessment/interventions among Japan, Taiwan, and North America.

Importance of psychological approach in clinical setting; a comprehensive strategy to manage lifestyle related diseases with applying the transtheoretical model

George Koike (1), Akira Tsuda (2) 1. Fukuoka City Medical Association Hospital, Japan; 2. Kurume University, Japan

Recently, a number of patients with lifestyle-related diseases, such as obesity, diabetes mellitus, and hypertension, are increasing very rapidly world wide. In addition, it has been well recognized that this health condition leads to various psychological problems, such as depression. Therefore, slowing down the speed of this situation has been an urgent task, and being healthy is very crucial, physiologically and psychologically. Although a lot of new drugs and medical technologies have been developed, such a reality is indicating something important is missing to deal with this issue. Then, we have initiated to develop a comprehensive strategy for applying a psychological approach, the transtheoretical model, for managing lifestyle-related diseases, and demonstrated that this approach worked efficiently. This indicates that a psychological approach might be inevitable in the clinically medical area. We would like to discuss this issue in this symposium.

The Initial Development of the Culturally-Sensitive Emotion Regulation Scale /

Li-Fei Wang, Evelyn Y Koay, Mih-Ying Chen National Taiwan Normal University, Taiwan

The purpose of this study was to develop and validate the culturally sensitive emotion regulation scale of Belief-Emotion-Action-Result (BEAR). A total of 469 Taiwanese children and adolescents participated in this study. The data were randomly divided into two subsets: one (N=233) for exploratory factor analysis and the other (N=236) for confirmatory factor analysis and validity. The one-factor model solution seemed to be the most interpretable and fit the criteria. Factor 1 included eight items (factor loadings ranged from .71 to .60), accounting for 42.60% of the variance. The reliability was reasonable ($\alpha = .81$). In the second data subset, the confirmatory factor analysis explored the one-factor solution, and results indicated a good fit, $\chi^2(20, N=236) = 50.04, p = .000, CFI = .92, SRMR = .05, \text{ and } RMSEA = .08$ (90% CI: .05, .11). Thus, the BEAR scale has a good and reliable structure of inventory.

An Integrative Psychotherapy Model: Systematic Treatment Selection (STS) (DVD)

Larry E Beutler Palo Alto University, United States of America

Since 1990, Beutler and his colleagues have attempted to rectify this lack by developing an empirically based, cross-cutting model of treatment planning and implementation and have developed an integrative model, called Systematic Treatment Selection (STS). STS posits that assessment and treatment are integrated and that clinicians can systematically improve outcome by focusing on trans-theoretical principles and strategies that offer the best match for the client. Dr. Beutler (via DVD) talks about complex issues and erroneous assumptions of mental health problems and interventions and introduces a creative and innovative application of Systematic Treatment Selection (STS) in order to learn/apply evidence-based principles and increase the effectiveness of mental health interventions.

IAAP INVITED SYMPOSIUM

IAAP07

Health behaviors in context: The role of social and structural factors in self-regulation

Organizer: Jennifer Inauen University of Zurich, Switzerland

Discussant: Urte Scholz
University of Zurich, Switzerland

Session Abstract:

Contextual factors have received little attention in health psychology. This symposium presents cutting-edge research on the importance of social and other contextual factors to regulate health-related behaviors. Karolina Horodyska

will present results from an umbrella review that identified 83 implementation conditions for interventions to change diet, physical activity and sedentary behavior. Karolina Zarychta will highlight the importance of parents' and peers' perceptions of adolescents' weight status on their eating behaviors and body mass. Jennifer Inauen will present research on how virtual strangers in mobile phone chat groups can help enhance their members' healthy eating. Finally, Guangyu Zhou will show results of a longitudinal study of the interplay between self-efficacy, action planning and social support to explain fruit and vegetable consumption. Urte Scholz will discuss the presented studies and outline future directions for research in this field.

Am I overweight? A longitudinal study on parental and peers weight-related perceptions on dietary behaviors and weight status among adolescents

Karolina Zarychta (1), Barbara Mullan (2), Aleksandra Luszczynska (1), Karolina Horodyska (1) 1. University of Social Sciences and Humanities, Poland; 2. Curtin University, Australia

An investigation of the interplay between adolescents' perceptions of weight status in predicting adolescents' nutrition behavior and their body weight was conducted using multiple mediation analysis with sequential mediators. Data were collected twice, with a 13-month follow-up. Participants (N=1096, age: 14–20, BMI: 16.20–41.21) completed questionnaires assessing nutrition behaviors and weight status perceptions. Their weight and height were measured objectively. Two types of weight perceptions (adolescents' own weight status perceptions, peers' perceptions of adolescents' weight status reported by participants), and adolescents' nutrition behaviors mediated the relationship between the others' own weight perceptions and adolescents' weight status at the follow-up. No indirect effects of others' own weight perceptions on adolescents' weight status through parental perceptions were found. Adolescents' nutrition behaviors and body weight status depend on what they think of their own weight status and their peers' perceptions, but do not on their parents' perceptions.

Implementation conditions for diet and physical activity interventions: an umbrella review

Karolina Horodyska (1), Aleksandra Luszczynska (1), Catherine B Hayes (2), Miriam P O'shea (2), Lars J Langøien (3), Gun Roos (4), Matthijs Van Den Berg (5), Marieke Hendriksen (5), Karolina Zarychta (1), Ilse De Bourdeaudhuij (6), Johannes Brug (7) 1. University of Social Sciences and Humanities, Poland; 2. Centre for Health Sciences, Ireland;

3. Norwegian School of Sport Sciences, Norway; 4. National Institute for Consumer Research, Norway; 5. National Institute for Public Health and the Environment, Netherlands; 6. Ghent University, Belgium; 7. VU University Medical Center, Netherlands

This umbrella review aimed at identifying evidence-based conditions important for successful implementation of interventions promoting a healthy diet, physical activity (PA) and a reduction in sedentary behaviors (SB). A systematic review of reviews and stakeholder documents was conducted. Data from nine scientific literature databases were analyzed and resources of eight major stakeholders (e.g., WHO) were systematically searched. 112 documents met the inclusion criteria. The RE-AIM framework was used to categorize elicited conditions. We identified 312 potential conditions relevant for successful implementation; 83 of these received sufficient support. The use of the proposed list of 83 conditions for successful implementation may enhance the implementation of health interventions. This study was undertaken as part of the DEterminants of Diet and Physical Activity (DEDIPAC) Knowledge Hub (KH), a joint action as part of the European Joint Programming Initiative a Healthy Diet for a Healthy Life.

With a little help from my friends: Enhancing healthy eating with smartphone support groups

Jennifer Inauen (1,2), Naill Bolger (2), Melanie Amrein (1), Pamela Rackow (1), Urte Scholz (1) 1. University of Zurich, Switzerland; 2. Columbia University, United States of America

The social context has been shown important to regulate health behaviors. However, most research has focused on support by close others. We investigated whether support provided by virtual strangers in chat groups can promote healthy eating, and tested two mediating processes: Received social support and action control (i.e., awareness of standards, self-monitoring, and self-regulatory effort). 208 adults were randomly assigned to the social support or the control group. Participants completed a 13-day photographic food diary, and reported daily social support and action control. During days 4–10, social support participants partook in smartphone chat groups. Unhealthy snacking significantly decreased in the social support compared to the control group, with action control mediating the effects. No effects on fruit and vegetable consumption were found. The results underline the importance of the social context to regulate eating behaviors, and extend previous findings of the benefits of social support to groups of virtual strangers.

Self-efficacy, Action Planning, and Social Support Explain Fruit and Vegetable Consumption

Guangyu Zhou (1), Yiqun Gan (2) 1. Free University of Berlin, China; 2. Peking University, China

It has been demonstrated that self-efficacy, action planning, and social support could predict changes in fruit and vegetable intake. This study examines the relationship among these variables and explores the putative mediator and moderator mechanisms that might account for fruit and vegetable consumption. A longitudinal survey study with 286 participants, surveyed three times with one month interval, was conducted in China. In a moderated mediation analysis, action planning was specified as a mediator between self-efficacy and fruit and vegetable intake, whereas social support was specified as a moderator between self-efficacy and action planning. Baseline fruit and vegetable consumption, age, sex, and BMI were set as covariates. Action planning mediated between self-efficacy and fruit and vegetable intake. Social support moderated this mediation, reflected by a self-efficacy and social support interaction on action planning. High social support appeared to compensate for low levels of self-efficacy on fruit and vegetable consumption through action planning.

CONTRIBUTED SYMPOSIUM

CS075

Psychology and Nutrition: Exploring nutrition-related behaviors to improve health and wellness from clinical setting to community

Organizer: Risatianti Kolopaking Universitas Islam Negri Syarif Hidayatullah Jakarta, Indonesia

Discussant: Leila S Africa

University of the Philippines Los Banos, Philippines

Session Abstract:

The world today faces antithetical dietary issue: under- and over- nutrition. In 2013, WHO announce that at least 2.8 million people die each year as a result of being overweight or obese. On the other hand, malnutrition still contributes to more than one third of all child death today. Understanding behavioral aspect of nutrition such food choices, dietary practices, and physical activities play important role to develop and evaluate interventions and programs. The aim of the symposia is to review the wide range of applications and theoretical frameworks that has been employed in nutrition-related behavior interventions from clinical to community setting in the area of health psychology.

Japanese students' cross-cultural adjustment related to eating in France: Implications for cross-cultural eating education from cross-cultural health psychological perspective

Tomoko Tanaka Okayama University, Japan

Cross-cultural adjustments related to eating were investigated in nine Japanese international students in France. A questionnaire and interview survey was conducted. We explored the students' changes and difficulties in eating, and their need for help. We found that they changed their eating patterns according to that of the host culture and tried self-cooking to a greater extent. Further, they faced limitations related to equipment and surroundings, and felt embarrassed about unfamiliar material, ways of cooking, and taste. However, they used food as a mode of communication with their hosts, compatriots and others. They enjoyed acculturating to the local food. Findings revealed improvements in awareness regarding health consciousness and health behaviors, as well as unhealthy acculturation. Thus, studying abroad could be an opportunity to brush-up on self-management of health. The two dimensions model for cross-cultural eating education with duration and cultural factors will be discussed from cross-cultural health psychological perspective.

Food-based intervention and psychosocial stimulation (FIRST) program for mothers with children under 2-years: Finding from a pilot study in East Lombok, Indonesia

Risatianti Kolopaking (1), Umi Fahmida (2) 1. Universitas Islam Negri Syarif Hidayatullah Jakarta, Indonesia; 2. SEAMEO Regional Center for Food and Nutrition Universitas Indonesia, Indonesia

Food-based intervention and psychosocial stimulation (FIRST) Program was designed for mothers with children aged less than 2-years in East Lombok, West Nusa Tenggara Province, Indonesia. The aims of the program was to enhance the quality of parenting behavior and to optimize the children growth and development. The program highlighted the role of mother-child relationship in feeding practices as well as creating a more stimulating learning environment in their home. Theory of Planned Behavior, Social-cognitive Learning Technique, and Ecological Framework were used to develop the program. Program activities covered knowledge of food groups, cooking skill, food safety, feeding behavior, and a hands-on approach to improve children verbal, social-emotional, gross and fine motor developments. Pre-post design using mix-method approach was used to evaluate the program. Findings demonstrate the positive impact of FIRST program on the mother

feeding-practices and psychosocial stimulation in addition to the children growth and development.

A psychological investigation concerning the affect of Japanese life on the diet and health of Vietnamese nationals: Acculturation and maintenance of the dietary customs during cross-cultural residence

Chihiro Takeshita, Caleb Jj Stone, Sachiko Nakano, Hirokatsu Tetsukawa
Okayama University, Japan

The aim of this research is to investigate how residing in Japan can affect the dietary habits, health consciousness, and acculturation of Vietnamese. We conducted a semi-structured interview and case study with two Vietnamese currently residing in Japan. The first participant reported that she had adopted various Japanese cooking skills and flavours through her part-time employment. Also adopting various healthy dietary choices B cooking techniques. Witnessed on Japanese television programming. The second participant reported that he mainly consumes food prepared by his wife. Although, he often ate fast food when he had studied unaccompanied. Furthermore, he experienced little discomfort with this, as he had little interest in the Japanese diet. These results indicate that the extent of one's dietary acculturation, depends on the level of interest and exposure to Japanese dietary customs. Implying, that health education may benefit the diet and health of International resident in Japan.

CS076

Biofeedback and clinical application of heart rate variability

Organizer: Masahito Sakakibara *Aichi Gakuin University, Japan*

Discussants: Leo O Oikawa (1), Maria Katsamanis (2) 1. *Asahikawa Medical University, Japan*; 2. *Rutgers Medical School, United States of America*

Session Abstract:

Heart rate variability (HRV) is a measure of the spontaneous fluctuations of heart period which reflects autonomic nervous system function. HRV has also attracted growing attention as a biological marker for emotional regulation, whereas HRV biofeedback (HRV-BF), an intervention aimed at increasing HRV, has clinical utility in the treatment of a variety of physical and mental disorders that involve autonomic nervous system dysregulation. First, Dr. Hirota (Japan) presents history of Japanese Society of Biofeedback Research and hot topics in HRV. After this, Dr. Sakakibara (Japan) describes data from psychophysiological studies that address the effectiveness of HRV-BF. Next, Dr. Uratani (Japan) reports data from application of respiration-guiding stuffed toy

for relaxation, which shed lights on interdisciplinary collaboration of psychology and engineering for increasing HRV. Finally, Dr. Katsamanis (USA) discusses clinical work addressing the usefulness of HRV-BF in the patients with depression. Potential possibilities of HRV for future work will be discussed.

History of Japanese Society of Biofeedback Research and Hot Topics in Heart Rate Variability

Akihisa Hirota *Kamakura Women's University, Japan*

The first meeting for biofeedback research in Japan was held in October 1973, when Dr. David Shapiro of Harvard University came to Japan to give a presentation related to the voluntary control of human blood pressure at the meeting. After the meeting, the membership increased rapidly, and the Japanese Society of Biofeedback Research (JSBR) was formed in 1981. Members from three fields: medicine, engineering, and psychology have come together to form this society, and this interdisciplinary collaboration of JSBR is unique. Many experimental and clinical studies have been conducted. In Japan, studies related to heart rate variability (HRV) have been performed since the 1980s. In addition, research about HRV biofeedback (HRV-BF) was conducted and the clinical utility has been investigated. A workshop of HRV-BF was held during the 41st annual meeting of JSBR 2013. Future research on the effectiveness of the clinical application of HRV-BF is expected.

Heart rate variability biofeedback increases respiratory sinus arrhythmia, a cardiorespiratory resting function

Masahito Sakakibara *Aichi Gakuin University, Japan*

Heart rate variability biofeedback (HRV-BF) is known to have clinical utility in the treatment of physical and mental disorders that involve autonomic nervous system dysregulation. HRV-BF is used with paced breathing to increase overall HRV. Restorative activity of HRV in autonomic nervous functions could be one mechanism underlying the efficacy of HRV-BF. Respiratory sinus arrhythmia (RSA) is an intrinsic cardiorespiratory resting function, which is mediated by the respiratory modulation of cardiac vagal outflow. RSA is known to improve pulmonary gas exchange efficiency by matching alveolar ventilation and capillary perfusion throughout the respiratory cycle. Moreover, RSA increases during sleep, when it saves cardiorespiratory energy expenditure by suppressing unnecessary heart beats. Sakakibara et al. (2013, 2015) have demonstrated that HRV-BF training immediately before bedtime increased the amplitude

of RSA during sleep, suggesting that the technique improves cardiorespiratory resting function. Further basic research is worthwhile to examine beneficial mechanisms of HRV-BF.

Application of respiration-guiding stuffed toy for the HRV biofeedback

Hiroki Uratani (1), Ohsuga Mieko (2) 1. *Shichida Child Academy Co. Ltd., Japan*; 2. *Osaka Institute of Technology, Japan*

Following natural disasters, accidents, and shocking incidents, some children experience post-traumatic stress disorder (PTSD). A respiration control method that relaxes the body and mind may efficiently prevent and improve PTSD symptoms. Therefore, we developed a stuffed toy using two airbags to measure the respiration wave and lead a child's respiration using the up-and-down movement of the toy's abdomen to help them relax. We then performed an evaluation experiment. Participants in the experiment consisted of 12 healthy girls aged 7–10 years old. The results showed that the respiration wave could be measured by the sensing device, and the child's respiration could be led by the moving device. Also the results showed that the respiration-guiding trial increased children's heart rate variability compared with just hugging the stuffed toy with no motion ($p < 0.01$). The effect of the developed stuffed toy on a child's relaxation should be evaluated by further study.

CS077

Biopsychosocial correlates of stress and health implications: laboratory and field studies

Organizers: Toshihiko Sato (1), Motohiro Nakajima (2) 1. *Tohoku Bunka Gakuen University, Japan*; 2. *University of Minnesota Medical School, United States of America*

Session Abstract:

Stress is a complex phenomenon which includes dynamic interactions at biological, behavioral, and social levels. As such, there are various viewpoints in stress research. These include studies looking at how mind and body respond to stress stimuli, what psychological and behavioral factors modulate stress response, and developing effective ways of mitigating the impact of stress in those who suffer from severe stress situation. This symposium will include three presentations from laboratory and field studies: 1) effects of psychological distress on nighttime sleep and its improvement among individuals who experienced a natural disaster; 2) psychobiological determinants of stress, withdrawal symptoms, and relapse among chronic smokers; and 3) stress mechanisms and psychological supports among school teachers. On the basis of these research findings, we will discuss biological and psychosocial factors of stress and future directions of stress research.

The relationship between the mental health and the help-seeking behavior of local government workers after the Great East Japan Earthquake

Ayami Nagao (1,2), Mikika Abe (1,2), Yoko Takahashi (1,2), Atsushi Sakuma (1,2), Ikki Ueda (1,2), Wataru Shoji (1,2), Matsuoka Hiroo (1,2), Kazunori Matsumoto (1,2) 1. Tohoku university, Japan; 2. Miyagi Disaster Mental Health Care Center, Japan

Individuals affected by large-scale disasters, such as the Great East Japan Earthquake of March 11, 2011, are known to develop various mental health problems. People working in the affected areas are committed to reconstruction and experience severe stress and mental health problems. We have supported for mental health of local government workers in the affected area and conducted a self-administered health survey for them. Results suggest that disaster-related and workplace stress negatively affects their mental health. However, they do not seek counseling support. Help-seeking behavior seems to be hindered by the urgent nature of their duties and the stigma attached to mental health problems. After a disaster, systems should be developed such that line managers are responsible for employees' mental health and counseling from outside is available. As mental health checkups are now mandatory in Japan, appropriate support systems for the workplace are also necessary.

Community and school mental health four years after the Great East Japan Earthquake

Yasuhiro Ujiie Sendai shirayuri women's college, Japan

Objectives: To clarify the mental health care needs of people four years after the Great East Japan Earthquake and the important actions that need to be implemented when responding to a natural disaster. **Methods:** Twenty-five junior high school teachers provided mental health care to students after the earthquake. They completed a questionnaire after they received training on knowledge and techniques related to mental health care. **Results:** When questioned about the quality of the training, 24 of 25 respondents selected "most satisfactory" from five choices, indicating that the need exists for continued mental health care knowledge and technique training. Results showed that if a natural disaster were to occur, participants most desired "information concerning what type of disaster it was" and expressed a "need to communicate with others about what specific situations and states they were in" during the disaster.

The Effect of Game Addiction on Juvenile Delinquency: The Mediating Effects of Stress Level

Jonghyun Oh, Heesang Jeong, Kangyoon Lee Handong Global University, Republic of Korea

This study examines stress as a mediator between game addiction and Juvenile delinquency. For the study, panel data of 9,402 students in 'A study on support measures for children and adolescents' mental health promotion III' were used. The participants were elementary, middle, and high school students nationwide in Korea. Bootstrapping was used to prove the significance of the indirect effect between game addiction and delinquent behavior (Shrout & Bolger, 2002). The result of the tests showed that game addiction partially mediated stress and had an indirect effect on delinquency behavior level. Based on these results, the implications and suggestions were made to treat stress as well as focus on decreasing level of game addiction in counseling or clinical practice for delinquent adolescents.

Psychosocial and biological correlates of stress, pain, and tobacco use

Motohiro Nakajima, Mustafa Al'absi University of Minnesota Medical School, United States of America

Evidence indicates the important role of psychosocial and biological factors in stress and unhealthy behaviors. Traumatic experience, negative affect, and gender differences are associated with stress. Stress is a well-known risk factor of initiation and maintenance of substance use such as smoking. Both acute stress and smoking activate central mechanisms, including the hypothalamic-pituitary-adrenal (HPA) axis and the endogenous opioid system, that are associated with drug reward, withdrawal symptoms, and pain. However, chronic smoking is associated with alterations in these neurophysiological mechanisms. Studies conducted in our laboratory found attenuated HPA response to acute stress and enhanced pain perception to cold pressor in smokers relative to non-smokers. The smoking-pain association was pronounced during smoking withdrawal. The endogenous opioid regulation of the HPA was also blunted in smokers. These studies suggest the clinical usefulness of psychobiological stress (the HPA axis) in identifying individuals who are vulnerable to drug addiction.

Nighttime sleep difficulties among individuals after the 2011 Great Eastern Japan Earthquake

Toshihiko Sato (1), Kent Takahashi (1), Hideo Ambo (2), Kazuhiko Fukuda (3) 1. Tohoku Bunka Gakuen University, Japan; 2. Tohoku University, Japan; 3. Edogawa University, Japan

Previous studies reported that after natural disasters, residents in devastated areas tended to experience sleep difficulties at a higher rate than usual. To support survivors with sleep difficulties, the kind and duration of sleep difficulty that occur frequently should be elucidated. We have conducted questionnaire studies annually to collect the data on sleep difficulties from university students and general residents in the Miyagi prefecture of Japan since the 2011 Great Eastern Japan Earthquake. In our comparison of questionnaire data collected before the great disaster, the prevalence of university students living in the coastal area who experienced arousal during sleep, difficulty in daytime arousal, and nightmares increased from 2011 to 2014, while the prevalence of difficulties in falling asleep remained high in the period 2011–2013 but decreased in the 2014 survey.

CS078

Connecting mindfulness and positive environments to enhance resilience in adolescence and adulthood

Organizer: Christoph Steinebach Zürich University of Applied Sciences, Switzerland

Session Abstract:

Education, prevention and therapeutic services aim at changing individual behavior and forge long lasting influences on problematic emotions, cognitions and social factors. It is becoming increasingly accepted that a consideration of basic individual needs, strengths and resources must complement the deficit-oriented tradition of interventions. Research on positive attitudes and emotions line out favorable effects of mindfulness based interventions by enhancing e.g. empathy and well-being. In addition, evaluations of interventions targeting pro social behavior show sustainable effects on self-efficacy and resilience. In this symposium we combine different perspectives of research from Chile, Italy, Switzerland, and Vietnam by connecting mindfulness to pro social behavior in positive social and physical environments to enhance resilience. Theoretical aspects, results of five different studies, and perspectives for practice in adolescence and adulthood to promote mental health and healthy lifestyles e.g. in schools or at the workplace are discussed.

Body and mind: Building resilience for adolescents with problems in eating behavior

Christoph Steinebach (1), Marcel Schär (2) 1. Zürich University of Applied Sciences, Switzerland; 2. Zürich University of Applied Sciences, Switzerland

Current innovations in prevention and psychotherapy for children and youth emphasize the importance of basic needs, strengths and resilience as object and purpose. To explore the

role of aspects of body image for individual well-being, 371 adolescents answered questionnaires about their health, body concept, and body appreciation. As the results show, (1) the difference between ideal and real body image influences the satisfaction with one's own body, (2) An essential portion of the body image is closely related to mental health. (3) The number of body parts and their estimation is important combined with the number of body parts we do not like. The data show gender differences in self-worth and attitudes related to self and body image. Consequences for research and practice as well as connections with mindfulness based interventions and possibilities to create positive social environments are discussed.

Mindfulness-based depression prevention in children and youth. Connecting practice in Chile and Switzerland

Philipp J Steinebach (1), Volker Schulte (1), Mariane Krause (2), Álvaro Langer Herrera (2), Carola J Pérez Ewert (1,2), Christoph Steinebach (1) 1. *Zurich University of Applied Sciences, Germany*; 2. *Pontifical Catholic University of Chile / School of Psychology / Milenium Institute for Research in Depression and Personality, Chile*

Problematic psychosocial development in children and youth is becoming an increasingly important aspect of public health in societies all over the world. Prevention and early interventions can reduce subsequent psychosocial problems on a large scale. Particularly in the treatment and prevention of depression, mindfulness is known to be effective. Following the bio-psycho-social model of development, mindfulness related interventions e.g. in schools seem to bridge the gaps between body experience, individual strengths, and positive development in school and community settings. The current study aims at evaluating the effects of an intervention program, designed to maintain psychosocial health and prevent problematic development in children and youth both in Switzerland and Chile.

Stress prevention in a risk and non-risk group of adolescents - how can we foster peer culture and promote psychic health using an online device?

Agnes Von Wyl ZHAW, Switzerland

Intervention programs in adolescence can be particularly effective when targeting a peer group as a whole by promoting the circulation of knowledge and behaviour in-between peers. In addition the implementation of a health promotion and prevention program needs to be attractive and compelling to young people e.g. by using an internet-based approach. We tested a web-based application during ten months in

a group of first and second year apprentices (n = 514), as well as in a group of unemployed adolescents (n = 140) participating in a social program. Control groups include apprentices (n = 490), as well as unemployed adolescents (n = 120) participating in a social program. Results of the evaluation related to the effectiveness of the intervention, as well as the comparison of baseline data in a risk and non-risk group are presented and discussed.

The relation between mindfulness and green lifestyles

Giuseppe Carrus (1), Angelo Panno (1), Fridanna Maricchiolo (1), Sabine Pirchio (2), Lucia Mannetti (2) 1. *Roma Tre University, Italy*; 2. *Sapienza University Rome, Italy*

Mindfulness can be a positive predictor of green lifestyles, by promoting higher connectedness to nature, subjective wellbeing, and the pursuit of gratifications other than material rewards. However, psychological research on this topic is still undeveloped. In this work, we tested the hypothesis that individuals with greater mindfulness are more willing to engage in pro-environmental behaviors, through a correlational survey (N = 299) and a field experiment (N = 100). Findings show that mindfulness is a direct predictor of pro-environmental behaviors, as well as a mediator of other predictors, such as social dominance orientation (SDO).

Positive standards for healthy workplaces. Comparing risk factors and strengths in Vietnam and Switzerland

Volker B Schulte Zurich University Applied Sciences, Switzerland

The workers and workplaces nowadays cope with global changes that in many cases are very challenging for the workers and for the very existence of many medium and small enterprises. The development of healthy workplaces requires leadership commitment and engagement, involving workers and their representatives, business ethics, regulatory compliance, as well as a systematic and comprehensive process to ensure sustainability. Based on the network of World Health Organization's Collaborating Centres (WHO) we adopted internationally recognized standards and methods for guideline development. We transferred key aspects of WHO Global Masterplan GMP on the local occupational health policies in Vietnam. Concretely, we established together: (1) International toolkits for healthy workplaces, (2) Mechanisms to stimulate the development of healthy workplaces, including core principles, ethics and values which promote collaborative participation of workers and employers, and (3) Modules for training on healthy workplaces with a focus on health workers' resilience and mindfulness at work

CS079

Living in amidst of uncertainty and caring: Exploring the psychosocial experiences and risk factors of cancer patients and the professional development of clinical psychologists inspecialist palliative care

Organizer: Lin Yaw-Sheng Department of Psychology, National Taiwan University, Taiwan

Discussant: Lin Yaw-Sheng

Department of Psychology, National Taiwan University, Taiwan

Session Abstract:

In this symposium, we will illustrate the professional developments of clinical psychologist in palliative care in Taiwan, the existential experiences of terminal cancer patient, and the healing processes of cancer patients through the mindfulness program intervention and the risk factors of the cancer patients. We hope we can understand the psychosocial transformations and risk factors in different diagnosis phases of cancer patients and specific psychological knowledge and skills to contribute to patients and families in palliative care through the entire discussions. There are four articles regarding this symposium. We expect the results will be helpful for future emotional distress screening for patients with cancer in early stage, to enhance ontological security in terminal patients, and demonstrate clinical psychologists have beneficial contributions for patients with terminal illness and families.

The experience of clinical psychologists in specialist palliative care and professionalization development

Sheng-Yu Fan Institute of Gerontology, College of Medicine, National Cheng Kung University, Taiwan

Patients and families facing terminal illness experience distress and suffering. Clinical psychologists have the specific psychological knowledge and skills to contribute to patients and families in palliative care. The purposes of this presentation will be to explore the working experience of clinical psychologists in palliative care in Taiwan, and the ways they developed professionalization. Nine clinical psychologists in palliative care participated a series of studies, including individual qualitative interview, focus group, and Skype peer supervision groups. The clinical psychologists expressed that the nature of psychological care for patients with terminal illness were caring and company. Providing psychological care was a dynamic process including psychological assessment, intervention, evaluation, and modification. However, they had to modify the care using an integrative framework and cooperate with other healthcare professionals.

Regarding supervision, they established a network to improve specific knowledge and skills, and support each other.

The prevalence of emotional distress and related risk factors among patients with cancer in Taiwan

Wang Sing-How *National Cheng Kung University Hospital, Taiwan*

Ministry of Health and Welfare in Taiwan has carried out the medical quality promotion project for cancer care several years. The policy address the psychological needs of patients with cancer. The aims of this presentation were to identify the prevalence of emotional distress in patients with cancer in Taiwan and related risk factors. The participants were the inpatients with cancer in one medical center in southern Taiwan from 2014. The Brief Symptom Rating Scale - 5 item version (BSRS-5) and the Distress Thermometer scale (DT) were used to measure emotional distress; and the demographic data were also recorded. Data analysis would include descriptive statistical analysis, correlation analysis, and the multiple regression analysis, in order to identify the prevalence of emotional distress and the risk factors. The results will be helpful for future emotional distress screening for patients with cancer.

The effectiveness of a mindfulness-based group intervention for fear of cancer recurrence and coping styles

Shih-Ming Shih *Koo Foundation Sun Yat-Sen Cancer Center, Taiwan*

The prevalence rate of fear of cancer recurrence after cancer treatments is high but few methods are developed to help cancer survivors. The aims of this study are to show the effectiveness of an 8-week mindfulness-based group therapy in dealing with fear of cancer recurrence (FoCR) and to explore relationships between changes in coping styles and FoCR. Fifty eight participants with FoCR issue were recruited from a cancer center and a cancer foundation. Participants learned mindfulness skills such as mindful breathing, body scan and loving kindness meditation, and practiced at home on daily basis. Preliminary results from paired comparison of the pre-post rating scales indicated significant decrease in fear of cancer recurrence among participants. Such decrease was positively associated with a decrease in anxious preoccupation and cognitive avoidance coping style. More influences from mindfulness interventions will be discussed.

Death Metaphor and Continuing Bonds to Understand Death and Dying

Samuel Ho *City University of Hong Kong, Hong Kong*

This presentation will discuss the meaning of death among those with life-and-death encounters. In an early study to understand the meaning of death, 148 healthcare workers were asked to draw a picture to represent their perception of death as well as complete a Death Metaphor Scale (Cheung & Ho, 2004; Cheung & Ho, 2006). A relational dimension of death emerged. Many participants conceptualized death as a family union or a home coming experience. Some focused on the adjustment of their significant others after their departure. The relational focus of death stimulated us to conduct another study on continuing bond (CB) among 71 bereaved individuals with spousal loss (Ho, Chan, & Field, 2013). CB was common and normative among Chinese bereaved. The above and other findings suggest that Chinese tend to use a relational orientation to understand death and maintain a continuing bond with the deceased. Clinical implications will be discussed.

Return to the terminal situation: Exploring psychological life experiences in dying cancer patient /

Lin Yaw-Sheng *Department of Psychology, National Taiwan University, Taiwan*

This study explored the psychological experiences of one patient with terminal cancer. Adopted by case study, through narrative collection and transcribed, data is analyzed by existential-phenomenological approach rendering the psychological experience of the participant. The participant is called P1, who is 59 years old, recruited from a palliative care medical unit in southern Taiwan to be interviewed nine times. We find there are three structural themes emerged through data interpretation, namely, first, temporality and situated structure (including I can't understand the past; variant living here and now; paradox attitude towards the future), second, the death anxiety (including hospice caring solicitude; facing near-death abyss), and third, passive synthesis state near the terminal phase (including living by nature and fatalism; meaning and meaninglessness for the mode of being). Sense of ontological security is important for the participant P1.

THEMATIC SESSION

TS080

Integrated theory-informed research as a means to develop an evidence base for the development of effective health behaviour-change interventions: Multiple perspectives

Organizers: Martin S Hagger (1), Derwin King Chung Chan (2) *1. Health Psychology and Behavioural Medicine Research Group, Curtin University, Australia; 2. University of Hong Kong, Hong Kong*

Session Abstract:

Theories from social and health psychology enable researchers to identify the key factors related to health behaviour, and outline the mechanisms by which those factors exert their effects. Tests of the effectiveness of the theories in accounting for variance in health behaviour will provide an evidence base on which to develop interventions that are efficient and effective in promoting health-related behaviours. The aim of this themed session is to showcase research demonstrating the efficacy of innovative theoretical approaches based on social cognitive, motivational, and action control theories in predicting health behavior. Specifically, contributions will outline the importance of developing and applying integrated models of health behaviour in multiple behavioral contexts (physical activity, healthy eating, injury-management) and demonstrate how such interventions can form the basis of effective interventions. Contributors will also demonstrate how mediation and moderation effects as tests of process can contribute to effective intervention development.

Theoretical Integration in Social Psychological Theories Applied to Health Behaviour: Rationale, Advantages, and Examples

Martin S Hagger (1,2,3) *1. Health Psychology and Behavioural Medicine Research Group, Curtin University, Australia; 2. Faculty of Sport and Health Sciences, University of Jyväskylä, Jyväskylä, Finland; 3. School of Applied Psychology and Menzies Health Institute Queensland, Griffith University, Mt Gravatt, Brisbane, Australia*

Psychology is a theory-rich discipline. The myriad of social psychological theories, models, and frameworks that have been adopted to identify the key factors that impact health behaviour, and the process by which the factors exert their effects, presents challenges to researchers in terms of maximising parsimony and confirming nomological validity. I outline the importance of theoretical integration as a means to reduce redundancy and promote parsimony and sufficiency in predicting health behaviour. I provide examples of how theoretical integration has been effective in identifying the factors and mechanisms that underpin health behaviour, and outline how integrated models can assist in developing effective interventions to change behaviour. The examples are drawn from primary research examining motivational and social cognitive theories that also incorporate individual difference and implicit non-conscious processes. I also outline how integrated theories can be tested using path analyses of relations derived from research syntheses using meta-analysis.

Theoretical Integration and the Psychology of Injury Management Derwin King Chung Chan University of Hong Kong, Hong Kong

Musculoskeletal injury not only has major negative impacts on individuals' health, but it also contributes to substantial economy loss to the country because of its related the medical expenses and loss of productivity. Therefore, the management of the injury is important especially for individuals whose working environments present higher risk of injury (e.g., athletes, police officers). Despite the effort in maintaining safety regulation or providing the advanced medical support for injury rehabilitation, research has demonstrated the vital role of human factors in increasing the risk, severity, and negative consequences of musculoskeletal injury. This presentation will focus on the application of multiple social psychology theories to understand the motivational and social cognitive process of injury prevention and rehabilitation. A number of studies that applied the integration of self-determination theory and the theory of planned behavior in explaining athletes' and workers' intention and behaviour of injury prevention and rehabilitation will be presented.

Why do people fail to change their unhealthy eating habit?

Shoji Ohtomo Konan Women's University, Japan

Unhealthy eating is a risk factor for people to become overweight. However, people fail to change their eating behavior. Unhealthy eating habits are a significant barrier to behavior change. Through the repetition of behavior, habitual behavior comes to be cued by the behavioral context and can be triggered by a contextual cue. Habituation of unhealthy eating enlarges the gap between diet intention and eating behavior. Moreover, habit weakens conscious control over unhealthy eating behavior. The session introduces the field studies to examine unhealthy eating habit. Unhealthy eating habit does not only determine behavior directly, but also indirectly through reactive motivation. Diet priming is an approach to intervene in the habitual reactive process. Although diet priming can change unhealthy eating habits, the effect is moderated by health status (e.g. dieter vs non-dieter, BMI). This session discusses the motivational process and health status that interrupt the intervention of unhealthy eating habits.

From Perceived Autonomy Support to Intentional Physical Activity in Chinese Adolescent Students: An examination of the Integrated Model

Chun-Qing Zhang Hong Kong Baptist University, Hong Kong

Recently, researchers proposed that motivational variables from self-determination theory and social cognitive variables from the theory of planned behavior that underpins the proximal antecedents of intentions can be integrated (Hagger & Chatzisarantis, 2009, 2014). In the current study, we adopted a three-wave prospective design. A sample of Chinese adolescent students (83 females, 82 males; Mage = 12.97, SD = .68) completed measures of perceived autonomy support, autonomous motivation, theory of planned behavior variables, and physical activity. Path analysis was adopted using Mplus 7. It was found that adolescent physical activities behaviours was predicted by intention, but intention was solely predicted by subjective norms. Also, behavioural attitude and norms were predicted by autonomous motivation rather than controlled and amotivation. Moreover, autonomous motivation was only predicted by parental support rather than peers and teacher support. Autonomous motivation and intention were demonstrated as two important mediators. Implication and future direction will be discussed.

Age differences in goals: Implications for health promotion

Xin Zhang (1,2), Helene H Fung (2), Bob H Ching (2) 1. Peking University, China; 2. Chinese University of Hong Kong, Hong Kong

Socioemotional selectivity theory postulates that, as people age, they prioritize emotionally meaningful goals, which has potential implications for health promotion. This study investigated whether these age differences in goals are reflected in how younger (aged 18–36, N = 111) and older adults (aged 62–86, N = 104) evaluated, remembered information from and moreover were persuaded by health messages to increase healthy behavior (i.e., healthy eating). Participants were randomly assigned to read health pamphlets about the benefits of healthy eating with identical factual information but emphasizing emotional or non-emotional goals. Findings showed that health messages that emphasized emotional goals, but not those emphasized future-oriented or neutral goals, were better remembered, were evaluated more positively and led to greater behavioral changes among older adults, but not younger adults. These findings suggest that health messages targeting older adults may be more effective if they are framed in ways that emphasize love and caring.

TS081

New Approaches to Integrated Care in Three Areas of Healthcare in the USA: Family Medicine, Mental Health, and Pain Management

Organizer: Jennifer F Kelly American Psychological Association, United States of America

Discussant: Cynthia D Belar

American Psychological Association, United States of America

Session Abstract:

The use of integrated care has dramatically increased in the United States, in public and private health care sectors. This symposium will address approaches to integrated care in Family Medicine, Mental Health and Pain Management. The increased focus on the integration of behavioral health in the Patient-Centered Medical Home model will be addressed and the rationale for integration highlighted. Attention will be paid to the myriad roles of psychologists on the PCMH team, such as providing screenings, offering evidence-based interventions, and facilitating team functioning. There will be discussion of transition from a physician-led practice to team-based care. The role of the psychologist in providing evaluation and treatment to pain patients will be presented. These presentations will focus on working in an interdisciplinary environment, with its advantages and challenges. The symposium will also underline the importance of interprofessional education and training for this new way of delivering integrated healthcare.

The Role of Psychology in Pain Management in an Interdisciplinary Setting

Jennifer F Kelly (1), Barry Anton (2), Cynthia Belar (5), Nadine Kaslow (3), Susan H McDaniel (4) 1. American Psychological Association, United States of America; 2. Past President, American Psychological Association, United States of America; 3. Emory University, United States of America; 4. President American Psychological Association, United States of America; 5. Interim CEO, American Psychological Association, United States of America

The role of the psychologist in providing comprehensive evaluation and treatment to patients who experience chronic pain will be presented. There will be focus on working in an interdisciplinary environment, whether co-located with other providers or in independent practice settings. A comparison of the various models will be presented, which will include the benefits and challenges of each setting.

Interprofessional mental health group practice

Barry S Anton American Psychological Association, United States of America

Economic and patient care realities of US health care reform encourages mental health professionals to create efficient, economically viable interprofessional mental health group practices to deliver integrated care. Most mental health professionals learn little about the business of practice in their graduate school

training or early years of practice. This presentation will review the business and professional skills necessary to create a thriving interdisciplinary mental health practice composed of different mental health specialists in one location. Coordinated care, including, "warm hand-offs" is explored. There will be discussion of practice structures, professional and business risk, legal issues, and reimbursement under the Patient Protection and Affordable Care Act.

The Role of Psychology in Patient-Centered Medical Homes (PCMH)

Nadine J Kaslow Emory University School of Medicine, United States of America

This presentation will begin with a discussion of the PCMH model and its functions and attributes. The increased focus on the integration of behavioral health into the PCMH model will be addressed and the rationale for the integration of behavioral health will be highlighted. Attention will then be paid to the myriad role of psychologists in the PCMH team, such as providing screenings, offering evidence-based interventions, engaging families, facilitating team functioning, and advocating for and implementing systemic transformations.

Team-based Integrated Primary Care in Family Medicine

Susan H McDaniel, Jennifer Kelly, Nadine Kaslow, Barry Anton, Cynthia Belar American Psychological Association, United States of America

This presentation will describe the transition from a physician-led practice to team-based care in Family Medicine, and the role of the psychologist in facilitating this transition. It will include discussion of collaborative leadership styles, staff-led team meetings, clinical examples, and the importance of interprofessional education and training for this new way of delivering integrated healthcare.

TS082

Revisiting social roles, self-actualization and well-being of Japanese women in the era of new economic reforms

Organizer: Kazuyo Mori J.F.Oberlin University, Tokyo, Japan

Session Abstract:

With its aging population and dwindling workforce, Japan is striving to encourage more women to enter the workforce and management positions to become the source of economic growth through diversity. Japanese women face significant challenges in balancing a career with the established demands for their role as primary domestic. This thematic session addresses Japanese women's roles, well-being, and their quest for self-actualization in today's

changing society and workplace. Four studies are presented and discussed in this session; the first paper reviews the current situation in Japan. The second paper reports a coaching intervention designed to empower young women seeking employment to move toward self-actualization. The third paper presents the psychometric properties of the Reemployment Self-efficacy Scale and an intervention designed to promote better mental health and facilitate return to work in women seeking reemployment. The final paper examines the factors influencing women's work engagement and psychosomatic health in the workplace.

The life situations of Japanese women

Kazuyo Mori J.F.Oberlin University, Tokyo, Japan

How do modern Japanese women live their lives? They have the longest life expectancy in the world (86.83 years in 2015), whereas the total fertility rate fell as low as 1.42 in 2014. Socially, women are expected to actively participate in the workforce, and reemployment within a few years after childbirth is reportedly their most desired life course. Considering such socio-economic changes, the traditional sex role of Japanese women must shift and progress must be made toward gender equality. Nevertheless, balancing childcare, home and work is by no means easy for women. Nursery services are in acute short supply and pregnant women often suffer so-called maternity harassment at work. The gender gap also remains high. Japan ranks 104th out of 142 countries in the World Economic Forum's 2014 Global Gender Gap Index. In this session, we will discuss how we can support Japanese women to self-actualize in today's changing world.

A Preliminary study of a Coaching Psychology Intervention to Enhance Women's Well-being

Rie Ishikawa J. F. Oberlin University, Japan

Coaching psychology research, in particular, practical research on women is scarce in Japan. Today, women lead diverse lifestyles, which requires making personal lifestyle choices and decisions, but also creates a sense of confusion. This preliminary study experimented with a coaching psychology intervention for women, aiming to enhance self-awareness and to improve well-being and performance in personal or work life. Young women (20's and 30's) were invited to participate in a three-session (one 3-hour session per week) program. The Intervention consisted of practical exercises for attentive listening, coaching questions to unlock the potential of others, a constraint-led approach to solution-finding, and goal-setting using the GROW model. The results indicated an improvement in mood and goal-setting skills, whereas no significant change in general self-efficacy was observed.

In order to further the practice of coaching psychology, we will discuss future research for a group-based brief coaching intervention and its methodology, effectiveness and limitations.

Development and Application of a Scale for Woman's Self-Efficacy in Reemployment / Career Change

Noriko Okuta Yokohama YMCA college of human services, Japan

Japanese women face many obstacles when re-entering the labor market following career interruptions for marriage or childbirth. They are concerned for their husband's approval of their decision to work and whether there will be no conflict between work and home responsibilities. Given the situation, a program was developed to help women gain self-confidence in reemployment/career change. Prior to the intervention being conducted, a self-efficacy in reemployment/career change scale was developed to evaluate the program. Forty-two items were generated based on the literature review and the narratives of the participants in a previous career-training program. The scale was administered to 303 working women aged 20–69 years. Factor analysis resulted in the extraction of three factors with 22 items. The final scale was administered to 22 women who participated in the program. Pre- to post-intervention improvement was significant. Future research will be focused on the continued support of participants to maintain self-efficacy.

Work Engagement and Psychosomatic Well-being of Japanese Women at Midlife

Yoriko Matsuda J. F. Oberlin University, Japan

This study investigates demographic factors predicting work engagement (WE) of Japanese women at midlife, and the relationship between WE and psychosomatic well-being. An online survey was conducted with 900 married women aged 40–60 years. Demographics, marital satisfaction, WE, existential well-being, i.e. purpose in life (PiL) and personal growth (PG), anxiety, depressive mood, and somatic symptoms were measured. Results indicated that age, income, education, and marital satisfaction significantly predicted WE in a positive direction. Also, mothers showed higher WE than childless women, and caregivers for elderly were more engaged than non-caregivers. Women managers and professionals demonstrated higher WE than non-managerial workers and part-time workers. Additionally, structural equation modeling analysis revealed that WE predicted PiL directly and indirectly via PG. Further, PiL was negatively related to anxiety, depressive mood, and somatic symptoms. With the perspective of helping women fulfill their full potential in work, the implications for future research will be discussed.

TS083**Effective delivery system for health behavior change: Practice and research in health psychology****Organizer:** *Hiroaki Uechi Yamaguchi University, Japan*

Discussant: Mayako Ashihara

Kobe shinwa women's university, Japan

Session Abstract:

Large proportions of Japanese people do not meet the public health guidelines for physical activity and diet behavior. Now there is major concern about effective delivery systems to large population in public health. Non face-to-face intervention has potential to be more cost-effective for improving large population's health behavior than a conventional intervention. So far, the non face-to-face programs for health promotion have relied on print-media, but now increasingly personal computers (PCs) due to the rapid development and dissemination of information and communications technology. The aim of this symposium is the proposing the effective delivery modes, print materials with cartoon, mobile phone, tablets, and PCs, for health behavior change. Further, we will discuss to the effectiveness of the interventions adopted with each delivery modes.

Development of the computerized expert system to change multiple health behaviors in Japanese elementary school children**Koji Takenaka** *Waseda University, Japan*

The modern society has accelerated change of the environment around children and this change has lead to impairment of their health such as low physical fitness, high obesity rate and bad mental health. In this study, the computerized expert system was developed for Japanese elementary school children to change their multiple health behaviors, such as sleep, tooth brushing, and active play, and was evaluated in terms of psychosocial variables such as their attitude, intention and self-efficacy. Based on the information from the transtheoretical model and the formative research in their health behaviors, the message sheet delivered to adjust to each child after developing the stage- and gender-matched messages of 8 typed behaviors. Results revealed that there were some significant differences of psychosocial variables in Stage and Time. Also, their parents showed positive attitude to the message sheet.

Role of psychology in health promotion print media**Takashi Shimazaki** *Waseda University, Japan*

Print media is used to promote healthy lifestyle choices and expand health education's impact. Numerous studies on the efficacy of using print

media have been undertaken by health promotion researchers. Recent studies have focused on the production of acceptable and usable print media. Tailoring, targeting, and framing approaches (i.e., messaging) can provide practical knowledge in terms of print media intervention. These approaches can generate health behavioral changes that result in psychological benefits. This section focuses on the role of psychology in improving health promotion print media. The level of acceptability and usability can predict reaction to print media, leading to an increase in self-efficacy and positive behavioral intent. Notably, the challenge for our research group was to apply manga (i.e., Japanese-style comic characters) to health promotion practice. Furthermore, this section demonstrates that the preliminary study results of the manga initiative promote increasing physical activity and healthy eating behavior.

Booklet intervention for activity improvement of post-stroke patients**Kayo Konuma** *Waseda university, Japan*

Post-stroke patients tend to reduce their social activity after discharge from a rehabilitation unit, which engenders decreased quality of life (QOL). Nevertheless, most health professionals and post-stroke patients do not know how to cope with this difficulty. Previous studies have clarified two points. First, recommendations from family or friends, one's own experiences, information from medical staff, and the presence of a fellow stroke patient can promote the adoption of activities. Second, evaluations of others, feelings of beneficial effects, specific goals, and the presence of supporters can all promote the continuation of activities. Therefore, we have developed a booklet-based intervention using results of previous studies. The booklet is a guideline for activity improvement of post-stroke patients. Using this booklet can provide an effective intervention for many post-stroke patients.

Application of Gamification for Developing eHealth Program**Hiroaki Uechi** *Yamaguchi University, Japan*

The purpose of this study was to examine the effectiveness of a smart phone application that applies gamification for promoting both physical activity and healthy diet behavior. The application had the following functions: recording daily steps; tracking body weight; checking whether the user accomplished the provided health behavior challenges; integration with social media; messages urging physical activity and healthy eating; displaying badges designed to resemble the colored belt system used in Japanese martial arts; and ranking on leaderboards. Various major gamification elements were applied to these functions, comprising points, badges, and leaderboards.

We have conducted to examine the application's effectiveness for promoting changes in health behaviors among university students. The findings of this study will provide further knowledges to develop new application for engaging and retaining participants in interventions for health behavior changes.

TS084**Impact of self-compassion across the ecological systems****Organizer:** *Ruirui Zhang* *The Chinese University of Hong Kong, Hong Kong***Session Abstract:**

Though rooted in Buddhist thinking, self-compassion has garnered much attention in Western psychology as a means to understand human experience and cultivate positive well-being. This symposium utilizes the Bronfenbrenner's ecological model to appreciate how self-compassion may impact human experience at different levels across four studies. The first study examines how self-compassion interacts with contingent self-esteem and well-being under the cultural context of Confucian relationalism. Next, regarding the exo- and mesosystems, we discuss how self-compassion moderates the perception of architectural barriers and stigma among adults with physical disability. Bridging through the micro-individual system, we then investigate how loving-kindness meditation cultivates compassion to the self and others. Finally, the closing presentation focuses on the delivery of a self-compassion training via a mobile application and its effectiveness on personal well-being. The symposium extends our understanding of self-compassion across the ecological systems and sheds light on practical implications of promoting self-compassion in the society.

Contingent self-esteem influences well-being through relational autonomous and personal controlled motivations: The role of self-compassion**Ruirui Zhang, Winnie Wing Sze Mak** *The Chinese University of Hong Kong, Hong Kong*

Contingent self-esteem connotes a lack of autonomy in pursuit of self-esteem. Given the salience of relational self-construal in China and that autonomous and controlled motivations can further be distinguished between relational and personal ones, the present study investigated the role of four motivations (i.e., relational autonomous motivations; relational controlled motivations; personal autonomous motivations and personal controlled motivations) in mediating the relationship between contingent self-esteem and well-being. The study also tested the moderating role of self-compassion on the costs of contingent self-esteem on well-being. Findings of 244 college students in Hong Kong showed that

contingent self-esteem has a positive indirect effect on well-being through relational autonomous motivations, a negative indirect effect on well-being through personal controlled motivations, and a negative direct effect on well-being. Self-compassion buffered both the negative indirect and direct effects of contingent self-esteem on well-being. This study has implications for cross-cultural studies regarding the self and autonomy.

The moderating role of self-compassion in the relationship between anticipated architectural inaccessibility and perceived stigma

Gloria Yuet Kwan Ma, Winnie Wing Sze Mak *Department of Psychology, The Chinese University of Hong Kong, Hong Kong*

Perceptions of architectural inaccessibility and stigma have both shown to be detrimental to well-being for individuals with physical disability. Architectural inaccessibility hinders social experiences and reinforces stigmatizing social perceptions towards individuals with disabilities. Unfortunately, architectural barriers are everywhere and cannot be eliminated readily. The present study tested whether self-compassion can be a protective factor against the negative perceptions of the architectural and social environment. 143 individuals with physical disabilities completed a self-report questionnaire on anticipated architectural inaccessibility, perceived stigma, and self-compassion. Results showed that self-compassion significantly moderated the effect of anticipated architectural inaccessibility on perceived stigma. The findings supported the direct association between anticipated architectural inaccessibility and perceived stigma. Most importantly, it highlighted the significance of a two-pronged approach to reduce perceived stigma experienced by individuals with physical disability from both societal (e.g. promoting the adoption of universal design) and individual perspectives (enhancing self-compassion).

Effects of cognitive understanding and practice of loving-kindness meditation on well-being

Holly H Ho, Winnie Wing Sze Mak *The Chinese University Of Hong Kong, Hong Kong*

Loving-kindness meditation (LKM), originated from Buddhism, aims to cultivate loving kindness, compassion, sympathetic joy, and equanimity through sending unconditional, all-inclusive love to oneself, loved ones, strangers or acquaintance, ones with whom one has difficulty, and all sentient beings. The present study investigated the effect of a brief, 15-minute guided LKM on well-being. We also investigated whether cognitive understanding on the rationale of LKM using a brief animated video could enhance the effect of

LKM. The study compared (1) LKM only, (2) video + LKM and (3) waitlist control among university students using a randomized controlled design. Findings showed LKM and cognitive understanding of LKM can improve well-being over waitlist control. Implications of study findings on practice of LKM will be discussed.

Efficacy of self-compassion training delivered using mobile application in promoting well-being: A randomized controlled trial

Alan Chun Yat Tong, Winnie Wing Sze Mak, Sindy Ying Chi Yip *The Chinese University of Hong Kong, Hong Kong*

Traditional face-to-face self-compassion training has shown to be effective in fostering well-being and resilience. Technology today enables mobile training that could accommodate more people from diverse backgrounds. This presentation reports on a randomized controlled study evaluating a 4-week self-compassion training program, compared with a cognitive-behavioral psychoeducation program, both delivered over a mobile app named "Living with Heart". Participants read built-in materials and did practice related to the respective conditions for 10–15 minutes a day. Among the participants who completed the post-training assessment, both programs could significantly enhance their mental well-being (e.g., WHO 5-item Well-being Index, Kessler Psychological Distress Scale, and Peace of Mind Scale), as well as self-compassion (measured by Self-Compassion Scale). Findings demonstrated the potential of app-based mental health training when resources are scarce in the community.

ORAL PRESENTATION

OR1072

Effects of optimistic and defensive pessimistic expectations on coping processes under academic pressure

Noriko Aizawa, Mika Omori *Ochanomizu University, Japan*

One of the most stressful events among high school students is an academic examination. Recent studies reported that optimism and defensive pessimism, the expectations for the future and consequences, are related to the performance. However, the research concerning expectations and stress coping processes among students is few, and the mechanism of such processes has been obscure. Present study was designed to investigate the effect of expectations on stress coping processes under academic pressure. Participants were 236 Japanese high school students. The anonymous survey was conducted one week before the examination. Path analyses revealed that defensive pessimism had effects on cognitive appraisals

(effectiveness, threat, and challenge: $\beta = .30, .16, .32$, respectively) and problem-focus coping ($\beta = .12$). In contrast, optimism had no effects on cognitive appraisals and had positive effect on emotion-focus coping ($\beta = .12$). Our findings revealed the interesting relationship between expectations and coping processes during academic pressure.

OR1073

PERCEIVED HEALTH OF MEXICAN MICROENTREPRENEURS

Fernando L Arias-Galicia, Carmen Camacho-Cristia *Morelos state university, Mexico*

Introduction. In Mexico there is a lack of research about microentrepreneurs, despite the fact this kind of firms contribute a large percentage of the GNP and create a substantial number of jobs. It is well documented that stress is associated with a diminished health. Therefore the question arises: how these entrepreneurs perceive their health? Method. A survey was launched in the State of Veracruz, Mexico. 235 microentrepreneurs (both female and male) answered voluntarily a questionnaire composed of these instruments: stress (Cohen, Kamarak y Mermelstein, 1983) and Quality of life (OMS, 1997). Results. There was no significant difference in the stress level between females and males, but perceived physical health was diminished in the first group. Also quality of life was associated negatively with perceived physical health. Discussion. All relationships resulted as expected by theory. Attention should be paid to this group of people in both remedial and preventive ways.

OR1074

Somatisation tendency, Perception of poverty, Potency in economically underprivileged adolescents from Urban West Bengal

Saoni Banerjee (1), Sonali De (2), Rachel Lev-Wiesel (3) *1. University of Haifa, Israel; 2. University of Calcutta, India; 3. University of Haifa, Graduate School of Creative Arts Therapies, Israel*

The paper focuses on somatisation tendency in urban adolescents of West Bengal from the lowest 30% income group of Indian PPP standard (N = 200, age: 12-16 yrs.), using Bradford Somatic Inventory. Somatisation serves an adaptive function to marginalized groups and as preferred response over other internalizing symptoms for youth living in hostile environments. Personal resources comprising both interpersonal and intrapersonal components like potency as conceived by Ben-Sira helps in initial coping and homeostasis restoration. Adolescents' perception of their own poverty situation moderates their mobilization power within the society and those who think themselves as 'poor' admits to feel depressed over

their current situation. This study reports presence of significantly high number of symptoms reported (mean = 5.50) in adolescents and discusses it with respect to their measured level of potency and perception of own poverty. Results indicate sense of potency may moderate somatisation tendency in adolescents, extending on the understanding of coping-stress-health relationship.

OR1075**Effect of Yoga on Self Concept, Feeling of Well Being and Emotional Maturity of Students With Disabilities**

Sandeep Berwal (1), Savita Chahal (2) 1. BPS Women's University, Khanpur Kalan, District Sonapat, Haryana State, India; 2. GVM College of Education, Sonapat, Haryana, India

The present paper is an outcome of research conducted by authors to see the effect of Yoga training on self concept, feeling of well being and emotional maturity of students with disabilities. The study was conducted on 100 students of three special schools of Haryana State, India. The Yogic classes were organised by the researchers for the disabled students for a period of three months, through special yoga instructor, keeping in view the nature and extent of their disability. Self concept inventory of Mohsin (1979), PGI General Well Being Scale of Verma (1989) & Emotional Maturity scale of Bhargava (1990) were used. Mean, S.D and t-test for data analysis were applied. Pre-test/post-test single group design was followed. The study indicated positive effect of Yoga on self concept, feeling of well being and emotional maturity of students with disabilities. The study has its implications for directorate of school education and others

OR1076**Music Therapy for preterm infants and their parents/caregivers during NICU hospitalization and after discharge to home: a systematic review and meta-analysis**

Lucja Bieleninik (1), Claire Ghatti (2), Christian Gold (1) 1. Grieg Academy Music Therapy Research Centre, Uni Research Health, Bergen, Norway; 2. Grieg Academy Music Therapy Research Centre, The Grieg Academy, University of Bergen, Bergen, Norway

Background. Previous meta-analysis provided some evidence that music therapy (MT) positively impacts infant physiological/behavioral status, parental wellbeing and hospitalization. We aimed to review the effects of MT for preterm infants and their parents/caregivers during NICU hospitalization and after discharge. Methods. A comprehensive searching strategy was used to identify all randomised trials comparing MT to standard care or other

therapies. We included infants (born before 37 weeks of gestation until 3 years old) and their parents/caregivers, who received MT carried out by or in consultation with a trained music therapist. Results. Of 1823 studies screened, 17 met the inclusion criteria. Included trials vary across MT's approach, dose and duration. Final results of the physiological data, behavioral status, hospital stay, maternal anxiety, bonding, feeding ability and weight gain will be presented. Conclusions. There is a need to conduct rigorously designed studies that focus exclusively on MT for parental and long-term infant/parent outcomes.

OR1077**Multiple versus single-behavioral health interventions: Randomized controlled trial of healthy rest breaks at work**

Katarzyna Byrka University of Social Sciences and Humanities, Poland

Background: Changing multiple behaviors in groups at risk of sedentary lifestyle may provide efficient solutions for many health problems. In this study we compared multi- versus single-behavioral interventions in the context of rest breaks. Methods: Office workers (N = 167) were randomized either to conditions of active breaks with healthy nutrition, active breaks alone, or healthy nutrition alone or to a control condition. The dependent variables were specific health behaviors, general health motivation, body composition and weight measured pre and post-test. Findings: The active-breaks intervention resulted in a change of targeted behaviors, whereas healthy nutrition condition produced no change. In a multi-behavioral condition the effectiveness of active breaks intervention was not reduced. Additionally, we found that initial BMI index and general health motivation of participants moderated the observed effects. Discussion: Multi-behavioral interventions seem equally effective as single-behavioral ones, unless they target persons less inclined to engage in promoted activities.

OR1078**Self-Acceptance As a Mother of Child with Special Needs**

Rizky A Cahyani none, Indonesia

Every mother wants her child was born in the normal and healthy condition. But, when the mother heard her son's diagnosis in need special, a variety of psychological problems experienced by the mother before finally reaching the stage of self-acceptance, and it is a difficult process. This type of research used qualitative phenomenological approach. Sample of three biological mothers of children with special needs. Based on the research results, the process as a mother of child with special needs are shock,

denial, grief, guilt, anger, bargaining, adaptations & reorganization, acceptance & adjustment. Self-acceptance in Islam include with the sincere, endeavor, patience, gratitude, and tawakkal. The factors of self-acceptance those are self support, social support, self judgement, social judgement, a religious concept, the state of knowledge of the mother, and socioeconomic status. Key words: Self-Acceptance, Mothers of Children with Special Needs, Children with Special Needs, Phenomenology

OR1079**Online gaming motivation mediates game involvement in predicting problematic Internet use: A longitudinal study**

Shan-Mei Chang (1,2), Ssu-Kuang Chen (1), Sunny S.j. Lin (1) 1. National Chiao Tung University, Taiwan; 2. National Tsing Hua University, Taiwan

This study collected a 3-wave longitudinal data to explore a multiple-mediator model with game motivations mediating the effect from online game involvement to problematic Internet use (PIU). Game motivations were six factors (modified from Yee, 2006) including advancement, competition, social component, role-playing, customization, and escapism. The self-developed PIU scale collected five core behavioral symptoms (tolerance, withdrawal, impulsivity, preoccupation and craving). All 389 college students (280 male and 109 female) participated in the study from freshman to junior years. Results indicated that data well fitted the modified hypothetical model. Two out of six motivations, advancement and escapism, showed significant mediation effects, demonstrating that higher game involvement at time-1 tended to sought advancement in games and escaping from real life in the next year, and experienced stronger PIU symptoms at time-3. The results highlighted the importance of particular motivations in the longitudinal development of PIU for online gamers.

OR1080**Mindfulness self-care education group for patient with type 2 diabetes: Preliminary study in Taiwan**

Hsiu-Jung Chen (1), Yih-Ru Cheng (2), Bee-Horng Lue (3) 1. National Taiwan Normal University, dep of Educational and Counseling Psychology, Taiwan; 2. Clinical Psychology Center, National Taiwan University Hospital, Taiwan; 3. Department of Family Medicine, National Taiwan University College of Medicine, Taiwan

Facing diabetes medical condition, patient can easily get stressed on challenge of adapting to chronic and progressive changing illness and life. Objective: This study designed the mindfulness psycho-education self-care program for type 2 diabetes patients aim to alleviate the

challenges. Methods: 26 patients mean age 63.42 with type 2 diabetes attended 4 sessions prevention group and 3months follow-up, 22 patients of contrast group from regular clinics mean age was 62.91. Both quantitative and qualitative of datum were analyzed. Results: 1. Prevention group perceived less external barriers of self care than contrast group by treatment effect. 2. Group differences in HbA1c % by treatment effect. 3. More meta-cognition and self-awareness inspired patients with positive action and more acceptance emotion can flow happiness embedded in their life quality care. Conclusions: This prevention group can renew patient perspective and attitude on self-care.

OR1081

Filial Piety Could Predict Quality of Life in Mothers with Breast Cancer *Pin-Hua Chen (1), I-Ju Chen (1), Chih-Hsun Wu (1,2), Sue-Huei Chen (2)* 1. National ChengChi University, Taiwan; 2. National Taiwan University, Taiwan

For older Taiwanese adults, children's filial piety might influence their quality of life (QoL), but few studies has focused on cancer survivors. In order to explore this issue, the current study recruited 158 mothers with breast cancer. QoL (by WHOQOL), filial expectation (i.e., if their children's filial behaviors meet their expectation), and filial consistency (i.e., if the type of filial behaviors they received consistent with what they think it ought to be) were measured. Results of hierarchical regression analyses revealed that filial expectation could predict psychological ($\beta = .19, p = .014$) and social ($\beta = .19, p = .017$) QoL after controlling for age and aging-stereotypes. Furthermore, filial consistency was found as a moderator. For those who reported filial-inconsistency, filial expectation could predict all domains of QoL, but no significance was found in the filial-consistent group. These findings suggest that filial piety is important for older cancer survivors' QoL.

OR1082

Through a cultural lens: Filial piety and overall well-being of Chinese HIV-positive gay men

Rachael Xi Cheng (1), Winnie W. S. Mak (2)
1. none, China; 2. The Chinese University of Hong Kong, Hong Kong

Chinese HIV-positive gay men are subject to double stigma of being HIV-positive as well as having same-sex attraction and sexual behavior. Such stigma may be particularly pronounced within traditional Chinese cultural context. The present study investigated the impact of a traditional Chinese value - filial piety - on overall well-being among HIV-positive gay men in China and the protective role of psychological flexibility. A cross-sectional survey was administered to 216 people living with HIV (age = 30.42,

SD = 7.57) in mainland China, who also identified themselves as gay. Filial piety was found to have an indirect negative effect on overall well-being via self-stigma as gay and moderated mediation analysis for the whole model showed that for those who have high psychological flexibility (i.e. scoring one SD below mean on AAQ-II), self-stigma as gay did not mediate the relationship between filial piety and overall well-being. Practical implications of the findings were discussed.

OR1083

Predicting Psychological Well-being: A Cross-National Comparison

Daniel Chiacchia (1), Esther Greenglass (1), Brian M Hughes (2)
1. York University, Canada; 2. National University of Ireland, Ireland

It has long been noted that there is a strong relationship between stress and health related outcomes. It is no surprise then, that the economic recession that occurred in 2008 has negatively affected millions worldwide. This is especially so for youth, who not only face the uncertainty of a bright, prosperous, and financially stable future, but are almost twice as likely to be unemployed than their adult counterparts. Using regression analysis, the current study predicts psychological well being in a Canadian ($n = 286$) and an Irish ($n = 445$) student sample using a number of variables related to stressors (i.e. financial threat) and personal resources (i.e. social support). The results indicated that financial threat and worry were significant predictors of psychological well being in both groups. However, economic hardship was a significant predictor of well being only for the Irish group. Implications of the results are discussed.

OR1084

Perceived Discrimination at Work and Its Association with Psychological Distress, Depressive Symptoms and Suicidal Ideation among Medical Residents in South Korea *Bokyoung Choi, Seung-Sup Kim* Department of Public Health Sciences Graduate School of Korea University, Republic of Korea

We analyzed a cross-sectional study of 1,270 medical residents from the 2014 Korean Interns & Residents Survey. This research aimed to understand the prevalence of perceived discrimination and its association with mental health outcomes. Over the past 12 months, 24.7% of male and 39.5% of female medical residents reported experience of discrimination at work. The main reasons for discrimination were education (7.9%) and age (6.7%) for male whereas were sex (30.5%) and age

(12.1%) for female medical residents. Discriminatory experience was associated with depressive symptoms (OR: 1.99, 95% CI: 1.51-2.61) and suicidal ideation (OR: 1.81, 95% CI: 1.22-2.69) over the past 12 months after adjusting for confounders including sex, training year, and work hours per week. Furthermore, discriminatory experience was associated with psychological distress over the past 30 days, assessed by Kessler-6 (OR: 2.18, 95% CI: 1.54-3.09). The findings suggest that discriminatory experience may harm mental health of medical residents.

OR1085

Sociocultural Barriers to Medical and Psychosocial Care for Women in Diverse Countries Coping with Chronic and Life Threatening Physical Conditions

Helen L Coons
Women's Mental Health Associates, United States of America

This oral presentation will focus on sociocultural barriers to psychosocial care for women coping with chronic and life threatening physical conditions from a range of countries (e.g., Asia, the Middle East, Africa, South America, United States). International research underscores the adverse impact of diseases on women's physical, mental health, relational and economic status. Women with physical conditions often have limited access to effective medical and psychosocial information or care, experience marked stigma in their communities, and may be highly isolated while coping with other significant stressors (e.g., unemployment, poverty, violence). Other women may live with family members who make decisions regarding their health and psychosocial care. The presenter is board certified clinical health psychologist who speaks in the US and abroad on health disparities and socio-cultural issues affecting the psychosocial experience and care of diverse women across the life span living with chronic and life threatening physical conditions. UnhideWhenU

OR1086

Therapeutic affordances and perceived outcomes of online support groups: findings from an online asynchronous interview study of women living with endometriosis

Neil S Coulson, Amie Shoebottom
University of Nottingham, United Kingdom

The Internet has provided women living with endometriosis new opportunities to seek social support online. Online support groups may provide a range of therapeutic affordances which may potentially benefit women living with this long-term condition, therefore the present study seeks to explore these affordances. Sixty-nine women (aged 19 to 50 years; Mean = 34.2 years; 65.2% UK; 21.7%

USA) participated in an online asynchronous interview exploring online support group use. Participants had been using online support groups on average 2 years and 4 months (Range = 1 month to 14 years, 9 months). Inductive thematic analysis revealed 4 therapeutic affordances related to online support group use; connection, exploration, narration and self-presentation. The associated outcomes of use were predominantly positive, such as reassurance and improved coping, with few negative aspects from online support group use. The results will be discussed in relation to the literature including practical and theoretical implications.

OR1087

Childhood self-control predicts smoking throughout life: Evidence from 21,000 cohort study participants

Michael Daly University of Stirling, United Kingdom

The extent to which childhood self-control underlies the emergence and persistence of lifetime smoking is currently unknown. Participants ($N = 21,000$) were drawn from two nationally-representative British prospective birth cohort studies. Child self-control was teacher-rated at age 10 and smoking was reported at five time-points throughout adulthood in Study 1 (ages 26–42) and six time-points in Study 2 (ages 23–55). Childhood self-control made a substantial contribution to smoking throughout life after adjustment for gender, social class, intelligence, psychological distress, and parental smoking. In adjusted regression models, a 1 standard deviation increase in self-control predicted a 5.5 percentage point higher probability of smoking. In Study 1, 28.5% of low self-control children (-1 SD) were daily smokers compared to 16.7% of high self-control children ($+1$ SD) and this was replicated in Study 2 (27.6% vs. 17.4%). This study provides strong evidence that childhood self-control predicts daily smoking throughout adulthood.

OR1088

Childhood self-control and mortality by midlife

Michael Daly University of Stirling, United Kingdom

Whether childhood self-control offers longevity benefits for young and middle-aged adults has not yet been established. 15,129 participants were drawn from the National Child Development Study (NCDS), a nationally-representative British prospective birth cohort study. Child self-control was teacher-rated at ages 7 and 11. 712 participants died over the 44 year period examined from age 11 to age 55 (1970–2014). Proportional-hazards models demonstrated that children with high levels of self-control ($+1$ SD) had a substantially reduced risk of

mortality by midlife ($HR = .83$; 95% confidence interval = [0.77, 0.88]) after adjustment for sex, social class, ethnicity and intelligence. Further adjustment for an extensive set of childhood health and environmental variables did not markedly attenuate this association ($HR = .85$; 95% confidence interval = [0.80, 0.91]). Self-controlled children are particularly likely to reach middle-age. The mechanisms underlying the life-lengthening effects of early self-discipline require further examination.

OR1089

Culture and Chronic Pain Experiences

Reem M Deif American University in Cairo, Egypt

Research shows the complexity of chronic pain as a physical experience, having or lacking a biological etiology, and being mediated by various socio-cultural influences. Here I argue for chronic pain complexity as opposed to the view that it is merely the sum of occurring pain experiences connected together over an unremitting period of time. Chronicity, in this regard, cannot be understood merely in terms of duration, and different pain-related variables should rather be examined to generate a full formulation of chronic pain. I attempt to provide a tentative theoretical explanation of chronic pain through examining five pain-related dimensions; pain experiences; pain coping, beliefs, perception, behavior and communication. Throughout the discussion, it will become evident that such dimensions are overlapping, contributing once again to the complexity of chronic pain, only when seeing the sufferer as an individual-in-context.

OR1090

Personal Wellbeing in a National Charity Institution. Workers Attitudes and beliefs

Guido R Demicheli, Alvaro E Infante Universidad de Valparaiso, Chile

This presentation reports the results of a research address to establish and measure workers' main attitudes and beliefs about some dimensions of personal wellbeing in relation with their work environment, a national charity institution. Using Galileo System (Woelfel & Stoyanoff, 2008), in a first stage, 21 in depth-interviews were carried out in order to identify those conditions that studied people themselves associate with their everyday work life. On the bases of the qualitative inputs previously obtained an ad-hoc questionnaire was constructed and applied to the studied population ($N = 153$) in a second stage. In the analysis, three sub-groups of workers were considered (resident, non-residents and staff); significant differences in beliefs and attitudes were found among them, but not if the genre variable was considered. At the same time, several close relationships

among some of the attributes being studied were brought forth: Myself-Service vocation, Personal Wellbeing-Familiar Wellbeing, Vocation-Job stability, Myself-Familiar Wellbeing.

OR1091

Exploring information 'priming' as a method for reducing response expectancy formation and subsequent experience of side-effects: A randomised controlled trial

Elise J Devlin (1), Hayley Whitford (2), Linley Denson (1) 1. The University of Adelaide, Australia; 2. The University of South Australia, Australia

Patient pre-treatment response expectancies (RE) often increase side-effect experience and intensity. To explore this relationship, controlling known and novel confounders, 134 college students were randomly allocated to one of two Cold Pressor Task (CPT) conditions, to investigate whether priming - presenting statistically identical side-effect information in positive versus negative formats - could reduce problematic RE formation. Post-negative or positive priming, participants completed baseline measures including pre-treatment expectancies of 14 side-effects, coping style, and mood; post-CPT intervention, they reported side-effect experiences. Priming did not significantly impact RE formation or side-effect experiences, but interestingly faster time-to-discomfort and higher tolerance were both trends ($\Phi = .68$ and $.79$) within the positive frame condition. RE independently predicted side-effects (excluding pain tolerance) in multivariate analyses, thus the robust relationship between RE and subsequent experience was supported. Although priming had minimal influence on RE formation, research in larger populations experiencing more complex toxicities may better test this notion.

OR1092

Patients perspective on interprofessional collaboration and patient safety

Amélia Didier (1,2), Maya Shaha (1,2), Vanessa Alvarado (3), Brigitte Liebig (3), Jean - Pierre Pfammatter (4) 1. University of Lausanne/HES-SO, Switzerland; 2. University of Lausanne/Institute of Higher Education and Research in Healthcare, Switzerland; 3. University of Applied Sciences and Arts Northwestern Switzerland, Switzerland; 4. Inselspital, University Hospital, Bern, Switzerland

Background: Interprofessional collaboration (IPC) is a key concept contributing to better patient outcomes and safety. Despite extensive research on IPC in healthcare settings, patients' perspective on IPC has rarely been explored

in clinical setting. Patients could be valuable partners in providing feedbacks on IPC. Objective: Describe the perceptions of patients about IPC and identify the influence of IPC on safety from patients' point of view. Method: 10 patients of each of three departments of a Swiss hospital, and minor patients' legal respondents in the pediatric service participate in this qualitative study. Using grounded theory (Corbin & Strauss, 2015), patients' perspective is explored through a first semi-structured interview. Then, they are invited to record their observations in a notebook during their hospitalisation. These records will be used to guide a second interview, at patient's home. Results permit to give an innovative perspective on IPC.

OR1093

Psychological consequences of mastectomy: a preliminary analytical study of 3 Senegalese women
Ismahan S Diop, Abdoul A Kasse *University Cheikh Anta Diop DAKAR, Senegal*
 Breast cancer has raised concern in the Senegalese population, especially because of its death incidence among Senegalese women, and general cancer awareness. This article is based on a preliminary qualitative study, conducted in Dakar with Senegalese women after mastectomy. It aims to understand the consequences of mastectomy on their definition of themselves as women, and the specificities of this process in a Senegalese context, in order to provide a culturally relevant support, whereas psychological care is inexistent. The methods used were clinical interviews, behavior observation and medical files analysis. The results, compared to those of north-American women, showed differences and similarities. Principal similarities were concerns about body image and sexual functioning; major differences were induced by the socio-cultural context: polygamy, cultural representations of breast, cultural representations of women and Islam. They caused different perceptions, and responses to the operation and the treatment. Senegalese women have a specific reaction to mastectomy.

OR1094

The lived experience of psoriasis patients
Migle Dovydaite, Laura Morkuniene *Vilnius University, Lithuania*

The lived experience of psoriasis patients The purpose of this research is to describe the phenomenon of psoriasis as it is known through everyday experience of patients with psoriasis. The qualitative phenomenological study was conducted with 3 women and 3 men (age 26–52 years), diagnosed with severe psoriasis condition. Unstructured interview was conducted to capture lived experience and the meaning of illness. Interview were recorded, transcripts were analyzed, using Colaizzi's

(1978) qualitative methodology, to identify significant ways in which illness experience impacted their lives. The following three themes emerged from patterns of categorised interview data: deeper than the skin: painful feelings; me and others: visible illness; psychological journey of: adjusting, excepting and growing. Patients with psoriasis experienced emotional, social and personal developmental challenges. Although burdened with multiple stressors they were struggling to cope with illness, to learn from experience and to grow in life.

OR1095

Body Image and Identity Status among Senior Students

Migle Dovydaite, Evelina Valiukaite *Vilnius University, Lithuania*

Elaborating a sense of self is essential in process of identity development. One's body functions as a means to interact to an environment in process of exploration and commitment making. Our study explores the relationship between identity development and body image in a sample of 189 high school students ($M = 17.9$, $SD = 0.534$). The aim of this study was to examine the role of identity distress in the relationship between demographic factors, body mass index, physical activity, identity status, and different aspects of body image. In this cross sectional study, significant gender differences emerged. Female participants showed significantly more concern for, and reported lower value in their bodies' appearance and functionality. However, identity distress was a significantly better predictor of various aspects of body image than demographic factors, body mass index, physical activity, and identity status alone. Therefore, identity distress should be considered important in determining body image.

OR1096

The Relationship among Five-pattern Personality, Constitution and Psychological Health in Chinese Medicine

Jian Du, Hao Wang, Qiuli Yang *China Academy of Chinese Medical Science, China*

Traditional Chinese culture attaches importance to harmonious in society and nature. There are a lot of thoughts in Yellow Emperor's Medical Canon about personality, constitution and psychological health. Based on these, we established two inventories about the personality and constitution, named Five-pattern Personality Inventory (FPPI), Five-five Constitution Test (FFCT). In this research, our purpose is providing the evidence for the TCM theory "integration of shape and spirit", by analyzing the correlation among personality, constitution and mental health, using the scales of FPPI, FFCT and SCL-90, from the data of college students. The results show that 13 kinds

of constitution types can be summed up to 4 factors, Taiyin personality has the strongest positive effect on the total score of psychological symptoms, normal constitution has the strongest negative effect. We found that constitution couldn't be ignored on the effect on personality. In the process that constitution affects psychological symptoms, personality is a moderating effect.

OR1097

Studying the anti-vaccination behavior and attitudes: a systematic review of methods

Ksenia Eritsyana, Natalia Antonova, Larissa Tsvetkova *Saint-Petersburg State University, Russia*

Recently vaccination refusal became one of the important public health concerns. A systematic review of English-language articles published from 1980 to 2015, using the Web of Science TM Core Collection database was made to analyze the studies that examine vaccine refusal and negative attitudes towards vaccination, focusing on methodological approaches used. The final analysis consists of 31 papers. Five types of studies were identified: 1) studies of parents' attitudes and behavior, 2) analysis of vaccination records, 3) studies of attitudes and behavior among the general population, 4) studies of medical professionals' attitudes, behavior and experience, and 5) others. The use of theoretical models in the studies was not very common; the studies were missing a common approach to the operationalization of vaccine refusal, as well as of negative attitudes towards vaccination. Several promising directions have been identified for future studies on this topic.

OR1098

Factors of differences in child vaccination patterns: the test of Health Behavior model on Russian sample

Ksenia Eritsyana, Natalia Antonova *Saint-Petersburg State University, Russia*

In recent years, worldwide decrease in vaccination coverage due to the negative attitudes of the population towards vaccination has been detected. This study has been tasked to quantify the applicability of the Health Belief Model and its components to predict the vaccination patterns in a Russian population sample (city of Saint-Petersburg). The subsample of persons who have minor children ($N = 260$) from a representative telephone survey of adult residents of St. Petersburg ($N = 1175$) was used. About 20% of the respondents have incomplete vaccinated children; including 4% of them have no single vaccination in the absence of medical contradictions. In log-linear regression the most predictive component of the model in relation to the pattern of vaccination was a perceived vaccine safety (barrier) (AOR 3.57

(8.30 - 1.59), $p < .001$). The perceived disease susceptibility and severity of preventable diseases were not significant predictors of the vaccination pattern in this study.

OR1099

A biopsychosocial model of recovery following stroke

Michelle Fox, Adrian Fisher *Victoria University, Australia*

For many stroke survivors rehabilitation is a slow and difficult process. A substantial proportion of stroke rehabilitative services follow conventional physical/functional treatment methods with minimal attention given to psychosocial concerns. Fortunately, in recent years research interest has been directed at the psychosocial features of recovery. However, despite this expanding knowledge rehabilitative services continue to be governed within a biomedical framework. To consider stroke rehabilitation within a biopsychosocial framework would conceptualise stroke management and recovery. In this study, 34 Australian stroke survivors participated in semi-structured interviews. The results indicate a need to include psychosocial interventions within the stroke recovery process. Stroke rehabilitation can no longer be interpreted predominantly within a biomedical framework. Instead, conventional stroke rehabilitation services must be transformed whereby the psychological, social and environmental aspects of recovery are given equal weight in service provision. By incorporating a biopsychosocial model, services would truly reflect a contemporary approach to stroke recovery.

OR1100

Acute Stress Disorder Symptoms and Mortality in Cardiac Patients

Karni Ginzburg *Tel Aviv University, Israel*

Myocardial infarction (MI) is a risk for acute stress disorder (ASD), manifested in dissociative, intrusive, avoidant, and hyperarousal symptoms during hospitalization. This study examined the prognostic role of ASD symptoms in predicting all-cause mortality in MI patients over a period of 15 years. 193 MI patients filled out questionnaires assessing ASD symptoms during hospitalization. Risk factors and cardiac prognostic measures were collected from patients' hospital records. All-cause mortality was longitudinally assessed, with an endpoint of 15 years after the MI. 21.8% of the participants died during the follow-up period. The decedents had reported higher levels of dissociation and hyperarousal during hospitalization than had the survivors. Hierarchical Cox regression analyses indicated that - after adjusting for age, sex, education, left ventricular ejection fraction, and depression - dissociative symptoms significantly predicted all-cause mortality ($HR = 1.49$, $p < .05$), indicating that the higher the level of in-hospital

dissociative symptoms, the shorter the MI patients' survival time.

OR1101

The evaluation of dehumanizing behaviors and professional burnout among nurses and nursing students

Alicja Glebocka, Ewa Wilczek - Ruzyczka *University, Poland*

According to the OECD report Health at Glance 2015, Poland ranks last, among the surveyed countries, in terms of the patient-healthcare workers communication. The aim of study was to analyze relation between professional burnout and evaluation of behavioral indicators of dehumanization in the context of occupational and educational experiences of current and future nurses. The study included nurses, 1st year students of nursing and non-medics. Maslach Burnout Inventory and The Scale of Behavioral Indicators of Patient's Dehumanization by Glebocka and Ruzyczka were used. No differences were found for emotional exhaustion. Nurses presented higher level of depersonalization than the control group and the lowest level of satisfaction. Students were the most tolerant to patient dehumanizing behaviors. No intergroup differences were found in the attitudes toward latent dehumanization. Patient dehumanizing behaviors were scored more negatively than the latent ones. More negative attitude to latent dehumanization correlated with emotional exhaustion and depersonalization.

OR1102

The attitudes toward euthanasia in the fear of death context among caregivers of patients with paralysis

Alicja Glebocka *University, Poland*

The goal of the study was to measure the attitudes toward euthanasia and the level of fear of death among people in daily contact with paralyzed patients. It was assumed that such people would have a different approach towards euthanasia than those who had not experienced taking care of physically handicapped patients. Physiotherapists rehabilitating patients with post-stroke paralysis, family caregivers permanently taking care of disabled relatives, and individuals from the control group were included in the study. Attitudes toward euthanasia were measured in three aspects: informational support approaches, liberal approaches and traditional-conservative approaches. The results showed consistency among respondents in terms of information support, having a liberal approach and the extent to which they had a fear of death. Physiotherapists were less conservative in their attitudes than the other participants. Accordingly, everyday contact with patients suffering from

paralysis diluted conservative attitudes toward euthanasia but only among the medical staff.

OR1103 PTSD

among Young Survivors of the 7.6 Magnitude Costa Rican Earthquake: A 2-Year Follow Up Study **Benicio Gutiérrez Doña (1), Maricela Villegas Angulo (2,3), Gilberto Peña Ruiz (4)** 1. *Universidad Estatal a Distancia, Costa Rica*; 2. *Colegio de Médicos y Cirujanos de Costa Rica, Costa Rica*; 3. *Sindicato Nacional Empleados de Salud Pública y Afines (SINAESPA), Costa Rica*; 4. *Colegio Técnico Profesional (CTP) de La Mansión, Nicoya, Guanacaste, Costa Rica*

Predictors of PTSD in young Costa Rican earthquake survivors were examined; data were gathered twice: Time 1 (2013): $N = 554$ /Time 2 (2014): $N = 305$. At Time 1, positive correlations were found between PTSD and resource loss, religion, active coping, denial, focus and venting on emotions, and behavioral/mental disengagement ($r > .30$; $p < .001$). Time 1 man-cova defining school grade as covariate revealed significant effects of sex [Wilks' $\Lambda = .968$; $F(3, 248) = 3.098$, $p < .05$] and age [Wilks' $\Lambda = .90$; $F(15, 784) = 2.037$, $p < .05$] on PTSD. Survivors aged 19 to 22 years and females showed highest PTSD as compared to the youngest and males. Time 2 man-cova yielded no significant effects. Time 1 multiple regressions showed that focus and venting on emotions was the best predictor of arousal ($\beta = .29$, $p < .001$; $R^2 = .20$ /total $R^2 = .33$), reexperience ($\beta = .27$, $p < .001$; $R^2 = .19$ /total $R^2 = .32$), and avoidance ($\beta = .23$, $p < .001$; $R^2 = .15$ /total $R^2 = .28$). Time 2 PTSD was weakly related to Time 1 predictors. Keywords: PTSD; Earthquake; Resource loss; Coping; Predictive models.

OR1104

Smoking behavior and the implicit approach: Developing an intervention applying Approach-Avoidance-Task

Stephani R Hamdan (1), Marisa F Moeliono (2), Willis Srisayekti (2) 1. *Universitas Islam Bandung, Indonesia*; 2. *Padjadjaran University, Indonesia*

This two-step study was a part of a comprehensive studies on smoking behavior in Indonesia. Step1, applying Stroop-Task to male-university-students (smokers = 45, non-smokers = 40; age 18-24 years, $M = 21.74$; $SD = .82$), revealed that the smoking-behavior was associated with attention bias, Anova, cigarette's-related-stimuli $F(3, 85) = 20.665$, $p < .01$. Step2 was based on the results of step1, aiming to develop an intervention for smokers, to investigate the effects

of the experimentally-retraining by manipulating the automatic-avoidance-action tendencies using Approach-Avoidance-Task (AAT) on smokers in Bandung. It involved 19 male university-students (CG = 9, EG = 10; smokers, age 18–24 years, $M = 21.74$; $SD = .82$). The results showed that the retraining (6 weeks, twice a week) effected the AAT-effect, $t(10) = 3.412$, $p < .01$; as well as reducing the cigarettes consumption of the smokers. The detail results will be included and discussed in the presentation.

OR1105

Modification effects of feminine personality trait on association between dietary intake and depressive symptoms in Japanese female students

Kumi Hirokawa (1), Yoko Takahata (1), Sayo Uesugi (2) 1. *Baika Women's University, Japan*; 2. *Otsuma Women's University, Japan*

The purpose of the present study was to investigate associations between a feminine personality, nutrition and depressive symptoms. Participants were 53 Japanese female students (mean age = 20.0 ± 1.6 years). The communion-agency scale for children and the Birlson depression self-rating scale for children were used to measure their feminine personality and depressive symptoms. Their nutrition intake was estimated by the dietary diary for three days. Partial correlations showed that feminine personality was negatively correlated with consumption of fish and seafood group (-0.36 , all $p < 0.05$). For nutrition, zinc and vitamin B6 were negatively correlated with depressive symptoms ($r = -0.31$ and -0.37). When stratified by feminine personality, iron, zinc, vitamin B1, B2, and B6 were negatively correlated with depressive symptoms in the high feminine group (-0.51 , -0.47 , -0.49 , and -0.50). The feminine personality may be associated with food consumption and may modify associations between nutrition and depressive symptoms.

OR1106

Health and well-being of medical students

Stefan Höfer (1), Melanie Hausler (1,2), Alexandra Huber (1,2), Cornelia Strecker (2), Mirjam Brenner (2), Thomas Höge (2) 1. *Medical University Innsbruck, Austria*; 2. *University of Innsbruck, Austria*

There is limited information about factors contributing to health and well-being among medical students. This study investigates which and how strengths of character (VIA Survey-120) may have an impact on health (Short Form 12) and well-being (Personal Well-being Index -PWI). Medical students ($N = 178$, age = 20.5 ± 2.2 , female = 61.8%,

single = 78.1%) report average physical (PCS) and mental (MCS) health (PCS = 55.8 ± 6.0 , MCS = 42.2 ± 10) and average personal well-being (PWI = 78.9 ± 15). The three most present strengths of character were kindness (3.3 ± 0.5), honesty (3.3 ± 0.5) and fairness (3.1 ± 0.6). Zest ($r = .6$), love ($r = .5$) and hope ($r = .5$) had the highest correlations with well-being; hope ($r = .35$), zest ($r = .32$) and curiosity ($r = .31$) with mental health and none with physical health. Strengths of character may have an impact on personal well-being and mental health but do not relate to physical health. To increase mental health among medical students the application of strengths of character should be further explored.

OR1107

Robots as messengers of bad news. Similar effects as human doctors

Johan F Hoorn (1,2), Marcel Nihot (1,2) 1. *Vrije Universiteit Amsterdam, Netherlands*; 2. *Vrije Universiteit Amsterdam, Netherlands*

Doctors delivering bad news should use negations ("The news is not bad") rather than a direct affirmation ("Bad news, I'm afraid"), nor should they deny a positive outcome ("It is not going well"). People will feel negative about the doctor, about the health message, and refrain from the advice (Burgers, Beukeboom, & Sparks, 2012). Repeating the positive-negative framing and affirmative-negative language with 134 participants receiving bad news about Bechterew's disease from a robot doctor, effects were quite similar. When the robot used negations ("The news is not bad"), respondents expected a higher quality of life and felt less distant towards the robot doctor than when it used affirmations ("Bad news, I'm afraid"). Just like humans, robots should beat around the bush. Whether robotic or human, a doctor probably should avoid any direct confrontation and wrap its message in denial. It seems that robots can deliver bad news just as well.

OR1108

Resilience and Migration: psychosocial and cultural risk and protective factors in Iranian immigrants living in Australia

Ashraf A Hosseini (1), Ritsuko Kakuma (1), Melanie Davern (1), Mehdi Ghazinoor (2), William Evans (3), Harry Minas (1) 1. *Melbourne University, Australia*; 2. *Umea university, Sweden*; 3. *University of Nevada, Reno, USA, United States of America*

Migration is often a challenging and life changing experience. Psychosocial and cultural risk and protective factors in Iranians living in Australia were investigated using an online questionnaire and a semi-structured interview. The

main protective factors were: personal and social competencies, sufficient English proficiency, family and social support, longer duration in Australia, experience of higher levels of gender equality and multicultural experience. In contrast, being unemployed, cultural differences, discrimination, and difficulties with social cohesion in the Iranian community were found to be the main risk factors. This study suggests possible approaches aimed at promoting resilience among immigrants, including: setting up community support groups that strengthen social cooperation; creating strategies to enhance employment opportunities; and raising awareness of Iranian culture in the larger Australian community to reduce discrimination. This research also highlights the need for further study to assess whether interventions that strengthen resilience will assist immigrants in the process of migration.

OR1109

Men's body image and body satisfaction--Influence on loneliness and implication for men's mental health

Randolph D Hubach, Bridget M Miller, Joseph M Currin, Julie M Croff, Chris Jayne Oklahoma State University, United States of America

The extant research on body dissatisfaction has focused primarily on women and sexual minority men; however, few studies have addressed this construct and the implication for mental health. Loneliness has previously been evaluated for links with negative mental health and sexual risk behavior (Hubach et al., 2014; 2015) but predictors of loneliness in men is not well understood. Given this men ($N = 232$) were recruited to through internet-based direct marking to complete an online questionnaire exploring sexual health and mental health outcomes. We assessed the extent to which body image (MBRSQ) and body exposure during sexual activity (BESAQ) predicted loneliness scores. The linear regression model was significant [$F(2, 229) = 23.47$, $p < .001$], accounting for approximately 17.0% of the variance in loneliness. The MBSRQ ($\beta = -.259$; $t = -4.21$, $p < .001$), and the BESAQ ($\beta = .272$; $t = 4.42$, $p < .001$) were significant predictors. Both body satisfaction and willingness to expose one's body during sex significantly predict loneliness.

OR1110

Psychological wellbeing among caregivers of schizophrenia patients in Malaysia

Norhayati Ibrahim, Hui Chien Ong, Suzaily Abd Wahab, Normah Che Din, Mahadir Ahmad, Noh Amit, Mohd Suhaimi Mohamad The National University of Malaysia, Malaysia

There has been an increasing in the number of people diagnosed with schizophrenia worldwide. The incapability of functioning well leads to distress not only to the schizophrenia patients but to their primary caregivers as well. Hence, this study aims to explore the psychological distress, the burden of care and quality of life (QoL) among caregivers of schizophrenic patients. This cross-sectional study involved 200 caregivers at the outpatients Clinic of Hospital Universiti Kebangsaan Malaysia. Patients were interviewed using Short Form- 12, Zarit Burden Interview and Kessler's Psychological Distress Scale. Results showed that almost 12% and 15% of the caregivers reported experiencing moderate to severe burden and distress respectively. The higher level of burden and distress correlated with lower quality of life. In conclusion, some of the caregivers reported distress and burden which negatively impact their QoL. Thus, effective family intervention programs should be implemented to increase the QoL of caregivers.

OR1111

To snack or not to snack: the force of habit in daily life snacking

Nele Jacobs, Saskia Wouters, Mira Duif, Rob Van Bree, Lilian Lechner, Viviane Thewissen *Open University of the Netherlands, Netherlands*

Many individuals engage in snacking behavior, which may contribute to overweight and may be partly responsible for diseases such as cardiovascular diseases. In this study, the role of habit in snacking behavior is investigated and it is examined whether gender, age, BMI and level of education moderate the habit-snack association. Participants were adults ($N = 269$) from the general population, aged 20–50 years. A smartphone application was designed and validated to assess between meal-snack-intake in the context of daily life. Results showed that habit was significantly associated with moment to moment energy intake: the higher habit's strength, the higher the amount of kilocalories consumed. This association was moderated by level of education: habit was significantly associated with momentary energy intake from between-meal snacks in daily life in the lower level of education group. It is recommended to address habitual between-meal snacking in future interventions targeting lower educated individuals.

OR1112

Acceptance of life with illness, disease-related appraisals and social support in patients with chronic obstructive pulmonary disease

Tomasz Jedynak (1), Konrad Janowski (2), Barbara Mackiewicz (3) *1. John Paul II Catholic University of Lublin, Poland;*

2. Department of Psychology, University of Finance and Management in Warsaw, Poland; 3. Department of Pneumology, Oncology and Allergology, Medical University of Lublin, Poland

Background. Acceptance of life with illness (AoLwI) is a useful indicator of psychological adjustment to a chronic disease. The aim of this study was to verify how this construct is related to disease-related cognitive appraisals and social support in patients with chronic obstructive pulmonary disease (COPD). **Methods.** 142 patients with COPD were assessed on a battery of relevant psychological, sociodemographic and clinical variables. **Results.** AoLwI was positively associated with perceived social support ($r = 0.37$) and negatively with the disease-related appraisals of threat ($r = -0.33$), obstacle/loss ($r = -0.51$), harm ($r = -0.26$), and with overall significance attributed to the disease ($r = -0.34$). Regression analysis demonstrated that social support and disease-related appraisals were independent predictors of AoLwI. Sociodemographic and clinical variables failed to contribute significantly to explanation of variance in AoLwI. **Conclusions.** Disease-related appraisals and social support are significant and independent factors contributing to psychological adjustment achieved by patients with COPD.

OR1113

Acceptability and feasibility of obtaining hair samples for assessing antiretroviral therapy (ART) non-adherence amongst alcohol drinking ART recipients in Tshwane, South Africa

Tjingaita C Kekwaletswe (1), Neo Morojele (1,2), Sebenzile Nkosi (1), Bronwyn Myers (1), Paul Shuper (3), Charles Parry (1) *1. South African Medical Research Council, South Africa; 2. University of the Witwatersrand, School of Public Health, South Africa; 3. Centre for Addiction and Mental Health, Canada*

Background: ART recipients who drink alcohol often under-report their ART non-adherence. ART non-adherence can be assessed via testing hair samples, a more objective method than self-report. The study assessed the feasibility and acceptability of obtaining hair samples from ART patients in Tshwane, South Africa. **Methods:** We conducted 4 mixed-gender focus group discussions (FGDs) with alcohol drinking ART patients at primary health care sites. Thematic analysis was undertaken. **Results:** Participants indicated that the novelty of hair donation, witchcraft concerns and the symbolic nature of hair may deter ART patients from hair donation. Nonetheless, a full explanation regarding what obtaining and testing the hair entails was perceived as a solution to patients' possible reluctance to donate hair. Hair donation was considered viable and less invasive than blood

donation. **Conclusions:** Hair samples' testing is a potentially acceptable and feasible method of assessing ART non-adherence amongst alcohol drinking ART recipients.

OR1114

Validity of brief versions of the Alcohol Use Disorders Identification Test (AUDIT) for identifying hazardous/harmful drinking among patients in HIV care in South Africa

Tjingaita C Kekwaletswe (1), Neo K Morojele (1,2), Sebenzile Nkosi (1), Paul Shuper (4,5,6), Samuel Manda (1), Bronwyn Myers (1,3), Charles Parry (1,7) *1. South African Medical Research Council, South Africa; 2. University of the Witwatersrand, South Africa; 3. University of Cape Town, South Africa; 4. Centre for Addiction and Mental Health, Canada; 5. University of Toronto, Canada; 6. University of Connecticut, Storrs, United States of America; 7. University of Stellenbosch, South Africa*

Background: In sub-Saharan Africa (SSA), many antiretroviral therapy (ART) patients' heavy drinking of alcohol is often undetected. Health care workers (HCWs) need brief screening tools to routinely identify their patients' hazardous/harmful alcohol use. Various brief versions of the 10-item Alcohol Use Disorders Identification Test (AUDIT) exist. This study assessed the utility of these brief versions of the AUDIT relative to the full AUDIT for identifying hazardous/harmful alcohol use among ART patients. **Method:** Participants comprised 703 (204 men and 499 women) ART patients. Performance of the brief AUDIT measures for screening for hazardous/harmful alcohol use was evaluated against the full AUDIT using the area under the receiver operating curve (AUROC). **Results:** Compared with the full AUDIT, each brief AUDIT measure had an AUROC above 0.90. **Conclusions:** Various brief versions of the AUDIT may be appropriate substitutes for the full AUDIT for screening for hazardous/harmful alcohol use in HIV clinics in SSA.

OR1115

The relationship between Big-Five with happiness and mental health among Iranian college students

Moluk Khademi Ashkzari (1), Salehe Piryaee (2), Maryam Abdolapur (3) *1. Alzahra University, Tehran, Iran; 2. Alzahra University, Iran; 3. Islamic Azad University, Iran*

The purpose of this research was to investigate the relationship between personality traits (Big five) with happiness and mental health in college students. The population of this research was all students in Islamic Azad University-

South Tehran Branch (2014–2015). The sample consisted of 75 students were selected by stratified random sampling method. The results of hierarchical regression analysis indicated that openness and consciousness were significant predictors for mental health. Also extraversion solely predicts significantly the level of happiness in college students. Keywords: Big-Five, Happiness, Mental health

OR1116**Factors influencing women's decisions to initiate and terminate breastfeeding**

*Michael J Kiernan, Izumi Hiramatsu
Charles Sturt University, Australia*

Women's decisions about initiating, maintaining and terminating breastfeeding are made in the context of multiple, and often contradictory, societal messages and pressures. The current research developed a 12 factor/120 item questionnaire to assess women's beliefs and attitudes to breastfeeding. The results are presented for 325 Australian women, aged 19 to 82, of whom 92% had at some time attempted to breastfeed their infant. The results suggest that Australian women show moderate agreement with contemporary health messages about the benefits of breastfeeding for both mother and baby. However, in contrast to the recommended breastfeeding duration, there was strong support for the early cessation of breastfeeding for reasons related to the mother's physical or mental health, lifestyle choices or employment considerations. Consideration is given to how mothers balance competing pressures in their decisions to initiate and terminate breastfeeding.

OR1117**Change in job insecurity and depressive symptoms among automobile sales workers: A 7-year follow-up study in South Korea**

*Seung-Sup Kim (1,2), Yugyun Kim (1)
1. Department of Public Health Sciences, Graduate School of Korea University, Republic of Korea; 2. College of Health Sciences, Korea University, Republic of Korea*

Job insecurity might be a potential threat to workers' health. This study examined the prospective effect of job insecurity on depressive symptoms among automobile sales workers in South Korea, using a longitudinal cohort data of 557 sales workers from an automobile company. Job insecurity was measured in both 2007 and 2014 using six items of Korean Occupational Stress Scale. Based on perceived job insecurity at both waves, respondents were classified into four groups: secure-secure, secure-insecure, insecure-secure, and insecure-insecure. Depressive symptoms over the past week were assessed by Beck's Depression Index in 2014

as well as 2007. After adjusting for potential confounders including baseline depressive symptoms, the secure-insecure (PR: 2.49, 95% CI: 1.32-4.27) and the insecure-insecure (PR: 1.87, 95% CI: 1.18-3.69) groups had higher prevalence of depressive symptoms, compared to the secure-secure group. Our study found that job insecurity could be a relevant risk factor for developing depressive symptoms among automobile sales workers.

OR1118**Workplace Violence and Depressive Symptoms among Medical Residents in South Korea: 2014 Korean Interns & Residents Survey**
*Ji-Hwan Kim, Seung-Sup Kim
Department of Public Health Sciences, Graduate School of Korea University, Republic of Korea*

This study sought to assess experience of workplace violence among medical residents and to examine its association with depressive symptoms, using a cross-sectional survey of 1,195 medical residents (Male: 838, Female: 357) from the 2014 Korean Interns & Residents Survey. Three different types of workplace violence (i.e. physical violence, verbal assault, and sexual harassment) were assessed. Depressive symptoms during the past one week were measured by using CES-D 10. The prevalence of physical violence, sexual harassment, verbal assault in the preceding 12 months was 13.4%, 2.0%, 45.0% among male residents, whereas 7.0%, 14.3%, 42.3% among female residents, respectively. Experience of physical violence was associated with depressive symptoms among male residents (PR: 1.30, 95% CI: 1.03-1.65), whereas sexual harassment (PR: 1.75, 95% CI: 1.28-2.40), and verbal assault (PR: 1.73, 95% CI: 1.28-2.35) were associated with depressive symptoms among female residents after adjusting for confounders including working hours, and medical specialty.

OR1119**The Study on the Relationship between Expectant Fathers Perceived Stress and Expectant Parents Depressive Symptoms from Early Pregnancy to Six Week Postpartum in Hong Kong**

*Yee Woen Koh (1), Chui Yi Chan (2), Antoinette Marie Lee (2), Catherine So Kum Tang (1), Jean Wei Jun Yeung (1)
1. The National University of Singapore, Singapore; 2. The University of Hong Kong, Hong Kong*

The current study investigated the relationship between fathers' perceived stress and couples' depressive symptoms at early, late pregnancy and six week postpartum in Hong Kong. 622 expectant couples were assessed in early, late pregnancy and six weeks postpartum. Perceived stress and perinatal depression were

assessed using standardized and validated psychological instruments. Findings showed that expectant fathers reported highest prevalence of perceived stress at early pregnancy. Fathers' perceived stress at early pregnancy could significantly predict depressive symptoms at late pregnancy and six week postpartum. Perceived stress in fathers at early pregnancy were significantly correlated with mother's depressive symptoms at early and late pregnancy and perceived stress in fathers at six week postpartum was also significantly associated with mothers' depressive symptoms at six week postpartum. The results contributed to theoretical understanding on the role of fathers' perceived stress and could inform the design of clinical strategies against perinatal mental health problems.

OR1120**Rural and urban differences in beliefs about breast cancer and help-seeking intentions for the disease among women in India**

*Neena Kohli (1), E A Grunfeld (2)
1. University of Allahabad, India; 2. Kings College, London, United Kingdom*

Breast cancer is a common malignancy among women. The purpose of this study was to examine beliefs of Indian women about breast cancer and help seeking for the disease and how these beliefs related to their intentions to seek help for a symptom of breast cancer. Furthermore the study aimed to examine if there were differences in the beliefs of rural and urban based women. 685 women completed a questionnaire framed around the illness perceptions and the theory of planned behaviour. One in four women reported that they would delay seeking help for at least one month following the discovery of a symptom. Rural respondents held more negative beliefs about breast cancer and reported less positive attitudes towards help seeking. The findings of the study do provide some suggestions for the targeting of an intervention aimed at improving early detection and help seeking for breast cancer symptoms.

OR1121**Impact of stigma on quality of life of HIV positive individuals**

*Neena Kohli
University of Allahabad, India*

The stigma associated with HIV/AIDS poses psychological challenge to people living with HIV/AIDS and influences their quality of life. This study attempts to bring out the impact of stigma on quality of life of 200 HIV positive individuals. Semi-structured interview was used to elicit information pertaining to socio-demographics, felt and enacted stigma and quality of life. Results showed that as the perception of felt and enacted stigma increased, there was a reported decrease in quality of life. Also, in regression analysis, both felt and enacted stigma emerged as significant

predictors of quality of life. Findings suggest that PLWHAs should be encouraged to rise above stigma and live a better quality of life and it also cautions health providers and caregivers to help PLWHAs live a life of dignity by being gender sensitive, caring and supportive.

OR1122
Validation of Modified Children Eating Behavior Questionnaire for Low-to-middle Income Elementary School Children in Urban Area of Indonesia

Risatianti Kolopaking (1), Jahja Umar (1), Umi Fahmida (2), Umar Firmansyah (3), Nia Tresniasari (1) 1. Universitas Islam Negeri Syarif Hidayatullah Jakarta, Indonesia; 2. SEAMEO-Regional Center for Food and Nutrition University of Indonesia, Indonesia; 3. Faculty of Medicine University of Indonesia, Indonesia

Children's Eating Behavior Questionnaire (CEBQ) is parent-rated questionnaire designed to measure children eating style that was developed by Wardle et al. (2001). The aim of the study was to adopt, modify, and validate CEBQ in the sample of low-to-middle income elementary school student's mothers in the setting of Indonesian urban area (I-CEBQ). Using confirmatory factor analysis the seven-factors model I-CEBQ (satiety responsiveness, speed in eating, food selection, food responsiveness, enjoyment of food, desire to drink, and spiritual eating) with 18 items was found fit to the data in sample of Indonesia mothers of 6–12 years elementary school children in Greater Jakarta (N = 385). Using multivariate regression analysis significant positive effect of age, body-mass-index, and gender (boys) on the I-CEBQ factors was found. The I-CEBQ provides a useful tool to assess eating behavior related to weight management in Indonesian children-eating culture in urban area.

OR1123
Role of Positive Psychological Attributes in Health: An Empirical Investigation

Anshula Krishna Vasanta College for Women, Rajghat, Varanasi, India

Health has been considered very important in overall functioning of people. Positive attitude towards life plays a vital role in determining health status and psychological well-being of people. This study investigate the role of positive psychological attributes in supervisory level employee's health status and also how positivity affects the physical, psychological and social well-being of employees. Study was conducted on 100 supervisory level male employees of manufacturing organizations. Tools used were General Health Questionnaire (Goldberg & Hiller, 1979), Positive and Negative Affect Scale (Watson, Clark & Tellegen, 1988), and Resilience Optimism

Scale (Srivastava, 2008). Positive psychological attributes (positive affectivity, resilience, optimism) were found to be negatively correlated with ill-health status. Stepwise multiple shows that resilience and positive affectivity emerged as significant predictors influencing the health of employees. Psychological well-being and physical health of employees play an important role in the smooth functioning of an organization and positivity boosts it.

OR1124
Individual coping with stress and negative affectivity when romantic relationships end or disengage

Tatiana L Kryukova Nekrasov Kostroma State University, Russia

Aim: to investigate individual stress-coping in subjectively close heterosexual relationships ending stage or disengagement. Method. The sample includes 161 respondents: 44 adolescents 17–23 and 117 adults 24–40 yrs old. Measures: WCQ Lazarus, Folkman; IOS scale Aron, et al.; Jealousy reactions Maslach; Brief COPE Carver; an Interview. Results. Qualitative changes in close partners' relationships are revealed: negative affectivity (jealousy, anger, hate, feeling hurt) hard to cope with. When a person experiences close relationships loss main coping strategies are escape-avoidance ($p < 0.01$). Intimacy turns to distancing, exclusion a former partner from the Self ($t = 10.37$, $p = 0.000$), re-establishing own borders happen. Dyadic coping doesn't work properly. Conclusion: stress caused by close relationships is specific by strong negative affectivity; disengagement of romantic relationships is characterized by high emotional "price"; threat to personal values, loneliness, depression, weakening of subjective control, negative outcomes for well-being, health, and relationships. Avoidant coping predominance also means lack of coping skills.

OR1125
Weekday Recovery Periods and Fatigue among Information Technology Workers: An Observational Study with Smart Tablet Fatigue Apps

Tomohide Kubo (1), Shuhei Izawa (1), Masaya Takahashi (1), Masao Tsuchiya (1), Hiroki Ikeda (1), Norie Hayashi (2), Yuki Kitagawa (2), Mihoko Yano (2) 1. National Institute of Occupational Safety and Health, Japan; 2. Medical Room, C&B Group, Human Resource Division, Microsoft Japan Co., Ltd., Japan

Much interest has been paid to new work-time regulation to prevent excessive fatigue in Japan. EU's working time directive stipulates "11 consecutive hour rest-intervals between working days." Recently, some companies have adopted this regulation, though the rest intervals are generally shorter than the EU's

standard. Since empirical data regarding the associations of rest intervals with recovery from fatigue are very limited, we developed a new tablet fatigue app to repeatedly measure neurobehavioral function with a psychomotor vigilance task, psychological fatigue symptoms, and conditions for work, leisure, and sleep over long-term periods. We then examined the above associations among seven workers in the information technology industry using the smart tablet apps over 2 weeks. Results showed main effects of rest intervals or some synergistic effects with workload and off-job activities on fatigue recovery. Our preliminary findings indicate that ensuring quantity and quality of rest intervals could be beneficial in enhancing recovery.

OR1126
The American Psychological Association's Clinical Practice Guideline Initiative

Howard S Kurtzman American Psychological Association, United States of America

Clinical practice guidelines, which provide evidence-based recommendations for interventions for specific health conditions, are increasingly used in health care systems throughout the world. The American Psychological Association (APA) has designed a set of policies and procedures for guideline development and is currently working on development of guidelines in three areas: depression, obesity, and post-traumatic stress disorder. In accord with best practices, APA's guidelines will be based on systematic reviews of evidence, clinicians' experiences, considerations of patients' values and preferences, and public input. Panels that develop guidelines are composed of scientists and clinicians from multiple disciplines as well as patient representatives. This presentation will review the structure and mechanisms of APA's guideline development effort and report on the progress made thus far and the challenges that have been faced. It will also address how APA guidelines are expected to be used in health care systems.

OR1127
Australian miners challenging the Stages of Change model for healthy behaviours

Sarah J Lacey (1,2), Tamara D Street (1,2) 1. Queensland University of Technology, Australia; 2. Wesley Medical Research, Australia

This study investigated associations between demographic characteristics, theoretical Stage of Change, and health behaviours for physical activity and nutrition. Participants were 897 employees (73.6% male) of a mining company operating in rural Australia. The results showed an inverse relationship between the

theory and health behaviours for physical activity and nutrition when controlling for demographic variables. Surprisingly participants in the lower stages of the model (precontemplation and contemplation) were more likely than those in the higher stages (action and maintenance) to meet the WHO guideline for both physical activity and nutrition behaviours. Of the four demographic variables assessed, younger age was a significant predictor of meeting the WHO guidelines for both physical activity and nutrition. Male gender was also found to be a significant predictor of meeting the guideline for nutrition. These findings provide insights suggesting that Stages of Change measures require refinement and validation in the context of healthy behaviours.

OR1128

Lookism hurts: Appearance discrimination and its association with poor self-rated health among emerging adulthood in South Korea

Hyemin Lee, Seung-Sup Kim Department of Public Health Sciences, Graduate School of Korea University, Republic of Korea

To investigate whether appearance discrimination is associated with poor self-rated health, we analyzed the 2nd-9th (2005–2012) waves of a longitudinal data of Korean Education Employment Panel (KEEP). Lifetime experience of appearance discrimination has been assessed by a question when participants were 19 years old (baseline) and became 23 years old (follow-up). The dichotomous responses for appearance discrimination at two time points were classified into four groups: (1) never (not discriminated at both baseline and follow-up), (2) chronic (discriminated at both baseline and follow-up), (3) incident (discriminated only at follow-up), and (4) error (discriminated only at baseline). Compared to 'never' group, higher odds ratio of poor self-rated health was observed among 'chronic' (OR: 3.87, 95% CI: 2.36-6.35) and 'incident' group (OR: 3.20, 95% CI: 2.26-4.55) compared to 'never' group, after adjusting for potential confounders including self-rated health and BMI at baseline.

OR1129

Organizational responses to violence against fire-based EMS providers and its association with depressive symptoms in South Korea

Nagyeong Lee, Seung-Sup Kim Department of Public Health Sciences, Graduate School of Korea University, Republic of Korea

To examine whether depressive symptoms are associated with organizational responses to

experiencing violence by citizens, we analyzed a nationwide survey of 1,979 fire-based EMS providers in South Korea. Experience of violence on duty (i.e. verbal assault, physical violence) was classified into three groups based on the victims' reporting and organizational responses: (1) 'No experience,' (2) 'Not reporting,' (3) 'Reporting-with organizational response,' and (4) 'Reporting-without organizational response'. Compared to the 'No experience' group, experience of physical violence was significantly associated with depressive symptoms (CES-D 11): 'Reporting-without organizational response' (PR: 3.30, 95%CI: 2.35, 4.26), 'Reporting-with organizational response' (PR: 2.01, 95%CI: 1.17, 3.13), and 'Not reporting' (PR: 1.69, 95%CI: 1.39, 2.03) after adjusting for confounders including years of service. Similar trends were observed in the analysis with verbal assault. Our findings suggest that organizational responses could play a critical role in reducing depressive symptoms among fire-based EMS providers who experienced violence at work.

OR1130

Development and validation of an Occupational Mental Health Scale for Chinese teacher

Yuan Li (1,2), Xuqun You (1,2), Zhenhong Wang (1,2), Ying Li (1,2), Jijun Lan (1,2), Jinlu Tu (1,2), Ming Ji (1,2), Bihua Yan (1,2), Chengting Ju (1,2)
1. Shaanxi Normal University, China; 2. Shaanxi Provincial Key Laboratory of Behavior and Cognitive Neuroscience, China

Background:The purpose of this study was to develop and validate an Occupational Mental Health Scale (OMHS) for Chinese teachers. **Methods:**The OMHS was developed as the following steps: (1) item generation based on literature and interview (experts/teachers: N = 30/N = 45); (2) pre-test questionnaire formation with both experts' ratings (N = 22) and teacher's feedbacks (N = 100); (3) the component structure assessed by principal components analysis with varimax rotation (N = 1138); (4) criterion-related validity assessed with Self-rated Health Measurement Scale (N = 597), viewing and evaluating lessons (N = 131), performance appraisal (N = 131), and principals' ratings (N = 89); (5) reliability identified by internal consistency Cronbach's α (N = 1138). **Results:**This study yielded a 139-item Scale with 20 factors (organization, self-efficiency, self-positive, responsibility, learning, interpersonal relationship, patience, altruism, implementation of program, team work, communication skills, sense of justice, spirit of dedication, self-examination, innovation, honesty, achievement), which accounted for 45% of total variances. The Scale showed satisfactory internal consistency reliability and criterion-related validity. **Conclusion:**The OMHS can thus be a reliable and

valid instrument to measure the level of the occupational mental health of Chinese teacher.

OR1131

The conceptions and actions of mental health of the professionals members of the teams of the "Support to the Health of the Family" (NASF) from Fortaleza/Brazil

Aluisio F Lima (1), Stephanie C F Lima (2), Beatriz O Santos (3), Kilson Sena (4), Brigia S A Lima (5), Thiago S Felix (6), Emanuel M A Castro (7), Yuri M Lisboa (8), Renata B Holanda (9), Gabriela G F Benigno (10), Pedro R S Oliveira (11)
1. Universidade Federal do Ceara, Brazil; 2. Universidade Federal do Ceara, Brazil; 3. Universidade Federal do Ceara, Brazil; 4. Universidade Federal do Ceara, Brazil; 5. Universidade Federal do Ceara, Brazil; 6. Universidade Federal do Ceara, Brazil; 7. Universidade Federal do Ceara, Brazil; 8. Universidade Federal do Ceara, Brazil; 9. Universidade Federal do Ceara, Brazil; 10. Universidade Federal do Ceara, Brazil; 11. Universidade Federal do Ceara, Brazil

The aim of this research was analysed the conceptions and actions of mental health of the professionals members of the teams of the "Support to the Health of the Family" (NASF) from Fortaleza/Brazil in the perspective of harm reduction policies (HRP). The method was a quantitative survey. We used the questionnaire applied face to face in a population of 57 workers, divided in 16 teams. The results of the research show that the current configuration of the "NASF" has a fragile structure that mischaracterizing the service and this become it impracticable the implementing of HRP. In relation to the conceptions and professionals' actions of the "NASF" on Mental Health, Drugs treatment and HRP, it was seen that most of the interviewed ones have not a formation on the harm reduction policies, for this reason they present feelings of insecurity and impotence.

OR1132

Evaluating sensitivity of a scale questionnaire developed to measure psychosocial effects of cognitive training activity on community-dwelling older adults through comparison between first-timer participants and participants with prior participation experience

Shuzhen Lin (1), Hajime Yoshida (2), Akiko Kamada (3), Mieko Akiyama (3)
1. University of Tsukuba, Japan; 2. Ritsumeikan University, Japan; 3. Bunkyo University, Japan

A scale questionnaire for measuring psychosocial effects of cognitive training activity on community-dwelling older adults was

developed, and factor structure and internal consistency were previously examined (Lin, 2015). In this study, sensitivity of the 6-factor scale was examined through comparison between first-timer participants (Group 1) and participants with prior participation experience (Group 2) over six months. 242 community-dwelling older adults participants from 12 prefectures in Japan filled in the scale questionnaire at the beginning (T1) and at the end (T2) of their 6-month training period. Independent t-test result at T1 revealed significant difference between Group 1 and Group 2, and paired-sample t-test results at T2 revealed significant difference within Group 1 but not within Group 2. The results demonstrated the scale's sensitivity to differences between groups and intervention effects. Implication of the results is discussed in terms of the potential of the scale as an assessment tool in practical settings.

OR1133

Health Disparities among Asian American Ethnic Communities in the United States: A Phenomenological Approach

Angela M Lui, Hung-Bin Sheu, Jennifer J Bordon University at Albany/SUNY, United States of America

This presentation highlights findings regarding perceptions and utilization of the U.S. healthcare system among immigrants of Chinese, Filipino, and Korean ethnic communities in New York City, NY. The sample included four focus groups (Ntotal = 24; male = 6; mean age = 55 years). Using the phenomenological approach, transcripts were analyzed by three qualified researchers. Specialized care, inpatient care, and diagnostic and follow-up care are among the services participants had utilized and found beneficial; however, quality of emergency care was perceived as less than ideal. Barriers to healthcare included limited coverage of health insurance plans, language, and discrimination in the medical environment. Alternative approaches to maintaining health (e.g., yoga, herbs) have also been used. Most participants noted that although the U.S. healthcare system has its challenges, the quality of care is better than that in their home countries. Research directions and practical implications for health care services will be discussed.

OR1134

Drugs and Higher Education Students Beliefs

Maria José D. Martins, Beatriz Costa Polytechnic Institute of Portalegre, Portugal

The entry in higher education enables young people to experience new life experiences, some contribute to their development, others can be harmful to health. The main objectives

of this study were to examine the type and frequency of legal and illegal drugs, used by students of a Polytechnic Institute, and the beliefs and attitudes or cognitive distortions associated with these inputs. We adapted the HIT - D&A questionnaire (How I think about drugs and questionnaire alcohol) from Barriga and colleagues (2008) and applied to 193 students, aged between 19 and 25 of the first year of higher education. The results showed that the most consumed drug were alcohol, followed by tobacco and then marijuana. The results are discussed in terms of the role of irrational beliefs in behaviour with consequences for human health and the most appropriate strategies to prevent the use of these substances.

OR1135

Comparing of sexual satisfaction, marital commitment, marital intimacy and body image among married employed and married housewives women

Iran Mehdizadegan, Zeynab Sharifi Renani Islamic Azad University, Isfahan (Khorasgan) Branch, Isfahan-Iran, Iran

The main purpose of present study was to compare sexual satisfaction, marital commitment, marital intimacy and body image among employed married women in governmental banks and housewives. Research method was causal-comparative study and statistical population included married women employed in the banks and the housewives who has benefited from facilities and services of women's gardens. The sample size consists of 680 people, 290 employed and 390 housewives which were chosen using convenience sampling method. A set of questionnaire consisting of sexual satisfaction, marital commitment, marital intimacy and body image were used. Data were analyzed by use of T-test for independent groups. The results showed that there were significant differences between sexual satisfaction, marital commitment, marital intimacy and body image among employed women and housewives ($P < 0.01$). Meaning that, employed women have reported high rate of sexual satisfaction, marital commitment, marital intimacy and body image than housewives.

OR1136

Using narratives to influence perceived skin cancer risk and sun screening intentions: the impact of story outcome and perceived controllability

Fraukje E Mevissen (1), Brian Zikmund-Fisher (2) 1. Maastricht University, Netherlands; 2. University of Michigan, United States of America

In this online study, we explored the impact of narrative-ending (positive, negative, unknown) as well as perceived control (PC) on skin

cancer-related risk perceptions and intention to protect the skin against sunburn. Participants (N = 2100; 54.7% female, Mage = 33.7) were randomly assigned in a 3(outcome story: negative vs. positive vs. unknown) x 2(PC: low-high) design. PC was primed by having a story about a person not really putting effort in sun-protection (low PC condition) and a person putting a lot of effort in sun protection (high PC condition). Manipulation checks showed that the control-priming resulted in opposite effects on PC than hypothesized (PC*Outcome: $F = 31.5$, $p < .001$, $\eta^2 = .03$). Other interaction and main effects were found for risk perception and negative as well as positive emotions (p 's $< .01$). Story outcome seems to matter more than feelings of controllability.

OR1137

Improving Health and Wellness for Women with Disabilities: Integrating Care from the Margins to the Center

Shari E Miles-Cohen (1), Caroline Signore (2) 1. American Psychological Association, United States of America; 2. n/a, United States of America

This paper will focus on an agenda for eliminating inequities and improving health and wellness for women with disabilities. In the 2013 American Community Survey, 20.2 million American women and girls reported having a disability (U.S. Census Bureau, 2013). These numbers are expected to increase, in part because of the aging population of the United States (Vincent & Velkoff, 2010), increased survival from traumatic injuries (Halfon, Houtrow, Larson, & Newacheck, 2012), and increasing prevalence of disability in childhood (Devivo, 2012). Structural, environmental, and social barriers operate to prevent women with disabilities from accessing effective, culturally competent care and services. Presentation will describe a framework, with a clear and specific agenda for education, research, health care delivery and policy-that can be pursued by future researchers, as well as health care professionals, administrators, educators, advocates and women with disabilities themselves, to lead to improved health and wellness for women with disabilities.

OR1138

Does Body Image, Body Satisfaction, and Loneliness Predict Sexual Satisfaction in Men?

Bridget M Miller, Joseph M Currin, Chris N Jayne, Julie M Croff, Randolph D Hubach Oklahoma State University, United States of America

The extant research on body dissatisfaction has focused primarily on women and sexual minority men (Peplau et al., 2009). Although sexual satisfaction and body image are believed to be closely correlated (Wiederman, 2002),

few studies have addressed these relationships among men. Men ($N=215$) were recruited through internet-based direct marketing to complete an online questionnaire exploring sexual health and mental health outcomes. We assessed the extent to which body image, body satisfaction, and loneliness would predict rates of sexual satisfaction. The linear regression model was significant [$F(2, 212) = 30.27$, $p < .001$], accounting for approximately 29.3% of the variance in sexual satisfaction. Loneliness ($\beta = -.467$; $t = -7.49$, $p < .001$), and body image ($\beta = .183$; $t = 3.03$, $p = .003$) were significant predictors; however, body satisfaction ($\beta = .037$; $t = .61$, $p = .542$) was not a significant predictor. Discussion will expand upon this important intersection of psychology and public health. Limitations, implications, and suggestions for future research will be also be discussed.

OR1139

The influences of personal values, personality traits, and social economic status on subjective well-being in a sample of university students in Sabah, Malaysia

Mazni Mustapha (1,2), Balan Rathakrishnan (1), Ferlis Bahari (1), Mahirah Masdin (1) 1. *Universiti Malaysia Sabah, Malaysia*; 2. *Plymouth University, UK, United Kingdom*

The aim for this study was to examine the effects of personal values, personality traits, and social economic status on subjective well-being in a sample of undergraduate students. Participants were recruited amongst 188 first year students enrolling in various psychology programmes at a public university in Sabah, Malaysia. Measurement for personal values was based on Schwartz's value theory. The Big Five Inventory was used to measure personality traits; whilst Positive and Negative Affect Schedule (PANAS) and Satisfaction with Life Scale (SWLS) were the indicators for subjective well-being. Social economic status of the participants was indicated by parental monthly income. Results revealed that personality trait Agreeableness, Neuroticism, and Openness significantly contributed to life satisfaction, whilst Openness and Achievement values contributed to positive affect. Both Extraversion and Neuroticism contributed to negative affect. Lastly, low-income mothers showed to be a potential predictor towards negative affect amongst the students.

OR1140

Insight alleviates the discrepancy between self-other evaluation toward the self

Miho Nakajima, Yoshihiko Tanno *Graduate School of Art and Sciences, University of Tokyo, Japan*

Insight is subjective sense of clear self-understanding. Improving insight is one of the main goal in psychological treatments. Yet, few studies have provided empirical evidence of how insight can be improved. We investigated the association between insight and interpersonal consistency of the self-image. A total of forty six undergraduate students participated in the present survey in pairs. Each pairs were friends. Participants answered Big Five Scale (Wada, 1996) from three aspects: (a) evaluation toward the own personality (b) expectation of the evaluation from the partner toward the own personality (c) evaluation toward the partner's personality. The result suggested that individuals with lower insight expected the evaluation from their partners more negatively than actual evaluation from their partners. Meanwhile, individual with higher insight expected their partner's evaluation more accurately. This result indicated the possibility that accurate understanding of objective evaluation toward the self is an important factor of improving insight.

OR1141

Group therapy: insights from the recipients

Petra Neumann *university Ulm, Germany*
Many studies exist about the effectiveness of group therapy (e.g. Thim, et.al, 2014; Burlingame, et.al. 2003) a). There is some evidence, that group therapy could be even more effective in terms of treatment length and outcome measures (e.g. Arntz, 2013). But why does it work? Using a qualitative design (half-structured interview), nine participants of three different groups were interviewed. In retrospect they were asked about their expectations and reasons to take part as well as their experiences in so far. All participants were satisfied by the treatment. In a qualitative analysis import effectiveness parameters named by the participants were identified, e.g. similarities as well as different behavior patterns compared to other group members. Also not to be alone in front of a ("healthy") therapist was named to be helpful. This qualitative study should help to do research of work mechanism of group therapy from the participant point of view.

OR1142

Psychological factors associated with cancer: A study of the lived experiences of a group of elderly men of African descent diagnosed with prostate cancer

Shai E Nkoana, Tholene Sodi *University of Limpopo, South Africa*

Prostate cancer (PCA) is rated as a leading cancer among men of African ancestry in the USA, Caribbean, and Sub-Saharan Africa. Though the biomedical model remains the focal goal

of most cancer research, attention is increasingly paid to the importance of psychological factors, including cultural beliefs. The aim of the study was to explore the lived experiences of a group of men of African descent diagnosed with prostate cancer. Twenty (20) elderly men of African descent receiving treatment for prostate cancer at a provincial hospital were interviewed using semi-structured interviews. Data were analysed using interpretative phenomenological analysis. The study found that culture played a central role in the participants' attitudes, beliefs, and perceptions of the disease, including how they cope with their morbid condition. The study is concluded by recommending that culturally competent approaches should be used to manage and improve the quality of care for prostate cancer patients.

OR1143

Exploring the relationship between childhood trauma and internet gaming addiction

Fariza Oskenbay (1), Man Cheung Chung (2), Elmira Kalymbetova (1), Aliya Tolegenova (1) 1. *al-farabi Kazakh National University, Kazakhstan*; 2. *Chinese University of Hong Kong, Hong Kong*

Whilst the link between childhood trauma and drug or alcohol addiction (e.g. Taplin et al, 2014) has been investigated, how this trauma relates to internet gaming addiction is unclear. This paper outlines a theoretical postulate suggesting that internet gaming addiction is a form of immature defence mechanism particularly for people who have experienced childhood trauma. Effects of such trauma are expressed through alexithymia (difficulty in identifying, describing and accessing internal feelings) as an attempt to defend against the emotional distress associated with the trauma (Helmes, et al, 2008) and thereby inhibit the emotional processing of it. Conversely, according to the sensitization hypothesis (Bowman & Yehuda, 2004), people's sense of cognitive avoidance can be sensitized leading to the emergence of psychological difficulties. Persistent game playing helps to facilitate and maintain the foregoing defensive processes.

OR1144

Self-efficacy and health locus of control as a function of duration of hypertension

Meera Padhy, Neelima Krishnakumar *University of Hyderabad, India*

The objectives of the study were to find out the differences in the level of self-efficacy and health locus of control and to explore the relationship between self-efficacy and locus of control among hypertensive patients. A between-subjects design was adopted and 150 individuals were grouped into three categories on the basis of duration of illness- below one year, between one to five years and

above five years. Chronic disease self-efficacy and multi-dimensional health locus of control scales were administered. Results revealed that the three groups differed significantly in internal and doctors health locus of control as well as all the ten dimensions of self-efficacy scores. The internal health locus of control was found to have a significant positive correlation and doctors health locus of control was found to have a significant negative correlation with all the dimensions of self-efficacy. The implications of the study were discussed.

OR1145

The Young and The Resilient: Exploring the construct of resilience among HIV positive adolescents from the perspective of adolescent HIV healthcare providers and experts

Shenaaz Pahad, Nataly C Woollett, Kirsten Thomson Wits Reproductive Health and HIV Institute, South Africa

HIV has introduced a multitude of psychological risk to adolescents' development, yet research indicates adolescents infected and affected by HIV often demonstrate resilience. Few studies have focused on understanding or theorizing the construct of resilience from the perspective of HIV healthcare providers and experts. Through indepth, qualitative research with health providers and experts, we explored contextual meanings of resilience and key factors that promote resilience among HIV positive adolescents. A multilevel approach applied a coding framework incorporating personal and environmental factors to verbatim transcripts using Nvivo. We found resilience to be understood as a bidirectional interaction of personal and environmental factors for example, caregiver involvement influences adolescent health and viceversa. To promote resilience adolescents require access to perceived role models. However, extreme cases of resilience seemed counterproductive to adolescent well-being. Therefore, psychological interventions that develop skills, provide emotional support and impart hope can buffer adolescent challenges and promote resilience.

OR1146

The effectiveness of drug attitude forming program towards elementary school children drug abuse attitude

Listyati S Palupi Addiction Study Centre, Faculty of Psychology, Airlangga University, Indonesia

Drug abuse among primary school children in Indonesia has been increasing every year, especially in high risk area in Surabaya, East Java, Indonesia. Aimed of this research is to investigate the effectiveness of drug attitude forming program on elementary school children attitude toward addictive drugs. The method used is

experimental research. The samples included elementary school student in high risk drug abuse area in Surabaya, East Java, Indonesia. Drug knowledge questionnaire and drug abuse attitude scale was used to collect data. A one-way between subjects ANOVA was conducted to compare the effect of Drug Attitude Forming Program on the experimental group and the control group. There was a significant effect of the Drug Attitude Forming Program on children attitude toward drug abuse with sig at 0.1. The result suggests that Drug Attitude Forming Program does have an effect on elementary school children attitudes attitude towards drugs.

OR1147

Family Environment, Motivation and Smoking Tendency of Youths

Ravi Pratap Pandey (1,2), Purnima Awasthi (1,2) 1. Banaras Hindu University, India; 2. Banaras Hindu University, India

Smoking has been identified as one of the most common health compromising behaviors involving recreational drug use, in which tobacco is burned and the smoke is tasted or inhaled. The aim of the study is to explore the relationships of family environment, autonomous and controlled motivation with smoking tendency of youths. The study was carried out with 100 male youths residing in different rural and urban areas of Varanasi. The age of participants ranged from 19 to 25 years. The measures of treatment self-regulation, family environment, and smoking urges were administered. Analysis showed autonomous motivation to be negatively and poor family environment and controlled motivation to be positively correlated with smoking tendencies of the participants. Controlled motivation and family environment emerged as the significant predictors of smoking tendency of youths. The findings are discussed and their implications are pointed out. Key Words: Family Environment; autonomous and Controlled Motivation; Smoking Tendency;

OR1148

Reinstatement may improve mental health: A comparative study about the laid-off and the reinstated after the massive lay-off in 2009 from SsangYong Motor Company in South Korea

Jooyoung Park, Seung-Sup Kim Department of Public Health Sciences, Graduate School of Korea University, Republic of Korea

Massive layoff is termination of employment among a group of employees for business reasons. We analyzed a survey about the laid-off (N = 140) and the reinstated (N = 176) in SsangYong Motor Company during May 2015. Both groups were laid off in 2009, but

only the latter have returned to work at the company in 2013. Two groups has similar socio-demographic characteristics and work experience. This research found that the prevalence of depressive symptoms over the past week assessed by CES-D 11 was significantly higher among the laid-off (the laid-off 79.1% vs the reinstated 52.8%). The prevalence during the past year of the laid-off was significantly higher compared to the reinstated about depression and anxiety disorder (the laid-off 74.8% vs the reinstated 30.1%), insomnia and sleep disorder (the laid-off 71.8% vs the reinstated 49.0%). The results suggest that the reinstatement may play a role in improving health of the laid-off.

OR1149

Massage Therapy: Its Psychological Effects

Grant J Rich Consulting Psychologist, United States of America

Massage therapy is more common in some cultures/nations than others, and growing recognition of its acceptance as a health-care modality exists in North America. Though many persons utilize massage therapy, psychologists seldom know its effects (Rich, 2010). This presentation defines/describes massage therapy, surveying conditions/populations for which evidence supports its utilization (Field, 2006; 2014). Research indicates efficacy for pain reduction, anxiety, PTSD and depressed mood (Moyer, Rounds, & Hannum, 2004; Rich, 2013), and for various conditions, from the agitated elderly to supplemental care for autoimmune/immune conditions (Rich, 2002). Massage therapy's significance to psychology (Hymel & Rich, 2014), and types of massage therapy credentials/education are discussed (Rich, 2011). The presenter, a U.S.A. certified massage therapist, also is an American Psychological Association Fellow, and serves as massage therapist on international medical missions, offering seminars around the globe. AMTA past-presidents and medical schools, including Harvard, endorsed his quantitative massage therapy research book (Rich, 2002).

OR1150

To determine Type D personality components Quota on Coronary heart disease severity

Mohammadreza Seirafi (1), Hassan Ahadi (1), Sadegh Taghilo (2), Farokh Haghranjbar (1) 1. Karaj Branch, Islamic Azad University, Alborz, Iran; 2. Astara Branch, Islamic Azad University, Gilan, Iran

Object: The aim of current study was to determine Quota of each one of Type D personality components (affectivity and social inhibition) to explain coronary heart disease severity. Method: This study was under kind of correlation research. 343 men and women were selected biased on convenience sampling in

Tehran- Iran. Research tools were Type D Scale (Denollet, 1988) and Severity of coronary heart disease was calculated on atherosclerosis in vessels by angiography. The data were analyzed by multi variable regression. Findings: The results showed, there is a meaningful correlation between type D personality and coronary heart disease severity and % 10/2 of coronary heart disease severity is clarified by type D personality in the studied group. With consideration of findings of the plan, from among components of type D personality only component of "Social inhibition" with 0/317 Beta coefficient has meaningful correlation with coronary heart disease severity ($p < 0/001$).

OR1151
Unhealthy behaviors, lipids and coronary heart disease severity: A structural equation modeling approach

Mohammadreza Seirafi, Hassan Ahadi, Mozghan Agamohammadi Karaj Branch, Islamic Azad University, Alborz, Iran

Background: Coronary heart disease (CHD) is the important cause of mortality in the most of countries. CHD has a number of well determined risk factors and Investigators have examined the role behavioral factors in the cause of CHD. Method: This study was under correlation research. 343 men and women were selected based on convenience sampling. Research tools were unhealthy behaviors questionnaire, routine blood test and Severity of CHD was calculated on atherosclerosis in minimal, 1, 2 or 3 vessel by angiography. Data were analyzed using Structural equation modeling by Amos software. Finding: The result show, the model has been fitted. There is significant reverse correlation between unhealthy behaviors and CHD severity ($P < 0/01$). So lipids significantly mediate between unhealthy behaviors and CHD severity. Conclusion: It seems necessary that researchers and professionals Pay attention to behavioral factors and mode of action, as risk factors and predictors for coronary heart disease (CHD) severity.

OR1152
Stress in families affected by caring for sick members due to HIV/AIDS

Mokgadi M Setwaba, Teresa-Ann Ta-B Mashego UNIVERSITY OF LIMPOPO, South Africa

The study aimed at assessing stress in families affected by caring for family members physically deteriorating due to HIV/AIDS. Two-hundred and fifty four families were conveniently selected in this study. The experimental group of the HIV/AIDS affected families ($n = 122$) and the control group of families caring for members ailing because of a non-HIV/AIDS physical ailment ($n = 132$).

Family caregiver stress was measured by the Relative Stress Scale. HIV/AIDS affected families had high stress level as compared to the control families. The demographic information indicated that more stress was experienced in the HIV/AIDS affected families with a younger sick member and with poor economic conditions, as well as when the sick person was a breadwinner. Low income and ethnicity also increased stress in HIV/AIDS affected families. This indicated that stress elevation in the HIV/AIDS affected families relates to lack of adequate resources and helplessly watching young sick family members progressing towards death.

OR1153
Exploring the role of self-leadership as a personal resource in an integrated model of work characteristics and health-related outcomes

Christian Seubert, Severin Hornung, Jürgen Glaser University of Innsbruck, Austria

Modern working environments bring about new opportunities for personal growth but also increased risks for health impairment. Promoting the former while preventing the latter is a core target of work design, yet structural change of work systems as the prime cause of strain is often difficult. Instead, interventions tend to focus on preventing detrimental consequences of working conditions at the individual level. Building on an integrated model of work characteristics rooted in action regulation theory, I examine the role of self-leadership as a personal resource in the relationship of work characteristics with health-related indicators. $N = 410$ day nursery workers participated in a survey study. Job characteristics and health-related indicators were assessed by well-established questionnaire measures. Self-leadership was assessed by SLSI, a new measure that overcomes weaknesses of existing instruments. The results provide evidence for the effectiveness of self-leadership as a personal resource, allowing individuals to cope successfully with today's work environments.

OR1154
Attachment styles, self-compassion, and psychological adjustment in long-term breast cancer survivors

Kerry A Sherman (1,2), Jelena Arambasic (1), Breast Cancer Network Australia (3) 1. Macquarie University, Australia; 2. Westmead Breast Cancer Institute, Australia; 3. Breast Cancer Network Australia, Australia

In breast cancer survivors, higher attachment anxiety and attachment avoidance have been associated with poorer psychological adjustment. Self-compassion, a kind manner of treating oneself during suffering, has also

been linked with psychological adjustment. The aim of this study was to determine whether self-compassion underlies the association between attachment styles and psychological adjustment in long-term breast cancer survivors. An online questionnaire was administered to 92 long-term breast cancer survivors measuring attachment styles, self-compassion, psychological distress (i.e., depression, anxiety, and stress), and the positive and negative impact of cancer. Higher attachment anxiety and attachment avoidance were positively correlated with depression, anxiety, stress, and a negative impact of cancer. Bootstrapping mediation analyses revealed that higher attachment anxiety and attachment avoidance indirectly predicted greater stress and a more negative impact of cancer, through lower self-compassion. These findings suggest that self-compassion training may be useful for enhancing the psychological adjustment of long-term breast cancer survivors.

OR1155
Communication avoidance, coping and psychological distress of women with breast cancer

Kerry A Sherman (1,2), Yisha Yu (1) 1. Macquarie University, Australia; 2. Westmead Breast Cancer Institute, Australia

This study investigated the relationship between compromised couple communication and psychological distress in breast cancer survivors. The extent to which this relationship was mediated by women's coping strategies was also investigated. Members, $N = 338$, of a nationwide breast cancer organisation completed an online survey including measures of self- and perceived partner communication avoidance, psychological distress - depression, anxiety, stress, and coping strategies. Women's and partners' communication avoidance about cancer were correlated with greater anxiety, depression and stress in the cancer-affected women. Bootstrapping mediation analyses revealed indirect effects of self- and perceived-partner communication avoidance on all psychological distress outcomes through increased disengagement coping, and a significant indirect effect on anxiety through reduced engagement coping. Reducing communication avoidance of cancer-related matters between spouses and enhancing women's coping capacity may be important targets for psychosocial intervention. These findings highlight the need for early screening to identify women who may benefit from psychological intervention.

OR1156
Initial Psychometric Evidence of Two New Measures for Assessing Health-Related Social Support and Outcome Expectations among College Students in the United States

Hung-Bin Sheu *University at Albany, State University of New York, United States of America*

This presentation will highlight the findings of two novel measures, the Health Behavior Outcome Expectations Scale (HBOES) and Social Support for Health Behavior Scale (SSHBS), which were designed to assess social support and outcome expectations for engaging in health behaviors. The sample included 356 college students (mean age = 19.96 years) in the U.S., and the majority were females (70%) and White Americans (58%). Results of factor analyses identified a four-factor structure for the HBOES and a two-factor structure for the SSHBS. Cronbach's alphas of HBOES and SSHBS scores ranged from .78 to .94, and four-week test-retest reliability estimates ranged from .69 to .81. These scores were associated with health coping efficacy ($r_s = .06$ to $.49$), motivation for healthiness ($r_s = .11$ to $.38$), engagement in health behaviors ($r_s = .03$ to $.43$), and health status ($r_s = .09$ to $.27$). Research directions and practical implications will be discussed.

OR1157

Quality of Life of Head and Neck Cancer patients: Role of Illness Perception, Perceived Emotional Distress and the course of cancer treatment

Ravindra Singh (1), Hari S Shukla (1), Mallika Tewari (1), Yogesh K Arya (2), Tushar Singh (2) 1. *Dept of Surgical Oncology, IMS, Banaras Hindu University, India;* 2. *Department of Psychology, Banaras Hindu University, India*

Illness perceptions have been shown to profoundly affect the quality of life of patients. However, there seems lack of studies exploring the interactive effects of illness perception, perceived distress and treatment duration on quality of life of head and neck cancer patients. This study was designed to address this issue. Thirty patients were administered measures of emotional distress, Illness Perception and Quality of life. Their treatment details and other demographic information were also obtained. Results show strong correlation among illness perception, emotional distress and quality of life of head and neck cancer patients. Further illness perceptions and perceived distress have emerged as strong predictors of quality of life of these patients with head and neck cancer. The treatment duration did not predict quality of life, yet has emerged as moderating variables to affect the illness perception and Quality of Life relationship.

OR1158

Perception of precariousness in the public service and the dynamic of psychopathologies at work

Ronaldo G Souza, Ana Magnólia B Mendes *University of Brasília - UnB, Brazil*

The aim of this theoretical essay is to present the dynamics of psychopathology at work, from the perception of precariousness at work in the public context. From a literature review it was noticeable that when workers perceive poor working conditions, they trigger individual and collective defense strategies in order to protect themselves and not get sick. According to the perspective of psychodynamics of work, there are times when the defenses work out and the workers are able to mobilize and reframe suffering. But when the defenses fail, they develop different psychopathologies. Given this scenario, it's proposed a theoretical model that uses as an antecedent variable the perception of precariousness as a trigger of the dynamics of psychopathology at work. It's estimated theoretical and methodological advances on psychopathology in the work context in order to create healthy psychosocial conditions and public policies that recognize and enrich workers from public context.

OR1159

Predictors of mental wellbeing among university undergraduates in eastern nigeria

Ngozi N Sydney-Agbor (1,2), Martin O Onyeonu (1,2) 1. *Imo State University, Owerri, Nigeria;* 2. *Imo State University, Owerri, Nigeria*

Predictors of students' mental wellbeing were studied among 348 undergraduates selected through random cluster sampling from the Faculties of Social Sciences of three higher institutions in Eastern Nigeria. Participants' ages ranged from 16 to 33 years, with the mean age of 23.15 and a standard deviation of 3.46. Descriptive Cross-Sectional Design was employed while Standard Multiple Regression and 2-Way ANOVA were adopted for data collection and analyses respectively. Results revealed that academic stress, substance abuse and age had significant inverse relationship with mental wellbeing. Mental wellbeing and academic stress did not differ across gender, while type of institution influenced academic stress ($P < .05$). The researchers recommended stronger awareness of the implications of drug use and the re-structuring of academic programmes that can minimize stress. Also, the need for a free functional counseling unit to enable students obtain professional advice that will help promote mental well being was advocated.

OR1160

Prevalence, Comorbidity and Psychosocial Correlates of Six Addictive Behaviors in Young Adults in Singapore

Catherine So-Kum Tang *National University of Singapore, Singapore*

A total of 976 young Singaporean adults aged 18 to 25 years old completed a survey on the prevalence and psychosocial correlates of six addictive behaviors. Results showed that the percentages of participants reported to have addicted to the following behaviors were: 16% for use of social media platforms, 15% for online gaming, 11.5% for use of internet, 5% for excessive exercising, 3.4% for compulsive buying habits, and 2.7% for excessive intake of sweet and fatty food. Various addictive behaviors tend to co-occur with each other as well as with mental health conditions such as depression, anxiety, and mania. Similar to current literature with Western young adults, risk factors of addictive behaviors include low social support, low self-efficacy, poor coping abilities, as well as high life stress, social anxiety, impulsivity, and obsessive-compulsive personality traits. Implications in designing related prevention and intervention programs for young adults will also be discussed.

OR1161

The role of theory-based intervention strategies in increasing the effectiveness of pelvic floor muscle training (PFMT) of women with urinary incontinence (UI): A meta-analysis

Diana Taut, Adriana Baban, Sebastian Pinte *Babes-Bolyai University, Romania*

It is known that PFMT is effective in reducing UI in women with mild to moderate incontinence. However, there are factors hampering effectiveness of PFMT (e.g. low discipline to exercise, interference with routines, low self-efficacy) that make elements of delivery important in treatment effectiveness. We investigated whether and which theory-grounded strategies used in interventions increase effectiveness of PFMT. A meta-analysis was conducted with 55 intervention studies reporting effects of PFMT. Intervention strategies were coded by using the behavior change techniques taxonomy (Michie and Abraham, 2008). There was a general medium effect of all interventions, $g = 0.52$, $p < .001$, but no effect of behavior change techniques on effectiveness, except for one (prompting practice; $g = 0.58$, $p < .009$). The results should be cautiously interpreted, since it was difficult to estimate the degree to which the interventions corresponded to reported strategies, as PFMT trials lacked details or were unavailable for in-depth coding and analysis.

OR1162

Psychological well-being and attitudes toward lifetime in connection with past traumatic experience in adulthood

Evgenia G Troshikhina, Anna V Koltunova *Saint-Petersburg State University, Russia*

The objective of this study was to investigate the perception of traumatic life events by adults in connection with their psychological well-being and attitudes toward lifetime periods. Methods used were: Scales of Psychological well-being (Ryff), The Time Attitude Scale with five components (Vasserman), the Linköping questionnaire (LYLES) to measure traumatic life events. The study involved 58 adults (22–50 years) from Saint-Petersburg. The results show that adults with high psychological well-being perceive the personal present time as an active and the future time as full of possibilities. They noted a significant number of traumatic events in their lives, such as accidents and fires, but these events did not reduce their psychological well-being, but on the contrary, increased it. They perceive this kind of event as the challenges and overcoming such leads to greater psychological well-being and vitality. And therefore, it may lead to even more traumatic events in their lives.

OR1163

Attitudes towards donating to the biobanks among Russian students *Larisa Tsvetkova, Ksenia Eritsyayn, Natalia Antonova Saint Petersburg State University, Russia*

Biobanks are specialized facilities for storing biological materials for research and medical purposes. The successful functioning of biobanks directly depends on people's willingness to donate their biological materials. The goal of this study was to measure the attitudes towards biobank donation among young Russians and their factors including personal values. Data from 542 students of St. Petersburg State University was collected using paper-and-pencil questionnaires. Only one fifth of the interviewed students know about the existence of biobanks. However, the study results indicated a relatively high level of readiness to become biobank donor among young Russians (74%). The willingness to be a biobank donor is significantly correlated with studying biology and just modestly correlated with the students' values. This study demonstrated that today the general population attitudes (at least, the subgroup studied, i.e. students) do not pose a problem for further development of biobanking in Russia.

OR1164

Husbands Expression of Emotions to His Wives Psychological Adjustment to Breast Cancer A Qualitative Study

Tience Debora Valentina Udayana University, Indonesia

This qualitative study designed to explore the role of husband's expression of emotions to his wife's psychological adjustment to breast cancer. The participants of this study were four married couples, in which the wives diagnosed with breast cancer. Participants were asked to

participate in an open-ended, semi-structured interview. Data were analyzed using a phenomenological method. The research questions addressed in this investigation: (a) what factors contribute to women's psychological adjustment to breast cancer?; (b) how do husbands expression of emotions impact his wife's psychological adjustment? Results showed that women's psychological adjustments to breast cancer were related to some sources: religious beliefs and attending religious services, support from husbands, children, social network, and personal characters such as optimism. Husbands were less expressive showing positive emotions such as love, verbally. Since husbands were tent to express his emotions non-verbally, husbands' expressing emotions taken a small part to his wife's psychological adjustment to breast cancer.

OR1165

What is really worth doing in work-site wellness, and to what extent: A Meta-analysis and insights from a dose value model

Hanlie Van Wyk (1,2) 1. UNISA, United States of America; 2. Habits at Work Performance Actuaries, United States of America

The wellness industry is relatively new, very topical and continues to accelerate showing no signs of slowing down. However, there are some alarming reports regarding wellness programs: in an estimated \$6billion dollar industry, less than half of U.S. employers offering wellness programs measure their impact. Despite available research, the industry has not focused on understanding exactly what's worth investing in as it relates to specific business objectives. This research aimed to answer the question: what's really worth doing in wellness and to what extent? This 'dose value' is a meta-analysis of available research expressed as an actuarial value of specific health habits (exercise, dietary habits, sleep, stress management, talk inventions, quitting tobacco) on particular outcomes (cost, productivity and life quality). Where research allows, the dose value also explains the ideal dose, the time to onset of the output, the pattern of emergence and other relevant dimensions of the dose value.

OR1166

Depression, anxiety, and stress among female inmates

Alfred D Waldo Saint Louis University, Baguio City, Philippines

Women represent a small proportion of the total prison population. Interestingly, the proportion is rising, more so than the rise in the rate of male prisoners. Aside from this, 99% of available data from prison surveys are derived from western populations. Therefore, the need for research in non-western populations such as the Philippines is greatly needed. This is a cross-sectional study carried out at

two prisons in Benguet, Philippines. Purposive sampling was used in target recruitment were $n = 62$ female prisoners participated. The average respondents were married, in their 30's, have children, educated at secondary the level, and had been in prison for more than 6 months. Participants experienced symptoms of depression, anxiety, and stress to some degree or some of the time. Overall, there were no significant findings in relation to depression, anxiety, and stress to the independent variables. However, inferences were made when risk factors were evaluated.

OR1167

Using Cusp Catastrophe Model to Examine the Influences of Adolescent Attitude and Exposure to Environmental Tobacco Smoke on Their Own Smoking Behavior

Yan Wang, Xinguang Chen University of Florida, United States of America

Little research is done using complex system approach to understand adolescent smoking. Using cusp catastrophe modeling, this study analyzed survey data from 1085 Chinese adolescents to examine the relationships among adolescent attitude to smoking (as asymmetry variable), exposure to environmental tobacco smoke (as bifurcation variable), and adolescent smoking behavior. Results indicated a better data-model fit of the cusp catastrophe model ($AIC = 1497.4$, $BIC = 1527.4$, $R^2 = .77$) than the linear model ($AIC = 3489.5$, $BIC = 3509.4$, $R^2 = .09$). In general, attitude was positively associated with smoking behavior. However, this relationship took two modes: when exposure level was high, it was gradual and continuous; when exposure level was low, sudden changes in smoking behavior were inducible to even subtle changes in attitude. These findings suggest that smoking intervention programs targeting adolescent attitude modification may be more effective when smoking in public space is strictly controlled in China.

OR1168

Suicide risk in Australian adolescents: Socio-demographic, health and psychological correlates

Anthony Winefield (1,2), Paul H Delfabbro (2), Helen R Winefield (2), Catia Malvaso (2) 1. University of South Australia, Australia; 2. University of Adelaide, Australia

This study examined factors associated with suicide risk in Australian adolescents. A sample of 2552 young people aged 14–16 years completed a survey measuring demographic, social and psychological indicators and four levels of suicidality: occasional ideation, regular ideation, suicide plans, suicide attempts. Separate statistical models were developed for

each level of suicide risk as well as an overall multinomial logistic regression to compare more severe levels of suicidality against occasional ideation. While most predictors were indicative of elevations of suicide risk, only some predicted attempts. The highest attempt risk was observed in girls, smokers, those in romantic relationships, and with poorer health. Concerns about weight, marijuana use, negative mood states and involvement in romantic relationships, predicted suicide plans. The results suggest that the identification of young people at highest risk of suicide attempts can be enhanced by focusing on specific indicators, including gender, substance use, and declines in physical health.

OR1169

mHealth Interventions are promising for increasing medication adherence among people with serious mental illness: Results from a systematic review

Peng Xiong (1), Tat Leong Wu (1), Brian J Hall (1,2) 1. University of Macao, Macao; 2. Johns Hopkins Bloomberg School of Public Health, United States of America

Medication adherence is crucial to effectively manage serious mental illness (SMI). Increasing evidence suggests that mHealth interventions improve adherence for various populations. The purpose of this systematic review is to evaluate the effectiveness of mHealth interventions to promote the adherence for people with SMI. We searched PubMed, PsycINFO, CINAHL, EMBASE, and five eligible papers were identified among 944, with four from the USA and one from Spain. One study showed that mHealth intervention was feasible and acceptable among people with SMI. Limited evidence suggested that mHealth intervention was promising. Daily text messages and weekly telephone calls increased adherence after 3–6 months intervention. Generally, there were few studies that quantified the effectiveness of mHealth inventions for medication adherence among people living with SMI. Future work is needed to expand the mHealth intervention research on treatment adherence for people with SMI and this work should be expanded to low- and middle-income countries.

OR1170

Changes in the Mental Health of Five Occupational Groups (1990s-2010s): A Cross-Temporal Meta-Analysis

Xinfa Yi Shaanxi Normal University, University of Connecticut, United States of America

Many studies were conducted to measure the mental health status of these five Chinese occupational groups: migrant workers, members

of Chinese Army, railway workers, teachers and civil servants. However, empirical research on the topic has thus far yielded no consistent results. Cross-temporal meta-analysis was applied to examine the changes in the mental health of five occupational groups from 1990s to 2010s. 481 published studies of the mental health of the five occupational groups (N = 277, 363) were included in the data. In these studies the Symptom Checklist 90 (SCL-90) was used as the instrument of mental health assessing. Main findings are: (1) The mental health of members of Chinese Army and migrant workers was getting better and better between 1990s and 2010s; (2) Teachers and civil servants' mental health declined during the time; and (3) There was no change of railway worker's mental health.

OR1171

Patient safety experiences: patient and healthcare profession perspectives

Dusadee Yoelao Srinakharinwirote University, Thailand

This research investigated meaning of patient safety from patients and healthcare professions. Research participants consisted of 50 patients, 20 health care university students, and 50 health care professions. Data was collected using semi structured interview, and storytelling asking experience when being in the hospital. Data was analyzed using grounded theory method. The result showed categories at individual, group, and organization level. The individual level category examples were multi dimension safety, communication for understanding, family participation care. The group level category examples were team communication, team reflection, team safety culture. The organization level category examples were safety policy, safety and risk management. These categories were used to construct safety attitude questionnaires to be used in the hospital in Thailand.

OR1172

Does disapproval hurt? Experience of medical benefit application among firefighters injured on the job and its association with depressive symptoms in South Korea

Seohyun Yoon, Seung-Sup Kim Department of Public Health Sciences Graduate School of Korea University, Republic of Korea

Korean firefighters are not eligible for Worker's compensation benefits. Instead, they can apply for their own medical benefit when injured at work. To examine whether depressive symptoms are associated with experience of the medical benefit application after work-related injury during the past year, we analyzed a nationwide survey of 7,625 firefighters in South Korea. Firefighters were divided into

4 groups based on their injuries over the past year: (1) 'not injured' (2) 'injured, not applied for the benefit' (3) 'injured, applied for the benefit but disapproved', and (4) 'injured, applied for the benefit and approved'. Compared to the first group, the prevalence ratios for depressive symptoms (CES-D) for the second, third, and the fourth group were 1.99 (95% CI: 1.80-2.18), 2.56 (95% CI: 1.72-3.46), and 1.58 (95% CI: 1.22-6.92), respectively. The findings suggest that the experience of disapproval for the medical benefit application may increase depressive symptoms.

OR1173

Work more, feel depressed: 2014 Korea Interns & Residents Survey
Jaehong Yoon, Seung-Sup Kim Department of Public Health Sciences Graduate School of Korea University, Republic of Korea

This study sought to assess working hour per week among doctors in training and to examine its association with depressive symptoms, using a cross-sectional survey of 1,661 interns and residents from the 2014 Korean Interns & Residents Survey. Working hours per week was classified into five categories (i.e. less than 60 hours, 60–79 hours, 80–99 hours, 100–119 hours, and 120–168 hours). Depressive symptoms during the previous week were measured by using CES-D 10. We found that 86% (N = 1,429) of interns and residents worked 60 hours or more per week. Compared to the "less than 60 hours" group, long working hours for interns and residents were significantly associated with depressive symptoms: "60-79 hours" (PR: 1.56, 95% CI: 1.05, 2.32), "80-99 hours" (PR: 2.27, 95% CI: 1.54, 3.33), "100-119 hours" (PR: 2.62, 95% CI: 1.76, 3.89), and "120-168 hours" (PR: 3.28, 95% CI: 2.21, 4.86) after adjusting for confounders including medical specialty and training year.

OR1174

Dyadic Interdependence of Conception of Death of AIDS and Quality of Life in Chinese Couples with Both Partners Infected with HIV

Nancy X Yu (1), Jianxin Zhang (2) 1. City University of Hong Kong, Hong Kong; 2. Institute of Psychology, Chinese Academy of Sciences, China

The present study aimed to examine the actor and partner effects of conception of death of AIDS on quality of life in Chinese couples wherein both are people living with HIV (PLHIV). A total of 49 couples who were both infected with HIV completed measures on conception of death of AIDS and quality of life. The results showed that the couples showed moderate to high correlations of conception of death of AIDS and quality of life-mental health summary, respectively. Both actor and partner

effects of conception of death of AIDS on quality of life-mental health summary were significant within the dyad. Our findings indicate the dyadic interdependence of conception of death of AIDS and quality of life-mental health summary in the couples. Psychosocial interventions targeting reduction of negative death conceptions and enhancement of well-being in the context of HIV should treat the couple as a unit.

OR1175

The effect of work-family balance on job satisfaction : A Moderated Mediation Model

Yue Yu, Jianxin Zhang *Institute of Psychology, Chinese Academy of Sciences, China*

Previous studies examined that personality traits moderated the effect of work-family balance (WFB) on job satisfaction (JobS). However, personality would be more reasonably believed to moderate the relation of WFB and JobS through work engagement(WE).The present study enrolled 263 grassroots employees from a petrochemical enterprise in China being assessed by Utrecht Work Engagement Scale (UWES), Work-Family Balance Scale(WFBS), Job Satisfaction Scale(JSS) and Big Five Inventory(BFI-10). The results showed that:1)WE partly mediated the effect of WFB on JobS; 2) the effect of WE on JobS was further moderated by trait of extraversion; 3) the indirect effect of WFB on JobS through mediation of WE was moderated by extraversion and therefore a moderated mediation model was proposed in the present study that suggested: WFB boosts JobS by firstly enhancing employees' WE, while this indirect effect is then moderated by their personality of extraversion. Theoretical and practical implications were discussed.

OR1176

The Mediating Effect of Self Consistency and Congruence on the Relationship between Happiness and Adolescents' Conscience

Lianping Zeng (1), Chuikai Zeng (2), Liangshi Yan (3), Shouying Zhao (1), Yun Pan (1), Wenjie Lan (1) *1. Guizhou Normal University, China; 2. Zhejiang University of Finance & Economics, China; 3. Hunan Normal University, China*

Abstract: This study tried to explore the functional mechanism of conscience together with self consistency and congruence(SCC) towards adolescent's happiness. The Conscience Scales, the Self Consistency and Congruence Scales, the Happiness Scales assessed 1675 teenagers of mainland China. The results indicated that: (1)Teenagers' conscience and SCC were significantly positively related with their happiness. (2)Teenagers' conscience were significantly positively related with their SCC.

(3)The responsibility, gratitude and the sense of right and wrong of conscience, SCC have positive influence on happiness, while sympathy and modesty have negative impact on happiness. (4)SCC have completely mediating effects between gratitude and happiness while have partly mediating effects between responsibility and happiness. Implications of this study was that both improving teenagers' conscience and developing their self consistency and congruence could increase happiness. **Keywords:** conscience, self consistency and congruence, happiness, teenagers

POSTER PRESENTATION

P1676

Psychiatric aspects (body image, self-esteem, depression, quality of life, general health) of patients seeking cosmetic nasal operations

Mohammad Ahmadpanah (1), Amineh Akhondi (2), Mohammad Haghighi (1), Leila Jahangard (1), Mohammad Zandi (3) *1. Behavioral Disorders and substances abuse research center, Hamadan University of Medical Sciences Hamadan, Iran; 2. Hamadan Educational Organization, Hamadan , Iran; 3. Hamadan university of medical sciences, department of dentistry, Iran*

Objective: the present investigation was performed to evaluate psychiatric aspects of patients seeking rhinoplasty operations. **Methods:** A total of 137 subjects seeking cosmetic nasal operations (study group) and 167 subjects who were not interested to do rhinoplasty (control group) were participated in this study. After obtaining the informed consent, a standardized questionnaires evaluating the body image, self-esteem, depression, quality of life, and general health was distributed among study (before surgery) and control groups. **Results:** The general health condition for both sexes in the control group was better than the study group. The quality of life score in the study group was higher than the control group. The positive body image score in the control group was higher than the study group. The self-esteem score was not significantly different between study and control groups. **Conclusion:** subjects seeking cosmetic nasal operations showed more psychiatric problems compared to subjects unwilling to do rhinoplasty.

P1677

Application of Health Action Process Approach to Oral Health Behavior among Japanese Youth

Mitsuhiro Amazaki (1), Chihiro Kemuriyama (2) *1. Faculty of Regional Policy, Aichi University, Japan; 2. Faculty of Education, Gifu Shotoku Gakuin University, Japan*

The study examined the application of the health action process approach (HAPA) for oral health behavior among Japanese youth. The group (male = 329, female = 255, mean age = 18.66, SD = 0.57 years) completed questions on an oral health behavior checklist, risk perception, outcome expectancies, self-efficacy, behavioral intention, and planning. Using structural equation analyses, the HAPA model explained 35 percent of the variance in oral health behavior among Japanese youth (GFI = .98, AGFI = .94, CFI = .98, RMSEA = .05). Results revealed that the HAPA was an applicable model for explaining oral health behavior; however, the influence of positive outcome expectancies and risk perception on behavioral intention was not significant. Therefore, health education to promote Japanese youths' oral health behavior should focus on increasing the negative outcome expectancy and self-efficacy for oral health behavior.

P1678

A systematic review of socio-psychological factors of the anti-vaccination behavior and attitudes

Natalia A Antonova, Ksenia Eritsyana *Saint Petersburg State University, Russia*

Immunization is one of the most significant achievements of public health in the last 100 years. Recently, however, people have been increasingly refusing to vaccinate. The goal of study was to conduct a systematic review of English-language studies published from 1980 to 2015, that examine factors of vaccine refusal and negative attitudes towards vaccination, using the Web of Science TM Core Collection database. The final analysis consists of 30 papers. The studies in question were mainly conducted in North America and Western Europe. All factors of refuse vaccination in the studies we have been divided into four content blocks: 1) social (gender, age, education level, income, etc.), 2) cognitive (attitudes, beliefs regarding the risks / benefits of vaccination, mistrust of official medicine, beliefs about a healthy lifestyle as a defense against infection), 3) behavior (eg, negative experiences, access to alternative medicine), 4) other (vaccine-specific, the role of health workers etc.).

P1679

Role-sustainment and leisure-ethics: effects on stress and on life-success

Ioana Cristina Bratescu Muscalu *Nagoya University, Japan*

We examined two precursor, composite indicators referring to health status (HS) and active-life (AL) in relation to outcomes of stress and of successful-life (SL). The hypothesized model assumed a mediator role of leisure

ethics (LE) and of role-sustainment (RS) (i.e. understanding needs of others and efficiency of environmental supplies). The sample ($N = 261$, age range, 18 to 78 years, 149 females and 102 males) was multi-cultural; participants answered to a back-translated measurement instrument. A structural equation model revealed that HS and AL have an inhibitory effect on LE, but enhancing effect on RS. Furthermore, RS proved to enhance SL ($\beta = .57$, $p < .001$, standardized value surpassing that of Pearson's correlation coefficient, $r = .55$, $p < .05$). The properties of this model were: AGFI = .99; CMIN = .26, $P = .61$, RMSEA = .000. We discuss findings in the context of engagement, even with a precarious health, in global entrepreneurships.

P1680

The effect of proactive coping strategies on transition from college to work: a one-year follow-up *Yihui Cai, Takaya Kohyama Doshisha University, Japan*

Proactive coping is conceptualized as a method of assessing future goals and setting the stage to achieve them successfully (Schwarzer & Tauber, 2002), and this way of coping could benefit individuals who are going through developmental transition. The purpose of this research was to examine the effect of proactive coping strategies that newcomers adopted 3 months before entering workplace (January 2014), on workplace adaptation of 1 year after (April 2015). 57 participants remained at the follow-up research. Results showed that within the 5 steps of proactive coping strategies, resource accumulation decreased the stress response, and simulation about the transition increased the achievement motivation one year after working. Even though the effect on the adaptation at 1 year after working wasn't as strong as the point of 1 month and 6 months after, proactive coping strategies was proofed to be an effective method in dealing with life transition.

P1681

Internet and cybersex addiction, and psychological and physical health

John A Castro (1,2) 1. University, Colombia; 2. Colombia, Colombia

The aim of this study was to assess the possible relationship between Internet and Cybersex addiction with psychological and physical health. Two hundred and fourteen Young adults answered a questionnaire that evaluated the variables of the study. The participants ages ranged between 18 to 30 years ($M = 21.71$ and $SD = 3.43$) The results showed in general significant associations between the variables, with also meaningful differences based on sexual identity characteristics like their biological, but did not show difference based on the sexual orientation of participants. Results are

discussed based on biological sex, adulthood characteristics, and cultural aspects, specifically the interiorization of the preconceptions of psychological and physical health, that apperentially seems to be culturally different between men and women.

P1682

Development of a Mindfulness-Based Smartphone Application for Stress Reduction

Sue-Huei Chen (1), Yu-Lien Huang (1), Chih-Yi Chiu (2) 1. National Taiwan University, Department of Psychology, Taiwan; 2. Department of Computer Science and Information Engineering, National Chiayi University, Taiwan

Growing evidences show that mindfulness-based smartphone apps may be taken as an alternative delivery medium for stress reduction practice. This paper reports the development of a mindfulness-based smartphone apps (MBSmartApp) and the examination of its utility. The MBSmartApp is designed to deliver mindfulness practice by Android phone applications and its protocol includes Introduction to Mindfulness (IntroM), Guided Mindfulness (GdM), Schedule for Practice (SoP), Reflection on Self Before and After the Practice (RefB&A), and Record of Practice (RoP). In IntroM, the conception and procedure of mindfulness is briefly introduced. The GdM includes body scan, spacing breathe, meditation, and mindful breathing. The SoP provides a practice calendar and automatic reminder. The RefB&A consists of questions asking physical tense and emotions before and after the practice. The RoP will analyze all data which will be stored in iCloud and provide feedbacks. Finally, an examination of the utilization over one month will be presented.

P1683

The Applications of Assessment on Heart Rate Variability in Employee Assistance Program

Chao Fen Chen (1), Hsinju Chiang (3), I-Mei Lin (2) 1. St. Joseph's hospital, Taiwan; 2. Kaohsiung Medical University, Taiwan; 3. St. Martin de porres hospital, Taiwan

Decreased vagal activity and increased sympathetic arousal have been proposed as the risk factors on morbidity and mortality of cardiovascular disorder among patients with depression. The aim of this study was to examine the employees with or without depression on heart rate variability (HRV) indices in employee assistance program (EAP). The results found that the employees without depression had higher HRV indices than employees with depression, included SDNN (42.05 and 40.11), NN50 (25.69 and 6.14), pNN50 (0.72 and 0.18), rMSSD (35.98 and 28.40), LF (119.21 and 111.49), HF (119.47 and 72.36), and LF/HF (2.23 and 1.60). This

study supports employees with depression may decrease their vagal activity and increased sympathetic arousal. The HRV biofeedback will be applied in the future.

P1684

The Psychological and Biological Effects of a Cognitive-Behavioral Group Therapy for Patients with Cardiac-Vascular Diseases

Yih Ru Cheng (1), Chia-Ying Weng (2), Lian-Yu Lin (3), Fu-Tien Chiang (3), Chang-Chang Tseng (1), Yu-Ting Yang (1), Chi-Yu Chang (1), Ya-Mei Lai (1), Po-Tsang Huang (1), Bee-Horng Lue (4) 1. Clinical Psychology Center, National Taiwan University Hospital, Taiwan; 2. Department of Psychology, National Chung Cheng University, Taiwan; 3. Division of Cardiology, Department of Internal Medicine, National Taiwan University Hospital, Taiwan; 4. Department of Family Medicine, National Taiwan University Hospital, Taiwan

Purpose: To examine the effects of an 8-week cognitive-behavioral group therapy program for patients with cardiac-vascular diseases (CVD). Methods: Fourteen patients (mean age = 58.42 ± 7.54 , male 69.8%) from cardiology clinics were recruited. All the participants completed the anxiety and hostility inventories as well as the examination of blood volume amplify (BVA) before and after the intervention. Nine of the fourteen patients completed 3 and 6-month follow-up assessments. Results: After intervention, there was a significant reduction on anxiety ($F = 5.81$, $p < .01$; Follow-up 3 m, Follow-up 6 m < Pre); and a marginal reduction on hostility ($F = 3.88$, $p = .07$). Furthermore, there was a significant increase on BVA ($F = 6.10$, $p < .01$; Follow-up 3 m, Follow-up 6 m > Pre; Follow-up 6 m > Post). Conclusions: The therapy program reduced the psychological distress and increased the vasodilation function, thus may improve the quality of life and reduce the risk of recurrent CVD.

P1685

Smoking Cessation Self-Efficacy and Nicotine Withdrawal in Treatment-Seeking Smokers With and Without a History of Mental Illness: Impact on Abstinence

Matthew Clyde (1,2), Heather Tulloch (1,2), Charl Els (3), Robert Reid (1,2), Andrew Pipe (1,2) 1. University of Ottawa, Canada; 2. University of Ottawa Heart Institute, Canada; 3. University of Alberta, Canada

Individuals with a lifetime diagnosis of a mental illness smoke at higher rates and have a more difficult time quitting than those with no such diagnosis. Cessation self-efficacy (CSE) and nicotine withdrawal (ND) have both been

identified as powerful predictors for smoking cessation outcomes, with previous evidence suggesting that individuals with a mental illness experience higher levels of withdrawal during a quit attempt. We investigated the association between CSE and ND on cessation across smokers with and without a mental illness. CSE at week 1 (OR = 1.04, 1.02-1.06), 5 (OR = 1.09, 1.06-1.12) and 10 (OR = 1.06, 1.04-1.09) was associated with 6-month abstinence; in contrast, ND symptoms only predicted relapse at week 10 (OR = 0.93, 0.92-0.99). No differences were observed by mental health history. CSE appears to be a more robust and consistent predictor of future abstinence when compared to the experience of withdrawal symptoms, even after controlling for demographic and smoking related variables.

P1686

On the influence of childbirth self-efficacy in the mode of delivery
María Isabel Comeche (1), María José Cunqueiro (2) 1. *Universidad Nacional de Educación a Distancia - UNED, Spain*; 2. *Centro de Salud, Fernandez Areal, Porriño,, Spain*

Objective: This paper explores the influence of self-efficacy in the mode of delivery with the aim of promoting normal vaginal delivery by encouraging coping behaviors to reduce risky interventions. Participants: The longitudinal study included 260 low-risk pregnant women with high likelihood of vaginal delivery. Data were collected during the last three months of pregnancy and after delivery. Statistical analyses were performed using SPSS. Results: The score on the Self-efficacy expectations scale was found to be significantly correlated with the use of coping behavior strategies during labor; women with either vaginal or operative delivery held the coping strategies longer than women with Caesarean sections; they rated their experience higher as well. Conclusions: Self-efficacy is an important marker of women coping abilities during birth. The use of coping behaviors during labor was found to be associated with an increased likelihood of vaginal delivery and more positive feelings about the whole experience.

P1687

Does Paranoid Cognitive Style (PCS) Always Make People Feel Bad? PCS Can Increase or Decrease Well-being

Dario Diaz (1), Pablo Briñol (2), Maria Stavrakis (3), Sofía De La Fuente (2), Luis Fernando Antón (4), Su Miao Ye Chen (4) 1. *Universidad de Castilla la Mancha, Spain*; 2. *Universidad Autónoma de Madrid, Spain*; 3. *Universidad a Distancia de Madrid, Spain*; 4. *Universidad Complutense de Madrid, Spain*

Previous literature suggests that paranoid cognitive style (PCS) is inversely related to well-being self-reports. Various possible factors that contribute to this relationship between paranoid cognition and discomfort (e.g. primary cognition: paranoid thinking increases negative self-evaluation) have been proposed. In the current work, we offer a new complementary explanation by arguing that paranoid cognition can magnify not only the impact of negativity of thoughts but also the influence of any thought that comes to mind (i.e. positive thoughts). This idea is based on current perspectives suggesting the possible relationship between paranoid social cognition and confidence (secondary cognition). In different experiments we measured (study 1) or manipulated (study 2) people's PCS and positive or negative self-related thoughts. When people were asked to generate mostly negative thoughts, paranoid thinking reduced well-being. In contrast, when people generated mostly positive thoughts paranoid thinking increased well-being.

P1688

Metacognitive Feelings of Ease and Eating Attitudes and Behaviors

Dario Diaz (1), Pablo Briñol (2), Blanca Requero (2), Ana Cancela (2), David Santos (2) 1. *Universidad de Castilla la Mancha, Spain*; 2. *Universidad Autónoma de Madrid, Spain*

The successful impact of health campaigns often depends on the extent to which interventions are effective in changing attitudes. The goal of the present research was to examine to what extent the ease adolescents experience in generating thoughts can influence persuasion in the domain of eating attitudes and behaviors. Participants were asked to generate either positive or negative thoughts about the Mediterranean diet. The spontaneous feeling of ease with which participants generated those thoughts was assessed for each participant. The impact of these two independent variables on attitudes toward the Mediterranean diet was examined. Participants who reported relatively higher (vs. lower) subjective ease experiences in the thought-listing task showed a greater effect of thought direction on attitudes toward the diet. This study demonstrates the importance of considering not only the thoughts people have with regard to health but also the subjective experiences and metacognitive feelings associated with those thoughts.

P1689

The Effect of Anxiety Sensitivity on the Autonomic Nervous Reaction During the Cold Pressor Test

Naomi Dodo, Ryusaku Hashimoto *Health Sciences University of Hokkaido, Japan*

We examined the effect of anxiety sensitivity (AS) on autonomic nervous response due to acute pain induced during the cold pressor test (CPT). The college students participated in the study and were divided into low- and high-AS groups based on Anxiety Sensitivity Index scores. The study included three phases: Rest, CPT, and Recovery. We measured fear of pain as index of psychological factor. Autonomic nervous response data were also collected during each phase. Scores for fear of pain were higher in the high-AS group relative to the low-AS group. Parasympathetic nervous response was activated in the CPT and Recovery phases in the low-AS group but remained unchanged throughout all phases in the high-AS group. These findings suggested that the parasympathetic nervous system was inactive in the high-AS group in both the CPT and Recovery phases. In conclusion, we observed a relationship between AS and autonomic nervous response.

P1690

Psychosocial Hazards and Strains among Teachers and Social Workers - Characteristics, Manifestations, Outcomes

Marie Drüge, Karin Schleider *University of Education Freiburg, Germany*

The present study describes and compares the characteristics and manifestations of psychosocial hazards among teachers and social workers and shows interrelations to resulting strains. The sample consists of 227 teachers and 239 social workers, the data was gathered online by means of the Copenhagen Psychosocial Questionnaire (COPSOQ). The data was compared to other professions from the COPSOQ-database (Nübling u.a., 2011). Variance-analytical results show bigger influence on work, greater possibilities for development, but higher demands and worse outcomes for both groups compared to other professions. Regression analysis show, that the outcomes are explicable through the psychosocial hazards. To protect and to preserve the psychosocial health there is a need for action in the investigation of possible causes as well as on the level of prevention and intervention.

P1691

Evaluation of heartmath training for improving personal resilience and psychophysiological coherence

David J Edwards, Stephen D Edwards *University of Zululand, South Africa, United Kingdom*

The goal of this study was to evaluate the influence of a HeartMath training apparatus on personal resilience and physiological coherence. A within group, pre-test and post-test, outcome evaluative design was employed to assess

changes in dependent variables. A small convenience sample of 6 participants, 4 women and 2 men, with a mean age of 49 years and an age range from 25 to 68 years, each completed 4 HeartMath training sessions which included 9 tools and techniques. Non-parametric statistical analysis for quantitative data indicated significant increases in physiological coherence and personal resilience perceptions. Thematic content analysis for qualitative data yielded unequivocally positive, experiential descriptions. Integrative findings are discussed in relation to previous and future research.

P1692**HeartMath positive psychology paradigm for psychophysiological and global coherence, health and wellbeing**

David J Edwards, Stephen D Edwards
University of Zululand, South Africa, United Kingdom

This paper introduces HeartMath as a positive psychology paradigm for promoting psychophysiological and global coherence. Evidence is provided for its value, with special reference to psychophysiological coherence as a natural, resonant, heart rhythm pattern associated with synchronization between positive emotions, cardiovascular, respiratory and other physiological systems. Various HeartMath tools and techniques are explicated. International and South African research, which has validated various HeartMath techniques, is described. This includes an original, African, breath based, heart focussed psychotherapeutic method called SHISO. The Sixth Global Coherence Initiative Monitoring Site, established recently on a private game reserve in Kwa-Zulu Natal, South Africa, is currently providing valuable research data with special reference to animal, human and cosmic relationships. Psychophysiological and global coherence are recommended as fertile fields for future research and intervention of great potential to develop humanity and promote global health and wellbeing. Research findings are available on the respective websites: heartmath.org and glcoherence.org.

P1693**Children's alcohol use and the association with parents' drinking behavior in Japan**

Kazuko Eto (1), Mana Asada (2), Satomi Totsuka (3), Toshiko Matsushita (4) 1. *Department of Nursing, Yokohama Soei University, Japan*; 2. *Department of Communication Engineering and Informatics, The University of Electro-Communications, Japan*; 3. *Faculty of Nursing, Tokyo Junshin University,*

Japan; 4. *School of Medicine, Yokohama City University, Japan*

Introduction In studies on high-school students (age 15–18), frequency of alcohol drinking of parents was correlated with their drinking behavior. On the other hand, 34.9% of 5th grade students (age 10–11) had already experience of alcohol use. The present study investigated family alcohol-related environment on elementary-school children (age 6–12) in Japan. Method 1,308 parent(578 fathers and 730 mothers) of elementary school children completed alcohol related questions which included an alcoholism screening tests, new Kurihama Alcoholism Screening Test (new KAST), which evaluated participants for "normal", "caution needed to alcoholism", "suspicious alcoholism" depended on the score. Results 241(41.7%), 21(3.6%) of fathers, and 120(16.4%), 12(1.6%) of mothers were classified as "caution needed to alcoholism", "suspicious alcoholism" respectively. Discussion The results showed that fathers who have alcohol related problems were about twice as the percentage of mothers. This suggested that fathers' participate in alcohol education program should be effective for alcohol prevention of children.

P1694**Confirmatory Factor Analysis of Hierarchical Structure of Women's Health Questionnaire**

Qianqian Fan (1), Biing-Jiun Shen (1), Upasana Bondopadhyay (1), Moon-Ho Ho (1), Wendy Mack (2), Howard Hodis (2) 1. *Nanyang Technological University, Singapore*; 2. *University of Southern California, United States of America*

The Women's Health Questionnaire (WHQ; Hunter, 1992) is a comprehensive instrument assessing nine domains of physical and emotional functioning and quality of life for women. Although the WHQ is widely used, there is a lack of investigation into its factor structure and its use in women during menopausal transition. To understand the measurement structure of WHQ and guide its use in health and clinical settings, confirmatory factor analysis (CFA) and hierarchical CFA were performed on WHQ in the present study. 448 postmenopausal women completed WHQ at baseline and at 6 and 12-month follow-ups. Results supported the nine-domain structure (RMSEA = .042, CFI = .947). A second-order CFA indicated two second-order factors (RMSEA = .045, CFI = .948), including emotional domain (anxiety, depression, and memory problems) and physical domain (somatic, menstrual, vasomotor, and sleep difficulties). The hierarchical CFA structure was stable over 6 and 12 months. The implications and utility of hierarchical factor structure of WHQ will be discussed.

P1695**The importance of social support, interaction with clients and work-family conflict for mental well-being of employees in the human service system**

Uwe C Fischer
University of Bamberg, Germany

Starting from a demand resource framework including the classical demand control aspects, social support systems, specific demands and resources of the client work, and work-family conflict were considered in the present study. We state hypothetically, that these factors have a meaningful association with the mental quality of life of employees working in the field of social, educational and health sectors. 1140 employees, working in human service organizations were asked for strains and resources at work (SALSA), work-family conflict, and mental quality of life (SF-12). We conducted a multiple hierarchical regression analysis. One third of the whole variance of the mental quality of life can be declared by the model. Inclusion of social influences decreased the influence of work related control resource. High workload, work-family conflict, social support by supervisors, co-workers and other persons outside work, as well as strains and resources associated with client work had significant regression coefficients.

P1696**Relationship between self-management and quality of life among people with hip osteoarthritis**

Yumiko Fujishiro (1), Masaki Hirabe (2) 1. *Komazawa Women's University, Japan*; 2. *Tokyo Future University, Japan*

Objective: Hip osteoarthritis is a chronic progressive disease, and self-management is required. In this study, we examined the relationship between self-management (SM) and quality of life (QOL) among people with hip osteoarthritis. Method: Subjects were 132 patients. In the questionnaire, SM was measured by the lifestyle related items, QOL was evaluated using the SF-36. Result: The number of responses was 117. The 69 patients reported problems in SM of the exercise. The SF-36 scores of the physical and role/social component summary (PCS/RCS) were lower than those of Japanese standard values. However, no correlation was observed between the PCS and the RCS. The PCS was positively correlated with SM of the exercise and dietary habit, but the RCS was not significantly associated with SM. Conclusion: In order to improve QOL, self-management of exercise is important. About the social aspects of QOL, it is necessary to consider the influence of other factors.

P1697**Development, reliability, and validation of a Japanese nurse version of the ProQOL-5**

Takaki Fukumori (1), Toyomi Goto (2), Hiroshi Sato (3), Yuko Kawabata (1), Yoko Asada (4), Yoshie Hara (4), Tomie Sakamoto (4), Hidenori Miyake (4) 1. Tokushima University, Japan; 2. University Hospitals Case Medical Center, United States of America; 3. Kansai University, Japan; 4. Tokushima Municipal Hospital, Japan

A Japanese nurse version of the Professional Quality of Life Scale version 5 (ProQOL-5) was developed for this study. The scale was designed to evaluate the quality of life in people who work in helping professions and involves three subscales; secondary traumatic stress, compassion satisfaction, and burnout. The reliability and validity of the scale was examined based on data from 619 Japanese nurses. Results showed that every subscale had 1-component structure, and slope parameters based on item response theory for each subscale were 0.24-1.40. A test-retest correlation indicated high reliability for the scale. Correlations with the Impact of Event Scale-Revised, the Posttraumatic Growth Inventory, and the Burnout Inventory were mostly consistent with the current theory of professional quality of life, supporting the high validity of a Japanese version of the ProQOL-5. These results indicated that the scale has good reliability and validity as a measure of nurses' quality of life.

P1698**Adapting multiple-group latent growth curve analysis for the relationship between Social support, Prosocial behaviors, and Subjective well-being**

Ayumi Fusejima (1), Akira Tsuda (2), Yoshiyuki Tanaka (3) 1. Kyusyu Junior College of Kinki University, Japan; 2. Kurume University, Japan; 3. Kyoto Tachibana University, Japan

Subjective well-being (SWB) can be enhanced by support behaviors. However, few studies clarify gender differences of effective supports and of prosocial behaviors. This study examined the effect of social supports and prosocial behaviors (toward strangers or friends) on SWB considering gender differences. 243 Japanese university students (46 males and 197 females) answered questionnaires (SWB, social support, and prosocial behaviors) three times during 1-year. Multiple-group (males or females) latent growth curve analysis was conducted to clarify intercept, slope, and factors affecting them. Social support had positive effect on change of SWB in both genders, but prosocial behaviors had gender difference of the effect. Males' prosocial behaviors toward strangers enhanced their own SWB, whereas those toward friends decreased SWB

in females. Anticipation of to repay the kindness might not enhance SWB; it might decrease SWB in females who were more sensitive to reciprocal relation than males.

P1699**Meta-Analysis of the Relationship between Self-esteem and Depression of Mental Health**

Shuang Gao, Xiangkui Zhang, Mengshu Cui, Jinfeng Zhang Northeast Normal University, China

The purpose of this research was to determine the relationship between self-esteem and depression of mental health through meta-analysis of research done on this topic in China. 30 studies with inclusive criteria were selected for meta-analysis. The meta-analysis showed a high significant correlation between self-esteem and depression ($r = -0.391$) by R language. Moderator analyses revealed that the type of subjects ($Q = 0.05, p > 0.05$) and academic journals ($Q = 0.05, p > 0.05$) have no significant moderating effects on relationship between self-esteem and depression. However the study found geographical distribution has significant moderating effects on the relationship between self-esteem and depression ($Q = 212.65, p < 0.001$). The results showed that self-esteem has an important predictive influence on depression of mental health.

P1700**Chemotherapy anticipation: An approach to Virtual Reality**

Marina García Peñalver (1), Ariadna Torres García (3,4,5), Tania Estapé Madinabeitia (2), José Gutierrez-Maldonado (3), Albert Abad Esteve (4) 1. Universidad Complutense de Madrid, Spain; 2. Fefoc (Fundación para la Educación Pública y la Formación en Cáncer), Spain; 3. Barcelona University, Spain; 4. Oncologic Council and Care Unit, Sanitas Milenium Iradier Barcelona, Spain; 5. Psious-Barcelona, Spain

The aim of this study is to describe an implementation of a virtual reality program with patients that will be on chemotherapy treatment. Some preliminary studies have proposed the efficacy and utility of the virtual reality to reduce distress and fear in patients and impulse positive emotions and coping. In this program, patients will see a preview of the chemotherapy situation, which will allow them to recreate the situation, so as to anticipate it and have more control of it. The program contains two different environments, first the waiting room and then the treatment box where the patient starts the chemotherapy treatment. We will use the virtual glasses Gear Samsung for Psious. This proposal considers one of the possibilities that virtual reality gives us to help patients cope with the chemotherapy treatment.

P1701**Social Workers' and Police Officers' Individual Social Support and Mental Health in Work with Unaccompanied Asylum-Seeking Refugee Children's Forced Repatriation**

Mehdi Ghazinour (1,3), Johanna Sundqvist (1,2), Anna-Karin Hurtig (2), Mojgan Padyab (3) 1. Umeå University, Basic Training Programme for Police Officers, Sweden; 2. Umeå University, Department of Public Health and Clinical Medicine, Epidemiology and Global Health Unit, Sweden; 3. Umeå University, Social Work, Sweden

Social workers and police officers are involved in forced repatriations of unaccompanied asylum-seeking refugee children (UARC), a demanding and complex work. This study focuses on individual social support, and the association to general mental health in working with forced repatriations of UARC. The abbreviated version of ISSI, and GHQ-12 were distributed nationally. Univariate and multivariable regression models were used. Social workers with experience of UARC's forced repatriation showed a significant poorer mental health than other social workers, but both groups had a relatively high access to individual social support. Police officers showed no difference in their perceived mental health and they also reported a relatively high access of social support irrespective of working with UARC or not. However, low levels of satisfaction of social interaction (ADSI) and low levels of satisfaction of close emotional support (ADAT) increased the odds of psychological disturbances for police officers with experience of UARC.

P1702**Medical Students' Procrastination and Stress: The Mediation Effect of Self-Compassion**

Benhong Gong (1), Xianming Luo (2) 1. Kangning Hospital, China; 2. Wenzhou Medical University, China

It has been demonstrated by previous research that procrastination leads to high levels of stress. The present study examined the relation between procrastination and stress among medical students, and tested the mediating role of self-compassion. A sample of 438 undergraduate students from a medical university completed the Aitken Procrastination Inventory, the Self-Compassion Scale, and the Perceived Stress Scale. In the light of the conceptual distinction of the three component of self-compassion (self-kindness, common humanity, and mindfulness), the mediation effects of the three components were analyzed separately. The results showed that only mindfulness and common humanity mediated the link between procrastination and stress,

while self-kindness didn't play a mediating role. These findings indicated that the three component of self-compassion played different roles in the link between procrastination and related stress, which enriched the understanding of the relation between procrastination and stress.

P1703

How patterns of illness perception explain differences in depression and anxiety among long-term breast cancer survivors

Saaya Hara (1), Emi Takeuchi (2,3), Yuko Ogawa (1), Shin-Ichi Suzuki (4)
 1. Graduate School of Human Sciences, Waseda University, Japan; 2. Keio University Hospital Palliative Care Center, Japan; 3. Consultation, Counseling and Support Service Center of National Cancer Center, Japan; 4. Faculty of Human Sciences, Waseda University, Japan

The purpose of this study was to examine the effects of illness perception patterns on depression and anxiety among long-term breast cancer survivors. Fifty-seven participants completed the Brief Illness Perception Questionnaire and Hospital Anxiety and Depression Scale. Cluster analysis was used to identify groups of respondents who reported a similar profile of illness perception scores. The results of the cluster analysis suggest that respondents in Cluster 1 had negative cognitions concerning life issues and emotional representations. Respondents in Cluster 2 had negative cognitions, and respondents in Cluster 3 had positive cognitions relating to their illness. The results of ANOVA revealed a significant interaction between receiving chemotherapy and group of cluster memberships. It is suggested that the illness perception patterns of long-term breast cancer survivors include more cognitive responses related to the impact of the illness on their daily lives compared to those of short-term breast cancer survivors.

P1704

Psychological and Environmental Correlates of Physical Activity among Older Adults with Cognitive Impairments

Kazuhiro Harada (1), Lee Sangyoon (1), Shimada Hiroyuki (1), Lee Sungchul (1), Bae Seongryu (1), Harada Kenji (1), Suzuki Takao (1,2)
 1. National Center for Geriatrics and Gerontology, Japan; 2. J. F. Oberlin University, Japan

Objectives: The present study aimed to examine psychological and environmental correlates of physical activity among older adults with cognitive impairments. Method: A baseline data ($n = 262$) of an intervention for older adults with global cognitive impairment (score of the Mini-Mental State Examination as 21 to 24) was analyzed. Physical activity were

measured by accelerometer. Self-efficacy, perceived benefits and barriers, self-regulation, social support, social network and demographic factors were assessed by questionnaire. Neighborhood environments of each participants were evaluated by geographic information system. Results: Structural equation modeling revealed that self-efficacy was directly associated with physical activity as well as gender and age, and that except for self-efficacy social support had higher total effects on physical activity than other psychological and environmental factors. Discussions: The results suggest that self-efficacy directly influences on physical activity, and that social support is an important indirect predictor of it among older adults with cognitive impairments.

P1705

The effects of gratitude intervention for daily life on positive and negative emotions in Japanese college students: interim report

Kenji Hatori (1), Ikuo Ishimura (2), Masahiro Kodama (1)
 1. Saitama Gakuen University, Japan; 2. Tokyo Seitoku University, Japan

The purpose of this study was to examine the effects of gratitude intervention for daily life on positive and negative emotions. In this study, 45 Japanese college students were randomly assigned to experimental condition (18 male, 10 female) and control condition (9 male, 8 female). The average age was 18.71 years ($SD = 1.13$) and 20.76 years ($SD = 0.83$). 2 factor design was adopted with Condition (experiment and control) and Time (pre and post) as independent variables. Participants were required to list and discuss gratitude for daily life. Results of a mixed analysis of variance revealed that the experimental group exhibited a significant decrease in negative emotions and increase in positive emotions compared to the control group at post the intervention. And post-intervention showed a significant decrease in negative emotions and increase in positive emotions compared to pre-intervention. Issues related to gratitude interventions for daily life were discussed.

P1706

Parental Feeding Strategies, Child Eating Difficulties, and Child Body Mass Index (BMI): The Moderating Role of Parental Regulatory Focus

Zijing He, Yan Mu, Qing Zhang, Yanfei Yu
 Sun Yat-sen University, China

Malnutrition and overnutrition may cause serious diseases in children. Previous research showed children's eating is influenced by parental practices. Present study investigated the relations among parental feeding strategies, children's eating and BMI. Current survey with 427 Chinese parents of children (aged 3 to 8) found that: (1)

parental feeding strategies predicted children's satiety-responsiveness/slowness-in-eating (SRSE) through parents' pressuring to eat. (2) Pressuring strategies mediated the relations between parents' explanation (about benefits of healthy food consumption) and children's SRSE. Such mediation effect was found in children with promotion-focused, but not prevention-focused parents. Also, such mediation effect was found in younger, but not older children. (3) Children's SRSE negatively contributed to their BMI. Consistent with Taoist wisdoms on interdependence between Yin and Yang, parental explanation, supposed to promote energy intake, might counterproductively result in undesirable pressure, leading to skinny and easy-to-get-full-up children. Present findings also shed light on interventions of youth nutrition problems.

P1707

The Impact of Personality on Psychological Health and Occupational Burnout: the Mediating and Moderating Role of Psychological Capital

Zhifang He (1), Shuiping Chen (3), Jianping Liu (2)
 1. School of Humanities, Jiangxi University of Traditional Chinese Medicine, China; 2. Institute of Psychology, Jiangxi Normal University, China; 3. Institute of Education, Jiangxi Science & Technology Normal University, China

In the fierce competition of modern society, psychological capital has played an critical role in keeping healthy and coping with difficulties. This research aims to explore how personality influences psychological health and occupational burnout through psychological capital. A survey was conducted with 560 teachers in two universities from a province in China. Questionnaires of EPQ, PCQ24, SCL90 and MBI-ES were rated by participants' self-report. The results revealed that: The psychological capital is at medium slant level, and the mental health and occupation burnout are at low level. There is a negative relationship between psychological capital, occupation burnout and psychological capital. And there is a positive relationship between mental health and occupational burnout. Furthermore, psychological capital plays an intermediary and regulatory role in the impact of personality on psychological health and occupational burnout. The research deepen the understanding for relationship of personality, psychological capital, psychological health and occupation burnout.

P1708

Effects of Internet-based training for reducing embarrassment when using condoms

Masataka Higuchi (1), Nakamura T Nanako (2)
 1. Sophia University, Japan;

2. Hyogo University of Teacher Education, Japan

Embarrassment is one of the most inhibiting factors when using condoms. Condom use is very important for the prevention of various STDs including HIV. This study investigated the effect of a new training method aimed at reducing embarrassment when using condoms. Participants were 262 adults from a participant pool for internet research. The participants assigned to the intervention group viewed a website showing some background automatic thoughts and the corresponding counterarguments when using condoms (e.g., "If I start to use a condom, my partner may think I don't love her." vs. "94% of women said, 'I don't dislike my partner starting to use a condom!'"). Results showed that our training succeeded in reducing embarrassment when using condoms at two weeks after the intervention. In the future, we must try to modify our intervention to expand the extent of the effect.

P1709

Relationship between pain and quality of life among people with hip osteoarthritis

Masaki Hirabe (1), Yumiko Fujishiro (2)
1. Tokyo Future University, Japan; 2. Komazawa Women's University, Japan

As for the conservative treatment for people with hip osteoarthritis, it's important to control their pain. In this study, we examined the relationship between pain and the quality of life (QOL) among patients with hip osteoarthritis. Subjects were 132 patients who had contact with one rehabilitation hospital introducing conservative treatment. Our questionnaire consisted of two versions, a first one answered by medical staff, and a second one answered by the patients themselves. The staff questionnaire collected data concerning medical history and severity of osteoarthritis. The patients' questionnaire asked for self-control, self-efficacy, WHO SUBI, SF-36 and so on. Indeed, patients rated their pain on the Visual Analogue Scale (VAS). One hundred seventeen patients responded to the questionnaire. The results indicated that the pain severity was significantly associated with all SF-36 subscales except for "Role emotional" and "Mental health". On the other hand, pain fluctuation range was only associated with "Role emotional".

P1710

Characteristics of Behaviors of Family Members Participating in Terminal Patients' Advance Care Planning in Taiwan: Perspectives from Transtheoretical Model

Hsueh-Lin Ho, Yaw-Sheng Lin, Ying-Chang Wu National Taiwan University, Taiwan

Purpose: This study adopted the transtheoretical model as frameworks and investigated preparedness of terminal patients' family members participating in patients' advance care planning (ACP) in Taiwan. **Method:** Ten family members of terminal patients were interviewed. The data were analyzed with thematic analysis. **Result:** Family members' behavior in discussions unfolded in four aspects, including "reflection and expression of personal viewpoint," "communication with patient," "communication with relatives," and "communication with medical staff." Concrete behaviors in the four aspects were classified to depict each stage of change in participating in discussions of ACP. **Discussion & Conclusions:** The four aspects of behavior in discussion present different patterns of change, which reveals that each aspect serves different function for the family member when they participate in patients' ACP. The "stage of change" of TTM helped not only to depict behavior in discussing ACP in concrete terms, but also to reveal the complexity of discussion behavior.

P1711

The improvement of cognitive styles by the successive description of daily uplifts

Asako Honda Tokyo Seitoku University, Japan

This study investigated the modification of cognitive styles in university students by collecting descriptions of positive events in their daily lives. 312 participants were requested to describe "events within the last 24 hours or the last few days that have caused a happy feeling" weekly, and to continue reporting these experiences for 15 weeks. They completed two questionnaires to evaluate their optimism, pessimism and positivity in both before and after the interventions. Participants were divided into the high optimism (HO) group and the low optimism (LO) group based on the preliminary optimism score. The scores of pessimism after the intervention decreased more than those before the intervention in the LO group. The scores of optimism after the intervention increased more than those before the intervention in the LO group. The findings suggested that the cognitive style in the low optimism group could be changed to adapted style through the intervention.

P1712

Transtheoretical processes of change that best distinguish between the action, maintenance, and termination stages of change for regular exercise

Satoshi Horiuchi (1), Akira Tsuda (2), Kei Deng (2) 1. Iwate Prefectural University, Japan; 2. Kurume University, Japan

The transtheoretical model of health behavior change regards the process of exercise

maintenance as the progression through three stages: action, maintenance, and termination. This study examines how action and maintenance as well as maintenance and termination are distinguished by the transtheoretical model's processes of change. Seven-hundred and sixty-eight Chinese men and 812 Chinese women completed questionnaires assessing the processes and stages of change. A series of logistic regression analyses were conducted. For men, maintenance was significantly distinguished from action by self-liberation and stimulus control and termination from maintenance by dramatic relief. For women, maintenance was significantly distinguished from action by helping relationships, self-liberation, and stimulus control and termination from maintenance by consciousness raising. These results suggest that experiential processes are more important for maintaining regular exercise than behavioral processes in maintenance, while the opposite is true in action.

P1713

Investigation of correlation between Job satisfaction and psychosocial work environment factors among Japanese care workers

Tatsuya Hosoba, Ochi Ayumi Prefectural University of Hiroshima, Japan

This study was aimed to investigate psychosocial work environment factors to improve job satisfaction of Japanese care workers. 374 care workers were randomly selected and surveyed using a self-administered questionnaire, which included of Japanese version of the New Brief Job Stress Questionnaire (Kawakami et al., 2012; the New BJSQ). The New BJSQ contained items to measure job satisfaction and four psychosocial work environment factors (job demands and task-level job resources, workgroup-level job resources, organizational-level job resources). Main results were as follows. Job satisfaction was correlated with all of work environmental factors. However, if 50 years old or more care workers had low evaluation to workplace before getting a job, job satisfaction was correlated with job demands and task-level job resources only. These results were suggested that care workers' job-satisfaction might be influenced by different work environmental factors depending on their age and motivation.

P1714

Hope theory-based, family-centered approach in psychological care for adolescents undergoing stem cell transplant

Yichen Hou (1), Chao-Hsun Hu (1), Shu Kao (2), Wan-Lin Lee (2) 1. Koo foundation sun yat-sen cancer center, Taiwan; 2. Department of Psychology, National Chengchi University, Taiwan

When adolescents have cancer, the disease and the treatment usually bring enormous changes and challenges to a patient's and their family life. Stem cell transplant is a unique cancer treatment and carries high risk of severe complications. Patients who have to go through such treatment will experience profound emotional distress. This study used two clinical cases to demonstrate Snyder's hope theory-based, family-centered psychological approach in helping patients and their family to cope with illness and maintain the sense of hope throughout the course of transplant. Content analysis was used to analyze the process and a two dimensional model of psychological intervention for medical care was proposed. One dimension was called "person to family"; the other is called "health restoration to death preparation." The goal of this model was to explain how the psychosocial intervention improved the medical care and enhanced patient's and their family's psychological health in different treatment stages.

P1715

Positive Meaning Interacted with Perceived Vulnerability in Predicting Distress Following Breast Cancer

Wen-Yau Hsu (1,2), Ashley Wt Wang (5), Cheng-Shyong Chang (3), Shou-Tung Chen (4), Dar-Ren Chen (4) 1. Department of Psychology, National Chengchi University, Taiwan; 2. Research Center for Mind, Brain, and Learning, National Chengchi University, Taiwan; 3. Division of Hematology-Oncology, Department of Internal Medicine, Changhua Christian Hospital, Taiwan; 4. Comprehensive Breast Cancer Center, Changhua Christian Hospital, Taiwan; 5. Department of Psychology, University of Miami, United States of America

Objectives: Inconsistent evidence was reported between perceived positive meaning and psychological distress. This longitudinal study sought to extend previous work by including perception of vulnerability. We examined the interaction of meaning and vulnerability on depression and anxiety in two years following BCa surgery. Methods: Participants were 312 women underwent surgery for breast cancer. Meaning and vulnerability and distress were assessed at 1 day, 3, 6, 12, and 24 months after surgery. Hierarchical linear modeling was used. Results: The results showed that there was an interaction of meaning by vulnerability. For depression, perceived meaning was associated with alleviation in depression for women who perceived greater vulnerability. On the contrary, perceived meaning was associated with elevated depression for women who perceived slighter vulnerability. As for anxiety, perceived meaning was associated with lower reduction of anxiety for women who perceived greater

vulnerability, but the association was lacking for those who perceived less vulnerability.

P1716

Investigation and Analysis on Mental Health Status of College Students in Henan Province

Liu Huiying, Hu Yue Zhengzhou university, China

[Objective] To understand and grasp the psychological status and characteristics of college students, strengthen the psychological health education work of targeted and effective, improve the mental health level of College students. [Methods] The 8837 freshmen in a university in Henan province were tested, and the data were analyzed by SCL-90. [results] Factor score is more than or equal to 2 students with a detection rate of 38.5%; factor score of greater than or equal to 3 students the detection rate of 6.6%; forcing and psychosis factor score was significantly higher than that of the National Youth norm; positive detection rate ranked in the top three factors: forced, interpersonal sensitivity and depression. The mental health status of subjects, gender difference is remarkable, there was no significant difference between national. [Conclusion] The students with the mental problems of individual factors have a larger proportion, which is more serious in forced, interpersonal sensitivity and depression.

P1717

Psychophysiological reactions to laboratory stressors in individuals with metabolic syndrome

Fu-Chien Hung, Chia-Ling Wang Chung Yuan Christian University, Taiwan

Objective. Previous studies found high associations between work stress and metabolic syndrome that may increase the risk of chronic diseases, such as cardiovascular disease and type 2 diabetes. This study aims to investigate the psychophysiological reactions to laboratory stressors in individuals with metabolic syndrome. Methods. One hundred and eighty-two participants (108 male; mean age = 36.5, SD = 9.19; metabolic syndrome group = 45, partial metabolic syndrome group = 54, and healthy control group = 83). Participants completed two stressful tasks, including recall of a stressful event and the Stroop Task. Participants' psychophysiological reactions (BVP, SC, TEMP and EMG) were measured for each stressful task at the baseline, stress task phase and recovery phase. Results. The metabolic syndrome group exhibited more hostility and higher reactivity rate in SC and EMG than healthy control group. However, the healthy control group showed better recovery rate in BVP and SC. Conclusions. Results of current study implicate stress vulnerability in individuals with metabolic syndrome.

P1718

Program evaluation of refinement-tailored education using a tablet-type device for caregivers of young children with asthma

Misa Iio (1), Masami Narita (2), Masaki Futamura (3), Kiwako Yamamoto-Hanada (2), Takahiro Kawaguchi (4), Naruo Saito (5), Yutaka Morisawa (6), Taku Oishi (7), Koji Takenaka (8), Yukihiro Ohya (2) 1. Kanto Gakuin University, Japan; 2. National Center for Child Health and Development, Japan; 3. National Hospital Organization Nagoya Medical Center, Japan; 4. Showa General Hospital, Japan; 5. Saito Clinic for Asthma and Allergy Children, Japan; 6. Kera Pediatric Clinic, Japan; 7. Kochi University, Japan; 8. Waseda University, Japan

Here we developed a tailored educational program based on behavioral sciences using a tablet-type device to alter management behavior in the caregivers of children with asthma. The purpose of this study was to evaluate the usefulness of a refinement-tailored educational program. Sixteen caregivers of young children with asthma were recruited while visiting the outpatient units of children's hospitals, universal hospitals, and pediatric clinics. The caregivers underwent a tailored educational program, in which they received tailored messages generated by a tablet-type device. A doctor or nurse provided counseling to the caregivers. After the program, they were asked to evaluate the program's impact, administration, behavioral intention, etc. Program evaluation indicated that the tailored educational program had high feasibility and usefulness for the caregivers. The program has strong potential for skill improvement and adherence to treatment regimens. Future studies are needed to explore the long-term effects and determine appropriate delivery modalities.

P1719

The importance of hope as a mediator of well-being and attitude toward death

Daisuke Ikota (1), Seiichi Okuno (2), Nozomi Ikota (3), Kaori Uno (4), Yoko Sawamiya (4) 1. Chiba University, J; 2. University of Yamagata Faculty of Education, Art and Science, a; 3. Tokyo Society of Certified Clinical Psychologists, p; 4. University of Tsukuba Faculty of Human Sciences Division of Psychology, a

In recent research, death and dying have been examined from the perspective of subjective well-being. In this study, we focused on how the attitude toward death affects well-being, particularly when hope serves as a mediator variable to positively influence the attitude. 171 university students completed the questionnaires such as The Attitude Toward Death Scale, Satisfaction With Life Scale, The Ryff

Scales of Psychological Well-Being, and The Adult Hope Scale. Structural equation modeling analysis showed that the following components of the attitude toward death were associated with well-being mediated by hope: appreciate the meaning of death in life, emphasize the death of mind rather than that of body, and underestimate the seriousness of death. Belief in existence of afterlife had direct effects on well-being. These results suggest that the components of the attitude toward death are associated with high levels of well-being mediated by hope.

P1720

Effects of Basic Lifestyle Habits and Attention Control on Chronic Fatigue in Children and Adolescents

Shoji Imai Nagoya University of Arts and Sciences, Japan

Objective: This study aimed to investigate how basic lifestyle habits and attention control effect chronic fatigue (CF) among elementary school and university students. **Methods:** University students and higher-grade elementary school students were surveyed using the Basic Lifestyle Inventory (BLI), Voluntary Attentional Control Scale (VACS) and Chalder Fatigue Scale (CFS) (Number of valid responses: 345 university students, 400 elementary students). A structural model was designed using the BLI factors (sleep, diet, exercise and leisure) as exogenous variables, the VACS as an intermediary variable, and the CFS as an endogenous variable, and a Multiple Group Structural Modeling Equation was applied. **Results:** Each of the BLI factors had a significant positive effect on the attention control, while the attention control had a significant negative effect on CF. The path coefficient did not differ between the groups. **Conclusions:** Stable basic lifestyle habits appear to increase the attention control capability and attenuate CF.

P1721

Positive Psychological Interventions and Personality Fit

Yumika Imamura (1), Kaori Uno (2), Yoko Sawamiya (2) 1. University of Tsukuba Graduate School of Comprehensive Human Sciences, Japan; 2. University of Tsukuba Faculty of Human Sciences Division of Psychology, Japan

The previous research shows that it is crucial to match participants' personality traits and preferences toward positive psychological interventions (PPI) and create "personality-fit" situation in order to maximize the effects of PPIs (Schueller, 2010; Lyubomirsky & Layous, 2013). The current study aims to seek the relationships between one's personality traits and one's preferences toward PPIs. 313 undergraduate students were asked to identify their personality traits and rate their motivation to

try the PPIs as described on the questionnaire. The results indicate that there is a correlation between one's personality traits and one's preferred PPIs. High extraversion, openness to experiences, or eudaimonic orientation is positively correlated to most of the PPIs. In contrast, high neuroticism, high depressive symptoms or high interdependent construal of self is negatively correlated to particular PPIs: active-constructive response and using one's strength. The study suggests that one's personality traits affect one's preferences toward PPIs.

P1722

Effect of the Sense of coherence is for depression and subjective-happiness-feeling, what is mediated by generalized self-efficacy and sense of basic trust

Soutarou Isowa Graduate School of Human Sciences Osaka University, Japan Sense of coherence (SOC) has been found a negative correlation with depression, and also it has been found a positive correlation with happiness. However, SOC has a positive correlation with generalized self-efficacy (GSE). The relationship between SOC to depression and the happiness, there is a possibility of spurious correlation. The purpose of this study was to examine the relation between SOC, GSE, and sense of basic trust to depression and subjective-happiness-feeling. The data for this analysis was collected by the questionnaire method from 156 university students, and be analyzed by Structural Equation Modeling (SEM). For that result, the effects of GSE and sense of basic trust to depression was mediated by SOC, and the effects of SOC and GSE to subjective-happiness-feeling was mediated by sense of basic trust. From this result, the need to study the theory of SOC has been shown.

P1723

The effect of job stress change on maintenance of mental wellness: Results from the longitudinal study using Mental-Rosai II web-based stress check program

Sakurako Ito (1), Haruyoshi Yamamoto (1), Akira Tsuda (2) 1. Yokohama Rosai Hospital, Japan; 2. Kurume University, Japan

Objectives: To examine the effect of job stress change on maintenance of mental wellness by comparing before and after using a web-based stress-check program called Mental-Rosai II (MR2). **Methods:** MR2 consists of self-check of one's strain, stressors and coping profile, and computer-tailored personal advices on reducing stressors and increasing effective coping behaviors. The intrapersonal changes in job stressors and depression level of 371 Japanese IT company employees were measured before and 2 months after using MR2, using the Brief

Job Stress Questionnaire and CES-D included in MR2. **Results and Discussion:** The significant interaction effects with mental-health status were found in job-control and support from one's superiors, co-workers, family and friends ($p < .01$). Decreased job-control and support in 2 months related to the mental-health aggravation ($p < .01$), and increased job-control related to the maintenance of mental wellness (CES-D < 16 ; $p < .05$). These suggest that ensuring job-control and social support is beneficial for maintaining mental wellness.

P1724

Personality and health locus of control among middle-aged and older adults living in a Japanese community

Hajime Iwasa (1,2), Yuko Yoshida (2) 1. Department of Public Health, Fukushima Medical University School of Medicine, Japan; 2. Tokyo Metropolitan Institute of Gerontology, Japan

This study aimed to examine the relationship between personality and health locus of control (HLC) among middle-aged and older adults. A total sample of 416 men and 416 women aged 40–79 years participated. The NEO five-factor inventory was administered to assess the "big five" personality traits: neuroticism, extraversion, openness, agreeableness, and conscientiousness. The Multidimensional HLC Scale (including three subscales: Internal HLC (IHLC), Powerful-others HLC (PHLC), and Chance HLC (CHLC)) was conducted to assess health belief. In multiple regression analysis adjusted for gender, age, education, chronic diseases, and financial circumstance, extraversion were positively associated with IHLC ($\beta = 0.25$) and PHLC ($\beta = 0.23$). Agreeableness were negatively associated with CHLC ($\beta = -0.24$). Conscientiousness were positively associated with IHLC ($\beta = 0.29$). Our results suggest that personality traits may predict health belief among middle-aged and older adults, and could be beneficial for developing health promotion strategies among community dwellers.

P1725

Disease-related appraisals and clinical characteristics of chronic obstructive pulmonary disease

Tomasz Jedynak (1), Konrad Janowski (2), Barbara Mackiewicz (3) 1. John Paul II Catholic University of Lublin, Poland; 2. University of Finance and Management in Warsaw, Poland; 3. Medical University in Lublin, Poland

Disease-related appraisals (DRAs) are subjective meanings people may attribute to their illness. Which meanings are actually attributed

by a particular person is a function of psychological characteristics of this person and clinical characteristics of the illness. In this study we analyzed which clinical characteristics are related to DRAs in patients with chronic obstructive pulmonary disease (COPD). 142 patients with COPD were assessed on a questionnaire measuring six DRAs (threat, profit, obstacle/loss, challenge, harm and value) and clinical data were collected for each participant. All DRAs were found to be weakly positively correlated with the time elapsed from the onset of the disease. Negative but not positive appraisals were also weakly positively correlated with the number of previous hospitalizations. No significant differences in DRAs were observed between patients with different severity of the disease. These findings provide evidence a relatively weak association between DRAs and clinical course of COPD.

P1726

Effect of Laughter Therapy

Yoshiko Kajiwara (1), Kazue Takayanagi (2) 1. *University of Hyogo, Japan*; 2. *Nippon medical school, Japan*

Laughter in complementary and alternative medicine means to offer the atmosphere and environment where depressed person can be educated smile and laughter to improve psycho-physiological status. Takayanagi, (2007) advocate Laughter Therapy that relief stress, care and heal the patient mentally as well as physically. Some local governments exploit Laughter Therapy as one of the measures of preventing suicide. In this study, 198 adults, who participated Laughter Therapy seminar had completed some psychological scales (POMS, DAMS, TS scale) to examine the effect of the therapy. The results that were significantly changed led by Laughter Therapy seminar were as follows. Negative mood and anxiety were decreased, on the other hands positive mood was increased. Willingness to communicate, involve and accept other people was rose. Physical pain was decline, vitality and vigor were ascended. These findings suggest that Laughter Therapy increases psychological as well as physical QOL.

P1727

Occupational Stress, Leisure Time after Work and Stress Response among Human Service Professionals

Naoko Kamba *Kyoto Koka Women's University, Japan*

This study examines the relationship between occupational stress, leisure time after work and stress response. A web-based survey was conducted targeted at human service professionals (e.g. nurse, public health nurse, midwife, speech-language-hearing therapist, social worker, psychiatric social worker, certified

care worker, counsellor, psychologist, dietician, registered dietician and sports instructor). Four hundred and thirty two participants (179 males and 253 females, ages 22–69, $M = 43.21$, $SD = 9.96$) answered the questionnaire containing a scale of occupational stressor, recovery experiences (i.e. psychological detachment, relaxation, mastery and control) and stress response. Two-way ANOVAs with stressor level (low/high) and recovery level (low/high) revealed the main effects on psychological stress response and physical complaint. An interaction between stressor and psychological detachment was significant on the score of physical complaint. Therefore, it was suggested that the recovery experience, especially concerning psychological detachment, is important as a factor to reduce the stress responses among human service professionals.

P1728

Reality shock experienced by nursery teachers part II: Revealing aspects of reality shock experienced by nursery teachers employed 2–4 years by interviews

Reiko Kamiji (1), Miharu Matsuura (1), Jun Minagawa (2) 1. *Sanyo Gakuen University, Japan*; 2. *Sanyo Gakuen Collage, Japan*

In Japan, there is a problem of lack of nursery teachers. One of the conceivable reasons is early turnover caused by reality shock. Reality shock is caused by large gaps between their expectations before employment and their experiences on actual job, and it causes various stress reactions. Reality shock felt by Japanese professional person had been researched mainly about nurses. However, few research about the nursery teacher exists. So we intended to reveal various aspects of reality shock experienced by nursery teachers. We interviewed 9 members of the nursery teachers who were employed 2–4 years. We carried out the following procedures: Creating verbatim records from participant's remarks, separation of contents from verbatim records, and classification of separated contents from the aspects of reality shock.

P1729

Relationships between Resilience Factors and Controllable/Uncontrollable Life Stressors

Yuki Kaminishi, Suguru Sato *Doshisha University, Japan*

The purpose of the present study was to examine the relationships between resilience factors and controllable/uncontrollable life stressors. The Bidimensional Resilience Scale (BRS) and the Stress Self-Rating Scale for University Students (SSRS) were administered to 285 (102 males, 183 females; average age 20.08 years) university students. Each subscale of the BRS

was not correlated with the number of experienced life stressors. Multiple regression analyses were carried out to predict each subscale of the BRS based on the stress responses to controllable/uncontrollable life stressors. The results showed that "optimism" (an innate factor) and "self-understanding" (an acquired factor) indicated significant negative standardized partial regression coefficient. Standardized partial regression coefficient of "optimism" was higher in controllable life stressors, however, that of "self-understanding" was higher in uncontrollable life stressors. The results suggested that an effective resilience factor could vary according to characteristics of life stressors.

P1730

Effects of physical touch on stress: A pilot study with Japanese students

Emiko Katsurada *Kwansei Gakuin University, Japan*

Effects of physical touch was examined with Japanese female university students. Four pair of women participated in the present study. They belong to a same seminar, therefore, they know each other at a certain extent. First they learned how to perform touch and answered the Touch Aversion Scale in class. Next week, seven female students measured their levels of stress before and 5, 10, and 15 minutes after being administered touch on their back or arm. We employed the Saliva Amylase Monitor by Nipro Inc. to measure their stress level. Due to the small sample size, we conducted non-parametric analyses to detect the differences and correlations. The results indicated that their stress level was not reduced after 5 minutes, but it was significantly reduced at the 10 and 15 minutes marks. There were no significant correlation between the degrees of disliking touch and the reduction of stress.

P1731

Prejudice and necessary support toward hard-of-hearing people: An interview survey

Noriko Katsuya (1), Tokika Kurita (2), Yasuyuki Nabata (3) 1. *Aoyama Gakuin University, Japan*; 2. *Mie University, Japan*; 3. *Hokkaido University, Japan*

We examined what support hard of hearing people need using interviews. Two hard of hearing participants had a semi-structured interview in which they mainly answered questions about their experiences of prejudice and what support they need. They did not receive obvious prejudice from others, but said they were concerned that people considered them as eccentric and inferior. As for necessary support, interviews indicated that participants want the following. 1) Hearing people need to have opportunities to understand characteristics of hard of hearing people's communication and psychological tendency. 2) Hard of hearing

people need environments in which they can receive different kinds of social support such as information services and emotional support. 3) The hearing people who interact with hard of hearing people need to receive useful information for understanding them. We discussed the ideal way to support the hard of hearing.

P1732

Psychological effect of nail-care on mental state of Japanese female
Atsushi Kawakubo (1), Takashi Oguchi (2) 1. Graduate School of Contemporary Psychology, Rikkyo University, Japan; 2. Rikkyo University, Japan

The purpose of this study was to examine psychological effect of the nail-care through a comparison with the makeup. The makeup is one of the most familiar beauty services. And previous studies suggested that the makeup change mental state of the person as well as outward appearance. On the other hand, in recent years nail-care which makeup on one's nails attracts people's attention. With a central focus on woman of the young generation, a nail salon becomes popular in Japan. However, there are still few studies on effects of nail care. Therefore, we conducted an internet survey and the total of 500 participants answered it. In a result, we confirmed that the makeup had a positive influence on the psychological state of participants. Furthermore from the result of the analysis of variance, it was revealed that nail care had a greater psychological effect than makeup.

P1733

The stigma of suicide among Japanese suicide bereaved: A preliminary report

Daisuke Kawashima (1,3), Shizuka Kawamoto (3), Keisuke Shiraga (2,3), Kenji Kawano (3) 1. Chukyo University, Japan; 2. Joetsu University of Education, Japan; 3. Center for Suicide Prevention, NIHM, NCNP, Japan

Introduction: Every year, since 1998, approximately 30,000 people die by suicide in Japan. Despite the increasing research evidence from Japan, there is still insufficient knowledge and research to support suicide survivors. Aims: This preliminary report demonstrates the relationship between suicide stigma and survivors' mental health, and explores the way of destigmatizing suicide. Methods: A total of 51 suicide survivors completed a questionnaire comprising items on stigma, mental health, social actions for suicide prevention, and other variables including demographic information. Results: As results, the stigma of suicide showed significant trends on deterioration of mental health, and related with social action for suicide prevention in a negative way. Further, participants who have attended support groups reported lower stigma than non-attendees. Discussions: The study revealed that the stigma of

suicide may affect on survivors' mental health and their social actions. At the same time, attending support groups may facilitate destigmatization of suicide.

P1734

Positive Changes in Subjective Well-Being of Aphasic Adults and Family Caregivers after Participation in Group Activities for Aphasic People

Masae Kazama (1), Mari Honma (2) 1. Hokusho University, Japan; 2. Sapporo Medical University, Japan

The authors have been participating in the activities of an aphasic persons' association, including group language therapy and recreation games. They have also been providing support through consultations and counseling for over 10 years as supporting members. Moreover, authors collected data by making videos and taking notes. Changes of subjective well-being and related factors in aphasic adults and their families resulting from participation in the aphasic persons' association were investigated by qualitatively analyzing such data. The results indicated that interactive functions, including sympathy, acceptance, and peer support among people with identical disorders, as well as communicational and psychological support provided by specialists improved motivation to communicate, facilitated acceptance of disabilities, lead to the recovery of self-esteem, and improved non-verbal communication, which enhanced the subjective well-being of aphasic people. Furthermore, their families were empowered through interactions with other families in identical situations.

P1735

The opposite effects of meaning searching on coping styles: Moderated by presence of meaning

Qin Ke, Gan Yiqun Peking University, China

There are two dimensions of meaning in life, Presence of Meaning and Search for Meaning. Presence of Meaning refers to one's subjective feeling that life is meaningful. Search for Meaning refers to one's desire and efforts to find meaning in life. While Search for Meaning itself can be distressing, its positive effect has also been found in previous research. This study hypothesized the moderating effect of presence of meaning on the effect of meaning searching with regard to coping styles such as acceptance and denial. Results from the study of 227 bank employees whose data had been collected at two time points supported our hypotheses. It has been found that meaning searching exerted positive effect on acceptance when presence of meaning was high and positive effect on denial when presence of meaning

was low. These results extend our understanding on the function of the Search for Meaning.

P1736

Exploring Determinants of Maternal Role Development in Mothers of Premature Infants: a Path Analysis

Ahrim Kim (1), Youngran Tak (1), Hyunkyung Park (2), Hyunju Lee (2) 1. Hanyang University, College of Nursing, Republic of Korea; 2. Hanyang University, College of Medicine, Department of Pediatrics, Republic of Korea

Aim. To testify the relations among predictive factors related to maternal role development (MRD) based on Mercer's becoming a mother theory in mothers of premature infants following discharge of the neonatal intensive care unit. Design. A cross-sectional and descriptive research design was adopted. Method. The sample consisted of 121 mothers recruited from both an online community and the tertiary university hospital. Path analysis was conducted. Results. Maternal attachment, maternal identity and marital intimacy directly influenced MRD evaluation, a positive perception of parenting experience including quality of mother-infant interaction and caregiving, accounting for 60% of the variance while maternal attachment greatly predicted MRD centrality, awareness of importance of baby in parent's life, with 49% of the variance. Conclusion. Community-based family centered interventions focused on these predictors are useful to facilitate positive effects on not only maternal health but optimal growth and development of premature infants.

P1737

Effectiveness of a behavioral guidebook for lifestyle changes among elderly persons with chronic health problems

Harim Kim, Kyongmee Chung Yonsei University, Republic of Korea

Lifestyle change has been emphasized as important element to manage chronic illness, however, behavior changes are not easily accomplished in real-world settings, mainly due to limited information regarding effective strategies for changes. This study aims to investigate effect of a behavioral guidebook for lifestyle changes to promote healthy behaviors. Participants were 91 elderly persons with chronic health problems(56 intervention, 35 control) aged from 61 to 85. Disease-specific self-care behaviors(e.g., reducing salt intake, daily blood pressure monitoring, etc.), general health behaviors(e.g., smoking, drinking, weekly exercise), self-care knowledge & efficacy, and quality of life were measured before and after the intervention via monthly face-to-face and/or telephone interview. During intervention, participants were

taught proper goal settings, and specific behavioral strategies to their own problems. Results showed significant group differences in disease-specific self-care behaviors only. Recommendations for clinical use of these strategies and related issues were discussed.

P1738**The Relationship between percept of pros/cons on social media and addiction in Japanese University Students**

Yuina Kitami (1), Yasuo Shimizu (2), Kazuyo Mori (3) 1. Teikyo Junior College, Japan; 2. International Christian University, Japan; 3. J.F.Oberlin University, Japan

Japanese Ministry of Internal Affairs and Communications (2015) announced that the social network system users are steeply increasing with the diffusion of smartphones. According to the spreading of social media, bullying through the internet and social media addiction are also increased in young people. The purpose of this study was to examine the relationship between Japanese students' perceptions of social media and their smartphone addiction level. The subjects of 163 Japanese university students were asked to answer a questionnaire which composed of socio-demographic questions, decisional balance questions about social media, and smartphone addictive questions. In order to analyze the text data, a text mining analysis and t-test was performed on open-ended answer. The result of analysis showed that higher pros-perception on decisional balance is significantly higher smartphone addiction level than lower pros-perception on decisional balance. Further studies between decisional balance and smartphone addiction need to be analyzed by standardized questionnaire.

P1739**Prevalence of HIV/AIDS among patients in Rivers State, Nigeria (2006–2009)**

Tonubari Kpai (1), Boma Ikiroma (2) 1. Ignatius Ajuru University of Education, Rumuolumeni, Port Harcourt, Nigeria; 2. Postgraduate student, University of Port Harcourt, Nigeria

With the advent and spread of new and deadly diseases in West Africa recently like ebola, HIV/AIDS seems to have been relegated to the background. The first part of this study assessed the factors in the prevalence of HIV/AIDS among patients in Rivers State of Nigeria from 2006 to 2009, the second part is ongoing. Two research questions and hypotheses guided the study. Study population comprised all recorded cases of HIV/AIDS as reported by the Rivers State Agency for the control of AIDS. A sample of 6964 cases comprising 1694 males and 5270 females were

used. Data obtained were analyzed using simple percentages for the research questions and chi-square (χ^2) statistic for the hypotheses. The findings indicated that HIV/AIDS still has a high prevalence in the region and is significantly associated with age and gender. More work is needed in reducing the current prevalence rate through increased sensitization, among others.

P1740**Changes in depressive symptoms and social support from pregnancy through postpartum**

Shu-Yu Kuo (1), Ya-Ling Tzeng (2) 1. School of Nursing, College of Nursing, Taipei Medical University, Taiwan; 2. School of Nursing, China Medical University, Taiwan

Objective: Little is known about the association between the course of depression and social support among pregnant women. Methods: A prospective study of childbearing women ($N=211$) was conducted. Depressive symptoms were assessed using the Edinburgh Postnatal Depression Scale at five time points from pregnancy through postpartum. Structured questionnaires on demographic features and social support were completed. Depression trajectories were identified by group-based trajectory modeling. Results: Three distinctive trajectories of depressive symptoms were identified: class 1 (low, 38.9%), class 2 (mild, 40.2%), and class 3 (high, 20.9%). Social support at baseline were significantly different among the trajectories classes ($p < 0.001$). Women classified as mild or high depression class showed a trend toward lower social support ($p < 0.001$) than those with low depression. Fewer women (2.4%) tend to seek professional help for their depression symptoms. Conclusion: Women had distinct depression trajectories before and after delivery. These depression courses were associated with social support.

P1741**Psychological symptoms of menopausal women in the state of madrid: a study of prevalence**

Cristina Larroy, José I Robles Universidad Complutense de Madrid, Spain

Anxiety and depression have been associated to menopause, but are not assessed with specific instruments. The aim of the study is to assess them with specific instruments, in order to confirm: (1) their prevalence; (2) if the instruments that are commonly being used to assess that symptomatology are really useful. 250 women of the state of Madrid fulfilled the following questionnaires: social demographic data interview, MENQUOL, HADS, MRS and Quality of Life for Women 45 to 64 Questionnaire (QLWQ). Data revealed that: a) Psychological symptoms related to menopause exist. Women scored significantly in both

anxiety and depression subscales of HADS (Anxiety: mean = 9.97; SD = 5.54; Depression: mean = 14.53; SD = 3.81). The percentage of women who scored higher than 8 (short-cut point for both subscales) was 50.4% of women in anxiety and 94.4% in depression b) The psychosocial subscales of MENQUOL, MRS and QLWQ correlates significantly with subscales of HADS

P1742**Posttraumatic Growth, Core Beliefs and Illness Perception: A Structural Equation Model with Women Diagnosed with Breast Cancer**

Isabel P Leal (1,2), Catarina B Ramos (1,2), Richard G Tedeschi (3) 1. ISPA-Instituto Universitário, Portugal; 2. William James Center of Reserach, Portugal; 3. University of North Carolina at Charlotte, Charlotte, NC, USA, United States of America

Objective: The current study tested a theoretical model of posttraumatic growth (PTG) with the inclusion of illness perception and distress disclosure. Method: Women diagnosed with non-metastatic breast cancer ($n=106$), mean age 55.16 years ($SD=10.02$) completed self-report questionnaires to assess PTG, stressfulness of the event, illness perception, core beliefs, rumination, and distress disclosure. Results: Structural Equation Modelling results indicated that the model fit the data well ($\chi^2(10)=10.29$; CFI = .99; NFI = .97; RMSEA [90% CI] = .02 [.00, .11]). As predicted, core beliefs challenge ($\beta = .49$), deliberate rumination ($\beta = .45$) and distress disclosure ($\beta = .041$) had significant indirect effects on PTG. Illness perception of breast cancer mediates the relationship between stressfulness of the event and core beliefs. Conclusions: Findings highlight the importance of core beliefs, illness perception and distress disclosure in the process of PTG, in aftermath of breast cancer.

P1743**Perceived Positive Consequences of a Successful Weight Loss. A Qualitative Study**

Isabel P Leal (1), Raquel Rosas (1), Filipa Pimenta (1,2) 1. ISPA-Instituto Universitário, Portugal; 2. William James Center of Research, Portugal

Introduction: Overweight and obesity have a negative impact on physical and psychological health. Being an important approach to health conditions improvement, a moderate weight loss provides several benefits. The present study aims to explore the perceived positive consequences of a successful weight loss. Method: Thirty men and women who achieved a successful weight loss (lost

at least 7% of the initial weight and maintained it for at least 12 months) were interviewed. The interviews were transcribed and analyzed through content and thematic analysis with a jury of psychologists. Results: Positive consequences included the improvement of body image and physiological indicators, decrease of physical fatigue, among others. A three factor model was created through multiple correspondence analysis. Discussion: The positive consequences include physical, emotional, psychological, relational and professional domains. Including both genders and using in-depth, audio-recorded interviews are advantages that emphasize the study's contributions. The retrospective analysis is considered a limitation.

P1744

Neurotic personality trait as a risk factor for anxious symptoms in pelagic fishermen

Yungsing Lee (1), Sailan Li (2) 1. Hainan Medical University, China; 2. Hainan Provincial Psychiatry Hospital, China

The aim of this study is to explore whether neurotic personality trait is a risk factor for anxious symptoms in pelagic fishermen. A sample of 905 pelagic fishermen finished the NEO five factor inventory-neuroticism subscale, the psychological stress questionnaire for seafarers, and the mood and anxiety symptoms questionnaire. Hierarchical regression analyses showed that neurotic personality trait strengthened the positive relation between environmental stress and anxiety symptoms ($\beta = 0.32$, $P < 0.01$). Pelagic fishermen with higher neurotic personality trait and higher environmental stress level were at an increased risk for the occurrence of severer anxious symptoms. Neurotic personality trait is a risk factor for anxious symptoms in pelagic fishermen. Psychological intervention for neurotic personality trait should be included in the pelagic fishermen anxiety disorder management strategies.

P1745

The Construction of Revised Version of Continuing Bond Scale: Consideration of Cultural Uniqueness

Wan-Lin Lee (1), Yaw-Sheng Lin (2) 1. National Chengchi University, Taiwan; 2. National Taiwan University, Taiwan

During the last decade, there is a revolutionary change in grief theory since the concept of "continuing bonds" has been challenged. Researchers indicated that the process of grief experience is to adjust rather than relinquish the continuing relationship with the deceased to establish transformative relationship after the death. The present study aimed at revising the continuing bond scale (Field, 2005) to improve cultural sensitivity and validity for

Taiwanese bereaved people. We reanalyze narratives of 10 bereaved spouses. Phenomenological approach of data analysis revealed two unique aspects of continuing bonds: (1) Symbolic continuing bonds: the deceased has become a virtual existence of god-like feature to protect the whole family. (2) Ethical bonds: the bereaved people re-cathexis the love and caring to other family members or other people. In the future we'll investigate the reliability and validity for this revised version of CB scale.

P1746

Relations between Life Events Stress on Suicidal Ideation in Chinese Adolescents: the Moderating Effect of Approach Coping Style

Dan Li, Shihong Liu, Junsheng Liu Shanghai Normal University, China

The present study tried to explore the relations between life events stress and suicidal ideation in Chinese adolescents, and the moderating effect of approach coping style using a one-year longitudinal design. The participants included adolescents in grade 6 to 8 from two schools in Shanghai ($N = 723$, 362 girls, 361 boys). They were asked to complete the self-reported questionnaires, and did above all again after one year. The Results showed that: (1) there were mutually predictive relations between life events stress and suicidal ideation during one year interval; (2) approach coping style had played a moderating role between life events stress ($T1$) and suicidal ideation ($T2$), had also played a moderating role between suicidal ideation ($T1$) and life events stress ($T2$); (3) Suicidal ideation and life events stress were stable during one year. The findings suggest that suicide prevention should be carried out by promoting approach-coping style, and suicidal ideation of adolescents need to be paid more attention.

P1747

Learn to rational attribution, harvest happy life? The Influence of Attribution Styles on Subject Well-being: The Mediating Effect of Psychological Capital

Bin Li, Ziwei Luo, Fangjun Li, Haiying Wei, Aimei Li Jinan University, China

To explore the relation among psychological capital (Psycap), attribution style, and subjective well-being (SWB) in China. Positive Psycap Questionnaire (PPQ), Attribution Style Scale, and Subjective Well-being Scale were administered to 402 participants from China. The results show that: (1) there were some significant differences in demographic; (2) attribution style is an excellent predictor of psychological capital; (3) moreover, psychological capital mediated the effect of attribution style and SWB.

P1748

Gender Differences in Relationships between Body-ideal and Body Change Strategies among University Students in China

Xiaoting Li, Ai Takamura, Yoko Yamazaki, Mika Omori Ochanomizu University, Japan

Body-ideal internalization has been thought to increase the risk for body change strategies (i.e. extreme dieting and physical exercises), by mediating body dissatisfaction. Many studies reported females' thin-ideal, but both thin-ideal and muscularity-ideal were found among Chinese males recently. In aim to examine the relationships among these two body-ideal, body dissatisfaction, and body change strategies, a survey with 255 universities students (108 males and 147 females) was conducted. Body-ideal internalization, body dissatisfaction, body change strategies, and eating attitudes were measured. Most females got significantly higher scores than males on thin and eating items, but males got higher scores on muscularity items. Results of path analyses showed that among both males and females, thin-ideal internalization had a positive direct effect on eating attitudes, as well as an indirect effect through body dissatisfaction. By contrast, only among males did muscularity-ideal internalization have a positive effect on strategies to increase muscle size.

P1749

An Experiment Study on Functional Strength Training on Promoting Adolescents' Mental Health

Ting Liao (1,2), Weitao Zheng (2), Yang Liu (3), Geng Du (1), Yunming Wang (1) 1. Wuhan Sports University, China; 2. Hubei Provincial Collaborative Innovation Center for Exercise and Health, China; 3. Physical Education College of Zhengzhou University, China

Functional strength training (FST), as a relatively novel form of specific training for fitness, provides a new solution for the maximal development of integrated function of physical health of adolescents physiologically and psychologically. The aim of this study was to determine the functions and effects of FST and traditional strength training (TRT) on middle school student's mental health. 269 students (13.55 ± 1.34 yrs) have involved in this study, and then were divided randomly into two groups (FST, $n = 134$; TRT, $n = 135$). KAP Questionnaire, MMHI-60, EFI and Social Adaptability Questionnaire were used to evaluate acceptance and effectiveness of FST. The results show that, after intervention, the number of self-esteem, self-confidence, mood and social adaptability of the experimental group have changed which are 6.81, 14.54, -5.10, 8.74, 8.63. Significant difference has existed among groups ($P < 0.05$).

Qualitative research also indicated that functional strength training is an effective way to improve students' mental health.

P1750

The relationship between brachial-ankle pulse wave velocity and depressive symptoms among patients with coronary artery disease

I-Mei Lin, Hsueh-Chen Lu Department of Psychology, Kaohsiung Medical University, Taiwan

Noninvasive brachial-ankle pulse wave velocity (baPWV) is an index for arterial stiffness in coronary artery disease (CAD). Depression was related to increased adverse cardiac events and mortality in CAD. The aim of this study was to investigate the relationship between arterial stiffness and depressive symptoms in CAD. Eighty-six patients with CAD were recruited. Demographic characteristics and Beck Depressive Inventory II scores were obtained, and resting baPWV was measured. The participants were divided into mild and severe arteriosclerosis groups according to baPWV values. After controlling for age and taking β -blocker, the result revealed a higher total score for depression, including somatic and cognitive symptoms of depression, in the severe arteriosclerosis group than in the mild arteriosclerosis group. A hierarchical regression analysis indicated that baPWV significantly predicted somatic symptoms of depression after controlling for CAD risk factors. This study supports that depression symptoms are related to arterial stiffness among patients with CAD.

P1751

Relationship between the Parental Feeding Practices and unhealthy diet and body weight among children; parent-child dyads. A longitudinal follow-up study

Natalia Liszewska (1), Urte Scholz (2), Theda Radtke (2), Aleksandra Luszczynska (1) 1. University of Social Sciences and Humanities, Poland; 2. University of Zurich, Switzerland

This study investigated the direction of the relationships between parental feeding practices and children's body mass/unhealthy diet indices. Participants were dyads of 526 children (6–11 years old) and 526 parents. Parental feeding practices (measured among parents) and children's diet and body mass (measured among children) were assessed twice, with a 6-month follow-up. Body mass was evaluated objectively among children and parents. Results of path analysis with cross-lagged model demonstrated that parental feeding practices are reactive with respect to children's body mass, i.e. parental feeding practices such as pressure to eat, permission for

unhealthy diet, restriction are applied after children develop overweight/obesity. In turn, children's unhealthy diet was a result of parental feeding practices such as pressure to eat, permission for unhealthy food.

P1752

The mediating role of children's perceptions of parental practices in the relationship between parent-reported feeding practices and children's body mass/diet. A longitudinal follow-up study

Natalia Liszewska, Aleksandra Luszczynska, Anna Gancarczyk, Karolina Horodyska University of Social Sciences and Humanities, Poland

This study investigated the mediating role of children's perceptions of parental practices in the relationship between parent-reported feeding practices and children's body mass/diet indices. Participants were dyads of 526 children (6–11 years old) and 526 parents. Parental feeding practices (measured among parents) and children's diet and body mass (measured among children) were assessed twice, with a 6-month follow-up. Body mass was evaluated objectively among children and parents. The results of mediation analysis demonstrated that the practices indicated by parents such as restriction, pressure to eat are predictors objective variables, while the children perception of parenting practices, i.e., forming environment of healthy food and unhealthy food, rewarding through eating, taking care of a healthy diet of a child are mediators in the relationship between child's healthy and unhealthy diet and parental feeding practices.

P1753

Individual Quality of Life of the patients in Long-term Care Facility

Fukuda Mari Ritsumeikan University, Japan

Purpose: The purpose of this study was to examine support for the improvement of Individual Quality of Life (iQOL) of participants who lived in the long-term care facility. Particularly, I will investigate the general iQOL of the participants who included a social life as well as a medical nursing care. Design: In a semi-structure interview style, 10 participants with muscular dystrophy who live in a National Hospital in Japan, were asked to complete the "SEIQOL-DW Japanese version". Result and Conclusion: Their iQOLs and narratives were analyzed by focusing on the relation between the levels and the relative importance of them. As a result, their iQOL constructed of not only the effective treatment and nursing care, but also the social activity and the living environment. Those associated

to keep participant's autonomy. This study suggest the support strategy for participants who have environmentally-constrained lives.

P1754

Relationship between decisional balance for stress management behavior and subjective well-being in Japanese, Chinese, and Korean college students

Terumi Matsuda (1), Akira Tsuda (1), Euiyeon Kim (2), Ke Deng (1) 1. KURUME UNIVERSITY, Japan; 2. INHA UNIVERSITY, Republic of Korea

Subjective well-being (SWB) refers to how people experience the quality of lives which includes positive and negative affect and cognitive appraisal of life satisfaction. Stress management behavior practice improves SWB. Decisional balance (between pros and cons) is assumed to mediate behavioral change for effective stress management. However, the role and association between decisional balance and SWB is unclear. Interactions were examined between decisional balance and SWB in Japanese, Chinese, and Korean college students because SWB has culture differences. The result shows that pros are associated with positive affect while cons with negative affect. Decisional balance indirectly affects life satisfaction of Chinese and Korean students and directly or indirectly affects life satisfaction of Japanese students. The relationship between decisional balance and SWB has the same emotional effects while it has different cognitive effects in three groups. Increasing the pros and decreasing the cons is important to improve SWB.

P1755

Development of the KIT version of the PERMA-Profilier (2): results of item analysis

Kei Matsumoto, Toru Shiotani, Kaori Matsumoto, Fumino Yamakami, Ooya Sumiko, Masaki Ishimaru, Tomoko Muraoka, Tomomitsu Kagami Kanazawa Institute of Technology, Japan

To evaluate college students' well-being multi-dimensionally, we adapted the PERMA-Profilier (Butler & Kern, 2015) into Japanese, and added three original items. The KIT (Kanazawa Institute of Technology) version of the PERMA-Profilier was administered to 1332 college students. Evaluating based on "reliability" showed that measurement to be applicable to Japanese in all the domains as a scale of measure (Shiotani et al., 2015). However, the analysis on the item level was insufficient. The present report shows the item-total correlations in all domains of the measure. Almost all items of all domains except "Relationship" had moderately acceptable values ($r = .32 - .60$). All three items included in "Relationship"

showed relatively low values ($r = .29 - .34$). We will discuss the results from the cultural point of view and adaptability to the Japanese population.

P1756

Mental state of and support for Fukushima evacuees from the perspective of health psychology

Osamu Matsumura *Waseda University, Research Institute for Letters, Arts and Sciences, Japan*

Mental recovery is considered the most important issue in supporting Fukushima evacuees after the nuclear power plant accident. Most local governments where Fukushima evacuees now live have focused on their "mental care." However, these efforts are inadequate for two reasons. First, mental care from the perspective of clinical psychology applies only to a small portion of evacuees. Second, the effectiveness of this approach is limited because evacuees tend to refuse meeting with people they do not know. A questionnaire survey was conducted to address the subjective well-being of evacuees who live in Yamagata City, which is located next to Fukushima. The survey revealed their state of well-being, and provided insight into strategies to enhance their well-being by changing their lifestyle. This study takes a health psychology approach aimed at self-recovery by changing the lifestyle of evacuees.

P1757

The effect of engaging in hobbies on resilience in individuals with visual impairments

Kumiko Matsunaka (1), Kimiko Wazumi (2) *1. Kansai University of Welfare Sciences, Japan; 2. Nippon Lighthouse Welfare Center for The Blind, Japan*

The interview was given to 110 adults (58 men, 52 women) with visual impairment in order to investigate the effect of leisure activities on resilience as well as other points. Their mean age was 51.9 (SD = 16.6). The content of hobbies as leisure activities was asked and each participant's favorite was selected. The participants were divided into three groups: output type, input type, and no hobbies according to the answers. The output type included doing sports, playing instruments or making something. The input type included watching sports, listening to music, or reading. The levels of resilience were compared among those groups. The results showed that the output type group has the highest resilience of the three. There was no difference in walking or communication skills, but the output type showed higher supports score than those with no hobbies.

P1758

Reality shock experienced by

nursery teachers part I: Revealing aspects of reality shock experienced by nursery teachers employed less than one year by interviews

Miharu Matsuura (1), Reiko Kamiji (1), Jun Mihagawa (2) *1. Sanyo Gakuen University, Japan; 2. Sanyo Gakuen College, Japan*

In Japan, there is a problem of lack of nursery teachers. One of the conceivable reasons is early turnover caused by reality shock. Reality shock is caused by large gaps between their expectations before employment and their experiences on actual job, and it causes various stress reactions. Reality shock felt by Japanese professional person had been researched mainly about nurses. However, few research about the nursery teacher exists. So we intended to reveal various aspects of reality shock experienced by nursery teachers. We interviewed 8 members of the nursery teachers who were employed less than one year. We carried out the following procedures: Creating verbatim records from participant's remarks, separation of contents from verbatim records, and classification of separated contents from the aspects of reality shock.

P1759

Reality shock experienced by nursery teachers part III: Comparative study of reality shock experienced by nursery teachers employed 1–4 years

Jun Minagawa (1), Miharu Matsuura (2), Reiko Kamiji (2) *1. Sanyo Gakuen College, Japan; 2. Sanyo Gakuen University, Japan*

In Japan, there is a problem of lack of nursery teachers. One of the conceivable reasons is early turnover caused by reality shock. Reality shock is caused by large gaps between their expectations before employment and their experiences on actual job, and it causes various stress reactions. We intended to compare the aspects of reality shock experienced by nursery teachers who were employed one year and experienced by nursery teachers employed 2–4 years.

P1760

Relation between features of the problem-solving and depressive symptoms in Japanese school-aged children

Koji Minosaki (1), Hironori Shimada (2) *1. Graduate School of Human Sciences, Waseda University, Japan; 2. Faculty of Human Sciences, Waseda University, Japan*

Aim: In stressful situation, various problem-solving strategies affect psychological stress responses such as depressive symptoms. However, there is no evidence

what kind of problem-solving strategy alleviates or exacerbates depressive symptoms in Japanese school-aged children. Thus, this study aims to examine what kind of problem-solving strategy affects depressive symptoms. **Method:** Participants: One hundred and fifty seven 6th-grade children (82 males; mean age 11.25, SD = 0.45) participated in this investigation. They answered the Depression Self-Rating Scale for Children (Birlleson, 1981), and thought of problem-solving strategies for fictitious scenario situation ("A friend who was playing together went back home angrily"). **Results:** Problem-solving strategies fell into six categories. As a result of the ANOVA, the depressive symptoms score of the children who selected "receive advices" was higher than the children who selected "leave it as is". These results suggested that indirect problem-solving strategy such as "receive advices" exacerbates depressive symptoms.

P1761

Effect of exercise with others on SOC among community-dwelling older adults

Takafumi Monma (1,2), Kaori Kishi (1), Sakiko Ozawa (1), Fumi Takeda (1) *1. University of Tsukuba, Japan; 2. The Japan Society for the Promotion of Science, Japan*

[Aim] Sense of coherence (SOC) has been known for contributions to resisting stress and promoting health. Previous studies suggested that exercise would enhance SOC among community-dwelling older adults. However, it is still unclear that how exercising with others impacts on SOC. This study investigated effects of exercise with others on SOC among community-dwelling older adults. **[Methods]** The questionnaire survey was conducted with 280 community-dwelling older adults living in Kasama, Ibaraki Prefecture, Japan; 183 individuals who completed questionnaires were included in the analysis. A multiple linear regression analysis was performed by gender, using SOC as the dependent variable, and exercise ("alone" or "with others") as the independent variable. Covariates included demographics (sex, age, years of education, living arrangement, and clinical histories) and social network. **[Results]** In women, "exercise with others" was positively associated with SOC ($\beta = 0.295$, $p < 0.05$). **[Conclusion]** Exercise with others would be effective for enhancing SOC among community-dwelling older women.

P1762

Depression among Human Care Service Professionals and Positive/Negative Work Life Events:

Data pertaining to Six Types of Human Care Service Professionals
Hirumichi Morimoto (1), Masahumi Inada (2), Shinya Takigawa (2), Yuko Kuroda (1), Hisao Osada (3) 1. *Kawasaki College of Allied Health Professions, Japan*; 2. *Kawasaki University of Medical Welfare, Japan*; 3. *J.F. Oberlin University, Japan*

This study aimed to analyze the relationship between depression among human care service professionals and positive/negative work life events (PWLEs/NWLEs). PWLEs refer to work life episodes that are positively correlated with positive feelings experienced by human care service professionals at the workplace. Similarly, NWLEs refer to work life episodes that are positively correlated with negative feelings experienced by human care service professionals at the workplace. With the understanding that depression is constituted by low positive affect and high negative affect, we analyzed the relationship between depression and PWLEs/NWLEs. We conducted surveys in 2014 and 2015 on human care service professionals representing six types of care. These six categories of individuals were nurses, certified care workers, nursery teachers, elementary school teachers, physical therapists, and occupational therapists. Data showed a high tendency of depression among human care service professionals who experience high frequency of NWLEs and/or low frequency of PWLEs.

P1763
The cognitive factors of motivation in Japanese worker's resilient behavior

Kensuke Nakajima *Obirin University, Japan*

Objective: Most Japanese workers are forced to develop their working skills in order to perform effectively under stressful working conditions. It is said resilient behavior must be the factor to continue their work. The purpose of this study was to find the cognitive factors which motivate Japanese worker's resilient behavior. This study focused on the sense of authenticity and the perceived relationship with intimate persons. Method: The participants were Japanese workers who had worked for four years or more, age under 39 years old. Four questionnaires were used in this study: the sense of authenticity scale (Ito and Kodama, 2005), the individual identity and the relationship scale (Yamada and Okamoto, 2008), and the resilience scale (Iseki and Nakamura, 2008). Result: 100 workers answered (male:49, female:51, age average :33.5). It was found that resilient behavior was influenced by the sense of authenticity and the perceived relationship with intimate persons.

P1764
Self-complexity without insight does not associate to decreased depression

Miho Nakajima, Yoshihiko Tanno *Graduate School of Art and Sciences, University of Tokyo, Japan*

Self-complexity is an index which represents the complexity of self-concept. It is defined by two factors: the number of self-aspects in the self-concept and the degree of differentiation between each self-aspects. Higher self-complexity is assumed to reduce the risk of depression. However, not all the empirical studies supported the idea. We hypothesized that insight decide the direction of the association between self-complexity and depression, which is subjective sense of clear self-understanding. Although higher self-complexity with higher insight would associate to decreased depression, higher self-complexity with lower insight would represent disorganized nature of self-concept and associate to increased depression. One hundred and twenty-two undergraduate students answered a packet of questionnaire. The Result of ANOVA showed that self-complexity associates to decreased depression only in the individuals with higher insight. The present result indicated that self-complexity requires insight to contribute to decreased depression.

P1765
The influence of interpersonal stressors in extracurricular activities on mental health: the role of expressing emotions for university students with high over-adaptation tendencies

Chiyuki Nakaoka *Tsukuba University, Japan*

Attendance in extracurricular activities have positive effects on the development of technical knowledge and skills required to those activities, interpersonal skills, sociality and leadership that promotes human growth. Attendance in extracurricular activities also have negative effects on mental health, depending on the type of motive, attitudes toward activities. University students (N=129) completed a self-report questionnaire that aimed to discover (a) whether interpersonal stressors in extracurricular activities had a negative influence on psychological well-being of high over-adaptive students, and (b) whether the association between interpersonal stressors and psychological well-being differed, depending on over-adaptation tendencies and expressing emotions. The results indicated that over-adaptation was significantly and negatively associated with psychological well-being, and over-adaptation was positively associated with depression. Furthermore, non-over-adaptive students reported a greater psychological well-being response than high

over-adaptive students, and high-over-adaptive students with expressing emotions reported a greater psychological well-being response than high-over-adaptive students with suppressing emotions.

P1766
Qualitative evaluation of a couple-based cognitive-behavioral intervention on postnatal depression

Fei Wan Ngai *The Hong Kong Polytechnic University, Hong Kong*

Background: Postnatal depression is a significant public health problem which has long-term sequelae on the family. Cognitive behavioral therapy (CBT) is an effective intervention for postnatal depression. There is limited qualitative evaluation of the impacts of couple-based CBT during the perinatal period. Objectives: The purpose of this study was to explore Chinese mothers' perceptions of a couple-based CBT at early postpartum. Methods: This study used an exploratory qualitative design. A purposeful sample of 30 first-time Chinese mothers who had participated in a couple-based CBT was interviewed at 6 weeks postpartum. Content analysis was used to analyze the data. Results: The results revealed that Chinese mothers perceived the couple-based CBT to be helpful in enhancing their emotional control, increasing sense of support and well-being in taking up the maternal role. Conclusions: The findings provide empirical support for the feasibility of couple-based CBT in facilitating maternal adaptation during the transition to parenthood.

P1767
Need for cognition promotes adaptive self-focusing with the mediation of effortful control

Yuki Nishiguchi, Masaki Mori, Yoshihiko Tanno *The University of Tokyo, Japan*

Need for cognition (NfC) is a personality trait which is related to individuals' motivation to enjoy effortful cognitive activity. Previous studies have not investigated the effect of NfC on mental adaptation, however, it is possible that higher need for cognition leads to mental adaptation through promotion of adaptive self-focusing. There are two types of self-focusing style: one is self-rumination, which is a repetitive thinking of negative contents and the other is self-reflection which promotes cognitive reappraisal. It was hypothesized that NfC promotes adaptive self-focusing by decreasing self-rumination and increasing self-reflection. In the present study, we found that NfC directly increased self-reflection and NfC indirectly decreased self-rumination through the mediation of attentional control.

P1768

Efficacy of expressive writing on rumination in community-dwelling older Japanese

Susumu Ogawa (1), Hiroyuki Suzuki (2), Masashi Yasunaga (2), Yoshinori Fujiwara (2) 1. Graduate School of Letters, Chuo University, Japan; 2. Tokyo Metropolitan Institute Of Gerontology, Japan

Writing about stressful or negative events is beneficial to physical and psychological health. In this paradigm known as expressive writing, participants are asked to write about fact and thoughts concerning their events for 15–20 minutes each day during 3–5 days. Although many researchers have targeted undergraduates for 30 years, we should develop this treatment for diverse participants. The present study examined the effectiveness of expressive writing for healthy older Japanese. Participants were 75 community-dwelling elderly people ($M = 72.0$, $SD = 5.0$) from Toshima City in Japan. We used the Negative Rumination Scale (NRS) as a psychological outcome. NRS has two factors: Negative Rumination Trait (NRT) and Uncontrollability of Negative Rumination (UNR). The results showed that participants in the expressive writing group had lower NRT score than participants in the control group. This study implies that expressive writing is effective for healthy older Japanese.

P1769

Desirable Degree of Self-Participation to the Content and Method Determination of Medical Services in the Japanese Young, Middle-age and Elderly groups

Hiroki Okuda *Kinjo University, Japan*

The purpose of this research is to examine the desirable degree of self-participation for ordinary people in determining the contents and the methods of medical services from medical service workers. 150 participants were divided into the young, middle-aged and elderly groups. Informed consent was obtained from all the participants. 36 evaluation items were divided into three groups according to the participation level of patients in the determination of the contents and the methods of medical services. These groups are called low, medium, and high degree self-participation item (DSPI) groups. The participants were asked to assume three cases of mild, moderate and serious illnesses or injuries. The participants were asked to evaluate the degree of desirability of each item in all the three cases. An ANOVA revealed significant main effects for case and for DSPI group as well as significant interaction between age group and case, age group and DSPI group.

P1770

Estimating the effects of psychological stress on postural balance by using the Trier Social Stress Test

Wataru Onoguchi (1), Yasuyuki Fukukawa (2) 1. Graduate School of Letters, Arts and Sciences, Waseda University, Japan; 2. Waseda University, Japan

Previous studies have revealed the effect of stress on human behaviors, cognitions, and emotions, by assessing the changes of psychological (e.g. state anxiety, negative mood states) and physiological (e.g. heart rate, neuro-endocrine markers) measures between pre- and post-stress. Postural balance is another physical measure, which has been suggested to be affected by physiological stress, however, little is known whether it is also affected by psychological stress. The purpose of this study was to examine the effect of psychological stress on postural balance under the strict control of various modifying factors, by using the Trier Social Stress Test (Kirschbaum et al., 1993), a standardized protocol inducing psychological stress. We used state anxiety as psychological measure, and assessed heart rate and salivary amylase as physiological measures besides postural balance. The results of the study using undergraduate students as participants are presented and discussed in detail.

P1771

The effect of altruistic behavior on happiness is modulated by relationship with the recipients

Takahiro Osumi (1), Takashi Yamane (2) 1. Hiroshima Shudo University, Japan; 2. Hiroshima University, Japan

Previous studies have supported the idea that altruism is an element to enhance health and subjective happiness. Adaptation through social interactions may increase positive events. It is important to note that, in theory, the adaptive role of altruistic behaviors in the evolutionary course differs depending on recipients: kin-selection and reciprocity underlie altruistic behaviors toward family members and the others, respectively. Therefore, in the present study, we aimed to examine whether the putative effect of altruistic acts on happiness would be modulated by relationship with the recipients. To this end, we conducted a survey using self-report scales regarding subjective happiness and daily altruistic acts toward family members, friends or strangers. Results indicated that participants with high frequencies in altruistic behaviors toward friends and strangers scored high on subjective happiness. The findings suggest that a lifestyle based on direct and indirect reciprocal interactions is likely to bring about a feeling of happiness.

P1772

Journeying through weight management: Case studies of young women with weight issues

Maria Gloria Isabel R Paredes *Ateneo de Manila University, Philippines*

This study aims to understand the phenomenon of weight management through the subjective experiences of young Filipina women. It attempts to identify the common emotional phases and turning points encountered through weight management and describes how internal and external resources contributed to goal weight attainment. Six (6) Filipino women were purposively selected for this study. A multi-case study method was used and a thematic analysis processed all information derived from various sources. The results of this study revealed that the individual journey begins long before the weight management program itself with a strong influence from their families. Unique social pressures and Filipino concepts came into play, contributing to the way Filipino women have come to value themselves and their ideas of weight loss. Results also showed that self-awareness and a sense of identity are requisites to change, and that self-compassion is key to continued growth and better health management.

P1773

Alcohol consumption, coping and social support in university club members

Jörg Richter (1), Sarah Allen (2)

1. University of Hull, UK, United Kingdom;

2. University of Liverpool, United Kingdom

The present study investigated factors, which may impact alcohol consumption in university students while comparing members of sport societies with non-sport societies. 140 students from the University of Hull recruited from non-sport societies and sport societies have been investigated by the AUDIT (alcohol consumption), the SSQ6 (social support), perceived normative pressure, alcohol-related harassment, and Ways of Coping. There was no significant difference in alcohol consumption between members of sport and non-sport societies, suggesting that previously reported relationships between sport and alcohol consumption is more complex. Higher alcohol consumption in UK university students was significantly related to membership of team societies, single-gender societies, sponsorship from the alcohol-industry, participation in sport not affiliated with the university, participation in competitions, alcohol-related harassment, perceived normative pressure and lower age. However, there was no significant difference in alcohol consumption between males and females, which suggests that the gender difference in drinking levels may be disappearing.

P1774

The Influence of avoidance cognition on self-care behaviors and satisfaction in type 2 diabetes patients
Miho Sasaki (1), Mariko Miyao (2), Tomoko Okuyama (2), Michiko Nanao (2), Masaya Koshizaka (2), Ko Ishikawa (2), Akira Sata (2), Yuzo Mizuno (2), Hiroaki Kumano (3), Shin-Ichi Suzuki (3)
 1. Hijiya University, Japan; 2. Kanto Central Hospital, Japan; 3. Waseda University, Japan

Introduction: This study investigates the influence of avoidance cognition on self-care behaviors and satisfaction in type 2 diabetes patients. **Method:** Fifty-five outpatients with type 2 diabetes were recruited from a hospital in Tokyo. The measures used in this study were (1) Acceptance and Action Diabetes Questionnaire, (2) The Summary of Diabetes Self-Care Activities Measure, (3) Diabetes Treatment Satisfaction Questionnaire. **Results:** Patient demographic characteristics are as follows: men $N=38$, women $N=17$, insulin therapy patients $N=31$, and HbA1c level was $=7.01\% \pm 0.79\%$. Hierarchical multiple regression analyses showed that avoidance cognition affected diet therapy as a component of diabetes self-care behaviors ($\beta = -.36, p < .01$). However, satisfaction of diabetes treatment did not significantly affect. ($\beta = -.04, n.s.$) **Discussion:** It is effective in order that the intervention which changes the avoidance cognition to diabetes medical treatment may raise the adherence of a patient's dietary therapy.

P1775

Longitudinal Survey of Sense of Coherence (SOC) Scores: Comparison of First and Third Year Japanese University Students
Eri Sasaki (1), Ryo Horita (2,3), Akihiro Nishio (2,3), Yuki Isomura (2), Mayumi Yamamoto (2,3,4)
 1. Department of Cultural Development, Gifu Women's University, Japan; 2. Health Administration Center, Gifu University, Japan; 3. Gifu University Hospital, Japan; 4. United Graduate School of Drug Discovery and Medical Information Sciences, Gifu University, Japan

[Introduction] To evaluate the stability and usefulness of Sense of Coherence (SOC) which is a concept of salutogenesis, changes in SOC scores of Japanese university students were examined. [Methods] A general health questionnaire and SOC were conducted at first and third year. After exclusion of uncompleted data, 180 subjects were analyzed. [Results] Average total score in the third year was significantly higher in students who lived with their family than those who lived alone. Apart from comprehensibility, total score, manageability, and meaningfulness in SOC significantly declined from the first to third year.

Increased, stable, and decreased SOC total score from first to third year students were analyzed. It was revealed that the faculty of students significantly influenced SOC, while their gender, K10 score, and living status did not. [Conclusion] SOC might not be stable in university students and they may be affected by their specialty and living status.

P1776

The relationship among affiliation motives, over-adaptation, and life satisfaction

Yuka Sekiguchi Seitoku University, Japan
 This study examined the relationship among affiliation motives (sensitivity to rejection and affiliation tendency), over-adaptation and life satisfaction. Over-adaptation contains the low internal (self-inhibitive personality traits) and high external (other-directed behavioral adaptation strategies) over-adaptation. The investigation was administered to 271 female students. The SEM showed that strong positive paths from the affiliation tendency and negative paths from internal over-adaptation to life satisfaction were observed. The results of the cluster analysis indicated that the four distinct clusters, the highest over-adaptation cluster was the lowest life satisfaction of any other clusters. From the results of this study, low internal over-adaptation associated with high life satisfaction. The high external over-adaptation did not exhibit a clear relation to the life satisfaction. It might be effective for those with problems concerning over-adaptation and life satisfaction, to improve their affiliation tendency, and to be dealt with their sensitivity to rejection and internal over-adaptation.

P1777

Mental Health Disorders in School Age Children with epilepsy
Farshid Shamsaei, Fatemeh Cheraghi
Behavioral disorders and substance abuse research center, Hamadan University of Medical sciences, Hamadan, Iran

Aim: this study was to compare mental health disorders in children with and without epilepsy. **Method:** In this case control study following 120 children aged 6 to 12 years with idiopathic epilepsy and 240 healthy controls. Children with epilepsy were recruited from Iranian epilepsy association in 2014. The parent version of Child Symptom Inventory-4 questionnaire was used to measure mental health disorders. Mean comparisons were performed using Student's t test. **Results:** There were statistically significant differences between children with epilepsy and healthy controls group on attention deficit hyperactivity disorder, generalized anxiety disorder, major depression, separation anxiety ($p < 0.001$), social phobia, motor and vocal tics and oppositional defiant disorder ($p < 0.05$). Children with epilepsy are

at high risk for psychiatric disorders. **Conclusions:** These findings support that the carefully evaluating and prospectively following the psychopathology of children with epilepsy are critical for early identification and treatment.

P1778

Having a furry friend: The benefits of pet-keeping behavior
Zhuozhuo Shen (1,2), Yick Ku, Vivienne Dr. Tao (3), Brian J. Hall (2,3,4)
 1. University of Macau, Macao; 2. Global and Community Mental Health Research Group, Faculty of Social Sciences, Department of Psychology, University of Macau, Macao; 3. Department of Psychology, Faculty of Social Sciences (FSS), University of Macau, Macao, People's Republic of China, Macao; 4. Johns Hopkins Bloomberg School of Public Health, Department of Health, Behavior and Society, Baltimore, MD, USA, United States of America

Interacting with pets positively influences mental health (e.g., emotion, life satisfaction, empathy) and behavior (e.g., helping behavior). This study investigated the purported benefits of pet ownership and the possible variables which may be associated with those benefits. Participants ($N=506$) were Chinese citizens recruited from the internet by using snowball sampling. Two groups were compared: pet owners: $n=366$; non-pet owners: $n=140$. The results showed that level of pet attachment was positively correlated with loneliness, empathy, helping behavior, and life satisfaction while it was negatively correlated with interpersonal sensitivity. Path analysis was used to test mediation. Pet attachment was positively associated with life satisfaction, which was mediated by helping behavior and interpersonal sensitivity. Pet owners are more attached to pets and show more helping behavior towards animals than non-pet owners. Dog and/or cat owners reported higher attachment levels than other pet owners. **Keywords:** pet ownership, mental health benefits, pet attachment, helping behavior

P1779

Association among Dietary Patterns, Unidentified Complaints, Self-reported Stress, and Subjective Happiness in College Students
Eri Shiba Kochi University, Japan

The current study investigates whether dietary intake associates self-perceived health status by focusing on unidentified complaints, self-reported stress, and subjective happiness in Japanese college students. Self-reported questionnaire was conducted. A cross-sectional survey data ($N=496$) revealed that the respondents' stages of change for healthy dietary behavior had negative associations with self-reported unidentified complaints and stress, while had a positive

association with subjective level of happiness. Additionally, I found that there was a positive association between dairy intake and dietary adequacy. Adequate calcium intake affects not only the total dietary adequacy of individuals but also self-perceived health status in a positive way. Implications of these findings may be useful for developing food and nutrition education program and improving health condition.

P1780

Examining factors affecting life satisfaction and psychological well-being: Effects of parenting attitude and individual character traits

Akihito Sonoda *University of Shizuoka, Japan*

In this research, factors that influence life satisfaction and psychological well-being in college students and general adults were investigated. Participants responded to questions regarding their parents' child-rearing attitudes. They were asked to focus on one important parent but to answer the questions from their own personal perspective. We also examined the following individual traits: optimism, sense of authenticity, and self-esteem. Results indicated that, in the case of male participants, a parent's "respect for individual action within the defined limits" increased participants' optimism and sense of authenticity. These two traits also increased life satisfaction and psychological well-being. In the case of female participants, the parents' child-rearing attitude did not influence individual traits; however, both a sense of authenticity and optimism increased life satisfaction and psychological well-being. Although parents' child-rearing attitudes only influenced men's individual traits, a further analysis of these relationships using each parent will be needed.

P1781

Unaccompanied Asylum-Seeking Refugee Children's Forced Repatriation: Social Workers' and Police Officers' Health and Job Characteristics

Johanna Sundqvist (1,2), Jonas Hansson (1,2), Mehdi Ghazinour (1,3), Kenneth Ögren (3), Mojgan Padyab (3)
 1. Umeå University, Basic Training Programme for Police Officers, Sweden; 2. Umeå University, Department of Public Health and Clinical Medicine, Epidemiology and Global Health Unit, Sweden; 3. Umeå University, Department of Social Work, Sweden

The number of unaccompanied asylum-seeking refugee children has dramatically increased in Sweden. Some of them are not permitted to stay and are forced back to their country of origin. Social workers and

police officers are involved in these forced repatriations, and such complex situations may cause stressful working conditions. This study focus on the association between job characteristics and general mental health among those social workers and police officers working with unaccompanied asylum-seeking refugee children who are due for forced repatriation. A questionnaire including sociodemographic characteristics, the Swedish DCQ, and GHQ-12 were distributed nationally. Univariate and multivariable regression models were used. Poorer mental health was associated with working with unaccompanied asylum-seeking refugee children among social workers but not among police officers. Psychological job demand was a significant predictor for general mental health among social workers, while psychological job demand, decision latitude, and marital status were predictors among police officers.

P1782

Promoting symmetry of the human body by Eastern medicinal approach - A psychophysical study using head-turning tasks - Ryoko Takikawa, Yasutomu Ishii *Waseda University, Japan*

From the viewpoints of Eastern medicine, curing asymmetry of the human body will improve the psychophysical health. The way of curing has already been systematized just empirically, but there is not a perfect quantitative data to explain the methods. We examined the relationship between Largest Lyapunov Exponent (LLE) of pulse waves and the recovery of symmetry of the head by using head-turning tasks by the Japanese methods called Sotai-ho, which is the exercise program to recover antagonistic movement balance. The results showed that LLE for the post-task condition was significantly lower for the symmetric-recovery group over the unrecovered group. In this case of recovered group, by using slow motions as turning the head, awareness turning to physical sensation against the outside environment, tension levels of muscular system and mood state decreasing, which would have provided the recovery of the range of motion of the head and the decrease of LLE.

P1783

Effects of past memories of taking meals on attitudes towards having breakfast **Shujiro Tani, Sanae Aoki** *University of Tsukuba, Japan*

Effects of past memories of taking meals on attitudes towards having breakfast were investigated. University students (N=230, 86 men and 144 women) completed questionnaires assessing past memories of taking meals, centrifugal-centripetal family systems in memories of taking meals, and attitudes towards

breakfast consumption. Results of multiple regression analysis based on gender suggested the following. "Concerns about preparing meals" in both men and women affected the attitude that taking breakfast is important. Moreover, men that believed preparing their own breakfast was under their control were affected by "mutual communication at the dinner table", whereas women that believed the same were affected by "discipline of manners." Finally, the possibility that experiences of "Shokuiku" effected attitudes towards breakfast consumption through social support is discussed.

P1784

The hospice nurses experiences of caring the terminally ill patients self-perceived burden: a hermeneutics perspective

Wenchang Teng *Chung Yuan Christian University, Taiwan*

Purpose. In Chinese culture, caring is the task of family. When the patients felt self-perceived burden (SPB), it may influence the family and the nurses' caring task. This research is to investigate the caring experience of hospice nurse while the terminally ill patients suffered the SPB. Method. Based on the hermeneutics perspective, semi-structure interview was used to gather the experiences of 4 hospice nurses. These interviews were analyzed by hermeneutics strategies. Results. The themes about the hospice nurses' inner and coping experiences of caring SPB are "the caring triggers nurses' emotional experiences", "the caring strategies were based on nurses' personal experiences", "nurses are active in learning". And the themes of the relation between the hospice nurses and SPB are "the broken and struggle of the professional roles and the self", "the conflict and balance", and "the deeply nursing companion based the infusion of the professional roles and the self".

P1785

Respiratory Sensations and Psychophysiological Relaxation

Kensuke Terai (1), Akio Umezawa (2)
 1. Fukui Red Cross Hospital, Japan; 2. Fukui Study Center, the Open University of Japan, Japan

Although self-controlled breathing is a widely used relaxation technique, little is known about the role of respiratory sensations in breathing relaxation. We conducted two experiments to investigate the effects of sensations related to comfort and difficulty breathing during relaxation. In Experiment 1, 10 participants were asked to progressively slow their breathing from 12 to 2 cycles/min (cpm) and to evaluate subjective comfort. Results of respiratory measures showed that gas-exchange efficiency estimated by VE/VO₂ improved under 2 cpm, whereas subjective comfort and performance of the breathing maneuver dropped markedly

during 2cpm. In Experiment 2, 200 participants completed subjective ratings related to calm/difficulty breathing from 20 through 2cpm. The data indicate that each participant has a critical respiratory rate with high comfort and low suffocation, with comfort decreasing and suffocation increasing above or below this rate. These results suggest that breathing relaxation is determined primarily by respiratory sensations.

P1786

Religiosity and Healthy Lifestyle Behaviours in Malaysian Muslims: The Mediating Role of Subjective Well-Being and Self-Regulation

Swan Ee Tey, Karen Jennifer Golden, Miriam Sang-Ah Park Monash University Malaysia Campus, Malaysia

Healthy lifestyle behaviours studies were primarily conducted within Western or Judeo-Christian contexts, while non-Western or Muslim contexts remain underrepresented. This study examines the predictors of healthy lifestyle behaviours in Malaysian Muslims, and explores the mechanisms underlying the relationship between religiosity and healthy lifestyle behaviours. Responses from 183 healthy adults (Mage = 28.63 years, SDage = 8.90 years) who completed the Moslem Attitude Towards Religiosity Scale, Short Self-Regulation Questionnaire, Flourishing Scale, and Health Promotion Lifestyle Profile-II, were analysed using regression and multiple mediation analyses. Results indicated that religiosity became a non-significant predictor of healthy lifestyle behaviours after subjective well-being and self-regulation (impulse control and goal-setting) were added to the regression model. While impulse control also appeared as a non-significant predictor, subjective well-being emerged as the strongest predictor followed by goal-setting. Furthermore, subjective well-being and goal-setting mediated the relationship between religiosity and healthy lifestyle behaviours. Findings provide guidance for future health-promoting interventions.

P1787

The conjoint effect of adaptive and maladaptive coping strategies in colon cancer patients in Taiwan

Yu-Han Tseng (1), Wen-Yaw Hsu (2), Yuan-Yu Chiang (3), Wei-Ting Wang (4) 1. Soochow University, Taiwan; 2. National Chengchi University, Taiwan; 3. Tzu Chi University, Taiwan; 4. National Chengchi University, Taiwan

This study examined the conjoint effect of adaptive and maladaptive coping strategies on psychological distress in colon cancer patients in Taiwan. Seventy four colon cancer patients, mean age 49.95 years (SD = 10.80), were recruited. The Brief COPE Scale,

Ruminative-Reflection Questionnaire (RRQ), and Hospital Anxiety and Depression Scale (HADS) were assessed at 3-month and 6-month post-surgery. Cross-sectionally, we found that adaptive coping strategies (including acceptance, positive reframing) can predict depressive symptoms alone and in interaction with maladaptive coping strategies (including behavioral disengagement, denial, suppression, and brooding): when at high levels of maladaptive coping strategies, adaptive coping strategies could alleviate depressive symptoms more strongly. Furthermore, adaptive coping strategies (but not maladaptive coping strategies or interaction) showed prospective relationship to depressive symptoms. These findings can be interpreted from the views of post-traumatic growth and cultural difference.

P1788

Rumination, psychological distress and post-traumatic growth in colon cancer patients

Pei-Chiung Tu Fo-Guang University, Department of Psychology, Taiwan

This study examined the effects of brooding and reflection subtypes of rumination on psychological distress and post-traumatic growth (PTG) in the colon cancer context. 70 newly diagnosed colon cancer patients, mean age 48.42 years (SD = 10.95), were recruited. The Ruminative Response Scale (RRS), Hospital anxiety and Depression Scale (HADS), Post-traumatic Growth Inventory (PTGI) were assessed at 6-month and 1-year post-surgery. Hierarchical regression analyses indicated that age, gender and brooding at 6-month post-surgery interacted to predict increase in depression over time, whereas age, gender and reflection at 6-month post-surgery interacted to predict change in depression and PTG during the 6-month follow-up interval. This finding supported the differential impacts of brooding and reflection subtypes of rumination on both positive and negative psychological responses of people diagnosed with colon cancer. They may serve as potential therapeutic leverages in the alleviation of depressive symptoms and facilitation of PTG following cancer diagnosis and treatments.

P1789

Effectiveness of PACAP and USDT for Population Approach to the Primary Prevention of Child Abuse: A better screening by eliminating false positives and false negatives

Reiko Ueda (1), Junko Miyazawa (2) 1. Okinawa Prefectural College of Nursing, Japan; 2. Josai International University, Japan

Aims and Objectives: To prove the effectiveness of two-step primary prevention program for child abuse in the population approach,

by the combined use of two newly developed assessment tools, PACAP and USDT. Design: A prospective-longitudinal study of three years in one of the southern islands of Japan. Methods: All the pre-school children and their parents/caretakers and multiple health-related workers participated in this study. The Pre-Assessment tool for Child Abuse Prevention (PACAP) was administered to all the parents/caretakers and, if PACAP indicated the suspicion of abuse, Ueda's Simplified Developmental Test (USDT) was administered to the children. Results: The response rate of PACAP during three years was 90.9% (500/550). From these 24 (4.8%) was 'questionable'. The results of USDT were 13 'normals', eight 'questionables' and three 'untestables' in these 24 cases. Conclusions: The effectiveness of early intervention in population approach, as well as children's resiliency was confirmed.

P1790

Psychometric proprieties and normative data of a Spanish-sample for the Short Form Perceived Stress Scale (PSS-4)

Miguel A Vallejo (1), Laura Vallejo - Slocker (2), Guillermo Mañanes (1) 1. UNED, Spain; 2. Complutense University, Spain

This study provides population norms for the Short Form Perceived Stress Scale (PSS-4) and the relationship between PSS-4 scores and sociodemographic variables. The PSS-4 was administered to a Spanish participants sample (n = 37450) of an on-line smoking cessation program. The results show that the PSS-4 provides a normally distributed data. The general mean was 5.25 (SD 2.9). There were differences related to sex, socio-economic and education level. The scale has a good internal reliability (Cronbach's alpha 0.74) and has a good construct validity with anxiety (0.51) and depression (0.69) scales of the SCL-90R. An exploratory factor analysis obtain one factor who explained a 56.4% of the variance. The study facilitates normative data of a wide sample stratified for age (18 to 97), sex and other relevant sociodemographic variables.

P1791

An examination of cortisol, alpha-amylase, and sIgA diurnal and reactive profiles in breast cancer survivors

Cynthia Wan, Marie-Eve Couture-Lalande, Catherine Bielajew University of Ottawa, Canada

The illness trajectory of a breast cancer survivor is filled with a myriad of stressors and their accumulation can have adverse health effects. The stress system comprises the HPA and SAM axes, and their functioning can be assessed via an examination of

specific biomarkers that reflect their activity and immune status. The aim of the current study was to investigate the diurnal and reactive stress profiles of female breast cancer survivors through an analysis of saliva, from which cortisol (HPA biomarker), alpha-amylase (SAM biomarker), and sIgA (immune biomarker) were extracted. Results revealed a blunted cortisol and augmented alpha-amylase profile, indicating a compromised stress system, but no indication of suppressed immunocompetence. Salivary IgA may be more closely related with short-term survivorship and vary temporally with stress responses at the beginning of the breast cancer trajectory when stress loads are pronounced.

P1792
Self-efficacy and Sleep Quality as Mediators of Perceived Stress and Memory and Behavior Problems in the Link to Dementia Caregivers' depression in Taiwan

Peng-Chih Wang (1), Ping-Keung Yip (2,3), Yuhsuan Chang (4) 1. Department of Clinical Psychology Fu Jen Catholic University, Taiwan; 2. Department of Medicine, Fu Jen Catholic University, Taiwan; 3. Attending Staff, Neurological Center, Cardinal Tien Hospital, Taipei, Taiwan; 4. College of Management, Yuzn Ze University, Taiwan

Objectives: Caregivers' perceived stress and reactions to patients' memory and behavior problems have been commonly regarded as outcomes in caregiving research. The current study investigated caregiving self-efficacy and sleep quality as possible mediators in the relationship between perceived stress and reactions to patients' memory and problem behaviors and depression. Methods: This study is a cross-sectional study. The study sample consisted of 72 family members caring for a loved one with Alzheimer's disease who completed a set of questionnaires Results: The results indicated that both higher perceived stress and RMBPC reaction scores were directly and indirectly associated with higher depressive symptoms. A specific domain of caregivers' self-efficacy and sleep quality mediated the indirect path. Conclusion: These findings suggest that caregiving self-efficacy and sleep quality may function as mechanisms through which perceived stress and reactions influence depressive symptoms and that this mechanism may be domain specific.

P1793
Inhibition skills, eating behavior and obesity in primary school children

Tamara Wirt University of Ulm, Medical Centre, Germany

Research indicates an association between inhibition and obesity. Presumably, (impulsive) eating behavior is a mediator, however, due to a lack of appropriate assessment tools findings are scarce. 340 Children (7.02 years (SD 0.62), 47.6 percent boys) performed a computer based inhibition test (KiTAP). Body height and waist circumference were measured to compute Waist-to-height-ratio (WHtR). Parents rated childrens eating behavior (emotional eating, overeating, irregular eating, externally induced eating) on a four-point rating scale. Correlation and mediation analyses were conducted. There was a significant association between inhibition and WHtR ($b = -0.003$, $p = .018$) and between eating behavior and WHtR ($b = 0.001$, $p = .000$) but no association between inhibition and eating behavior. Thus, the mediation hypothesis has not been confirmed. Possibly, the association is adverse, body composition may influence the cognitive performance via metabolic pathways, or general inhibition skills and specific eating related inhibition skills need to be distinguished.

P1794
Development of the Taiwan Attitude toward Cancer Scale (TACS)
Chih-Hsun Wu (1,2), Wen Hsin Hsu (1), Tung Lin (1), Sue-Huei Chen (2) 1. National Chengchi University, Taiwan; 2. National Taiwan University, Taiwan

For cancer survivors, attitude toward cancer is an important factor affecting their quality of life. The current study aimed to develop a scale measuring attitude toward cancer in clinical situations. After literature review and clinical interview, we developed the Taiwan Attitude toward Cancer Scale (TACS) which has 3 factors, including appearance/outlook (2 items), fear of recurrence (2 items), and self-blame (4 items). A total of 209 women with breast cancer (age: 34~87) were recruited from an oncology OPD. Confirmatory factor analysis was used to examine the construct validity of the TACS. Results showed that the model fit is very good (GFI: 0.979, CFI: 0.996, RMSEA: .023, SRMR: .031), and supported that 3-factors are separate constructs with significant correlations ($r = .63 \sim .71$). The internal consistency (Cronbach's alpha) of TACS is 0.81. In conclusion, TACS is a useful scale with proper reliability and validity for measuring attitude toward cancer in clinical situations.

P1795
Association between stress underestimation and information about mental health among Japanese workers

Kosuke C Yamada (1), Nanako Nakamura-Taira (2), Shuhei Izawa (3)

1. Saga University, Japan; 2. Hyogo University of Teacher Education, Japan; 3. National Institute of Occupational Safety and Health, Japan

Currently, more Japanese workers participate in the checks and education sessions. Participating in stress checks and education sessions, however, is not always related to subsequent implementation of self-care behavior. We hypothesized that workers' stress-management behaviors are affected by both individual differences in attitudes toward stress and information about mental health. An Internet survey was developed to identify information about mental health that affects Japanese workers. Information of mental health consists of 7 sentences about stress and depression. A total of 400 workers responded the online survey. Respondents were divided into 3 groups by tertile value of an originally developed 12-item scale to assess stress underestimation beliefs (SUB). It was found that 3 sentences were associated with the SUB. The combination of the SUB and the kind of information about mental health is expected to enhance the effectiveness of stress-level checks or stress-management education in companies.

P1796
The effect of massage on release of oxytocin

Hajime Yamaguchi (1), Michiyo Akiyoshi (2) 1. J.F. Oberin University, Japan; 2. Therapeutic Care Association, Japan

This study examined the effect of massage on oxytocin and also measured its effect on other physiologic factors, including cortisol and Ig-A. 19 pairs participated in the experiment. The method of massage was used of "Therapeutic care", which was developed in English Red Cross for mental care. One of each pairs, were massaged on their necks and shoulders for 30 minutes by the other, licensed massage therapists. Before and after each massage, participants and therapists were taken blood samples twice, and blood plasma oxytocin(OT) and cortisol and Ig-A assays were done at the laboratory. Besides these physiological measures, we measured Self-Esteem and POMS of them. The results were as follows; (1) Massage was associated with an increase in OT and reduction in cortisol especially of therapists. (2) The Self-Esteem and Relaxation significantly increased in client and therapists. The reason of these results was discussed.

P1797
Increased mindfulness reduces long-term care workers' stress perception and occupational burnout through emotional regulation

Li-Hao Yeh (1), Guan-Yi Chen (1), Chun-Yu Chen (2), Jin-Mei Hu (3) 1. Chung Yuan Christian University, Taiwan; 2. Taiwan Catholic Foundation of

Alzheimer's Disease and Related Dementia, Taiwan; 3. Chinese MBSR Service, Taiwan

The purpose of the study was to examine whether mindfulness intervention changes long-term care workers' stress perception and occupational burnout. Taiwan has become an aged society; therefore, the need for long-term care has also dramatically increased. This overloaded working stress has rose up long-term care workers' occupational burnout and raised turnover intention. Thus, there is a critical need to offer research-based interventions for long-term care workers. In the present study, 36 long-term care workers participated in an eight-week MBSR and their levels of mindfulness, emotional regulation, stress perception and occupational burnout were measured before, in the middle, immediately after and one-month after the intervention. The results are summarized as below. First, participants' level of mindfulness and emotional regulation were increased and stress perception and occupational burnout were reduced throughout the intervention. Second, the increased mindfulness was associated with lower stress perception and occupational burnout through the mediation of emotional regulation.

P1798

The relationship among awareness of bodily and emotional feelings, and psychosomatic health

Issei Yoshida (1), Yuichiro Ichikawa (2)
1. none, Japan; 2. College of Humanities and Science, Nihon Univ., Japan

The aim of this study was to investigate the relationship among awareness of bodily and emotional feelings, and psychosomatic health in a sample of undergraduates ($N = 231$). In this study, Alexithymia scale (TAS-20), Alexsomnia scale, and Somato-Sensory Amplification scale (SASS) were used as scale of evaluating bodily and emotional feelings. The results suggest that poor awareness of bodily feeling coexist with condition that sensitive to bodily feeling in a person. Furthermore, the results indicate that the concepts that Alexithymia and Alexsomnia were not independence but overlapping concepts.

P1799

Depression after Childbirth among Mothers with Obstetrics Complications at a large Tertiary Hospital, Bangkok, Thailand

Kanlaporn Youngdee, Chutima Roomruangwong Chulalongkorn University, Thailand

We aimed to examine the prevalence of depression after childbirth among mothers with obstetrics complications. Edinburgh Postnatal Depression Scale (EPDS), Personal Resource Questionnaire (PRQ-part II), and Dyadic Adjustment scale were completed by

116 subjects during their first (T1) and 4–6 weeks (T2) after delivery. Using the EPDS score more than and equal 11, 13.8% were depressed at T1 and 5.2 % were depressed at T2. Unemployment, unplanned pregnancy, disturbing physical symptoms during first and trimester, history of postpartum depression, and husband's dissatisfaction of baby's sex, emergency caesarean section, numbers of baby complication(s), low social support, and marital dissatisfaction were associated with depression at T1. Education level, income, delayed menarche, disturbing physical symptoms during first and second trimester, history of postpartum depression, longer duration of labor, baby's Apgar score at 1 minute, pain, longer duration of baby nighttime awakening, low social support, and marital dissatisfaction were associated with depression at T2.

P1800

Effectiveness of "Happy Program" in promoting mental health and well-being at workplace

Jin Yu, Shunji An, Akiko Iwata, Yuko Kurosawa The DIA Foundation For Research on Ageing Societies, Japan

Objectives: Mental health issues at workplace include a high prevalence of work-related high anxiety, distress or stress, mood disorders such as depression, and suicide among the middle-aged group. This study investigated effectiveness of "Happy Program" in promoting workers' mental health status. Methods: Forty-four workers (Male = 10, Female = 34; age = 45.4 ± 10.1) at a company in Tokyo completed the program, which composed of eight weekly group sessions and assignments based on positive psychological approach between June–July, 2015. Pre and post self-reported tests were administered to assess their anxiety status, sleep quality, psychological well-beings and depressive symptoms. Results: The most prevalent mental health problem was sleep disturbances (60%+) followed by anxiety, low well-beings and depressive symptoms. Improvement in both state and trait anxiety ($p < 0.001$), sleep conditions ($p < 0.01$), depressive symptoms and psychological well-beings ($p < 0.05$) was observed after the intervention. Conclusion: The Happy Program alleviated depressive symptoms, sleep difficulty, anxiety and improved well-beings. It can be useful in promoting mental health and well-beings at workplace.

P1801

The Related Factors between Intellectual Activities of Daily Living and Biopsychosocial Function in Community Dwelling Elderly

Shuzhen Zhang (1), Shuzhen Zhang (1), Yada Yukihiko (2), Tsuda Akira (1,3)
1. Kurume University, Graduate School of Psychology, Japan; 2. University of

Tsukuba, School of Integrative and Global Majors, Japan; 3. Kurume University, Department of Psychology, Japan

Intellectual Activities of Daily Living is necessary to be maintained as a precondition for quality of life in the elderly. Therefore, we propose to consider the predictive factors related to the drop of the IADL in community dwelling elderly. The participants consisted of 85 healthy elderly living in Fukuoka (male: 26, female: 59, 75.4 ± 10.1 years old) agreed to participate in the study. This study was to examine the biopsychosocial factors such as physical function (muscular strength, finger motor function, balance and walk), mental function (depression, forgetfulness) and cognitive function (Mini Mental State Examination) to predict decreasing of IADL using logistic regression analysis. In order to increase the functional capacity in elderly, early preventive measures are necessary to combat decline in intellectual and social ADL. It was also suggested that the finger motor function is more important to carry out the activities of daily living than muscular strength.

P1802

Predicting Mobile Phone Addiction among Middle School Students: The Role of Self-Worth and Loneliness

Jian-Hong Zheng, Wuming He Lingnan Normal University, China

Mobile phone usage is ubiquitous among middle school students and its addictive nature is of concern. We developed a Mobile Phone Addiction Scale for Adolescents, which consists of four subscales measuring uncontrollable craving, sense of loss, withdrawal, and counter-productivity, with eight items embedded in the 17-item scale creating a composite mobile phone addiction index. A total of 1250 middle school students in China were surveyed using Mobile Phone Addiction Scale for Adolescents, Self-Worth Scale for Adolescents, and Loneliness Questionnaire for Middle School Students. Results indicated that the prevalence of mobile phone addiction at risky level was about 13% in our sample. Pure loneliness and parental support-driven self-worth were the most potent predictors of mobile phone addiction level. Our findings suggest that social support, especially those from parents, functions as a protective factor for mobile phone addiction among middle school students.

P1803

Stress and self-esteem mediate the relationships between different categories of perfectionism and life satisfaction

Mingtian Zhong (1), Lingyu Chen (1), Jinyao Yi (2) 1. School of Psychology, South China Normal University, China; 2. Medical Psychological Institute, Second

Xiangya Hospital, Central South University, China

This study was conducted to explore the unclear relationships among stress and self-esteem and life satisfaction of perfectionists. A sample of 1957 undergraduates completed Frost Multidimensional Perfectionism Scale(FMPS), Perceived Stress Scale(PSS), Rosenberg Self-Esteem Scale(RSES), and Quality of Life Enjoyment and Satisfaction

Questionnaire(Q-LES-Q). Cluster analysis was used to define categories of perfectionists and nonperfectionists. Correlation analysis and structural equation modeling were also used. Results showed that adaptive perfectionists had higher RSES scores and Q-LES-Q scores and lower PSS scores than maladaptive perfectionists(all $p < .01$). All variables were correlated significantly(all $p < .01$) and were included in the final structural equation model, which

fitted the data well. The model showed that adaptive and maladaptive perfectionism had indirect significant paths to life satisfaction via self-esteem and stress. These results indicated that both stress and self-esteem mediated the relationships between adaptive and maladaptive perfectionism and life satisfaction, and self-esteem suppressed the negative effect of stress on life satisfaction.