

## Educational and School Psychology

### PUBLIC LECTURE

#### PL05

### Diversity of Learning in Classroom and Role of Psychology in Japan: The History, the Present Situation, and the Prospects

**Masayoshi Tsuge** *University of Tsukuba, Japan*

Beginning of the 21st century, Japan is, fundamentally review some of the education of children with disabilities up to it, tried to historical paradigm change to a new special needs education. And, learning disabilities (LD), attention deficit hyperactivity disorder (ADHD), and high-functioning autism (ASD) has been newly positioned clearly to the law and institutions. As a result, especially since 2005, academic research and educational practice has been rapidly increasing. Therefore, in this lecture, developmental disabilities, including learning disabilities (LD) in Japan, about the psychological understanding and support, will be discussed, from the point of view of historical changes since the Meiji period, grasp of the current situation, and future prospects. And, in particular, for the appearance of a variety of learning in the classroom in Japan of contemporary, and, about the possibility of the role and contribution of psychology to the elucidation of its aspects, will be discussed.

### INVITED ADDRESS

#### IA052

### Educational Psychology in the UK : Practice, Training and Research

**Victoria L Lewis** *None, United Kingdom*

This Address will introduce the dynamic role of Educational Psychologists working in the United Kingdom. Following a brief introduction to the history of the profession of Educational Psychology, there will then be a focus on the current initial training model and how this supports the development of professional practice, with attention to key themes. This will include a discussion of how recent changes to Government legislation and Policy in the field of Special Educational Needs and Disability impinges upon the role. It will be argued that an integration of theoretical bases for practice and research paradigms will help the profession to flourish. Dr Victoria Lewis is a teacher-tutor on the Doctorate of Child and Educational Psychology at the University of Sheffield and an associate tutor with the University of Nottingham, England. Victoria is also an experienced, practising Educational Psychologist working in Nottinghamshire, England.

#### IA053

### Towards a new science of academic engagement

**Katariina Salmela-Aro (1,2)** *1. University of Helsinki, Finland; 2. University of Jyväskylä, Finland*

This presentation focuses on a new science of academic engagement addressing the question, "Is there a dark side to academic engagement and a bright side to disengagement?" According to the PISA ratings, Finnish students are among the best performers worldwide, consistently achieving top scores. However, recent research findings show that Finnish adolescents may not be emotionally engaged in school. A recent PISA survey revealed that 15-year-old Finnish students ranked 60th out of 65 countries in their liking for school (OECD, 2013). Many Finnish secondary school students reported school burnout, feelings of inadequacy, exhaustion at school, and cynicism about the values of school. I present recent findings from several longitudinal studies that have sought to identify different trajectories and profiles of emotional engagement and school burnout; the longitudinal associations of emotional engagement and school burnout with academic and psychological outcomes; and explore the role of social context for academic engagement.

#### IA054

### Evidence-based prevention of school bullying (ijime): KiVa antibullying program

**Christina Salmivalli** *University of Turku, Finland*

The call for effective prevention of bullying has resulted in numerous school-based programs developed for this purpose. KiVa antibullying program was developed in Finland, with funding from the Finnish ministry of education and culture, and is now used by 90% of Finnish schools providing basic education. Recently, the program has become available in several other countries. There is strong evidence of the program's success in reducing bullying perpetration and victimization; in addition, numerous other positive effects have been documented, including increased school well-being and academic motivation, positive perceptions of peer climate, and reductions in social anxiety. In the presentation, the universal and indicated components of the KiVa program are highlighted, and the research on its effects in the short term (the first year of implementation) and long term (now implemented for seven years across schools in Finland) are summarized.

#### IA055

### Psychological perspective and conditions of giftedness

**Andrzej Sekowski** *The John Paul II Catholic University of Lublin, Poland*

The psychological perspective on giftedness and genius takes into account the etiology, structure and diagnosis of giftedness as well as individual differences and personality, which are predictors of outstanding human achievement. Psychologically oriented giftedness research involves the study of intelligence, creative abilities, personality, wisdom, and the impact of genetics and the environment on the development and actualization of outstanding abilities. In this article, we also discuss the problem of underachievers as well as psychological determinants of outstanding life, professional and academic achievement. A psychological analysis of the achievements of exceptionally gifted persons points to the importance of their social relations. Modern means of communication create new possibilities of using and developing giftedness. The psychological perspective on giftedness is both about maximising the achievement of gifted persons and taking into account their personal goals, values and aspirations as factors that affect the quality of their lives and personal development.

### INVITED SYMPOSIUM

#### IS049

### International Perspectives on Motivation and Engagement in Education

**Organizer: Andrew J Martin** *University of New South Wales, Australia*

#### Session Abstract:

This symposium, hosted by Division 5 (Educational, Instructional, School Psychology), showcases research on motivation and engagement from diverse regions of the world, including North America, Asia, and Australia. The contributions traverse academically typical students as well as academically at-risk students. <!--[if gte mso 9]>

### Teacher Structure as a Predictor of Students Perceived Competence and Autonomous Motivation: The Moderating Role of Differentiated Instruction in the Canadian Context

**Frederic Guay, Amélie Roy, Pierre Valois** *Laval University, Canada*

According to self-determination theory, provision of structure by teachers allows students to develop perceived competence in school subjects, which in turn facilitates the development of their autonomous motivation and limits the development of their controlled motivation. In this study, we test a mediated moderation model positing that teacher structure has a stronger positive effect on students' autonomous motivation (and a negative effect on controlled motivation) in French class when differentiated instruction is used frequently, and that this moderation effect is mediated

by perceived competence. We used a sample of 27 elementary school teachers and 422 French-Canadian students. Results from HLM revealed that the effect of teacher structure on students' autonomous motivation was positive only when differentiated instruction strategies were used frequently, and this moderated effect was partially mediated by perceived competence. Also, teacher structure was negatively associated with students' controlled motivation only when differentiated instruction was provided infrequently.

**School motivation in Hong Kong: Gender and year level differences**  
**Magdalena Mo Ching Mok, Dennis M Mcinerney** *The Hong Kong Institute of Education, Hong Kong*

This presentation is based on a normative study undertaken in Hong Kong in 2009. The research questions were: (1) What is the profile of school motivation for primary and secondary students? (2) Are there differences in motivation across year levels? (3) Are there gender differences? The study sample comprised 9,888 students from 215 primary schools, and 14,297 students from 152 secondary schools in Hong Kong. Students' motivation was measured using the Inventory of School Motivation (Chinese version). All subscales were found to have good psychometric properties and with acceptable Cronbach's alpha. Motivation decreases with an increase in year level. There were significant gender differences in all subscales except Token, favouring females for Affiliation, Effort, Social Concern and Task motivation for all year levels. Males scored higher on Competition for all year levels. Females scored higher in Social Power and in Praise only after Primary 5. Implications for teachers are discussed.

**Motivation and Achievement in the Diverse Australian Classroom: Towards a Better Understanding of Typical and At-risk Students**

**Andrew J Martin, Emma C Burns, Rebecca J Collie** *University of New South Wales, Australia*

This study investigated the role of basic psychological need (competence, relatedness, autonomy) satisfaction in the academic achievement (literacy, numeracy) of academically typical students and their academically at-risk peers (with attention-deficit/hyperactivity disorder; ADHD) located in the same classrooms and schools. A sample of N=4658 'typical' students and N=164 at-risk students diagnosed with ADHD participated in the study. Structural equation modeling demonstrated that competence and relatedness were consistently associated with higher academic achievement for typical and at-risk students. Interestingly, the positive effects of competence and relatedness were significantly stronger for the sample

of at-risk students than for the typical students. Autonomy was significantly associated with achievement for typical students, but not significantly so for the at-risk students with ADHD.

**IS050**

**Psychological problems of students seen through college counseling in the UK, China, and Japan**

**Organizers: Kenichi Suzuki (1), Kiyoko Sasaki (2)** *1. Nagoya University, Japan; 2. Sophia University, Japan*

**Session Abstract:**

College counseling is now considered a specialization within the field of student services in university or college as well as the larger professional domain of counseling. Theories and methods regarding the practice of college counseling are constantly being developed to suit cultural differences, student characteristics, and social demands. In this symposium, college counselors from three countries, the United Kingdom, China, and Japan, are brought together to discuss: 1) Current psychological issues or problems facing students in these countries; 2) how to understand and assess these students psychologically (as well as psychiatrically for some); and 3) how to support them psychologically. The similarity and difference of college counseling among these countries will be discussed in order to gain a deeper insight into the future of college counseling.

**Student Psychological Services in the United Kingdom**

**Barry P Keane (1,2), Catherine Mcateer (1,2)** *1. University College London, United Kingdom; 2. University College London, United Kingdom*

This talk will look at Student Psychological Services in the United Kingdom. We will outline how Psychological or also called Counselling Services are structured and situated within a University Setting, usually as part of other Support Services for students. This paper will discuss the types of presenting issues that students bring to their college Psychological Service and why the severity of these issues has increased over the last five years across the Higher Education sector in the UK. There will be a statistical analysis of this increase in severity of problems amongst university students. It is common that after a psychological assessment a student is offered time-limited counselling usually between four and six sessions and the thinking behind this will be explored. Suicide ideation has been increasing amongst students and we will explore how Universities manage this with a focus on the work at University College London's Student Psychological Service.

**College Counseling In Japan**

**Kuninori Takahashi** *Yamagata University, Japan*

This presentation will be about college counseling in Japan. Working with students with neurodevelopmental disorders, students who withdraw from college, and students with relationship problems is a large part of our counseling services. We also work to resolve issues of harassment; stalking; mental disorders, including schizophrenia, depression, and anxiety; distressed international students; and so on. These issues and the way they affect students' adjustment to school are examined from developmental, psychodynamic, and psychiatric points of view. Interventions vary because perceived problems, concerns, and psychological symptoms are intertwined. One-on-one counseling is usually provided; however, group therapy, referring students to hospitals, collaborating with faculty and family members, and occasionally rearranging academic environments are also practices that are utilized. Through our counseling services, we expect that college students will become more mature, more productive, and broaden their perspectives on life.

**College Student Psychological Services in China**

**Yuanhong Ji** *Ritsumeikan University, Japan*

This presentation will be about college student counseling in China. I will show how college counseling in China has developed recently. This paper will discuss 1) current psychological issues that students bring to counseling services, 2) how to understand and assess these students psychologically, 3) how to support them psychologically. With the rapid development of China's economy, the inequality of opportunity, and so on, the employment of China is not guaranteed, while the suicide rate among college students is increasing year after year. The College student psychological services in China are facing severe challenges. I will especially introduce the practical situation of suicide prevention for Chinese college students.

**IS051**

**Posttraumatic Growth Resulting from 3.11 in School Settings**

**Organizer: Yoshiaki Tominaga** *Hyogo University of Teacher Education, Japan*

**Session Abstract:**

Posttraumatic growth (PTG), positive psychological changes that are sometimes experienced as a result of highly stressful life events, has been studied for the past two decades. One area that has received increasing attention in recent years is the possibility of implementing psycho-educational intervention programs that aim at fostering PTG in school settings. This symposium will focus on how the concept of PTG can be applied

in educational and school settings. Findings about PTG in three countries (Japan, Germany, and the US) will be presented. For instance, based on the survey conducted with school counselors after 3.11 earthquake, the presenter will discuss the relationships between burnout, stress symptoms, compassion fatigue, and PTG. In addition, the effects of implementing a brief psycho-educational intervention program for high school students after 3.11 will be presented. We will then discuss the future directions and clinical applications of PTG, including stress management and psycho-educational program.

### A Brief Psycho-Educational Intervention Program on Posttraumatic Growth

**Kanako Taku** *Oakland University, United States of America*

This presentation will provide an overview of the brief psycho-educational intervention program that was designed to foster adolescents' perceptions of posttraumatic growth (PTG). By presenting the data that contain pre- and post-intervention assessment, I will discuss how the intervention program affected PTG perceptions. Specifically, those who learned about the positive changes possible after stressful experiences reported a higher level of PTG than those who learned only about negative changes. Being exposed to the knowledge about PTG may affect the teenagers' cognitive processing, particularly deliberate and intentional thinking, reflecting broadly on the personal experiences, which then may increase in reported PTG. I will also discuss what factors may suppress the perceptions of PTG. As much as we should raise an alert over the potential hazard of bringing up the subject of PTG out of context, the study supports the beneficial side of having the knowledge of PTG.

### Posttraumatic Growth Among Disaster Survivors in Yogyakarta Province, Indonesia

**Zarina Akbar, Evelin Witruk** *University of Leipzig, Germany*

Indonesia is a hazard-prone country situated at the meeting point of three most active plates in the world. Such condition has caused many disasters, two of which hit Yogyakarta Province: catastrophic tectonic earthquake and volcanic eruption of Mount Merapi. This study investigates the long-term condition of posttraumatic growth, spirituality, social support, and coping behaviour of the survivors. The research involved 200 participants who were divided into two groups: affected and non-affected. For the analysis, the two groups were compared regarding their level of post-traumatic growth. In addition, it was assessed to what extent protective factors could have contributed to post-traumatic growth. Spirituality and social support were found to have increased the score of posttraumatic growth. Another result of the

study also indicated that approach coping was found to be the most effective coping strategy to reach posttraumatic growth in the affected group, especially in a collectivistic cultural setting.

### Posttraumatic Growth among Children who experienced Great East Japan Earthquake in the Disaster Area

**Shiori Onuma (1), Tadao Fujiwara (2)**  
1. *Miyagi Prefecture Osaki City Miyazawa Elementary School, Japan*; 2. *Hyogo University of Teacher Education, Japan*

This study will report posttraumatic growth among children who experienced the Great East Japan Earthquake in the disaster area. The study was conducted three years after the earthquake. Children (N = 1,387) ranging in age from 10 years old to 15 years old in the area which suffered great damage from the tsunami of the Great East Japan Earthquake Disaster participated in the survey. We investigated grade difference and gender difference in PTG, and the relationship between PTG, resilience, self-esteem, and social support base on a hypothetical model. This time I will report the results of these analyses. I want to suggest a point of support to children as a teacher from the side of the PTG, based on this result and my own experience as a teacher.

### Secondary Traumatic Stress and Posttraumatic Growth after the Large Scale Disaster among School Counselors

**Yoshiki Tominaga** *Hyogo University of Teacher Education, Japan*

The purpose of our research was to examine the secondary traumatic stress and posttraumatic growth among school counselors who were dispatched in two to three months after the large scale natural disaster in Japan. Data consists of 244 school counselors who were assigned to visit disaster areas after the Great East Japan Earthquake, happened on March 11, 2011. Participants were asked to complete the online survey one month after their task completion that includes their support experiences, activities as a school counselor, Impact of Event Scale Revised (immediately after the service and at the survey point), Posttraumatic Growth Inventory (PTGI-J), and Professional Quality of Life (ProQOL). This talk will present the data of these scales and the factor structure of the PTGI-J. I will also discuss the possible factors that may explain secondary traumatic stress and posttraumatic growth resulting from a large scale disaster among school counselors.

### Psychological consequences among survivors of natural disasters and war with special reference to post-traumatic growth

**Evelin I Witruk, Zarina Akbar** *University of Leipzig, Germany*

Psychological consequences among survivors of natural disasters and war and flight were investigated and compared. On basis of our trauma-processing-model (Witruk, 2015) we could proof risk and protective factors which lead to a patho-psychological development or to a saluto-genetic development of affected people and can include their post-traumatic growth (PTG). Akbar (2015) investigated affected and non direct-affected people after the 2006 earthquake and the 2010 volcano eruption in Indonesia. She could confirm the important protective role of social support, spirituality and approach coping for the development of PTG. Witruk (2016) integrated adolescent refugees from Syria and Afghanistan which escaped from the war in Middle East to Germany in 2015 into a psycho-social intervention program. At the beginning of this program and after 3months intervention the post-traumatic symptoms, the coping behaviour and protective factors for the development of PTG were measured and compared to the group affected by a natural disaster.

## CONTRIBUTED SYMPOSIUM

### CS050

**Symposium title: Child Science of Parenting and Schooling: Comparison between Asia and Africa. (Japanese Society of Child Science officially supports this symposium)**

**Organizer: Juko Ando** *Keio University, Faculty of Letters, Japan*

Discussants: Mei Zhong (1), Kae Amo (2)

1. Foshan University, China; 2. The School for Advanced Studies in the Social Sciences (Ecole des Hautes Etudes en Sciences Sociales, EHESS), France

### Session Abstract:

In a process of globalization in every cultural field, the importance of psychology from Asian and African perspectives is growing. The proposed symposium presents a comparative view of parenting and schooling in China, Senegal and Japan from a standpoint of Child Science, an integrative science of children that brings together the natural sciences, humanities and social sciences. Four talks and one discussion will be given; 1) "Parenting stress and social support of young children's parents in P.R.China" by Mei Zhong (Foshan University, China), 2) "Family, community and schooling in Senegal: changing childhoods between traditional and modern education" by Kae Amo (EHESS, France), 3) "Teaching embedded: Cultural practice in Japanese preschools" by Akiko Hayashi (Meiji University, Japan), and 4) "The effect of grandparenting on children's development: comparison of Japan and China" by Cindy Sun (Ochanomizu University, Japan)

with Yoichi Sakakihara as a discussant and Juko Ando as a chair person.

### Teaching Embodied

**Akiko Hayashi** *Meiji University, Japan*

Teaching Embodied: Cultural Practice in Japanese Preschool (Hayashi and Tobin, 2015) is an ethnography of how Japanese preschool teachers act, think, and talk about the role they play to support young children's social-emotional development. The research method of this study combines video-cued ethnographic interviewing (Tobin, et al., 1989), with microanalyses of classroom videos. The argument of this presentation is that Japanese preschool provide young children with exposure to a range of clearly demarcated spatial, temporal, and social-emotional contexts and opportunities to develop the social skills and intercorporeal techniques of the body appropriate to these contexts.

### Children in family, school, and society: China and Senegal.

**Juko Ando (1), Mei Zhong (2), Kae Amo (3)** *1. Keio University, Faculty of Letters, Japan; 2. Foshan University, China; 3. EHES, France*

Parenting and educational conditions are affected partially by biological mechanisms and partially by cultural factors. In this presentation, two countries which are drastically different with each other and from western countries historically and culturally are compared; that is, China and Senegal. For China, the situation of parenting stress and how to provide social support to parents of young children will be focused. For Senegal in Africa, educational situations in family, community and school in transitional period from traditional to modern society will be discussed.

### The effect of grandparenting on children's personality: comparison of Japan and China

**Yi Sun** *Ochanomizu University, Japan*

With the prevalence of grandparenting, the study aimed to compare the influence of grandparents' parenting on young children's personality, between Japan and China. In Shanghai, China, 500 parents of 3-6yrs children were invited to answer the questionnaire with their consent, and 422 of them were effective. The same investigation was conducted in Tokyo, Japan, and 1313 ones were effective. In China, more than 50% grandparents lived together with their adult-children to take care of grand-children as the primary caregivers before the children entered into kindergartens. In Japan, less than 10% of grandparents lived with their adult-children. About 30% Japanese families have asked grandparents to help them to care children when necessary, but not every day. In China, grandparents' participation in parenting was found related to children's pro-social activities and intensity of reaction. However,

no significant relationship was found between grandparenting and children's personality in Japan.

### CS051

#### Psychology, Creativity and Participatory Education

**Organizer: Michael Hanchett Hanson** *Teachers College, Columbia University, United States of America*

Discussant: Seana Moran  
Clark University, United States of America

#### Session Abstract:

The increasingly powerful concept of creativity emerged in the nineteenth century and continues to evolve. Since the mid-twentieth century, psychology has taken a leading role in defining creativity, and educational applications have been central to that discourse. In this session, we look at the historical and ideology contexts for psychological discussions concerning creativity in education and at the resulting practices. In particular, we will focus on the potential advantages and dangers of current trends in project-based and student-centered educational practices (e.g., DIY, Maker Movement, etc.). What such approaches look like in practice, how they relate to emerging psychological theory, how they affect diversity within education, and what education still needs in psychological foundations and applied techniques. Participants will include Michael Hanchett Hanson, Teachers College, Columbia University (symposium chair), Edward Clapp, Harvard University, Project Zero, Vlad Petre Glaveanu, Aalborg University

### Making of a Star: Youth Development and Participatory Models of Creativity

**Michael Hanchett Hanson** *Teachers College, Columbia University, United States of America*

Tears came to the eyes of a teenager standing in front of a flipchart covered with post-it notes. This was a tough kid. He knew how to take care of himself on the streets. He was no stranger to violence, and he "did not believe in love." Years later, as a leader of other young people trying to change their communities, he would recall how those post-it notes gave him a crucial insight – he was not alone. This presentation considers the case of this member of a theater-based, youth development and social action program to illustrate the advantages of participatory models of creativity: (1) how the group and environmental context become actors in the construction of self and (2) how the social technologies of creativity – associated ideas and prescribed practices – can work in surprising ways to fit the needs of a person and context.

### Introducing Access and Equity to the Creative Classroom

**Edward P Clapp** *Project Zero, Harvard Graduate School of Education, United States of America*

When innovation takes place in our deeply connected world, it is almost always the result of the collaborative efforts and insights of a variety of individuals. Nonetheless, many educators retain traditional, individual-based understandings of creativity. But how might adhering to such traditional views of creativity favor the cognitive and cultural assets of some students over others? What barriers to access and equity in the creative classroom may such traditional views of creativity impose? Using examples drawn from a series of case studies, this session will reframe creativity as a distributed and participatory process that avails young people the opportunity to engage in invention and innovation in ways that best suit their individual talents, skills, and cultural perspectives. This session will further discuss how such a reframing of creativity allows for the emergence of new pedagogical practices that have the potential to make creativity more equitable and accessible for all learners.

### From distributed and participatory to critical approaches in educating creativity

**Vlad Glaveanu** *Aalborg University, Denmark*

In this presentation I consider different paradigmatic ways of studying creativity along with their epistemological bases and practical implications in education. From the He-paradigm (of creative genius) to the I-paradigm (of the creative person), our thinking about creativity has typically been marked by individualism and methodological reductionism. This is reflected in classroom practices that foster competition and reward (or punish) individual creativity. In the last decades more social and 'democratic' ways of understanding creativity have emerged, grouped under what I call the We-paradigm (of creative collaboration). I will outline briefly the premises and implications of two such related approaches - the recent discussion of distributed and participatory creativity - and argue for the pressing need to complement the cultural view with a critical perspective that actively challenges essentialist, exclusivist and discriminatory practices, particularly in contexts outside of the Global North.

### CS052

#### Literacy acquisition across diverse writing systems

**Organizer: Tomohiro Inoue** *Seigakuin University, Japan*

Discussants: Rauno Parrila, Rauno Parrila  
University of Alberta, Canada

**Session Abstract:**

The purpose of this symposium is to examine the contribution of different cognitive (phonological awareness, rapid naming, morphological awareness, orthographic processing) and non-cognitive (home literacy environment, motivation) factors to early reading and spelling across languages varying in orthographic consistency. We will report the findings of four cross-linguistic studies contrasting interesting combinations of languages (Study I: Japanese children learning to read Kana and Kanji; Study II: Korean children learning Hangul and Hanja; Study III: The cognitive predictors of reading in Chinese and English; and Study IV: Literacy acquisition across five alphabetic orthographies). The findings of these studies are expected to indicate what aspects of early literacy acquisition are language-specific and what are universal.

### Cognitive predictors of early literacy skills in syllabic Hiragana and logographic Kanji

**Tomohiro Inoue (1), George K Georgiou (2), Naoko Muroya (3), Takako Oshiro (4), Hirofumi Imanaka (5), Hiroyuki Kitamura (6), Miyuki Hosokawa (7), Hisao Maekawa (8), Rauno Parrila (2)**  
 1. Seigakuin University, Japan; 2. University of Alberta, Canada; 3. Tokiwa Junior College, Japan; 4. Okinawa Chubu Medical Treatment and Education Center, Japan; 5. Fukuyama City University, Japan; 6. Hokkaido University of Education, Japan; 7. Ibaraki University, Japan; 8. Iwaki Junior College, Japan

The relative importance of different cognitive factors in early literacy acquisition in syllabic Hiragana and logographic Kanji were examined in Japanese children ( $N = 169$ ,  $\text{Mage} = 80.1$  months at first test). Reading accuracy and fluency, spelling, phonological awareness, phonological memory, rapid automatized naming, orthographic knowledge, and morphological awareness were assessed at the beginning of grade 1, and reading and spelling were reassessed at the middle of grade 1. The results showed that the patterns of relationships in Hiragana were similar to those found in consistent alphabetic orthographies, whereas the patterns of relationships in Kanji were similar to those found in inconsistent orthographies such as Chinese. The findings suggested that Japanese children learning two contrastive orthographic systems develop partially separate cognitive basis rather than single basis for literacy acquisition.

### Cognitive-linguistic skills and reading and writing in Korean Hangul, Chinese Hanja, and English among Korean children

**Jeung-Ryeul Cho, Sang-Mee Kim** Kyungnam University, Republic of Korea

This study examined the contribution of orthographic awareness (OA), phonological awareness (PA) and morphological awareness (MA) to reading and writing in L1 Korean Hangul, Chinese Hanja, and L2 English among Korean 5th graders. Korean language and orthography have relatively transparent phonological and morphological structures. In Korean, compounding morphology is rich as in Chinese, and derivational and inflectional morphology is also productive as in English. Results showed that Korean PA contributed to word reading and writing in Korean Hangul and English whereas Korean MA contributed to reading and writing in Hangul and Hanja. Korean OA contributed Hangul reading only. These results suggest that PA and MA are meta-linguistic skills whereas OA is language specific. In addition, we found that English MA explained significant variance of reading and writing in Hangul and Hanja after controlling for Korean PA and MA, suggesting the transfer of MA from L2 to L1, across orthographies.

### Does culture influence the role of distal cognitive processes on reading and mathematics?

**Ciping Deng (1), Wei Wei (1), J. P. Das (2), Athanasios Tavouktsoglou (3), George K. Georgiou (2)**  
 1. East China Normal University, China; 2. University of Alberta, Canada; 3. Concordia University of Edmonton, Canada

Most cross-cultural studies of reading and mathematics have focused on the role of proximal cognitive processes. In this study we aimed to examine the role of distal processes on academic achievement in English and Chinese. One hundred twenty Grade 1 English-speaking Canadian children (65 girls, 55 boys; mean age = 6.41 years) and 181 Grade 1 Mandarin-speaking Chinese children (81 girls, 99 boys; mean age = 7.08 years) were assessed on measures of planning, attention, simultaneous and successive processing as well as on measures of word reading (accuracy and fluency) and mathematics (calculations and reasoning). Results indicated that planning and successive processing were significant predictors of reading and planning and simultaneous processing were significant predictors of mathematics. However, the effects were stronger in English than in Chinese. Taken together, these findings suggest that culture may impact the strength of the distal processes that impact reading and mathematics.

### Does orthographic consistency influence the growth of reading?

**George K Georgiou (1), Karin Landerl (2), Alain Desrochers (3), George Manolitsis (4), Peter De Jong (5), Rauno Parrila (6)**  
 1. University of Alberta, Canada; 2. University of Graz, Austria; 3. University of Ottawa, Canada; 4. University

of Crete, Greece; 5. University of Amsterdam, Netherlands; 6. University of Alberta, Canada

We examined the growth of reading fluency in five alphabetic languages with different degrees of grapheme-phoneme correspondences (English, French, Dutch, German, and Greek). Children learning to read in English ( $N=172$ ), French ( $N=262$ ), Dutch ( $N=114$ ), German ( $N=184$ ), and Greek ( $N=238$ ) were assessed on reading fluency (real words and nonwords) four times (at the beginning and end of Grades 1 and 2). The results of Growth Curve Modeling indicated significant differences between languages both in the intercept (English- and French-speaking children scoring higher than the rest) and the slope (steeper acceleration rates in German and Greek data). Our findings are in line with those of previous studies (e.g., Caravolas et al., 2013) showing that the growth of reading fluency is moderated by the level of orthographic consistency. Children learning to read in consistent orthographies learn more rapidly than children in opaque orthographies.

**CS053**

### Predicting Youth Mental Health and Well-Being: A Cross-National Study

**Organizer: Ayako Ito** Ochanomizu University, Japan

Discussant: Douglas C Smith

Southern Oregon University, United States of America

**Session Abstract:**

Historically, clinical psychology has focused most of its efforts on identifying and remediating risk factors that presumably contribute to negative outcomes among youth. Much less attention has been paid to protective factors, which promote psychological resiliency among youth and may also lead to enhanced mental health. In this symposia, we will present data from a large and ongoing cross-national study focusing on the impact of positive dispositions and attitudes including optimism, gratitude, and zest and external factors including support from friends, family, and schools on the overall well-being of adolescents and young adults. Participants include samples of students from the US, Japan, Thailand, Korea, and Australia. Our team of presenters will highlight key findings from a cross-cultural perspective and the implications of a strength-based perspective on promoting optimal functioning in all youth.

### Positive Life Assets and Well-being among Thai Youth. (Tripathi S.)

**Suriyadeo Tripathi** National Institute for Child and Family Development, Mahidol University, Thailand

Unlike the western models of developmental assets, the concept of positive life assets developed in Thailand (Suriyadeo, 1999) focus on

Family, Peer, Community, Wisdom, and Self. Based on this model the Positive Life Assets Scale (PLAS) was developed and validated to measure protective factors in the areas of Family, Peer, Community, Wisdom, and Self for youth across Thailand with three key positive development concept. This presentation will provide an overview of the positive life assets and the PLAS and its use in Thailand and also the national finding using PLAS will be discussed with respect to regional and demographic variations in protective factors and how a strengths-based approach can be used for positive youth development and specific interventions in school and community settings. The PLAS can be used as part of a developmental approach to addressing issues related to positive youth development and well-being in Thailand and in other regions.

### Positive Youth Development: A Comparative Study of Thai and U.S. University Students.

**Nonthasruang Kleebpung (1), Suriyadeo Tripathi (1), Douglas C Smith (2)** 1. National Institute for Child and Family Development (NICFD), Thailand; 2. Southern Oregon University, United States of America

Previous research suggests that a wide range of personal assets and emotional dispositions contribute to positive youth development. This presentation will focus on results of a comparative study of 1200 Thai and U.S. university students utilizing the Positive Life Assets Scale (PLAS) and the Social Emotional Health Scale (SEHS). Taken together, the two scales measure family, peer, community and personal factors and dispositions that contribute to positive outcomes among university youth. Results of this study highlight cross-cultural differences between these various factors and also provide implications for intervention efforts designed to promote positive youth development.

### Application of the Social Emotional Health Survey to Japanese youth

**Yoshiyuki Shimoda (1), Ayako Ito (2)** 1. Saga University, Japan; 2. Ochanomizu University, Japan

Previous research (Ito et al., 2015) showed good psychometric fit of the Social Emotional Health Survey-second version (SEHS-S) constructs among Japanese youth samples (Grades 7-9, N = 975, 52% females). The factor loadings of "self-awareness" and "persistence" in "belief-in-self" were relatively higher than "self-efficacy." Many studies reported low self-efficacy or self-esteem among Japanese youth; in fact, school counselors often interview students with lower self-efficacy in Japanese school settings. Based on the SEHS-S, promoting the client's self-awareness or persistence, not self-esteem, will improve their sense of "belief-in-self". Similarly, "gratitude" showed a relatively strong relationship

to "engaged living". Although many Japanese school practitioners have paid less attention to clients' gratitude, enhancement of grateful recognition and responses will improve Japanese youth's subjective well-being through a sense of "engaged living."

### Importance of Classroom Climate in Promoting Mental Health among Japanese Students: Teacher Attitudes and Management Style

**Ayako Ito Ochanomizu University, Japan**

Previous research utilizing the Social and Emotional Health Survey (SEHS) with Japanese students (Ito et al., 2015) suggests that factors such as perceived school, teacher, and peer support (i.e., "Belief in Others") are major determinants of students' satisfaction with school as well as their overall sense of well-being. Perceptions of support at school are shaped by multiple factors, including the climate of the school and classroom, in which teachers play a major role. Previous researches demonstrated the importance of classroom climate in promoting aspects of mental health in students, as well as optimal academic performance. This presentation is based on data obtained from 18 junior high schools in Japan and findings are discussed in terms of how changes in teachers' attitudes and classroom management style enhanced the social climate of the classroom, thereby improving students' perceptions of school. In addition, collaborative small-group processes and autonomous activities enhanced affiliation and involvement.

### Bringing out the Best in Teachers and Youths

**Jo-Anne N Lau-Smith Southern Oregon University, United States of America**

Educational institutions, and specifically teachers, play a critical role in positive youth development. But what kinds of teacher characteristics and instructional approaches foster students' intellectual, social, and emotional growth? This presentation will provide an overview of a strength-based teacher education model implemented at Southern Oregon University that assists teachers in connecting with their core qualities as a means of enhancing teacher effectiveness. Implications of the model for increasing positive youth development will be discussed.

### CS054

#### Creativity in Children: Educational issues

**Organizer: Todd I Lubart Université Paris Descartes, France**

Discussant: Todd I Lubart

Université Paris Descartes, France

#### Session Abstract:

Creativity is considered a 21st century skill that is important for personal problem solving, career success and societal growth. Several

international surveys have indicated that although teachers, administrators, parents and students recognize the need to develop creative thinking, there is a wide gap between general positive attitudes and actual practices. Recent research from international perspectives provides new results. First, there is work on a new creativity assessment tool, Evaluation of Potential for Creativity (EPoC), showing that both divergent-exploratory and convergent-integrative thinking can be assessed reliably in several subject domains. Second, studies of teachers show that their attitudes and behaviors may evolve with appropriate training. Research on pedagogical activities to foster creativity illustrates the impact on the development of creativity through school-based training. These pedagogical issues are examined in the general school context and in specific subject domains, such as mathematics. Research from European and Asian teams will be presented.

### Chinese teachers' view of creativity

**Weiguo Pang East China Normal University, China**

Chinese creativity education has long been criticized as less effective. "Chinese students lack creativity" and "Chinese people need to be more creative" are common topics in Chinese media and academic journals. The purpose of this research is to investigate whether Chinese teachers' views of creativity are appropriate for creativity education practice. More than 1100 teachers from the mainland China were investigated through a comprehensive creativity survey. The results showed that: 1) nearly half of the participants did not judge the mini-creativity behaviors as be creative; 2) environment, personality and learning task were listed as the top 3 influential factors of creativity; 3) most teachers agreed that "discover", "imagine", "design", and "invent" as important creativity activities, while "synthesize", "generate", "formulate", and "compose" were not well accepted as important creative processes; and 4) "excessive load on teaching basic knowledge and skills" and "inadequate teaching resources" were attributed to less creativity teaching.

### Students' cooperative learning and creative solutions on permutation and combination in elementary school mathematics classrooms

**Mayumi Oie Tokyo Woman's Christian University, Japan**

The purpose of the present study was to investigate children's cooperative learning and creative solutions in mathematics classrooms at the elementary school. I focused on permutation and combination to conduct pre-post tests in two classrooms. The participants were sixth graders (N=74) at the public elementary school in Tokyo. Classroom A was taught in

teacher-centered teaching method and classroom B was taught in student-centered cooperative learning. The results indicated that no significant difference between two classes in pre-tests. In the post-test on permutation which needs advanced skills to use tree diagrams, figures and tables to solve the problem, solutions in classroom B was more creative than A. In addition, in the post-tests on combination, there was no significance between two classrooms' scores in the basic level task, but in the introduction level task which use counting as informal skill, the score of classroom A was higher than B significantly.

### **The effects of Learn to Think Intervention Programme on the Creative Quality of Primary and Secondary School Students** *Weiping Hu Shaanxi Normal University, China*

Cultivating creative talents is in urgent need in our country and also be paid close attention by international society and academic. However, previous researches suggested that the creativity of children and adolescents was low, and the curriculum which was designed to cultivate students' core qualities such as thinking ability and creativity was lacking in China. Therefore, "Learn to Think" (LTT) intervention programme was designed to cultivate students' creative quality. This series of reports introduced the effects of the 10-year LTT on primary and secondary school students' creative quality, including thinking ability, academic achievement, learning strategy, learning motivation, creative tendency, creative personality, creative thinking and so on. Results showed the LTT had long-term far transfer effects on the development of students' learning motivation, thinking ability, creativity, and did promote the improvement of academic achievement and the formation of creative personality.

### **Evaluation of Potential for Creativity in Children and Adolescents (EPoC)**

**Todd I Lubart (1), Maud Besançon (2), Baptiste Barbot (3)** 1. *Université Paris Descartes, France*; 2. *Université Paris Ouest, France*; 3. *PACE University, United States of America*

A new tool (EPoC by Lubart, Besançon & Barbot) assesses potential for creative thinking in children and adolescents. Research conducted in France has led to the development of a set of tasks organized by domain of creative production (graphic art, verbal-literary, math, science, music, kinesthetics). In each domain, there are measures of divergent-exploratory thinking, and convergent-integrative thinking. These two modes of thinking are essential for creative work in each domain. Results concerning the psychometric properties, structural model of tasks, and relations to other measures such as

IQ will be presented. Implications for measuring creative potential in international contexts will be discussed.

### **Tolerance of Ambiguity and Cultural Differences**

**Herie (henderika) B De Vries (1), Franck Zenasni (2), Todd Lubart (3)** 1. *Université Paris Descartes, Luxembourg*; 2. *Université Paris Descartes, France*; 3. *Université Paris Descartes, France*

Many studies show a relation between tolerance of ambiguity (TA) stress and anxiety. According to theory, emotions embody values and social rules. Together with biological systems of individuals these shape cultural syndromes. Values differ according to societies or cultures. This means that anxiety can be embedded in a variety of cultural syndromes in different cultures. This paper explores how low TA lies within the process of cultural syndromes, where perceptions and feelings are culturally regulated. In a world naturally made of infinite ambiguities, humans use functions as feelings, cognitions, sensations and spirituality, to regulate responses to this ambiguity in culturally specific ways. Practically, what causes stress and anxiety might differ according to the culture or society. A theoretical framework is presented based on a review and critical analysis of empirical research on TA.

### **CS055**

### **Promoting academic engagement: Cognitions, contextual influences and transformative instructional practices in Japan, Hong Kong and Australia**

**Organizer: Clarence Ng** *Learning Sciences Institute Australia, Australian Catholic University, Australia*

Discussant: Jun Oshima  
Shizuoka University, Japan

#### **Session Abstract:**

Psychological models based on a socio-cognitive perspective have identified important cognitive enablers, such as achievement goals, for promoting academic engagement. However, inadequate attention has been given to examining the relationship between instructional practices and academic engagement. This symposium reports findings derived from four projects that address this gap. The first project highlights the critical role of collaboration in sustaining learning engagement in a Japanese primary school. The second project discusses the features of a motivating course environment that promotes online communication using English between Japanese and other Asian university students. The third project examines how self-regulation based instruction promotes students' reading engagement in Hong Kong. The final project investigates the influences of classroom practices on Australian disadvantaged students' engagement in Mathematics. Informed jointly

by sociocultural and cognitive theories, these findings collectively highlight the significant role of dynamic interaction and motivational support in a transformative instructional model for promoting academic engagement.

### **Transformative instructional practices for enhancing children's self-affirmation in a Japanese elementary school: An activity-theoretical case study**

**Katsuhiko Yamazumi** *Kansai University, Japan*

Recent curricular reform in Japanese schools has highlighted some pressing problems related to teaching 21st century competencies and skills to children in schools. Among these, a critical problem is the widening academic achievement gap. Within this context, more concerted effort is urgently required to address children's perceptions of curricula and instruction as these perceptions are major drivers of motivation and performance. This presentation focuses on the use of transformative instructional practices for intervention in a Japanese elementary school to change children's perceptions of learning and to enhance their self-concept, learning engagement, and achievement. These transformative instructional practices, embodied in collaborative and purposeful activities, are conceptualized through the frameworks of self-affirmation theory and cultural-historical activity theory. This presentation will discuss findings derived from an ethnographic research investigating how transformative instructional practices continually support children's learning, engagement, and self-concept enhancement through a collaborative activity system involving dynamic interaction between children and teachers.

### **Pedagogical principles for promoting learning of English as an international language between Japanese and Korean university students through internet: A self-determination theory perspective**

**Michiko Nakano (1), Clarence Ng (2)** 1. *Waseda University, Japan*; 2. *Learning Sciences Institute Australia, Australian Catholic University, Australia*

Students' abilities to use English as an international language have become important graduate capabilities in globalised economies in the Asia-Pacific region and beyond. However, many Japanese students lack motivation to learn this important language and disengage readily from the learning process. This paper discusses the findings derived from an ethnographic study on an innovative course design for promoting the learning and use of English in a leading private university in Japan. Based on interview and observation data, this study identified important pedagogical principles for

developing a motivating course environment for promoting Japanese students' intrinsic motivation in learning and using English as an international language with their Korean counterparts through online connection. These pedagogical principles include a high level of personal relevance, opportunities for inter-cultural communication, genuine language situations, and the silent teacher approach. The significance of these pedagogical principles will be discussed from a self-determination perspective.

### Enhancing students' reading engagement through incorporating self-regulated learning based instruction in Hong Kong Chinese language classes

*Kit-Ling Lau Faculty of Education, the Chinese University of Hong Kong, Hong Kong*

Self-regulated learning (SRL) includes elements of strategy, metacognition and motivation that are significantly related to reading development. This project aimed to collaborate with front-line teachers to incorporate the principles of SRL into Chinese reading instruction to promote students' reading engagement. The participants were 31 teachers and 1121 Secondary 4 students from 6 secondary schools in Hong Kong. A "TSAE" framework consisting of four major principles (instructional Task, teacher Support, Authority structure and Evaluation practices) derived from the SRL studies was used to guide teachers' instructional design. Pre- and post-test comparison indicated that students significantly improved their reading comprehension, motivation and strategy use over the project implementation period. Most of the teachers showed positive attitudes towards this new instructional approach. Pronounced instructional changes were found in teachers' task design and the provision of support while the changes in the degree of student autonomy and evaluation practices were relatively less obvious.

### Australian disadvantaged students' voices about motivation to learn Mathematics and their implications for transforming Mathematics instruction

*Clarence Ng Learning Sciences Institute Australia, Australian Catholic University, Australia*

Few Australian students from disadvantaged backgrounds, including those who are high achieving, have shown sustained aspirations for learning Mathematics. This paper discusses what motivates capable disadvantaged students to learn Mathematics and how instructional practices can be transformed based on students' voice about their motivation. A selected group of Year 8 high achievers in Mathematics (N=31) from schools situated

in high poverty suburbs in Brisbane were interviewed. These interviewees were nominated by their teachers as key informants who were high-achieving and had intention to study advanced Mathematics in senior secondary levels. The 30-min semi-structural interview focused on understanding classroom influences on learning Mathematics, and in particular, students' reasons for learning Mathematics. Major reported reasons for learning Mathematics include: parental support, performance, mastery, importance, and utility of knowledge. These reasons will be discussed from the perspective of achievement goal theory for developing reformatory practice to support a valuing orientation in learning mathematics.

### CS056

#### Structures and issues of PTA in socio-cultural context in democratic countries of Japan, USA, and UK

**Organizers: Kazuko Takeo (1), Yasuhiro Omi (2)** 1. Tokyo University of Science, Japan; 2. University of Yamanashi, Japan  
Discussant: Charlie N Lewis

Lancaster University, United Kingdom

#### Session Abstract:

Given that PTA is a forum for parents and teachers to cooperate, PTA has significant influence over children's development. Therefore, PTA has significance to be affirmatively addressed as an educational theme. Recently, however, Japanese media have been reporting various PTA-associated issues such as mandatory enrollment, compelling assignment of directors or committee members, excessive burden of PTA service, and relation between parents and teachers. It is not exaggerated to say PTA problems are now becoming social problems. This symposium aims to understand these issues as microcosms of socio-cultural structure." Specifically, panel members will give presentations on PTA in the US, UK, and Japan, all democratic countries. Comparing and studying the state of PTAs in these countries should help view and understand PTA as microcosm of socio-cultural structure so emerging issues can be studied from socio-cultural viewpoints.

#### Present state and issues of PTA in Japan - Focusing on conflicts between diversity of the PTA-active mothers' lifestyles and rigidity of the PTA organization

**Kazuko Takeo Tokyo University of Science, Japan**

Japanese PTA, sometimes expressed as M(Mother)TA, has a history of mothers dominantly involved in actual work while men dominate high-level managerial positions like association president and vice president (Takeo,2015; Takeo & Jinno, in print).

The many of the recent PTA problems covered by media were actually raised by these women who support PTA (Takeo & Jinno, in print) clearly indicates that contradictions and imperfections are growing as result of male-dominated PTA. Based on participant observation of PTA activity and interviews of the women involved, we identify current realities of PTA such as a rigid organization with actions shaped by conventionalism, and, conversely, the influence of lifestyle and values diversification among women and the changes in attitudes, emotions and awareness of those involved toward PTA. Based on these, we illustrate women's awareness, PTA organization's mutual constitution process and related conflicts, and also examine potential improvements and new possibilities.

#### The historical consideration about mandatory participation in PTA in Japan

**Kiyoshi Jinno Tokyo University of Science, Japan**

In this talk, I will consider historically about PTA system. Particularly, I will investigate the issue about the mandatory participation in PTA in Japan. In the current PTA system in Japan, parent was forced to become a new member and participate in their activities without confirmation of their intention. But many constitutional scholars are thinking that this method is against Article 21 of the Japanese Constitution, which secures "freedom of association" which is the right to join or leave groups in person's own discretion. To study the reason and the root of this problem, I refer to the several booklets and documents which were written by PTA in 1960's and 1970's.

#### The PTA and Education Inequity in the United States

**Sawako Suzuki Saint Mary's College of California, United States of America**

This presentation sheds light on current issues and challenges of the PTA in the United States, with specific focus on the state of California. Although fundraising is not considered one of the major functions of the PTA according to the national PTA guidelines, in reality, it is becoming an increasingly important role of the PTA given the statewide budget cuts to public education. As a result, discrepancies in the amount of resources between schools serving wealthy families versus poor neighborhoods appear to be widening in some areas. For example, in the San Francisco Unified School District where funds raised by the PTA are not redistributed among schools within the district, one school's PTA raised \$25 per pupil whereas another school was able to raise as much as \$1,500 per pupil in 2011, further contributing to the resource gap between schools. Issues of equity and parent involvement will be discussed.



**CS057****Role of family environment in the development and expression of high intellectual/creative potential in low SES children**

**Organizer:** Sylvie Tordjman University of Rennes, France

**Discussant:** Sylvie Tordjman University of Rennes, France

**Session Abstract:**

The role of family environment in the development and expression of high intellectual/creative potential is an internationally important issue. Studies in France, China and Thailand have explored this issue in low SES children (Socio-Economical Status assessed on parents' profession and levels of education) with high intellectual potential (assessed by the WISC-4 IQ) compared to non-high intellectual potential children. Creativity is also considered using a creativity test (EPoC). The objectives of this line of work are to examine: 1) Parental representation of success for their children (academic performance/achievement and success in future life); 2) Role of family physical environment including the availability of books and newspapers; 3) Positive effects of parents reading/telling stories very early (from the first months of life) on their children, possibly favoring the child's development and investment in the verbal language domain. The findings will be presented and discussed through a comparative transcultural approach.

**Family environment facilitating the development and expression of high intellectual potential in French low SES children**

**Sylvie Tordjman (1,2), Cindy Perou (2), Solenn Kermarrec (2), Jacques-Henri Guignard (1,2)** 1. University of Rennes, France; 2. Centre Hospitalier Guillaume Regnier, France

The study was conducted at the CNAHP (National Center for Children and Adolescents with High Potential) on 100 children with high intellectual potential and low SES (Socio-Economical Status). SES was measured by the Hollingshead Index of Social Position. Creativity was also assessed using EPoC (Evaluation of Potential for Creativity). The parental questionnaire FEQLIC (Family Environment Questionnaire of Language Investment in Children) was developed through a collaboration between French and Chinese teams and used to study parental representations of success for their children, home environment (such as the presence of books) and the effects of telling/reading/singing stories on the children. The results show that these families are characterized by a positive perception of school success, with an important value placed on books associated with knowledge and notably very early book reading by parents to their children, from the first months

of life. These results will be presented and discussed.

**Role of family environment in the development and expression of high creative potential in Chinese low SES children**

**Li Cheng (1), Mingjing Zhu (2), Hongci Dai (1), Zhengkui Liu (2)** 1. Beijing Normal University, Faculty of Education, China; 2. Institute of Psychology, Chinese Academy of Sciences, China

Relationship between low-SES family environment and high creative potential expression and development has been one of the most concerned issues. To disclose the specific association, the study adopted EPoC (Evaluation of Potential Creativity) to test 250 children with low-SES environment in China, aged from 10 to 16. Additionally, the study also interviewed their parents in order to specify the characteristics of family environment in their early childhood. The results revealed that low SES high creative children had more opportunities to access to learning materials (newspaper, books and magazines) in their home during their early childhood. Compared to low creative children from low SES family, parents read stories more frequently to low SES high creative children. Furthermore, the earlier parents told or read stories for children, the higher creative potential expressed and developed. The study will also explore the issue about domain specific in creativity on this situation.

**Role of family environment in the development and expression of high intellectual potential in Chinese low SES children**

**Mingjing Zhu (1), Li Cheng (2), Jianong Shi (1)** 1. Institute of Psychology, Chinese Academy of Sciences, China; 2. Faculty of Education, Beijing Normal University, China

The study aimed to examine the specific association between family environment and the development and expression of high intellectual potential in low SES children. Two hundred and fifty children from low SES family in China were tested by WISC-IV, which differentiated them into the gifted and the non-gifted. Meanwhile, their parents were interviewed in order to detect their family environment in early childhood. The results showed learning materials such as books and newspapers were more visible and easily available in the family environment of low-SES gifted children. Parents read stories more frequently for low SES gifted children during their early years compared to low SES non-gifted children. The study will draw a comprehensive picture concerning the significance of family environment for low SES gifted children.

**THEMATIC SESSION****TS062****The adolescents' lives after dropout from schools: How can we reconstruct trust with them?**

**Organizer:** Mami Kanzaki Ritsumeikan University, Japan

**Session Abstract:**

The dropouts from high school have been studied from various perspectives such as sociological focus on the poverty or economic disparity and psychological focus on the adolescent's personality. However, based on the adolescent's perspective, formal education is not necessarily an axiomatic and attractive choice, because non-academic interests might be more important for them. Under such circumstances, how can the supporters in formal education invite the adolescents to institutional trajectories, reconstruct the meaning of education and rebuild trust with them? In this thematic session, we present educational practices from different positions and discuss about the adolescents' lives after a dropout. Especially, we introduce both Danish and Japanese school systems and their characteristics and present the educational practices of social workers, school counselors, teachers, and volunteer-supporters to rebuild the relationships with them.

**How do the high school students suffering from multiple problems achieve participation and boundary crossing?**

**Tomomichi Kawamata** Taisho University, Japan

I am going to show an ethnographic study of community-based support practices for students suffering from multiple problems at a rural "education difficulties" high school in Japan. What is the "educational difficulties"? Lave and Wenger (1991) redefined the learning as the process of participation for community. Their difficulties are not as problems simply endured by individuals, but as problems that divide students from their social communities such as a classroom, high school and town they live. It is essential for teachers and specialists to support the students' "participation" and "boundary crossing of community" if they try to provide appropriate education. This presentation shows an analysis of students' participation in the school community, their participation in the local community, their employment in the local community, the effectiveness of social community-based initiatives in helping students with problems make the transition from high school to society.

### How do volunteer-supporters rebuild the relationships with the students, who had avoided school but start participating in the school?

**Mami Kanzaki** *Ritsumeikan University, Japan*

In Japan, graduation from high school is regarded as a lowest demand for getting a job. Under such circumstance, a part of the high schools which adopt a credit-based course have accepted maladaptive students. Generally, these schools construct many support devices considering long-range care for the students. As a case example of these support devices, I focus on a volunteer activity by university students in a high school where I have observed, which is called "learning-assistant activity". The aim of this activity is assisting the students' learning in a broad sense as well as subject learning. Therefore, the volunteer staff at first get confused about the uncertainty of their role. But the staff and the students gradually build a specific relationships, as I called it "neighbors like siblings". In the presentation, I show the process of building the relationships and consider the meaning and role of the volunteer staff.

### How does a school counselor take an approach to students who avoid school in cooperation with teachers?

**Ai Onohara** *none, Japan*

In Japan, one out of 37 junior high school students avoid schools. There are various ways for avoiding school in each student. I am, a school counselor, working on the development of feeling connection between the students and society, since feeling connections is one of the main components to live their life flexibly and to maintain a well-adjusted mind for a long time. Nonetheless, most of school counselors in Japan can work only once a week in each school, and have limitations of approaching to students by themselves. From the viewpoint of school teachers in Japan, they are required not only to teach schoolwork but also to provide psychological care. One of my roles is supporting the school teachers for cooperation. I will show some specific cases for discussing how a school counselor could take an approach for students not to avoid school.

### Drop out from school as a question of match rather than missing qualification or motivation.

**Mogens Jensen** *Aalborg University, Depart. of Communication and Psychology, Denmark*

Students dropping out of school can be seen as persons who did not have the competencies to function within the existing frames of schooling but needing a different kind of support in order to graduate. They can be very

clever but the match between them and the existing frames did not work out. The interesting point is to find out what is needed to make this match work. This is not just a question of them lacking competencies but also of finding different ways of teaching and running schools so this can facilitate the participation of these students. Neither is it just a question of students not wanting to graduate but sometimes a question of not seeing oneself as a legitimate student. Both of these reasons imply changes in the way of schooling. This presentation will elaborate on the mentioned aspects and connect with practice within Danish high schools.

#### TS063

### Designing School Crisis Prevention in East Asia

**Organizer: Hisako Nishiyama** *Fukuoka University of Education, Japan*

#### Session Abstract:

Although creating a safe and secure learning environment for children has been calling our attention, it is not easy to implement a well-established system. This dilemma is commonly seen in many Asian countries. Therefore, we present our efforts in collecting evidence on its' issue and developing our school crisis prevention in certain Asian countries and discuss how to determine which progress can be made and practical approaches to improve our practice on topics listed below: 1) difference in recognition of School Crisis Prevention by positions to share a vision for Service learning 2) bullying prevention in a Japanese elementary school. 3) the effect of a regional drug prevention programme in Hong Kong 4) outline of a trial In-service Training on School Crisis Prevention Through the discussion among panels and attendees in the session, it is hoped that some common issues and possible solutions can be found after sharing individual approaches.

### Difference in Recognition of School Crisis Prevention by Positions, School Levels and Domains

**Hisako Nishiyama** *Fukuoka University of Education, Japan*

To support all students' well-being, schools must be safe places, and it is necessary to put proper intervention in place for children to grow up healthy in both mind and body. The purpose of this study was to investigate the differences in recognition of school crises among positions, school levels, and domains. / The respondents to the research were at elementary to high school level. Positions were categorized in 5 groups: school counseling/career/student guidance, principal and management staff, homeroom and year head teachers, special education teachers, and others. The four-point scale questionnaire consisted of cooperation among family, school, & community, value, organization, environment,

curriculum, and training. The management, rather than homeroom and year head teachers, considered that collaboration was taking place in crisis prevention. The results would suggest that it is necessary to stimulate motivation for in-service training toward crisis prevention based on positions.

### The effect of a regional drug prevention project in Hong Kong

**Chan Mow Chiu Raymond** *Department of Education Studies, Hong Kong Baptist University, Hong Kong*

From 2004/05 to 2008/09, the percentage of children's drug abuse increased from 2.4% to 4.6% in Hong Kong. Specifically, the number of reported young drug abusers in the New Territories North District was exceptionally high in 2010/11. Responding to the alarming rise of young drug abusers in this district, seventeen primary schools jointly developed the "North District Joint School Anti-drug Ambassadors Project", which aimed at strengthening students' peer, family and social support network as "protective factors", and developing students' attitude against drug abuse. The project comprises a series of training seminars, peer-supported activities and family-oriented activities. Quantitative data for assessing participants' anti-drug attitude, skills and knowledge were collected upon project completion. Initial findings indicated that this project could enhance students' anti-drug competences effectively. This presentation will illustrate the design of the project and the implementation strategy. Based on findings from this project, recommendations for preventing drug abuse are proposed.

### Designing School Crisis Prevention in East Asia: Assessment and intervention for preventing bullying in Japanese schools

**Yayoi Watanabe** *Hosei university, Japan*

Decades of studies have demonstrated how poor social skills contribute to a variety of peer problems, including bullying and school refusal. Targeting social skills intervention and social emotional learning to schools can provide a rich opportunity for timely and effective intervention. However, educators and researchers must first have access to effective social and emotional skills assessment. Traditionally, such assessment has been administered in student-completed rating scales, but this method is limited in several ways, particularly as it is influenced by subjective cognition. To overcome the barrier, a game-based social and emotional skills assessment appears to be an effective tool. This study put a game-based assessment, a self-completed questionnaire, and teachers' information about three tiers of PBIS (Positive Behavior Intervention and Supports) to practical use. The current study will

illustrate how a social and emotional intervention has been introduced to schools and how its effects have been confirmed.

#### TS064

### Recent issues and future prospects of cognitive behavioral approach for Japanese children

**Organizer:** Masumi Osao Graduate School of Human Sciences, Waseda University, Japan

#### Session Abstract:

In recent years, mental health problems of children have attracted social attention in Japan. These problems have various causes such as a poor parent-child relationship, difficulties in school life, or problems in friendship, and have negative consequences like aggressive behavior, social anxiety, and depression. Cognitive behavioral approaches for psychological stress have been used to treat mental health problems in children. For example, classroom-based stress management programs have been shown to be effective preventive interventions. However, research has also shown that not a few group interventions with an ambiguously introduced purpose are conducted. The purpose of this symposium is to examine the current status and future outlook of cognitive behavioral approaches for children's mental health problems in Japan.

### Effects of the Japanese parent-child relationship on social skill of the child

**Noriko Morita (1), Shiho Udagawa (1), Koji Minosaki (2), Hironori Shimada (3)**  
1. Graduate School of Human Sciences, Waseda University, Japan; 2. Counseling Center, Surugadai University, Japan; 3. Faculty of Human Sciences, Waseda University, Japan

Social skill of the child is an important factor on building the good human relations and adapting to school life. In past many studies, rearing behavior of parents has been shown to affect the social skills of children. To improve these social skills, it is necessary to consider the parent-child relationship. On the other hand, it has also been mentioned that parents' and children's perceptions of parents' rearing behavior do not always match. Therefore, it is believed necessary to establish an intervention method based on the cultural background and its features in Japan. In this session, we study the effects of parents' rearing behavior and children's perception of parents' rearing behavior on the social skills of children. We also discuss the current situation and challenges of cognitive behavioral therapy intervention for social skills of children.

### Evaluation of methods to prevent aggressive and bullying behaviors among children and adolescents in Japan

**Masumi Osao (1), Hironori Shimada (2)**  
1. Graduate School of Human Sciences, Waseda University, Japan; 2. Waseda University, Japan

Bullying behavior has been identified and studied since the 1980s in Japan. Interventions to reduce bullying behavior in children and adolescents have included moral education and compassion education. However, from a behavioral theory understanding, bullying is seen as aggressive behavior and is an attempt to be in control. Thus, behavioral theory focused interventions have included anger control, acquisition of skills to replace the aggressive behavior, etc. In each case, individual differences are essential to consider to assessment for the interventions. Depending on the theoretical outlook, interventions were focused on either end of the bullying behavior. The point of intervention is to acquire behavioral repertoire which relied on functional assessment, and to take in consideration of Japanese cultural context. / In this session, we aimed to discuss the problem in adolescence including aggressive behavior from the point of behavioral theory. /

### Differences in the effect of video feedback on social anxiety between junior high school and high school students

**Shunsuke Nonaka (1), Anri Kawagoe (2), Hironori Shimada (3)**  
1. Graduate School of Human Sciences, Waseda University, Japan; 2. Graduate School of Human Sciences, Waseda University, Japan; 3. Faculty of Human Sciences, Waseda University, Japan

As development influences social anxiety, the effect of video feedback (VF) may be stronger in junior high school students than high school students. The purpose of present study was to examine such differences. VF was provided to 24 junior high school students and 18 high school students. They were asked to complete questionnaires assessing the degree of self-monitoring of social skills performance (self-monitoring), efficacy of social skills performance (efficacy), and social anxiety. An ANOVA showed that the main effect of time was significant for self-monitoring and efficacy. The effect sizes of monitoring scores and efficacy scores were larger in junior high school students than high school students. These findings suggest that the effects of VF differ between junior high and high school students.

### Adaptive behaviors for mental health promotion among children

**Shunsuke Koseki J. F. Oberlin University, Japan**

In the past, behavioral factors, especially adaptive behavioral factors, in interventions for children's mental health have not been often focused on; however, importance has been given to cognitive factors. Furthermore, maladaptive behaviors such as with or without school refusal, bullying, and trouble on the domestic front have often been considered when caring for children's mental health. When school consultations have been conducted, teachers have stated problems such as self- or other-directed violence, inattention, and hyperactive tendencies. However, factors such as focusing on, promoting, and reinforcing children's adaptive behaviors along with factors like attendance rate, number of statements in the classes, playing with friends, copying from the blackboard, and watching teachers should be paid more attention to. This will help reduce maladaptive behaviors by increasing adaptive behaviors. Although this perspective is crucial for mental health promotion among children, it may be overlooked when the usual support activities are carried out.

### Impaired social problem-solving in aggressive adolescents: cognitive skills deficit or communication style?

**Fumito Takahashi Shinshu University, Japan**

Aggressive behavior is, in the school setting, one of the common problems that decrease victims' well-being and should be solved appropriately. Although social problem-solving training, which focuses on individual cognitive process, has shown its effects on aggressive behavior and nominated as a "probably-efficacious treatment" for disruptive behavior disorders (Eyberg et al., 2008), most of the research-supported psychological treatments for aggressive behavior are focused on the environmental and relationship factor. For example, behavioral parent training focuses on both teaching behavioral principle for parents and encouraging parents to make collaborative relationship with their child. In this presentation, we revisit social problem-solving as a relationship factor of aggression and find some directions for future research about the treatment for aggressive behavior.

#### TS065

### International Comparison on Teachers' Mental Health

**Organizer:** Yasuo Shimizu International Christian University, Japan

Discussant: Takuro Motonaga

Teikyo University, Japan

#### Session Abstract:

In this thematic session, specialists from Finland, UK, Hong Kong and Japan will discuss

teachers' mental health and seek to find measures to address the problems relevant to teachers' mental health. Teachers' mental health is one of the most important topics for the Japan Association for School Mental Health since its establishment in 1998. In Japan, mental health problems were reported to account for more than half of teachers' long-term leave in 2002, and since 2006 they have been over 60%, which is significantly higher than most of other professions. In Europe, the European Health Psychology Society has launched a project in which teachers' mental health in eight countries are compared and analyzed since 2003. Teachers' mental health is an internationally shared concern and comparative analysis and discussion are expected to pave the way to improve the situations in each country.

### The Effect of Resilience and Perfectionism on Teachers' Mental Health

**Yasuo Shimizu (1), Takuro Motonaga (2), Tosaku Hayakawa (3)** 1. *International Christian University, Japan*; 2. *Teikyo University, Japan*

The number of reported teachers' mental illness has steeply increased for the last two decades and almost 9,000 teachers have taken a leave of absence from work because of their mental illness each year since 2007 (Japanese Ministry of Education, 2014). However, there is paucity of studies investigating teachers' mental health promotion. The purpose of this presentation is to introduce the results of a study on teachers' mental health using psychological scales. In order to evaluate teachers' psychological states, Teachers' Specific Resilience Assessment Scale (TSRAS) and Teachers' Specific Perfectionism Scale (TSPS) were developed, and the hypothetical model based on TSRAS, TSPS and School Job Adaptation Scale (SJAS) and Teachers' Stressor Inventory (TSI) was examined the statistical fit indices. The results suggested that teachers with a high degree of resilience and a low degree of perfectionism have low risk of maladaptation.

### Work-family life balance and psychological distress among Japanese junior-high school teachers

**Noboru Iwata** *Hiroshima International University, Japan*

In Japan, the number of teachers taking sick-leave due to psychiatric impairment has been consistently increasing, and is currently at a very high level. School teachers engage is what has been considered emotional work, involving interpersonal relations between teacher and students, as well as between teacher and students' parents, and among colleagues. Teachers, particularly in compulsory education institutions, may suffer from a variety of difficulties, such as poor

school environment, student misbehavior, poor working conditions, personal concerns, time pressures, and inadequate training, all of which may have a detrimental effect on work-family life balance (WLB). Although data on WLB among teachers has been reported in some European countries, such information has been sparse in Japan. Accordingly, I introduce here my empirical study on WLB and psychological distress among Japanese junior-high school teachers, as well as the associated risk and protective factors. I then discuss the similarities/differences of these findings cross-culturally.

### Mediating mechanisms in the association between stressful work-related psychosocial factors and wellbeing among Finnish primary school teachers

**Kia Gluschkoff (1), Marko Elovainio (2), Liisa Keltikangas-Jarvinen (1), Mirka Hintsanen (3), Sari Mullola (1), Ulla Kinnunen (4), Taina Hintsanen (1)** 1. *Institute of Behavioural Sciences, University of Helsinki, Finland*; 2. *National Institute of Health and Welfare, Helsinki, Finland*; 3. *Faculty of Education, University of Oulu, Finland*; 4. *School of Social Sciences and Humanities, University of Tampere, Finland*

We examined the associations between stressful work-related psychosocial factors and teacher wellbeing, and mediating mechanisms in these associations among Finnish primary school teachers ( $N = 76$ ). First, we compared the effects of job strain, effort-reward imbalance, and organizational injustice on depressive symptoms. The results showed that particularly higher effort-reward imbalance but also higher job strain were associated with depressive symptoms. Experiences of nonrestorative sleep partly mediated both of these associations. Secondly, we examined the association between effort-reward imbalance and burnout, and found that higher effort-reward imbalance was associated with total burnout syndrome and its three dimensions. Poor relaxation during leisure time and nonrestorative sleep partially explained some of these associations. Our results suggest that along with adjusting job demands, enhancing job control and rewards is important in teacher stress prevention. Interventions that support leisure time recovery and reduce sleep problems may help teachers to maintain their occupational wellbeing.

### Teacher Stress in Working with Challenging Students in Hong Kong

**I Wah Pang** *Gratia Christian College, Hong Kong*

This presentation illustrates how recent social, economic and educational development in Hong Kong contributes to teacher stress. It presents data from an international study on

teacher stress with respect to working with challenging students. Teachers were asked to report on perceived behavioral incidence, associated stress and the impacts of the most challenging student in their classes. The relationships among the various perceptions of teachers were examined using bivariate correlation, canonical correlation and one-way ANOVA. To account for associated stress and impacts on teachers, negative affect, self-critical attitude and self-efficacy beliefs of teachers were found to be more important than school characteristics. Compared to their counterparts, Hong Kong teachers were found to be subjected to highest negative impacts from challenging students and have most negative beliefs in working with them. This study concludes with a discussion of the findings and remedies that might relieve stress among teachers in Hong Kong.

### Discussion on Teachers Mental Health and Their Development

**Takuro Motonaga** *Teikyo University, Japan*

Teachers' mental health is one of the most important topics in schools all over the world. This theme has been discussed in the Japan Association for School Mental Health since its establishment in 1998. In this session, specialists introduce important concepts; Resilience, Perfectionism, Work-family life balance, Leisure, Sleep and so on. We can deeply discuss Teachers' mental health and related factors in international comparison using these concepts. I should also focus on a psychological and career development in Teachers when we discuss Teachers' mental health. I think that the concepts are closely related with the Teachers' maturity, which may provide effective educational influences on their students' development.

### TS066

#### The Emergence of School Guidance in High Schools in China and a Comparison with that in Australia

**Organizer: Wei Wang** *East China Normal University, China*

Discussants: Zhining Li (1), Ciping Deng (2)

1. *the Affiliated High School of SCNU, China*; 2. *East China Normal University, China*

#### Session Abstract:

School guidance/counselling services have been a built-in component of education among most developed countries. However, it is new in China. An official Ministry of Education guideline is anticipated soon with profound implications. Despite the emerging status, many schools have been providing such services at various levels. The symposium aims at discussing the current status and the future directions regarding school guidance in Chinese high schools with a comparison to Australian practices to position the current work internationally. Five presentations are proposed in

addition to a general/theme discussion: 1) A Chinese perspective of school guidance based on developmental evaluation. 2) Current status of developmental guidance in Chinese high schools. 3) A whole-school approach to school guidance: A case study. 4) The effect of career counseling on career decision-making self-efficacy in year 10 students. 5) The development of school guidance in China comparing with Australian school guidance practices: An international perspective.

### **A Chinese perspective of school guidance based on developmental evaluation**

**Ciping Deng, Wei Wang** *East China Normal University, China*

School guidance/counseling services begin to emerge in China as a policy requirement as well as schooling needs from schools in front line. Although some schools have been providing such services at various levels, as a new school service/function, there has been little theoretical or practical research into school guidance and counseling in China thus far. This paper endeavoured to propose a practical framework for developing and implementing school guidance services in Chinese schools and provide a context for the proposed symposium. The paper outlined a model based on multi-dimensional developmental evaluation. In a process from noticing the developmental differences through multi-dimensional evaluation to developmental guidance tailored to students needs integrated into a hub of conceptual framework change, individuality oriented education and differential and effective guidance, a specific net-based evaluation system will be introduced with the discussion of the practical implications for school implementation

### **Current status of developmental guidance in Chinese high schools**

**Peng Xiaojun (1,2), Weng Jing (2)**  
1. none, China; 2. Fuzhou No.1 High School, China

With the coming of the new reform in college entrance examinations, Chinese high schools have realized that the developmental guidance is imperative. However, most schools are still facing various difficulties in carrying out the work in school guidance. According to the last ten years' literature and the surveys of nearly 30 schools in different areas, this article introduces current status of developmental guidance in Chinese high schools, and especially to highlight these aspects: the regions, the types of schools, the operation modes, the forms of guidance. This review further discusses how to promote the developmental guidance in China vigorously. The conclusion is that Chinese high schools must consider and integrate the following factors: the establishment of guidance policy system, the embrace of new conceptual framework, the integration of school guidance

resources, the construction of information platform, the guidance curriculum building and the teacher training.

### **The related research of high school students' autonomous learning ability and mental health**

**Zhining Li** *the Affiliated High School of SCNU, China*

The study discusses whether there is a correlation between the ability of autonomous learning and the mental health of students. Research results: 1, the autonomous learning ability of high school students do not exist significant differences in gender, liberal arts; the overall situation of students' mental health is not optimistic, girls in anxiety, depression, phobia symptoms than boys has a more mental health problems; science students than liberal arts students has a more obvious tendency to force. 2, "autonomous learning ability of students is significantly related to mental health. The students' ability to study independently, mental health is better. Students "self value, test anxiety and self adjustment ability have a influence on students" mental health. 3, this study suggests that the school should pay more attention to the cultivation of students' independent learning ability, so that students can keep good health in the course of learning.

### **The effect of career counselling on career decision-making self-efficacy in year 10 students in a Chinese provincial key high school**

**Meng Wang** *Qingdao No. 2 Middle School, Shandong Province, China, China*

High school period is the stage of career exploration. The provision of the career counselling to all students has become an important endeavour in Chinese high schools. Students' career decision-making self-efficacy plays a significant role in the process of their career exploration. This study focused on the effect of the career counselling course on the career decision-making self-efficacy among 764 students in a provincial key high school. Both questionnaires and interviews were adopted to explore to what extent setting up career counselling courses would affect students' self-efficacy to help their career decision-making. The effects of an eight-month counselling courses on students' self-efficacy in making decisions for their future careers are reported and the implications for further implementation and expansion of the career counselling courses across grades and schools are discussed. The results are concluded that career counselling courses improve students' career decision-making self-efficacy effectively, especially in accurate self-evaluation and making plans.

### **The development of school guidance in China comparing with Australian school guidance practices: An international perspective**

**Wei Wang (1,2)** 1. *East China Normal University, China*; 2. *Rockhampton QLD, Australia*

For a healthy development of the emerging guidance/counseling services among Chinese high schools, it is important not only at a policy level to ensure the timely provision of adequate support to schools but also at a practical level to assimilate sound experiences and proven practices from those forerunners. This presentation demonstrates an effort towards such a direction by providing a general review of the school guidance practices in Australia using Queensland as a particular case. A comparison of the practices between Australian and Chinese schools is made along three dimensions: organisation and structural settings, roles and responsibilities of school guidance officers/teachers, activities and foci of applied researches including intervention and prevention. The similarities and differences will be discussed from both an international and Chinese cultural contexts, leading to a suggestion of a school guidance/counseling model based on a multi-dimensional developmental evaluation system in Chinese high schools.

## **ORAL PRESENTATION**

**OR0684**

### **Self-concept and achievement reading and non-reading among abused school children**

**Sajida Agha** *Isra University, Pakistan*

The present study aimed at investigating the relationship between self-concept and achievement among abused school children. The sample comprised of 703 students. The ages of the sample ranged between 12 to 13 years. Hypotheses were formulated. An adapted version of the Piers-Harris Children's self-concept Scale, the Standard Progressive Matrices, the Wide Range Achievement Test- Revised Level -2, aspiration and adjustment level rating scales were administered. Statistical analysis was done. t-test was computed to assess the significance of difference between the self-concept scores of the sexes, achievement groups, and teacher ratings of student's adjustment. Result showed that overall school achievement and self-concept are significantly and positively correlated. Significant correlation was found between teacher ratings of student adjustment and student's own self-concept. The difference between self-concept scores of the two genders was found insignificant. Finding inconsistent with the hypothesized direction were discussed. Avenues for further research have also been suggested.

OR0685

### Omani Teachers Burnout Levels of in relation to Teachers Collective Efficacy Beliefs

Said S Aldhafri Sultan Qaboos University & Thre Research Council, Oman

The current study examined the connection between Omani teachers' burnout levels using their perceived collective efficacy beliefs. The sample consisted of 516 teachers from different school districts in the Sultanate of Oman. The participants responded to the Maslach Burnout Inventory (MBI; Maslach & Jackson, 1981) and to the Teachers' Perceived Collective Efficacy Scale (TPCES, Aldhafri, 2006). Both measures showed adequate validity and reliability evidences. The results showed that there were significant correlations among the dimensions of teachers' burnout and their collective efficacy beliefs. Using regression models, the findings showed that the teachers' collective efficacy beliefs dimensions (instruction, engagement, & management) predicted significantly all three dimensions of burnout (emotional exhaustion, depersonalization, and feelings of low personal accomplishment). The largest variance explained in the three models was obtained for the dimension of low personal accomplishment.

OR0686

### Developing a Short Version of the Teachers Perceived Collective Efficacy Scale

Marwa N Alrajhi (1), Said S Aldhafri (1,2), Hussain A Alkharusi (1), Saleh S Albusaidi (1), Badar H Al Kharusi (3), Abdullah K Ambusaidi (1), Khoulia Z Alhosni (3) 1. Sultan Qaboos University, Oman; 2. The Research Council, Oman; 3. The Ministry of Education, Oman

The current study aimed to develop a short version of the Teachers' Perceived Collective Efficacy Scale (TPCES, Aldhafri, 2006). TPCE represents the teachers' beliefs about their ability as a group to influence student learning. It has been investigated across different cultures using different measures. Using a sample of (490) Omani students, the current study examined the factorial structure of a shorten version of TPCES (12 items) using a pre-specified exploratory factor analysis. The results showed that the three-factor solution explained 68% of variance in TPCE. Four items were included in each of the three dimensions: efficacy for instruction, management, and engagement. All items loaded on their respective dimension with no cross loadings. The researchers examined other validity and reliability indicators for the short version of the TPCES. Implications for the findings are discussed within the social cognitive theory and cross-cultural research contexts

OR0687

### Correlation between Work Experience and Perceived Competence among Early Childhood Teachers

Aulia Ariani, Tsabitah Tsabitah Universitas Gadjah Mada, Indonesia

Early childhood education is an important phase in individual life-span development. Thus, perceived competence among early childhood teachers is important as early childhood education is the second nurturing place after family. The purpose of this study is to examine the relation between work experience and perceived competence among early childhood teachers. The subjects involved in this research were 294 teachers from various districts in Yogyakarta, type of early childhood education, and gender. Data disclosed from this survey research hopefully become an empirical data as a reference in doing further research related to the theme of early childhood education. The data was obtained by filling questionnaire. Pearson's Product Moment was used as a tool for predicting their correlation and shows 0,004 (<0,005) score. It implies that there is a significant correlation between work experience and perceived competence among early childhood teachers in Yogyakarta. Keywords: perceived competence, work experience, early childhood teachers.

OR0688

### Philanthropists' Efforts: A contribution towards rural education and social reform?

Ghamiet Aysen (1), Sanjana Brijball Parumasur (2) 1. None, South Africa; 2. University of KwaZulu-Natal, South Africa

Most communities in South African rural areas are unable to access education thereby depriving children of learning in their Early Childhood Development (ECD) Phase. In efforts to overcome this, (GEMS) has implemented a program to provide education in the ECD phase in centers of excellence. This study aims to assess whether parents and teachers believe that the GEMS program is providing suitable education and contributing to social reformation. The study is undertaken in 10 rural areas in Edendale (Pietermaritzburg, South Africa) and comprises of a sample of 13 teachers and 293 parents drawn using the cluster sampling technique. Data was collected using a self-developed questionnaire whose psychometric properties were statistically assessed and, analysed using descriptive and inferential statistics. The findings indicate positive teacher and parent perceptions of the program and its contribution to education and society by bridging the education divide and enhancing the moral development of the community.

OR0689

### Retrospective Perceptions of Academic Success Among Undergraduate Students

Hana Bahak Open University Israel, Israel

Holding an academic degree is one of the most effective ways to achieve social mobility. Thus it is of crucial importance to achieve a better understanding of factors that facilitate or inhibit academic success. In this research I focus on how successful students construe factors that affected their path. I examine retrospective perceptions of successful students and study communalities and differences between students with different social background. Content analysis of 130 responses to a survey conducted at an Open Admission University with large variability in students' background, revealed interesting differences. Students from an advantaged background reported high academic self-efficacy and a well-planned academic journey including intensive undergraduate and graduate studies. Students from a disadvantaged background reported the need to overcome heavy barriers like low self-esteem, poor past academic experiences and occupational and family duties. Importantly, disadvantaged students expressed strong pride regarding their ability to overcome difficulties and being successful.

OR0690

### The effects of charismatic training style on training outcomes: The moderating role of trainer gender

Foroogh Bakhtiari University, Iran

This study examined the influence of charismatic trainer behaviors on self-efficacy and cognitive learning as training outcomes. Moreover we examined how charismatic training style and trainer gender interact and influence on training outcomes.. The sample was comprised 60 female undergraduates Trainers (male or female, charismatic or non-charismatic) presented a 45- minute training program. The training program involved instruction of basic and advanced functions in SPSS, such as how to enter data, to define variables, and to analyze data. To gather the data self-efficacy scale-eight items adapted from Quiñones (1995) and a cognitive learning test were used. Mancova results showed that charismatic training style had a positive effect on both self-efficacy and cognitive learning. Moreover the interaction between charismatic training style and trainer gender was statistically meaningful only for self-efficacy.

OR0691

### Participation and Reification of Identity among Children belonging to Economically Weaker Section (EWS) in Fee Charging Private Unaided Schools in India: A critical analysis.

**Megha Bali, Prof. Minati Panda Jawaharlal Nehru University, India**

School education in India aims at enabling children from different socio-economic and linguistic backgrounds to study together through common school system. However, reservation for economically less privileged and socially marginalised children in high fee private schools stood as the state's only answer to India's growing need for inclusive education (see Right to Education Act 2009). This research critically examines central assumptions of the policy using communities of practice (CoP) as theoretical framework to show how poor children cope socially and psychologically in middle and upper middle class oriented classrooms of Delhi and how their experiences constitute their self and identity. This empirical study was undertaken using data collection tools such as non-participatory classroom observations and semi-structured interviews with teachers. Through narrative analysis, it examines various bases of reifications like poor children are 'cognitively weak in academics', 'sexually more active children' etc. which impede their participation in these high fee schools.

**OR0692**

**Happy on the second try: Job satisfaction and job stress in second career teachers**

**Catherine E Bauer, Larissa M Troesch**  
*University of Teacher Education Berne, Switzerland*

In the context of recurrent teacher shortages, second career teachers have become an important recruitment pool for teacher education over the past years. Yet, little is known about their further professional development. The present study examined the experience of job stress and satisfaction as well as the effect of self-efficacy in second career teachers as compared to first career teachers. Analyses are based on a sample of 297 teachers who were still working in teaching 7-10 years after graduation, with 35% second career teachers. The latter reported being highly satisfied and experiencing low levels of job stress. They were significantly more satisfied and showed higher general self-efficacy than first career teachers. Furthermore, self-efficacy had a significantly higher impact on job satisfaction and stress in second career teachers. The findings are discussed on the basis of psychological theories of job satisfaction and stress, as well as from an education-policy perspective.

**OR0693**

**On the accuracy of German teachers' identification of pupils involved in bullying**

**Ludwig Bilz**  
*Magdeburg University of Applied Sciences, Germany*

The subject of this study is the accuracy of teacher judgements regarding identification of

perpetration and victimisation behaviour in German schools. We examine whether the portion of involved pupils is overestimated or underestimated, the agreement among pupils' and teachers' perceptions at the individual level, and factors influencing the accuracy of teacher judgements. Participants were  $n=85$  class teachers and  $n=1401$  pupils. Results indicate that teachers are overestimating the number of pupils involved in bullying as victims or bullies slightly, while agreement between pupils' and teachers' judgements is low at the individual level. Teachers' judgements of perpetration behaviour are influenced by pupils' school performance. Results are discussed in terms of their implications for handling bullying in schools and for teacher education and training.

**OR0694**

**Individual and School Factors Affecting Personal Guidance Efficacy of Korean High School Teachers**

**Eunjoo Boo, Jongho Shin**  
*Seoul National University, Republic of Korea*

The purpose of this study was to investigate individual and school factors affecting personal guidance efficacy of Korean high school teachers. Personal guidance efficacy refers to teachers' beliefs in their ability to exert student guidance effectively in school. The analyzed data was collected by the Korean Education Longitudinal Study (KELS) in 2012, which included 8,829 teachers from 194 high schools in South Korea. The data was analyzed with HLM, and the results showed that for teachers, who were in charge of a homeroom class, had more years of experience, and had communicated with colleagues more actively, showed higher personal guidance efficacy. Furthermore, female teachers felt less efficacious than male teachers, and teachers, who perceived more frequent student behavioral problems in school, showed less personal guidance efficacy. However, when teachers actively engaged in their school's decision making process, they tended to feel higher personal guidance efficacy. Keywords: personal guidance efficacy

**OR0695**

**Listing the stages of the creative process with teachers of creative activity**

**Marion Botella (1), John Didier (2)**  
1. *Université Paris Descartes, France;*  
2. *Haute Ecole Pédagogique, Vaud, Switzerland*

Even if many model describing the stages of the creative process exist and some common points were observed between domains of creativity, each domain implies also its own stages (Botella & Lubart, in press; Glaveanu et al., 2013). In the present study, 14 teachers specialized in the teaching of creative activity were

interviewed to establish a list of the stages of the creative process using their own words. For example, they described the stage of convergent thinking by words as "to gather, to focus, to condense, to collect, to combine, to structure". Additionally, they are invited to list the multivariate factors (cognitive, conative, emotional and environmental factors; Lubart et al., 2003) involved in their process and teachers talked about the significance of their memories or freedom. The lists of stages and factors will be presented during this oral session. Such lists will be then used to observe the creative process.

**OR0696**

**Phonological recoding of visual images in older typically developing teenagers: Establishing baseline performance.**

**Megan P Brophy**  
*none, United Kingdom*

Evidence suggests people, especially older children and adults, recode visual information into verbal information to aid recall, a process known as phonological recoding. Furthermore, expressive language has been found to predict visual recall in 6-13 year olds. The present study aimed to investigate the roles of phonological recoding and expressive language in an older teenage population, as well as how articulatory suppression interferes with recoding. The results suggest teenagers use phonological recoding to support their immediate serial recall of visual images (emojis) and that type of image also affects recall. Additionally, expressive language was found to predict immediate serial visual recall. The highly significant findings suggest that processing mechanisms within the phonological loop component of the working memory system are more important in immediate serial visual recall than mere capacity. Suggestions are made for future avenues of research and implications for memory strategies in educational contexts are discussed.

**OR0697**

**Role of Emotional Intelligence on developing coping with Traumatic events**

**Asanka Bulathwatta**  
*University of Leipzig, Germany, Germany*

This Study tries to figure out the role of emotional Intelligence for developing coping strategies among adolescents who face traumatic events. Study to be conducted in a cross cultural manner and it will be taking place in Germany and Sri Lanka. Late adolescence is a critical period of human being as it is foot step in their life which acquiring the emotional and social qualities in their social life. There are many adolescents who have affected by traumatic events during their life span but have not been identified or treated. More specifically, there are numerous burning issues within first year of the university students namely, ragging

done by seniors to juniors, bullying, invalidation and issues raise based on attitudes changes and orientation issues. Research findings in Germany show that students shows more interpersonal traumas, life threatening illnesses and death of someone related are common in German sample.

**OR0698****The Role of Task-focused Behavior, Self-concept, and Math Interest in Mathematics Performance of Chinese Children**

**Dan Cai (1), George K Georgiou (2), Jaana Viljaranta (3)** 1. Shanghai Normal University, China; 2. Educational Psychology, University of Alberta, Canada; 3. Psychology, University of Jyväskylä, Finland

The aim of this study was to examine the role of motivational factors in mathematics. Eighty Grade 2 Chinese children (34 girls) from Shanghai were assessed on measures of self-concept, math interest, nonverbal intelligence, working memory, and mathematics (Math Fluency, Math Problem Solving, and Math Reasoning). Parents filled out a questionnaire on their SES and teachers rated children's task focused behavior. The results of regression analyses showed that both task-focused behavior (6%-15%) and self-concept (5%-7%) accounted for unique variance in all mathematics tasks over and above the effects of SES, nonverbal IQ, and working memory. In addition, the effects of self-concept on Math Reasoning and Math Problem Solving were mediated by task-focused behavior. These findings suggest that motivational factors such as task-focused behavior and self-concept play an important role in children's math performance and should be taken into account when math intervention programs are developed and implemented.

**OR0699****Enhancing Well-being and Intrinsic Motivation of Academically At-risk Students through Classroom-based Hope Intervention Activities**

**Imelda S Caleon** Centre for Research in Pedagogy and Practice, National Institute of Education, Singapore

This study aimed to ascertain the effects of a five-session Hope Intervention Programme (HIP), which was tailored for classroom implementation, on well-being and intrinsic motivation of academically at-risk secondary students. The sample comprised one class of Year 7 students (n=31), with each student randomly assigned to be in the experimental (EG) or control group (CG) and two intact classes of Year 9 students (n=41), with each class randomly assigned to be the EG or CG. The EGs participated in the HIP facilitated by their class teachers during their Citizenship and Moral

Education (CME) classes; the CGs went on with their usual CME lessons. All participants took pretest and posttest a week before and after the HIP, respectively. Year 7 participants also took a follow-up test a month after the HIP. The HIP was found effective in enhancing hopeful thinking and intrinsic motivation, and reducing depressive symptoms of the participants.

**OR0700****Making Social Connections Visible: An Exploratory Analysis of Academically At-risk Students' Peer Networks**

**Imelda S Caleon, Jennifer Pei-Ling Tan** Centre for Research in Pedagogy and Practice, National Institute of Education, Singapore

This study explores the peer networks of Year Seven students (age (N=196) from 10 classes in a Singapore school that specializes in educating academically at-risk students. The participating students were identified as academically at risk based on their performance in a national test that was given at the end of primary school. Based on students' nominations, sociograms showing the students' friendship networks within each class were constructed. The social networks for each class were analyzed qualitatively (i.e., assessing network cohesion and identifying cliques) and quantitatively (i.e., determining centrality and betweenness of each student). The students' risk level, which was based on the students' grades and academic achievement at the end of the school year, was found to have a significant negative correlation with the students' centrality in the network. Significant difference was found in the distribution of students across risk levels for classes with high and low levels of connectedness.

**OR0701****A Longitudinal Study of Happiness Among Students from 6th to 9th Grade**

**Fei Cao** none, China

Many previous studies show that, secondary school students have a high level of well-being but at the same time the level declines rapidly over years. However, few studies have done on the relationship between the level of well-being, the academic-self and the well-being view. Based on Diener's theory of subjective well-being, this study developed a five point scale and conducted a follow-up study of 417 students in Beijing for three years (from 7th to 9th grade). The results show that, though the students in general were happy, over the years their well-being continued to decline and the gender difference was not significant. The level of well-being in all aspects was substantially higher among the students with good academic performance. Furthermore, the

academic-self and the level of well-being had a positive correlation, and could predict each other. Theoretically, we have developed the concept of well-being view and its three specific types.

**OR0702****Customers, investors, or producers: Foreign language learner orientations toward program-level satisfaction**

**Peter D Carter** Kyushu Sangyo University, Japan

During the past 25 years, a significant body of research has explored the relationship between university students' satisfaction with their education and issues such as their psychological wellbeing, academic achievement, and post-graduation success. This present research sought to gauge the applicability of first language satisfaction models in a foreign language paradigm. To this end, a 10-item survey (n=60) and semi-structured interviews (n=12) were employed, with all participants being English language majors at a private university in Japan. Results showed that all participants subscribe to beliefs about satisfaction extant in first language research. Students identifying with customer service paradigms were less equipped to deal with "lifeload" issues than those who orient toward investment or happy-productive models. Although investment and happy-productive focused students were equally adept at managing their studies, the happy-productive group self-reported both greater benefits from and higher satisfaction with their program.

**OR0703****Developing a researcher identity: PhD students' writing conceptions and research-related conditions.**

**Montserrat Castello (1), Carles Monereo (2)** 1. Universitat Ramon Llull, Spain; 2. Universitat Autònoma de Barcelona, Spain

Writing conceptions play a crucial role on productivity but there is a lack of research on the impact of PhD students' writing conceptions and research conditions. In this study 1823 participants from three countries (UK, Finland and Spain) answered a cross-cultural questionnaire to explore the relationship between writing conceptions and some research conditions (35 items) Factorial analysis was developed to confirm the structure of the writing scale. Correlations, T-test, Mann-Whitney U and ANOVA were also conducted to relate variables (SPSS, v21). 'Maladaptive conceptions' (MCW) included four factors: 'Blocks', 'Procrastination', 'Perfectionism' and 'Innate ability'; whereas 'Adaptive conceptions' (ACW) included two factors: 'Knowledge creation' and 'Productivity'. Differences were found on



writing perceptions regarding age and experience, but not among disciplines. Students under thirty scored higher on MCW. ACW were related to productivity and community. Implications for doctoral education will be discussed.

**OR0704**

**Am i doing it all right. childrens motive orientation on literacy learning activities in the transition to first year primary**

*Paula Cavada University of Copenhagen, Denmark*

Drawing on a Cultural Historical approach of human development, the aim of this work is to present from the children's perspective an analysis of the institutional practice organized for children's development and literacy learning in the classroom in the transition to first year primary. The analysis of four children's motive orientation from Chile and Denmark, in 16 video recorded classroom observations, shows that from first year primary, the activities tend to be individually oriented and offer limited possibilities of communication; and their content is frequently decontextualized and barely relates to children's previous experiences or interests. However, children actively try to make sense of the activities and remain engaged by creating playfulness situations and seeking social interactions, changing their motive orientation from play to learning. Yet, children's engagement is often related to fulfil the requirements of the student position established by the teacher and its associated results.

**OR0705**

**Type of school, academic motivation and mathematics self-efficacy of senior high school students**

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A two-phased study that looked into the academic motivation and mathematics self-efficacy of 598 high school students enrolled in public and private high schools in the Philippines. Phase one dealt with determining whether a difference exists in the academic motivation and efficacy beliefs of the two groups of participants. Results show that it is only in the academic motivation that the two groups of participants differ and not in their efficacy beliefs. Phase two focused on identifying the significant predictors of mathematics efficacy belief, results show that academic motivation influences the efficacy beliefs of students. Keywords: Academic motivation, mathematics efficacy, efficacy beliefs

**OR0706**

**It Can't Bridge the Gap by Superficial Respect**

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During the "Seminar on cultural expression", one student said, "We respect each other so much that we cannot see each other." This single phrase touched upon the issue of growing distance between different social groups at the same time as the respect toward cultural diversity is promoted. This has led to silent confrontation between people who held different opinions and their inability to collaborate. This study summarized experiences from the "Seminar on cultural expression" and "Film, psychology, and human life" (both courses based on group discussion) to provide a critical reflection on modern concepts of multiculturalism and multicultural education. It is suggested that the gap can be bridged only by discussing the differences deeply and critically.

**OR0707**

**Socialization and Self Identity Preservation of Thai Parents who Homeschool their Child(ren): a Case Study of BAAN FLEARN.**

*Sovariththon Chansaengsee Srinakariniwrot University, Thailand*

The objectives of this research are to study the advantages of homeschool group, its socialization and identities. In this study, qualitative research methodology was employed. Key informants were mainly 7 families attending BAAN FLEARN. Four advantages of homeschool group emerged in focus group: resources sharing, child's fulfillment, proper number of the learners and opportunity to learn with the children. For socialization, children were focused on morality, ethics, finding self and life skills. Learning by doing, modeling and told stories, social participation and media were group approaches. The parents' identities were child-center, out of frame and trust. The identities establishment started at collecting experiences before selecting the right ones then connecting them to personal philosophy and admitting any feedbacks as the feedbacks were capable of convincing that they were authentic. The conditions that help sustain these identities were consuming media, having well-established relationship, attaining sufficient social support and perceiving children's advancement.

**OR0708**

**A Research on Implementation of Entrepreneurship Competence Education of University Students in Shanghai**

*Liping Che USST, China*

Abstract Cultivating the entrepreneurship competence of university students is the important part of higher-education. Consequently, entrepreneurship should be encouraged to improve the status quo of graduate employment problem, which have practical and strategic significance to improve the economic development of China. Using questionnaire survey, the present study examined the entrepreneurship competence of six representative universities in Shanghai. This article analyzes the current implementation of entrepreneurship competence education of universities students. It also summarizes the main problems of entrepreneurship competence education implementation in university. And on the basis of the result, the author presents corresponding and specific suggestions in implementing the entrepreneurship competence education. Key words: university students, entrepreneurship competence, entrepreneurship competence education

**OR0709**

**Conception of learning in children's drawings**

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What is learning? By asking participants to draw the answer for the above question, this research investigated children's conceptions of learning from kindergarten to high school. A Total of 1470 students of kindergarten, and second, fourth, sixth, eighth, tenth, and 12th grade, participated in this research. The drawings were coded and analyzed in qualitative approach. A Coding scheme was developed based on previous studies. Further categories were added to the scheme where necessary. The preliminary results showed that younger children conceptualized learning in more diverse context, including indoor and outdoor environments. The older children tend to conceptualize learning in terms of school subjects such as English, mathematics, and physics. Also, themes like testing and studying books appeared more often in the drawings of older students. In addition, younger students draw learning as interpersonal activities more. The findings suggest schooling may be critical to children's development of conceptions of learning.

**OR0710**

**Attitudinal tolerance of and actual involvement in academic dishonesty and their psychosocial correlates among Hong Kong Chinese university students**

**Hiu Ming Apesta Chung, Wai Yi Annabel Li, Qian Wang** *The Chinese University of Hong Kong, Hong Kong*

Attitudinal tolerance of and actual involvement in various dishonest acts in the academic setting (e.g., copying others' answers in an exam, plagiarism) were examined among 304 Hong Kong Chinese university students (228 females; mean age = 20.28 years, SD = 1.26). Students' tolerance of (mean = 2.25, SD = .87; 1 = totally unacceptable, 2 = pretty unacceptable, 3 = somewhat unacceptable to 7 = totally acceptable) and involvement in academic dishonesty (mean = 1.21, SD = .30; 1 = never, 2 = rarely to 7 = for many times) were averagely low. In terms of individual differences, greater tolerance of and involvement in academic dishonesty were related to lower life satisfaction, a weaker belief that education can contribute to better employment, a weaker tendency to value interpersonal relationships, lower religiosity, greater susceptibility to peer influence, greater perceived parental achievement-oriented psychological control (e.g., "My parents would only be proud of me when I get good grades."), and greater resistance to parental influence ( $r$ 's > .11,  $p$ 's < .05). Implications for preventing academic dishonesty among university students will be discussed.

**OR0711**

**Differences of foreign students' psychological adaptation to Russian university environment**

**Larisa Darinskaia (1), Natalia Somova (3), Galina Molodtsova (2), Natalia Moskvicheva (4)** *1. Saint Petersburg State University, Russia; 2. Saint Petersburg State University, Russia; 3. Russian State Hydrometeorological University, Russia; 4. Saint Petersburg State University, Russia*

Investigation of adaptation of foreign students provides differentiation of psychological support programs (R.Torralba et al, 2011; Arastaman, 2014). Psychological characteristics of foreign students' adaptation to Russian university were examined ( $n = 441$ ; Africans - 149, Turkmen - 164, Mongols - 128, mean age  $21.6 \pm 0.9$ ) using special questionnaire, Hobfoll Strategic Approach to Coping Scale, Rokeach Value Survey, Lazarus Coping Questionnaire. The adaptation indicator "coming into social contact" is closely associated with the strategy "search of social support" among Turkmen (Pearson correlation,  $r = 0.378$ ,  $p < 0.001$ ), Africans ( $r = 0.454$ ,  $p < 0.001$ ), Mongols ( $r = 0.273$ ,  $p < 0.01$ ). Other characteristics associated with this indicator differ: among Turkmen, it is positively correlated with the strategy "accepting responsibility" ( $r = 0.263$ ,  $p < 0.01$ ), the value of "social recognition" ( $r = 0.258$ ,  $p < 0.01$ ); among Africans - the value of "self-control" ( $r = 0.259$ ,  $p < 0.01$ ),

cautious ( $r = 0.357$ ,  $p < 0.001$ ) and manipulative actions ( $r = 0.267$ ,  $p < 0.01$ ); among Mongols - cautious actions ( $r = 0.386$ ,  $p < 0.001$ ). The results show the differences of psychological features of foreign students' adaptation.

**OR0712**

**Accounting of differences in students' learning styles in the development of tasks in General Studies**  
**Larisa Darinskaia, Daria Gnedykh** *Saint Petersburg State University, Russia*

Nowadays university teachers of General Studies face a challenge of accounting of peculiarities in students' learning styles of various specialties and need empirical substations of the differentiated approach in the development of self-study tasks (Valenza et al, 2011; Pinheiro, 2015). Based on the Canfield's Learning Styles, Diagnostics of self-organization features-39 (Ishkov) inventories it was revealed that students of mathematics ( $n = 166$ , mean age 21.1) in comparison with biology students ( $n = 111$ , mean age 19.5) demonstrate a higher ability to goal-setting ( $p = 0.02$ ), prefer well-organized, planned by a teacher work, but less prone to make their own decisions about objectives ( $p = 0.05$ ). Studying General Studies mathematicians choose to operate with numbers, logic ( $p = 0.000$ ), pictures ( $p = 0.001$ ); biologists prefer verbal tasks ( $p = 0.000$ ), experimentation ( $p = 0.02$ ). Taking into account identified characteristics of learning styles self-study tasks to operate with tables, graphs, diagrams, tests are recommended for mathematicians; case studies, projects - for biologists.

**OR0713**

**Antecedents and Consequences of Job Crafting by School Teachers**  
**Sanket S Dash, Neharika Vohra, Pradyumana W Khokle, Manjari Singh** *Indian Institute of Management Ahmedabad, India*

The study explores the effects of school-level facilitating factors such as principal's leadership style and teacher's psychological empowerment on teacher's job crafting behavior. Wrzesniewski and Dutton (2001) defined job crafting as employee-initiated actions that modify the task or relational boundaries of their work to make it more meaningful. Since the goal of job crafting behavior has been variously viewed as to increase personal meaningfulness of work and build favorable work identities, it is expected that those who engage in job crafting will likely feel less alienated, which denotes feelings of powerlessness, meaninglessness, normlessness and social isolation (Seeman, 1959). Few studies have found a positive correlation between job crafting and job satisfaction and affective commitment (Ghitulescu, 2007; Kirkendall, 2013). It is thus hypothesized that work alienation will mediate the effect of job crafting on job satisfaction

and affective organizational commitment. Results for the study are expected around April 2016.

**OR0714**

**Conceptualizing while doing as a mean of facilitating individual and collective learning**

**Victor Denance, Alain Somat** *Université Rennes 2, France*

Problem-solvers develop their competences by "conceptualizing while doing" (e.g., Pastre, 1999). This process consists in the construction of Operational Invariants (OI; epistemic knowledge) through the production of Action Rules (AR; pragmatic effectors) aimed at transforming the environment (Coulet, 2011; Vergnaud, 2009). If the role of OI has already been stressed out (e.g., Elliott, 2005), little research on the interaction of AR and OI has been carried out. A first experimental study highlighted that participants ( $N = 68$ ) solving problems individually must be trained with both AR and OI, rather than AR or OI separately. A second study tested the transferability of these findings to a collective level. After short trainings, participants ( $N = 126$ ) communicated in dyads about their respective learning in terms of AR, OI or both. They then solved problems requiring both parties' competences. Results confirm that harmonious collective learning is only possible if diverse parties communicate using both AR and OI.

**OR0715**

**Unsuccessful retrieval and its effect on subsequent learning: explaining through implicit theories of intelligence**

**Salam P Devi Jawaharlal Nehru University, New Delhi., India**

Unsuccessful retrieval and its effect on subsequent learning: explaining through implicit theories of intelligence Abstract: Retrieval practice enhances learning. However, the benefit of retrieval is not recognized in mainstream education. Retrieval is only used as a method to diagnose learning. What if the student does not answer correctly in a test? What will be the effect on subsequent learning? Implicit theory of intelligence suggests that negative feedbacks are interpreted differently by different theory holder. Unsuccessful retrieval itself is a form of negative feedback about one's performances; it was hypothesized that persons holding different implicit theory of intelligence will interpret unsuccessful retrieval differently. We tested the effect of testing and re-reading at final recall, study used 2X2X2 mixed design. Results suggest that there was no strong influence of implicit theories on recall, but incremental theory holders were slightly better recall on final test than the entity theory holders.

**OR0716****The relationship between interest in science and personality dimensions of engagement.**

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The Interest in Science Scale was developed by Tanaka (2015) to measure different kinds of interest in science, and has been shown to have a robust factor structure. In order to examine the construct validity of this scale, the relationship between this scale and personality dimensions of engagement were examined amongst grade eight high-school Japanese students ( $N = 58$ ). The HEXACO personality factors of Extraversion, Conscientiousness, and Openness to Experience were used as dimensions of engagement within social endeavours, task-related endeavours and idea-related endeavours, respectively. Results indicated significant positive correlations between interest in science and the 3 engagement dimensions: Extraversion (.286); Conscientiousness (.323); and Openness to Experience (.432). These positive associations remained significant after controlling for gender in multiple-regression analyses. Of the three non-engagement dimensions, interest in science was only correlated at a significant level with Honesty-Humility (.259). However, after controlling for gender this association was no longer statistically significant.

**OR0717****Transitioning to Mainstream Education for Refugee and Migrant Children: A Longitudinal, Mixed-Methods Study of School Engagement**

**Clemence Due (1), Damien W Riggs (2), Martha Augoustinos (1)** 1. The University of Adelaide, Australia; 2. Flinders University, Australia

Despite the importance of education for child development, little research has considered the experiences of schooling for children with refugee or migrant backgrounds in resettlement countries. This paper reports on the findings of a study concerning transition from the Intensive English Language Program in Australia to mainstream schools. Participants were sixty three migrant or refugee children aged between five and thirteen. The study was mixed methods, and aimed to measure school engagement, discrimination and levels of anxiety concerning transition to mainstream classes. Overall, participants level of school engagement was high while in the IELP, and experiences of discrimination were low. However, school engagement decreased significantly post transition, while experiences of discrimination increased. The study suggests young refugee and migrant children adapt well to mainstream education in

resettlement countries and show high levels of resilience. Nevertheless, this cohort of children face a range of challenges that impact their education.

**OR0718****Comparison on Perceiving Proud of Profession between Certified and Un-certified Early Childhood Teacher in Yogyakarta.**

**Sigma P Erlanita, Amanda Rachmaniar Gadjah Mada University, Indonesia**

Qualified teacher is a standard for mediating children in gaining best early education. Purpose of this study was to examine the difference on perceiving proud of profession between certified and un-certified teacher. Certificate is used as a legality to prove teacher's qualification. The research was involved 155 teachers from five districts in Yogyakarta including Kulonprogo, Sleman, Yogyakarta Special Region, Bantul, and Gunungkidul. The data was analyzed with one sample t-test. Result of this study explains that there is no difference on perceiving proud of profession between certified and un-certified teacher where the number of sig 2-tailed shows 0.897. Keyword: Perceiving Proud of Profession, Certificate for Educator, Early Childhood Teacher

**OR0719****Psychological Health of Russian students**

**Regina V Ershova Moscow Region State University of Humanities and Social Studies, Russia**

In 2013-2015, we studied cognitive abilities, psycho-emotional portrait, psychosocial characteristics and psychophysical condition of students. 466 students took part in our research: 331 females, 135 males. Pupillometry demonstrated that about 13 % of students had intensive, and 11,04% acute pathological fatigue. 17% of students showed the residual effects of resource loss. About 11-14% of the students had excessive, pathological neuroticism, anxiety, emotional impulsivity and extraversion. The attention switching exceeded the age norm by one third. 13, 95% showed extremely fast switching, high distractibility, inability to concentrate on one thing, reduced ability to memorize and remember the information. The results can be connected with phenomena of digital dementia which means a deterioration in cognitive abilities caused by over-use of smart phones and game devices that hampers the balanced development of the brain. The results of study show the actual need of psychological support of the education process in higher school.

**OR0720****«Obedience to authority» in russian education**

**Regina V Ershova Moscow Region State University of Humanities and Social Studies, Russia**

We studied the obedience of Russian students to instructor's authority ( $N=338$ ). The study was partially a replication of A.Poskocil's experiment with absurd quiz given by instructor to test students' knowledge of course material. The independent variables were: personal traits and basic social roles of participants, influence of disobedient people to the obedient behavior, "individual"/"in group" testing procedure. We showed: the obedient behavior is characterized by lowered self-esteem, intellectual inertness and meekness. The presence of denying figures might provoke disobedience in a minority and reinforce the pro-group behavior in a majority. The influence of personality traits are rather insignificant, only L (Vigilance) ( $r=0,27$ ); C (Emotional Stability) ( $r=-0,21$ ); O (Apprehension) ( $r=0,29$ ); Q1 (Openness to Change) ( $r=0,25$ ) can reduce obedience to authority of the teacher. Excessive obedience in the learning environment can reduce the quality of education, through the transformation of educational motivation, decreased research activity, skills of logical thinking, dialogue and discussion.

**OR0721****Student Reluctance to Choose Early Primary Education Specialization: Pre-service Teachers Perspectives on the Contributing Factors**

**Adnan M Farah, Esra Kaskaloglu, Ronald Brown University of Bahrain, Bahrain**

This study aims at identifying different perceptual factors that contribute to Bahrain Teachers College (BTC) pre-service teachers' lack of interest in choosing early primary education specialization. The sample for this study was drawn randomly from pre-service teachers at the foundation year and at academic year one. A mixed design study was used, utilizing qualitative interview and a quantitative survey questionnaire; Factors Contributing to Lack of Interest Questionnaire was developed and Semi-structured Interview was conducted. The findings of this study will contribute to understand the possible causes for the lack of interest in Choosing early primary education Specialization, which would assist policy makers and stakeholders to implement possible remedies for this problem. Furthermore, findings of this study will contribute to better understanding for pre-service teachers' decisions to choose teaching profession as related and influenced by some possible factors and variables such as the SES, gender and parents educational level.

**OR0722****School Counsellors supporting teachers implementing inclusive education in South African schools**

*Jean V Fourie University of Johannesburg, South Africa*

South African teachers face many difficulties in implementing the country's policy of inclusive education. Teachers from twenty schools reported over-crowded classrooms, lack of specialised pedagogy and limited teaching resources as factors impeding the full integration of pupils with special needs into their mainstream classes. Even though the inclusive education policy has been in place for over ten years, many teachers still experience practical obstacles and thus rely on the school counsellor for guidance. This study investigated the role of school counsellors in supporting teachers to implement inclusive practices. Although counsellors established relationships with speech and occupational therapists, insufficient funding for these specialised services resulted in counsellors creatively improvising their helping practices for teachers and pupils with special needs. School counsellors thus performed a vital role in helping teachers to realistically integrate these pupils by differentiating the curriculum, adapting assessments and modifying the learning environment to account for the situational realities.

**OR0723****Development and validation of bullying-IAT among Japanese junior high school students**

*Tsutomu Fujii (1), Masato Sawada (2) 1. Sungshin Women's University, Republic of Korea; 2. Utsunomiya University, Japan*

The present study investigated the use of Implicit Association Test (Greenwald, McGhee, & Schwartz, 1998; IAT) to measure implicit attitudes towards bullying. Participants, 144 junior high school students responded to a series of self-report scales including explicit attitude towards bullying, dispositional benign and malicious envy, dispositional vengeance, active involvement in bullying, and the bullying-IAT as a measure of implicit attitude towards bullying. We conducted multiple regression analysis with the self-report scales and bullying-IAT as predictor variables and self-report bullying-reinforcing behaviors as the criterion variable. Results showed explicit attitude towards bullying and bullying-IAT significantly predicting self-reported active involvement in bullying. Furthermore, bullying-IAT positively correlated with malicious envy, dispositional vengeance, and belittling attitude towards bullying (subscale of explicit attitude towards bullying) significantly. These results revealed the predictive validity and criterion-related

validity of bullying-IAT. Future research should examine its test-retest reliability.

**OR0724****Effects of Peer Presence on Collaborative Essay Revision**

*Yuko Fukaya (1), Yoko Ichikawa (2) 1. Tohoku university, Japan; 2. Chiba institute of technology, Japan*

In the current study, we investigated how peer presence in the collaborative revising process affected on students' motivation and the actual revision of essays. Twelve undergraduate students participated in a series of 4 sessions of collaboration, and in each session students prepared essays on particular topics based on assigned books beforehand. During 4 sessions of peer-review style revisions, students were instructed to use pseudonyms so that their anonymity and addressivity in collaboration can be assured. Results indicated that students were likely to adopt suggestions of peers to polish essays and to emulate their peers' ways of providing an argument. Further, even though students were not engaged in direct conversation in most sessions, they reported that peer presence had a positive effect on motivation and on cultivating the mindset of a competent writer. These findings are discussed in an educational context.

**OR0725****Effects of utilizing textbooks in mathematics class: Textbook strategy use and students' belief about textbooks**

*Mari Fukuda The University of Tokyo, Japan*

For self-regulated learning, it is important to use textbooks when an impasse is encountered. This study investigated the effects of utilizing mathematics textbooks in class on students' spontaneous use of textbooks and change in beliefs about textbook strategy use. Thirty-seven 8th-grade students participating in experimental classes were assigned to either an experimental group, in which they were shown which parts in a textbook were beneficial for overcoming misunderstanding and participated in collaborative learning using textbooks, or a control group (regular math instruction). The results indicated that students in the experimental group subsequently used textbooks in an impasse more than those in the control group, and the effect was moderated by students' previous achievement. The results also revealed that students in the experimental group improved in perceived utility of textbooks and viewed textbooks as a tool for work at home. These effects were moderated by students' beliefs about learning.

**OR0726****To avoid or to approach hard-working underachievers? Mediators between peers effort-making and adolescents friend-making in the Confucian cultural context**

*Bih-Jen Fwu (1), Chih-Fen Wei (2), Shun-Wen Chen (3), Hsiou-Huai Wang (1) 1. National Taiwan University, Taiwan; 2. University of Taipei, Taiwan; 3. National Tsing Hua University, Taiwan*

In individualist societies such as North America, those who work hard but fail suffer from incompetency and low self-esteem. However, in collective Confucian societies such as Taiwan, hardworking underachievers tend to have positive image because effortful students are given great moral salience and regarded as fulfilling their filial obligation. This study investigated if hardworking peers as a (moral) model and conformity to parental expectations mediated the impact of peer's effort-making on adolescents' decisions to avoid or to approach the peers. A self-made scenario questionnaire was administered to 342 high school students in Taiwan. Independent variable was peer's level of effort whereas dependent variables included peers as a model, perceived parental expectations, and personal choice of friends. Structural equation model was conducted. The results showed that the impacts of peer's effort were mediated by peer as a model and perceived parental expectations, which in turn contribute to personal choice of friends.

**OR0727****Bullying Victimization Heightens Cortisol Response to Psychosocial Stress in Chinese Children**

*Chen Guanghui, Kong Yanhong, Zhang Wenxin Shandong Normal University, China*

Objective: This experiment investigated the relationship between bullying victimization and physiological stress responses as measured by salivary cortisol levels. Method: Twenty three severe victims selected from 397 children ( $M=10.50\pm 0.5$  years), and nine children as control group completed the Olweus' victimization questionnaire, and the Trier Social Stress Test (TSST). Six salivary cortisol samples were collected at six time points of TSST, while children reported their subjective anxiety level together. Of these, 15 children also provided four samples of salivary cortisol on 2 non-sports school days. Results: Salivary cortisol levels were higher in victims compared to non-victims across all six points, although victims and non-victims did not differ with respect to subjective anxiety from the TSST. Analysis of diurnal cortisol suggested that frequent victimization was associated with hypersecretion of cortisol. Conclusions: This study indicates that bullying victimization may potentiate cortisol response to psychosocial stress in children.

**OR0728****The Effect of Context Characteristics on Students' Situational Interest when Learning Chemistry**

**Sebastian Habig, Helena Van Vorst, Elke Sumfleth** *University of Duisburg-Essen, Germany*

Research on how interest and learning of students can be supported is an essential part of educational psychology. In this regard, many studies emphasize the positive effects of context-based education on students' interest in science learning. However, there is little empirical evidence regarding specific characteristics of contexts, which induce these effects. Based on previous research, a relationship between the context characteristics relation to everyday life/uniqueness and the underlying content area was assumed and tested with 435 German ninth-graders. The students rated their situational interest in 20 chemistry-related texts, which differed in their specific context characteristics and underlying content areas (redox vs. acids/bases). Results show a differential impact of context characteristics on the feeling- and value-related valence depending on the content area to be taught and learned respectively. Obviously, the context in which a task is presented gets more important the less interesting the respective content is perceived to be.

**OR0729****An examination of the factorial structure of the self-efficacy scale for Japanese teachers in TALIS 2013**

**Yasuhito Hagiwara, Kenji Matsubara** *National Institute for Educational Policy Research, Japan*

TALIS 2013 defined three sub-scales on teachers' self-efficacy scale: efficacy in classroom management, efficacy in instruction and efficacy in student engagement. In TALIS 2013 Technical Report, these sub-scales were examined with a confirmatory 3-factor model for each participating country. However, it may be uncertain whether other models fit better or not for each country. In this study, we examined the factorial structure of the self-efficacy scale for Japanese teachers in TALIS 2013. Based on the graded response model and the generalized partial credit model, 1-factor model, confirmatory 3-factor model and confirmatory bi-factor models were compared. Sampling weights and clustering were taken into account in the analyses. The bi-factor model with no factor correlations and no path from one of the group factor, efficacy in student engagement, to the item "Help students think critically" was fitted the best among the models considered.

**OR0730****Students Perception of Flipped Classroom and Distant Mode Teaching Effects of Motivational and Self-Determination Orientations**

**Kit-Tai Hau, Jianfang Chang** *Chinese University of Hong Kong, Hong Kong*

"Flipped classroom" has become popular due to the ease in producing videos. The emphasis is to have students prepare individually before class using videos or e-materials, while leaving more class time for interactive activities. In contrast, in the distant mode of teaching, students self-studied the materials with minimal support from the teachers. We assessed and compared students' perception of these two modes of teaching and examined whether it was preferred only by highly motivated, independent, and self-regulators. In this experimental study, two groups of students were taught separately with flip and distant modes, on an introductory methodology course which had been traditionally taught in seven sessions. It was found that flip was more positively evaluated by students. Particularly for students with greater interest and self-awareness, flip and distant mode learning was preferred more. The assumption that only more strongly motivated students would prefer these mode of teaching was not supported.

**OR0731****Predicting academic attainment in a biomedical common year 1 course**

**Marcus A Henning (1), Christian U Krägeloh (2), Roger Booth (1), Erin M Hill (3), Julie Chen (4), Craig Webster (1)**  
 1. *University of Auckland, New Zealand*; 2. *AUT University, New Zealand*; 3. *West Chester University, United States of America*; 4. *The University of Hong Kong, Hong Kong*

This research assessed psycho-educational factors linked to academic achievement in a biomedical year 1 programme. It was hypothesized that grade achievement could be explained by psycho-educational measures. Students who completed their biosciences assessment participated in a survey capturing grade information and perceptions of motivational beliefs, quality of life, stress and competitiveness. A hierarchical multiple regression was conducted using four blocks: demographic information, competitiveness, quality of life, and motivation. A total of 339 students (response rate = 25%) participated in the research. In Block 4, academic attainment was explained by conscientiousness, psychological health, self-efficacy and test anxiety. The findings indicated that students with high levels of conscientiousness and test anxiety attained lower grades while students with high levels of psychological health and self-efficacy attain high

grades. This cohort is under immense pressure that inculcates a culture of competitiveness which strains the harmony of the learning environment affecting academic achievement.

**OR0732****The intersection between qualities valued and possessed of teacher scientific imagination: A measurement perspective**

**Hsiao-Chi Ho, Chia-Chi Wang, Chih-Ling Cheng, Ying-Yao Cheng** *National Sun Yat-sen University, Taiwan*

The study aimed to investigate the teachers' scientific imagination by identifying the qualities valued and possessed. Teacher Scientific Imagination Scale was conducted to collect data. Participants were 523 elementary and high school teachers recruited from Kaohsiung City and Pingtung City in Taiwan. Rasch Partial Credit Model techniques was applied to assess model-data fit, and the possession and value of TSIS were aligned on the interval logit scale to yield four quadrants. The results indicated that TSIS exhibited good model-data fit. Cross-analysis on the scientific imagination qualities possessed and valued by teachers were illustrated in terms of personal traits, mental imagery, and surroundings. There were no significant differences in teacher scientific imagination across gender and teachers instructing different subjects, except for their experiences of participating scientific competitions and of winning scientific competition awards. Suggestions for further development and application of the study were discussed.

**OR0733****Text mining of children's essays about animals kept at schools focusing on importance of life and attachment to animals**

**Kyoko Hori, Takatoshi Ando, Takehiko Ito** *University, Japan*

Contents of children's essays about school-owned animals that are collected and published as supportive activities for animal breeding in schools were analyzed to examine the effects of animal care on children's development. Essays (N=387) were examined using text mining on children's interest in animals, their activities, and feelings of children. Mean characters of essays were 326.3 with a sentence having a mean 14.6 characters. The results indicated that higher school grade children common used active expressions such as taking care of animals, whereas lower school grade children commonly used expressions suggesting their interest, such as watching closely. Emotional expressions were generally positive, regardless of the school grade. It was indicated that through animal care, children felt the sense of accomplishment, enjoyed contact with animals, obtained knowledge about animals, empathized with animals, considered

about animals and other children, and children could consider their own internal state, among others.

**OR0734****Resilient factors in transitions from preschool to first grade**

**Simona Hoskovicova** Charles University in Prague, Czech Republic

Our research focuses on personal resilient factors in the child in transition process from preschool to school and expectations about the school. Our research group are children in the age 5- 7 (N=110). We used the parent and teacher assessment form DECA-P2 (Devereux Early Childhood Assessment Preschool) and an own measure of adaptation. The first assessment was in May before the transition, the second in September directly after the change and the third in November. 9% of the sample expressed doubts about the transition to school. Nearly the same amount of children had adaptation problems. Doubts are connected with lower Initiative of children. We can say, that children in Czech Republic are generally looking forward to enter school and do not have massive adaptation problems. We discuss the role of Initiative and Self-regulation in the transitory process. Implication for practice is the focus on children with low agency for school.

**OR0735****Cix: An Evaluation Model for Creativity in Teenagers Education**

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Creativity, as a complex human phenomenon, has been extensively concerned and studied in many fields, especially phraseology, psychology and physiology. However, due to the boundary of disciplines and the lack of an intuitive relationship between them, it has been difficult to transform and share the research results or even communicate with each other understandably. In this work, we design a "common language" for communicating about the studies of creativity, which can also serve as an evaluation criterion in teenagers' education. Upon inspection, we find that experiential learning is a suitable scenario to implement and test the evaluation model. During the experiment, we use a variety of methods from different disciplines, such as biofeedback, observation, questionnaire, and interview. Through data collection and analysis, we have enough reasons to believe that our results can be used in many realms of science, and it's easy to understand.

**OR0736****The role of the school principal in the management of social, emotional, and behavioural difficulties in disadvantaged Irish primary schools**

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One third of Irish schools in acutely disadvantaged communities report child social, emotional, and behavioural difficulties (SEBD) prevalence rates greater than 40% (Banks & McCoy, 2011). Whilst issues relating to classroom management are primarily the domain of teachers, school principals provide vital support in the generation of a positive school behavioural culture. This qualitative sub-study was nested within a randomized controlled trial in South-West Ireland that assessed the effectiveness of a teacher classroom management intervention. Six primary school principals were interviewed on their role in managing child behaviour. Data were analyzed using the thematic Framework approach. Themes identified included 'perceived inadequate parental control', 'a whole school approach to discipline', 'the need for home-school links', and 'the importance of evidence-based intervention'. These findings are in line with previous research, and highlight the key role played by school principals in fostering a positive school climate, particularly in schools serving disadvantaged communities.

**OR0737****Self identification and growth after academic failure in javanese students: an indigenous approach**

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This study aimed to explore the influence of academic failure in Javanese students' life from an indigenous psychology perspective. The perspective intends to give a contextual understanding that is rarely found. This research use qualitative method with open-ended questionnaire. The question asked was "What is the influence of academic failure in your life today?" The participants of this study were 80 undergraduate Javanese students who were studying in Yogyakarta by the time of data collection. The age range of the participants is 18-22 years old. Further, the multiple responds data obtained were analyzed using thematic content analysis. The categorized data was then analyzed using cross-tabulation. The finding of this study showed that students who identify their strong ethnicity as Javanese reported academic failure as

self-development (67%) which included growing self-maturity, self-motivation, self-learning and self-awareness, and then shape their mentality (20%), influence-less (7%) and life guidance (6%).

**OR0738****Development of the Shared Leadership measurements for School Classes**

**Tomohiro Ioku, Naoki Kugihara, Ryoosuke Uchida** Osaka university, Japan

The purpose of this study was to develop the shared leadership measure for school students and to examine its reliability and validity. Based on the theoretical model of shared leadership components proposed by Hiller (2006), initial pools of items to measure four components (planning and organizing, problem solving, support and consideration, and development and mentoring) were generated. Questionnaires including above items were administered to samples of high school students (N=174). The result of exploratory factor analyses endorsed the significance of those four categories. Scores on these subscales revealed acceptable levels of internal consistency (Cronbach's alpha). Also, shared leadership components positively related to group identification and job satisfaction. These results confirmed the validity of the scales and this measurement may be utilized as a practical instrument in future shared leadership research, as well as management of a group in school and college.

**OR0739****Potentialities of the My Career Story for Group Career Interventions with adolescents**

**Isabel N Janeiro (1), Paulo Cardoso (2)** 1. Faculdade de Psicologia, Universidade de Lisboa, Portugal; 2. Universidade de Évora, Portugal

My Career Story (MCS) is an autobiographical workbook for individual counseling based on the theory of Career Construction (Savickas, 2005). The present study analyses the potentialities of an adaptation of this type of intervention for group interventions with high school students. The study involved 225 students from grade 9 and grade 12 of three Portuguese public schools. The intervention was organized in 5 sessions and both the experimental and the control group answered the Career Maturity Inventory - the Adaptability form (CMI-A), the Career Certainty Scale and the Career Self Efficacy Scale before and after the intervention. Results showed a significant and positive effect of the intervention on both Career Certainty and Career Self Efficacy, but no effect on Career Adaptability. Results also showed that MCS had a stronger effect on grade 12 students. Implications for future research and practice are discussed.

**OR0740**

**Construction of notebook to observe the creative process of young students during complex solving problems in educational context.**

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The development of creativity of students in educational context has been recognized as critical condition in solving complex tasks, without preconceived procedures (Didier & Leuba, 2011). Several models allow the creative process to understand and identify the multivariate factors (cognitive, conative, emotional and environmental) (Lubart & al, 2003) involved in solving complex situations. Based on previous notebook used to observe the creative process of adult during creative activities (Botella, Zenani & Lubart, 2011), our communication focuses on the adaptation of the notebook from adults to young students in the purpose to use it for solving problems in an educational projects and micro-projects-oriented context. The preliminary results which consider the increase of students with innovative ideas adapted to context during complex tasks.

**OR0741**

**Developing creativity in teacher training based on design activities.**

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In the context of teaching creative and manual activities in the education, in the French part of Switzerland, we developed a pedagogical method, based on design activities, in line with ergonomics and psychology. We argue that these activities favour the development of creative abilities in a constrained cognitive environment. As part of the design and realization of technical objects, the introduction of design activities should favour cognitive and environmental factors, which exert an influence on the creative potential (Lubart et al. 2003). We describe a study that was conducted with 86 teacher students, in a training teacher university. These participants had to design and achieve objects and their the early design process was based on either idea generation or constraint management, in accordance with the A-CM model (Analogy and Constraint Management) (Bonnardel, 2000). We will describe the effects of such methods on students' evocation processes and creative productions.

**OR0742**

**Maximum Exposure in English leads to Maximum Learning of English: Does Educators assumption empowers or disempowers learners in low cost English medium schools**

*Rashim P Kapoor, Minati Panda Jawaharlal nehru university, India*

This papers aims to explore the assumptions of educators regarding second language pedagogy in multilingual classroom and how these assumptions shape their teaching learning practices in lowcost English medium schools in India. Discourse analysis of interviews of educators and the classroom discourses of grade V where English was taught as a language subject to first generation English learners highlighted that Educator's assumptions that 'maximum exposure in English leads to maximum learning' leading to compulsory and exclusive use of English in these classrooms. Teachers' lack of understanding regarding the 'comprehensible input' and the 'metacognitive and metalinguistic processes' involved in second language learning discouraged active and authentic participation of learner. Even the supportive strategies such as translation and code switching adopted by teacher for comprehension of the content could achieve only limited academic proficiency in second language i.e. English. Behavioristic assumptions of educator with limited psycholinguistic understanding disempowered learners linguistically and academically.

**OR0743**

**Correlation between communicative skills, socio-metric status and level of intelligence in different age groups of high school students.**

*Sevara R Khadjieva (1), Yuliya D Babaeva (2), Olga V Mitina (2)* 1. Branch of Moscow State University in Tashkent, Uzbekistan; 2. Moscow State University, Russia

The relationships between intelligence (verbal and non-verbal), styles of communicative skills and sociometric status were studied on the sample of 148 Russian-speaking high school students in Tashkent city (age 12-16y.o., 92 boys, 57 girls). The relationships between considered parameters are found to be statistically significant and differently mediated by factors of sex and age. Aggressive behavior is largely determined by the low level of intelligence and is not attractive for classmates. Older teenagers demonstrate dependent style of behavior more frequently. Younger boys with low verbal intelligence and girl with high level of intelligence demonstrate dependent style of communication. Generally boys are more aggressive. To be chosen a teenager with low intelligence should demonstrate dependent

behavior. Dependent behavior correlates with infantilism, while competent behavior correlates with social maturing. High intelligence determines socio-metric status and social competence among boys, while the girls compensate the deficit of intellectual development by social maturing.

**OR0744**

**Harnessing the power of study groups in promoting success among first year university students in a south african university: a case study**

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Study groups are increasingly proving to be effective in institutions of Higher Learning of both developed and developing countries in reducing the attrition rate of First Year students which in some instances is as high as 30%. Studies that have been conducted in Africa from under resourced schools indicate that 17% of schools have no access to electricity, 79% of schools have no library facilities, 60% of schools have no laboratory facilities and 68% of schools have no computers. A brief background study groups will be presented to demonstrate the challenges encountered in creating and sustaining study groups. This will be followed by a case study to illustrate the benefits of study groups among the students. The case study will be tracked from foundation level to post-doctoral studies. The paper will conclude with recommendations to facilitate success and plans for future research.

**OR0745**

**The "Risk of bullying" questionnaire: a new tool for risk of school bullying evaluation**

*Kirill D Khlomov (1), Alexandra A Bochaver (2)* 1. Federal Institute of education development, Russia; 2. High Economics School, Russia

The problem of school bullying is highly unpopular among the specialists in Russia, and there are extremely few attempts of bullying evaluation and prevention in Russian schools. The 'Risk of bullying' questionnaire is a pilot tool in this area developed in Russian language. It responds the implicit requests made by the students and their children, and its outward title is 'School atmosphere questionnaire'. Developing this tool we based on the large corpus of studies by D.Olweus, C.Salmivalli, E.Roland, P.Smith, et al. The questionnaire was validated on the sample consisted of 285 children and adolescents aged 10 to 18 years (53% females;

Age=14,9 years old) in 14 educational institutions. The questionnaire structure is composed of 4 scales assessing risk factors (scales of unsafety and of disunity) and protection factors (scales of well-being and of equality).

#### OR0746

##### **Life course trajectory: an attempt of empirical modelling of life designing through the adolescence**

**Kirill D Khlomov (1), Alexandra A Bochaver (2), Alisa V Zhilinskaya (3)**  
1. Federal Institute of education development, Russia; 2. High School of Economics, Russia; 3. Moscow City University of Psychology and Pedagogic, Russia

Main psychological theories of adolescence describe this period predominantly as a transition from childhood to adulthood; however, they avoid discussion of life events as highly influencing factors of their further life. This abstract is focussed on significant events taking place during adolescence such as educational choices, professional orientation, the different forms of delinquent behavior (crimes etc.), as well as on the cultural, social, and family context in order to define the risk and protective factors influencing the person's life design during the adolescence. In our study, we used scales evaluating different personal characteristics, inquiries, as well as interviews conducted with over 100 adolescents. Our results showed that adolescent's life design was highly influenced by their social environment. Support of those 'life projects' coming from family members has been found to play an important role in their choice of social adaptation. Supported by the Russian Scientific Foundation in Humanities, project 15-36-01317

#### OR0747

##### **Materialism has a negative impact on student learning: Examining the role of materialism on motivation, engagement, and achievement**

**Ronnel B King (1), Jesus Alfonso Datu (2), Jana Patricia M. Valdez (3)**  
1. The Hong Kong Institute of Education, Hong Kong; 2. The University of Hong Kong, Hong Kong; 3. San Pablo College, Philippines

Previous studies have reported that materialism has a negative impact on psychological well-being. However, we do not know much about the relationship between materialism and learning. The aim of this study was to examine how materialism is associated with key learning outcomes, in particular, with students' academic motivation, engagement, and achievement. Study 1 was a cross-sectional study which found that materialism was negatively associated with engagement, and this

association was partially mediated by amotivation. Study 2 was a longitudinal study which found that Time 1 materialism was negatively associated with Time 2 teacher-rated engagement and academic achievement via amotivation. Results of the two studies provide converging lines of evidence that materialism has detrimental effects on student learning. Students high in materialism have lower levels of engagement and achievement, and these effects are partially mediated by amotivation. Implications are discussed.

#### OR0748

##### **Perseverance Counts but Consistency Does Not! Validating the Short Grit Scale in a Collectivist Setting**

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The central aim of the current study was to examine the psychometric properties of the Short Grit Scale (Grit-S) in a collectivist context through within and between-network construct validation approaches. There were 220 undergraduate students (Study 1) and 606 secondary school students (Study 2) who participated in the present investigation. The results of within-network construct validation showed that the hierarchical model of grit was not applicable for Filipino samples given that only the perseverance of effort significantly loaded on the higher-order grit construct. The Grit-S dimensions also had relatively low reliability coefficients across studies. In terms of the between-network construct validation, perseverance of effort served as a key of academic engagement and subjective well-being while consistency of interests did not predict adaptive outcomes. In general, the findings suggest that grit may operate differently in an interdependent setting.

#### OR0749

##### **Comparison on Perceived Competence among Certified and Non-Certified Early Childhood Education Teachers**

**Kurnia P Kiswanto, Acintya R Priwati**  
Universitas Gadjah Mada, Indonesia

Young children need appropriate nurturing to make developmental progress (California Department of Education, 2009). Therefore to maximize the development task, early childhood education teachers need to have standardized competency and skills (Permendikbud, 2014). The aim of this study was to know the comparison on perceived competence among certified and non-certified early childhood education teachers. This study involved 285 early childhood education teachers in Yogyakarta

Special Region as participants. The data was obtained by filling the questionnaire. Independent Samples t-test was used as a tool for predicting their comparison. The result shows that certified early childhood education teachers have more competence than non-certified teachers. Keywords: perceived competence, certified and non-certified teachers, early childhood education teachers.

#### OR0750

##### **Effects of Students' Goal on Job-Search Strategies in Japan** *Sayaka Kosuge Gakushuin University, Japan*

This study investigated university students' job-search processes in Japan. This study had two purposes. The first one was to explore the kind of job-search goals which promote the students' searching behaviors and how their job-search goals vary in accordance with the job-search processes. The second one was to examine the relationship between job-search goals and job-search strategies. Two hundred fourteen students participated in this study. The early job-search goal (e.g. "knowing myself") to which the 3rd-grade students mainly responded was positively correlated to the exploratory strategy. Furthermore, the subsequent goal (e.g. "gathering only the information of the specific company") to which the 4th-grade students mainly responded was positively correlated to the focused strategy. The results suggest that students set various goals and these goals vary depending on their job-search processes. Therefore, the students' job-search activities were affected by what individuals mainly pursue in their job search.

#### OR0751

##### **The Relationship between Work Experience and Pride in Profession as Early Childhood Educators in Yogyakarta, Indonesia**

**Lucia Kumalasari, Sindita D Pertiwi**  
Universitas Gadjah Mada, Indonesia

There's a sense of pride in profession as educators that makes people want to take the role. It is a prestige to be called a teacher in the society. Usually in Indonesia, when a teacher have a lot of experience they will get a lot more respects than new teacher. This study aimed to find correlation between work experience and pride in profession in early childhood educators in Yogyakarta. The data was collected by surveys to 153 educators in Yogyakarta. Data analysis showed no significant relationship ( $0,809 > 0,05$ ) between work experience and pride in profession. This means that work experience can't predict pride in profession as early childhood educators in Yogyakarta. Keywords: Work experience; pride in profession; early childhood education



**OR0752****General mental ability of adolescents of secondary school level in relation to their social maturity and gender**

**Parmod Kumar (1), Rita Devi (2)** 1. *Central University of Jammu, Jammu & Kashmir (India), India*; 2. *Central University of Jammu, Jammu & Kashmir (India), India*  
The present paper is an outcome of research conducted by authors to see the relationship between General Mental Ability and Social Maturity and also see the difference, in term of gender and Social Maturity on General Mental Ability of adolescents of secondary school level, using descriptive survey method and formulating directional hypotheses by taking sample of 250 adolescents (134 female and 116 male) of Secondary Schools of Kathua district of Jammu & Kashmir State (India). General Mental Ability Test by Jalota and Comparative Scale for Social Maturity by Roma Pal were tools used and co-efficient of correlation, Mean, SD, SED and C.R. ratio employed for data analysis. Study indicated significant positive relationship between General Mental Ability & Social Maturity and no significant difference of Social Maturity in term of gender on General Mental Ability was found. The study has implications for schools system, directorate of school education and the parents/community.

**OR0753****Adjustment and academic achievement of adolescents of secondary school in relation to their parental encouragement**

**Parmod Kumar (1), Ajaz A Reshi (2)** 1. *Central University of Jammu, Jammu & Kashmir (India), India*; 2. *Ex-Student, Department of Educational Studies, Central University of Jammu, India*  
The present paper is an outcome of research conducted by authors to see the relationship between Adjustment and Academic Achievement of adolescents of secondary school level with their parental encouragement. The descriptive survey method was used and formulating null hypotheses by taking sample of 250 adolescents (121 female and 129 male) of eight secondary schools of Jammu city of Jammu & Kashmir State (India). Parental Encouragement Scale developed by Dr. Sharma and Saxena's Adjustment inventory were used and co-efficient of correlation employed for data analysis. The study indicated the positive relationship of Adjustment and Academic Achievement of adolescents of secondary School level with their Parental Encouragement, in case of higher group of adolescents have significant positive parental encouragement but in case of low group, this relationship was positive but not significant. The study has its implications for schools system, directorate

of school education and the parents/community of the adolescent students.

**OR0754****Applying a Strengths-informed Multifaceted Approach for Supporting University Students with Learning Disabilities**

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Learning disabilities (LD) refer to a group of neurodevelopmental disorders impacting how a person learns. Post-secondary students with LD face challenges related to their learning styles. Difficulties are compounded by misunderstanding and negative judgments from instructors, peers, and even family members, which impact self-perceptions. Many with LD achieve academic success when their needs are accommodated and their strengths are nurtured. To support the multifaceted needs of students with LD, we have developed and are implementing a multilevel (personal, interpersonal and institutional) model for supporting academic and health/wellness needs. At the personal level, students focus on understanding LD-related needs and strengths; we leverage this understanding to facilitate self-efficacy. At the interpersonal and institutional levels, we create opportunities for our students to discuss their LD as well as to inform the university community. We present our model, its implementation, and examples and themes from materials created by participating students to raise awareness.

**OR0755****University Students' Reflections of Experiencing Wisdom in a Mindfulness Course**

**Thao N Le** *University of Hawaii Manoa, United States of America*

Research and theory suggest that education should not only focus on cognitive and intellectual skills, but also need to cultivate and bring forth qualities and virtues such as wisdom. Wisdom is rooted in philosophical traditions and contemplative practices such as mindfulness. This paper reports on the experiences and results of 25 university students who enrolled in a 16-week mindfulness & skillful living course that aims to develop personal and social awareness. Students provided weekly reflections (mean = 255 words/week) and integrated personal reflection (mean = 1,273 words) that were submitted to phenomenological analyses. Results revealed a processual over substance philosophical orientation whereby experiences in wisdom were expressed as realizing limits of one's knowledge, pausing to allow for insight, deepening understanding of self, and harmonizing in ways that provide for productive relations. Remarks contained important contextual parameters for experiencing wisdom including presence of safe, secure, inclusive, trusting, and open classroom climate.

**OR0756****Relationship of Epistemic beliefs, Grade Level and Identification of Informal Fallacies in Hong Kong Secondary School Students**

**Wing Sze Wincy Lee** *The Hong Kong Institute of Education, Hong Kong*  
Epistemic beliefs were found to be associated with the ability to identify fallacy. This study examined the joint function of Hong Kong students' grade levels and epistemic beliefs on their ability to identify three types of fallacy. Sixty-two students completed the epistemic beliefs questionnaires and 4 fallacy tasks. MANOVA results revealed that grade 11 students have more sophisticated epistemic beliefs than grade 7 students. ANOVA results revealed that grade 11 students were better in identifying appeal to popularity fallacy only. Multiple regression showed that, Certainty and Complexity, predicted the identification of appeal to popularity fallacy, whereas grade level exerted no effect. This study sheds light on the understanding of epistemic beliefs and informal reasoning among teenagers in the Chinese culture.

**OR0757****Harmony in the educational environment: conformity between professional interests, skills and area of training of university entrants**

**Elena V Leonova** *National Research Nuclear University «MEPhI», Russia*  
The research results among university entrants are presented. We have studied the conformity between a) the chosen area of training; b) professional interests; and c) professional skills among university entrants. The biggest percentage of the research participants, who demonstrated conformity between professional

interests, skills and area of training (from 80 to 93%), were university entrants of Cybernetics and Medical Faculties. It has been found that students who have less clear ideas about the content of their future careers, do want to do creative work, but are not capable of it. These results suggest that not every freshman has even very basic understanding of the profession, and as a result, has immature educational and professional motivation. A student with a low level of motivation, as a rule, is not inclined to study hard and to overcome the difficulties involved in adaptation to training in higher school.

**OR0758****The moderating effects of discipline on the relationship between asynchronous discussion and satisfaction of MOOCs**

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The present study has explored the relationship between asynchronous discussion and satisfaction of MOOCs. We collected the data from the largest MOOC community in China (mooc.guokr.com), including 321 courses, 13 platforms, and over 13,000 learners. Hierarchical multiple regression was used to analyze the relationship between asynchronous discussion, discipline, language of course, and satisfaction. Results indicated that asynchronous discussion significantly predicted learners' satisfaction of MOOCs, and discipline moderated the relationship between asynchronous discussion and satisfaction. Specifically, from the discipline of science to social science, the slope decreased gradually. The moderating effect of language was not found. Hence, asynchronous discussion is one of the most important predictors of satisfaction of MOOCs, discussion should be guided and scheduled by instructors. Asynchronous discussion may have diverse effects on course satisfaction in different disciplines. Instructors should pay attention to the characteristics of disciplines when organizing and monitoring asynchronous discussions.

**OR0759****A New Perspective of Explaining Tibetan Poor English Performance**

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The current study aimed to confirm the existence of national stereotype in English performance and discuss the difference of English performance between Tibetan and Han from the perspective of social cognition. Implicit stereotype questionnaire was compiled to test the implicit stereotype according to the theory

of Stereotypic Explanatory Bias (SEB). The results of the measurement showed significant implicit stereotype towards Tibetan. Furthermore, a  $2 \times 2$  (nationality  $\times$  stereotype threat manipulation) factorial design was conducted with 108 undergraduates. Results showed that when stereotype threat was primed, Tibetan performed poorer while Han performed better than when it was not primed. In other words, the English performance gap between Han and Tibetan was enlarged under stereotype threat. It can be concluded that stereotype threat is a vital cause of national difference in English performance.

**OR0760****Influence of a Aesthetic Swimming programme on Aesthetic perception & Feeling Ability and Swimming performance in Middle School Students**

*Ting Liao (1,2,3), Weitao Zheng (2), Bin Wang (3), Yunming Wang (1), Geng Du (1)* 1. Wuhan Sports University, China; 2. Hubei Provincial Collaborative Innovation Center for Exercise and Health Promotion, China; 3. Hubei Provincial Physical Education Skill Innovation Laboratory, China

The purpose of this study is to investigate the impact of a swimming learning programme (covered 8 weeks, 32 class hours) which integrated aesthetic education on aesthetic perception, aesthetic feeling and swimming skills in middle school students. The experimental subject ( $n=30$ , 13-16 yrs) allocated to training performed a aesthetic swimming programme two times a week, two classes at a time, whereas the others (control,  $n=30$ ) conducted traditional swimming course for the same length. Before and after the intervention, "the understanding of aesthetic concept questionnaire", "the level of aesthetic feeling questionnaire" are tested. And at the end of programme, a swimming performance test and a aquatic fitness test are conducted. The results show that the experimental subjects' understanding of aesthetic feeling and aesthetic perceptual level are improved greatly ( $P<0.05$ ). And compared with the control group, the acquiring of swimming performance and rich aquatic activities are promoted significantly at the same time ( $P<0.01$ ).

**OR0761****Teachers' Differentiated Assessment Practices and Students' Academic Performances**

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Students with special needs often received test accommodations (e.g., extra testing time) that change the regular test administration conditions in ways that support these students in

demonstrating their knowledge and skills. This study examined the percentages of subtypes in accommodation packages offered by teachers for their students with varied special needs, as well as the percentages of subtypes used by the students writing the Grade 9 math and Grade 10 literacy tests. Our results suggest that teachers often offered a very wide range of accommodation (e.g., 574 packages for literacy and 323 packages for math were offered to students with learning disabilities). We concluded that receiving complex accommodations did not necessarily mean better math or literacy outcomes. However, we found that teachers may offer more accommodations to students for a high-stakes literacy test than they did for the low-stakes math assessment in a Canadian testing program.

**OR0762****Comparing achievement goal profiles among students from various cultural backgrounds**

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Based on Personal Investment Theory, this study investigates whether individuals from five cultural groups shared similar goal profiles and whether these profiles led to similar outcomes across cultural groups. Latent profile analyses were first used to extract profiles from a 3-year longitudinal sample of high school students including Non-Indigenous Australians, Indigenous Australians, Indigenous American, Middle Easterners, and Asians ( $N = 2,643$ ). Then, the latent profile solutions and the predictive associations between the profiles and the outcomes were compared across groups. Five profiles were identified, showing similar structure but different relative proportions across cultural groups: Mastery-Caring, Performance-Extrinsic, Fully Motivated, Unmotivated, and Moderately Unmotivated. In regard to students' learning processes and future expectations, results revealed the advantage of simultaneously endorsing multiple goals, relative to a more limited set of goals, and the risk of solely focusing on performance and extrinsic rewards.

**OR0763****Potential Reciprocal Relationship between Motivation and Achievement**

*Yuan Liu, Hou Shumeng* The Chinese University of Hong Kong, Hong Kong

Extensive research has found that study motivation, especially the intrinsic motivation, and academic achievement may have bi-directional influence. However, the discussion of extrinsic motivation and achievement is only restricted to correlation findings: the influence of the

extrinsic motivation is either beneficial or detrimental, let alone the causal relationship between them. The present study is to figure out the potential causal relationship between the motivational factors-intrinsic and extrinsic motivation are at the same time considered-and the academic achievement. A large scale longitudinal study, National Education Longitudinal Study of 1988 (NELS88) data was used in the present study. A cross-lag model was used to estimate the relationship. Results indicated that the intrinsic motivation influenced the subsequent mathematics achievement. Moreover, bi-directional influence between the extrinsic motivation and achievement score: stronger extrinsic motivation positively predict the subsequent mathematics score, and vice versa.

#### OR0764

### Developmental Cascade Models Linking Peer Victimization, Depression, and Academic Achievement in Chinese Children

*Junsheng Liu (1), Dan Li (1), Amanda Bullock (2), Robert Coplan (2), Xinyin Chen (3)* 1. Shanghai Normal University, China; 2. Carleton University, Canada; 3. University of Pennsylvania, United States of America

A developmental cascade approach was taken to explore the longitudinal relations among peer victimization, depression, and academic achievement in Chinese children. Participants were  $N = 945$  4th grade students (485 boys,  $M_{age} = 10.16$  years) attending elementary schools in Shanghai, China. All participants were followed up for three years from grade 4 to grade 6. Assessment of peer victimization, depression and academic achievement were obtained from multiple sources, including peer nominations, self-reports, and school records. Among the results, peer victimization had both direct and indirect effects on later depression and academic achievement. Depression also had both direct and indirect negative effects on later academic achievement, but demonstrated only an indirect effect on later peer victimization. Finally, academic achievement had both direct and indirect negative effects on later peer victimization and depression. Findings are discussed in terms of the various transactions that exist among peer victimization, depression, and academic achievement.

#### OR0765

### Moderation of Prior Knowledge on the Guidance Effect in Technology-Based Guided Student-Centered Learning

*Anna Lou Oxford Academy, United States of America*

This study applies the Cognitive Load Theory and examines the Expertise Reversal Effect (ERE) using newly tested guidance

forms, prior-knowledge activation and feedback. The study first built upon Alfieri et al.'s (2011) meta-analyses findings on guidance and developed an innovative web-based instructional tool to enhance guided student-centered learning (SCL) in chemistry. Pre-posttests on randomly assigned college students ( $N=185$ ) revealed the following key findings: (a) Guided-SCL is significantly more effective than either traditional teaching ( $p=.00$ ,  $d=1.6$ ) or Khan Academy ( $p=.00$ ,  $d=1.4$ ) by combining expertise from both educational research on guidance and best practices; (b) Guided-SCL closes the learning gap between low-knowledge learners (LK) and high-knowledge learners (HK); (c) Prior-knowledge activation significantly benefits LK, but not HK, which results were consistent with ERE. The new empirical work in chemistry classroom setting gives important insight to instructional designs and also demonstrates the great potential of using guided-SCL to improve science education.

#### OR0766

### Reappraisal is not always more Effective than Suppression: The Effect of Emotion States on Analogical Reasoning

*Huixia Ma Tianjin Normal University, China*

The effect of emotion regulation on cognitive activity remains controversial. This study aim to explore the relationship between emotion regulation and analogical reasoning in the positive and negative emotional states of different arousal. 143 and 176 college students were asked to be participants in two experiments respectively. The results indicate that, when people are in the low arousal of positive emotion, suppression led to a lower correct rate of analogical reasoning than reappraisal significantly, and so does when they are in the high arousal of positive emotion. When in the low arousal of negative emotion, reappraisal's effect on the correct rate is positive. It is notable that there is no difference between suppression and reappraisal under the high arousal of negative emotion. In conclusion, when individuals are in the high arousal of negative emotion, neither suppression nor reappraisal can reduce the negative effect on cognitive activities.

#### OR0767

### Critically Evaluating Multiple, Conflicting Pieces of Information: The Effects of Unpacking the Information, and Theory of Mind Ability

*Emmanuel Manalo (1), Ai Mizokawa (2), Lisa Scharer (3), Masuo Koyasu (1)* 1. Kyoto University, Japan; 2. Meiji Gakuin University, Japan; 3. University of Muenster, Germany

With the increasing proliferation of information in modern societies, understanding

factors that influence a person's critical evaluation of information is important. This study examined the possible influence of information presentation and Theory of Mind (ToM) ability. One-hundred-and-fifty-nine undergraduate students were presented multiple short pieces of information, varying in the positivity-negativity of the expressed view and in the likely presence of bias (according to the source), and asked to make decisions. The information was presented in a "packed" (items presented one after another) or an "unpacked" manner (requiring consideration of bias and relevance after each item). The participants also completed advanced ToM tasks to assess their ability to conceptualize other people's mental processes. Results revealed influence of the valence of unbiased information on participants' decisions irrespective of presentation manner. Results further suggested that ToM ability has some influence on critical evaluation depending on people's topic motivation and manner of information presentation.

#### OR0768

### Jumping hurdles in life using best practice interventions - A hope filled case study

*Gloria Marsay Career Ahead, South Africa*

People who are different, and have special needs because they have (dis)abilities, are often faced with adversity, and need to find innovative ways to circumvent these challenges so that they can participate in life with dignity. This paper presents a case study of a young lady who was diagnosed with ADHD at an early age. She also suffers with comorbid anxiety that often convinces her to comfort eat. The paper illustrates how she successfully managed her school career with both learning and social support. In addition the paper describes how she managed her struggles with some of the dominant discourses that prevail in society regarding making choices for tertiary education. Finally, the paper links her progress with constructs of Hope: Attachment, Mastery, Survival and Spirituality (Scioli & Biller, 2009) and illustrates how she used these constructs to assist her in making decisions for her future.

#### OR0769

### Teachers Perceptions of Children at Risk

*Maria José D. Martins, Ana Cristina Figueira Polytechnic Institute of Portalegre, Portugal*

This research aims were: to know the frequency of pupils at risk attending schools at a town; identify the type of risk that they could be living according to the perceptions of their teachers; and to establish the relation between risk and gender, education grade, school failure and

economic support. A questionnaire for detection of children at risk that includes four subscales (active abuse, neglect, emotional problems and antisocial behaviour) was administered to teachers. Each of them answered as many questionnaires as many were their pupils. The sample corresponded to the entire scholar population of this municipality so the questionnaires reported up to 232 pupils. The results showed that the most frequent risk were poverty and socio-economic needs of pupils and their families. It was also found that the children perceived as being at greater risk were in higher grades, had more school failure and receive more economic benefits.

**OR0770**

**Teachers' beliefs about emergent literacy instruction for young children: a comparison among nursery, kindergarten, and elementary school in Japan.**

**Hiroo Matsumoto (1), Miho Tsuneda (2)**  
1. Kagawa University, Japan., Japan; 2. Kagawa Junior College, Japan

This study explored the types of general beliefs about teaching styles as background factors related to instruction for facilitating literacy. Teachers who belong to the institutions for early childhood education and care (ECEC) in Japan ( $n=165$ ) and elementary teachers ( $n=44$ ) were examined on their general beliefs about teaching styles. The questionnaire conducted was adapted from Uchida & Ishida (2011) that investigated parental styles of discipline. Exploratory factor analysis was used to determine three latent factors: 1) adult-centered, 2) child-centered, and 3) self-sacrificing. Independent-sample  $t$ -tests showed statistically significant differences as follows; elementary teachers had a tendency towards adult-centered styles,  $t(198)=6.48$ ,  $SE=0.10$ ,  $p<.001$ . On the other hand, ECEC teachers showed a tendency towards more child-centered styles,  $t(205)=6.37$ ,  $SE=0.07$ ,  $p<.001$ . The implications of these differences in ECEC teachers' beliefs regarding emergent literacy instruction for Japanese children (Matsumoto & Tsuneda, in press) are discussed.

**OR0771**

**Increasing calculation skills primary students using realistic mathematic approach in remote area**

**Elisabeth Desiana Mayasari, Apri Mariana, Titis Darmasari Sanata Dharma University, Indonesia**

The education problem in Indonesia is that the teachers use memorizing method for the students. The other methods, such as reviewing, discussing, and problem solving are rarely used by the teachers (The World Bank, 2011: 64). The phenomenon also happened to Primary students of Banteng Primary School grade III, IV, and, V in Merapi Mountain. The research

focuses on increasing of the calculation skills of the students by using Realistic Mathematic Education. The Realistic Mathematic Education uses imaginable problems and media, such as traditional food and things around Merapi Mountain for the students. The populations of the research were 60 students between 9-11 years old. The reliability coefficient are  $\alpha=0.764$ ,  $\alpha=0.764$ ,  $\alpha=0.827$ . The results of the research shows that the calculation skills of the students grade III increased up to 56%, grade IV increased up to 43%, and grade V increased up to 73%. Key Words: Calculation skills, realistic mathematic, student

**OR0772**

**Social intelligence and school bullying**

**Andrew J Mcgrath Charles Sturt University, Australia**

The current study examines the relationship between social intelligence and school bullying. Students from two schools in New South Wales, Australia, ( $N = 517$ , male = 102, mean age = 14.9, range 8 - 18), participated in a study measuring social intelligence, school connectedness, pro sociality and bullying perpetration and victimisation. Results showed the bullies were more socially intelligent, had lower connections to the school community, and were less prosocial. Further analysis showed the victims had significantly lower social intelligence than the bullies. Implications of the current findings for anti-bullying programs will be discussed.

**OR0773**

**Reinforcing life and Career skills; one effective sort of homeschooling in the 21st century**

**Namphung Meesil Srinakharinwirot University, Thailand**

This research aimed to understand the meaning and process of home education that reinforced life and career skills in the 21st century, on vision of best practice parents, and learners' outcomes. The qualitative research was conducted by interviewing 11 families that never sent their children to any primary schools, aging from 9- 16 years old. Meaning of life and career skills is their children have participated with people of various ages in society appropriately and created of production to make income and be proud to support their family. The parents' learning approaches were based on encouraging the children to participate in real-life situations from experienced persons. The children were motivated to practice on products and services to earn income during the learning process. The children have obtained certain skills, income, and pride for being one who helps in supporting the family.

**OR0774**

**A new trial to reorganize the concepts**

**Jun Minagawa Sanyo Gakuen College, Japan**

Concept mapping has been used to further refine the cognitive structure of learners and to let them understand learning contents systematically by structuring concept groups, but has originally ignored the concept that is not directly related to associations simply because of putting emphasis on the theoretical system of unit. In this study, the associations from other than the first concept are also allowed to be depicted on map on condition that they explicitly show their origin and order. As a result of experiment, this method was verified by the fact that it evoked related concepts more than the conventional concept mapping and increased cross-links. As for the post-test performance, the conventional method was superior in the limited test of concepts within the unit, but this new method was superior in the test including similar concepts.

**OR0775**

**The effectiveness trial of a universal preventive program "OKs Program" based on Cognitive Behavior Therapy in school setting**

**Mayumi Mio, Yuki Matsumoto Osaka University United Graduate School of Child Development, Japan**

Irrational beliefs (Ibs) contribute various kind of distress (Ellis & Bernard, 2006). In order to transform Ibs, OKs program has been developed as a self-help form which was especially designed for Japanese junior high school students. The OKs is a 50 minutes, one session program and not only cognitive restructuring but also cognitive objectively viewing utilizing conversational roleplays. Non-Equivalent Groups Design was used to investigate the effectiveness of the program. To the trial group of the OKs, 113 students were assigned and 143 students were assigned to the control group wherein an assertion training was implemented. Results revealed significant interactions on Ibs between time (pre- and post-) and intervention (OKs and control). An analysis of simple main effect confirmed that the OKs showed significant Ibs reduction with an effect size  $p-\eta^2=0.164$ . This presentation will discuss the program features, its effectiveness, limitations and a future direction.

**OR0776**

**A new way of educating: the Ontopsychological approach to higher education**

**Clarissa M Miranda, Patrícia Wazlawick, Any R Rothmann, Samuel A Carmignatti, Eloy D Teixeira, Luiz V Gazzaneo, Natallya Verardi, Ricardo Schaefer Antonio Meneghetti Faculdade, Brazil**

The definition of what is required to understand that the accomplishment of a joyful life depends on each one's efforts and that students can be much more than they thing are difficult topics for someone who has 18 to 22 years old and is deciding which path to follow. A new way of teaching may indicate an answer to these questions approaching an education that aims to be coherent to the individual's potential, fostering a *forma mentis* of responsibility and meritocracy. An experience taking place at Antonio Meneghetti Faculdade from Brazil, one of the first higher education institutions to experience the Ontopsychological Pedagogy proposed by Acad. PhD. Antonio Meneghetti (1936-2013). This methodology aims to research the potential of each student and, through an holistic educational environment including study, work experiences and life style in campus, forms responsible individuals, an humanist education to foster a global citizen.

**OR0777**  
**School-based Evaluation System in India: A Critical Review**

*Rita Mishra, Prof. Minati Panda* *Jawaharlal Nehru University, India*

Continuous and Comprehensive Evaluation (CCE) is a school-based evaluation system. Formulation of National Curriculum Framework (2005) and the adoption of constructivist paradigm led to the introduction of CCE in the Indian schools. When the debate on CCE is getting polarized and CCE is seen as a 'philosophically sound and defectively operationalized' system, this research brings back hope by identifying the areas of tensions using the analytical framework of Cultural Historical Activity Theory (CHAT). Review of important documents on CCE led to two findings. Firstly, Assessment is progressively seen as a process to develop a good understanding of how child's mind works and how children learn disciplinary concepts and ideas. Secondly, in the predominantly behaviouristic arrangement of Indian schools, CCE unfolds in the most minimalist form. But CCE is allowed to be practiced for a longer period, a shift may occur from coercive to collaborative power structure.

**OR0778**  
**Method of assessment critical thinking competency**

*Olga Mitina (1), Galina Tsukerman (2)* *1. Lomonosov Moscow State University, Russia; 2. Insitute of Psychology Russian Academy of Education, Russia*

The method of evaluation critical thinking core competency (recognizing the true and false statements) for 9-11y.o. children is created. The method includes 20 items - statements from mathematic and linguistics - which could be the truth or false: ALWAYS(6), NEVER(4) and SOMETIMES(10) in equal proportions in both fields. The subjects classified items among

these categories and in the case of "sometimes" category should give two examples: for demonstrating the truth and false situations. The sample of approbation included 1500ss attending public schools (Moscow). The reliabilities for the subscales were not less than 0.75. Children who have been trained in special course of critical thinking were more successful in recognition "sometimes" situations and findings proving examples than children with traditional education curriculum. There were no significant differences among these two groups in answering classification tasks. These tendencies are the same in mathematics and language competencies. There were no gender differences.

**OR0779**  
**Reciprocal Relations between Intrinsic Reading Motivation and Reading Competence Mediated by Reading Amount: A Comparison between Native and Immigrant Students in Germany**

*Ai Miyamoto* *University of Bamberg, Germany*

Previous research has shown positive relations between intrinsic reading motivation and reading competence. However, the causal direction, the mediating process, and the moderating role of student background variables of these relations are still unclear. To close these research gaps, the present study investigates whether intrinsic reading motivation and reading competence are reciprocally related and mediated by reading amount depending on the students' immigration background. Latent cross-lagged panel models were estimated for secondary school students with and without a migration background in Germany (N = 5029). Results indicated that the reciprocal relations between intrinsic reading motivation and reading competence were found only for the native sample. However, mediation effects of reading amount on these relations were found for both groups. Findings of the present study emphasize the importance of reading amount especially for immigrant students in order to facilitate the reciprocal effects of intrinsic reading motivation and reading competence.

**OR0780**  
**Effect of Early Intervention in removing the Specific Learning Difficulty among Indian School Children: A Study of English as a Second Language**

*Atasi Mohanty (1), Arundhati Sarkar (2,3), Namita Das (3)* *1. Indian Institute of Technology (IIT), Kharagpur, India; 2. Visva-Bharati University, Santiniketan, India; 3. Visva-Bharati University, Santiniketan, India*

The objective of the study was to assess the impact of early intervention on the reading performance of Indian school children with learning difficulty in English as a second language. The sample consists of 177 Primary school children, who were the 1st generation learners and having reading difficulty in English as a second language. This was a pretest and post-test quasi-experimental design, and there were two experimental groups and one control group. Phonological-structured- multisensory intervention programme was found to be most effective in comparison to existing experts' intervention, for children having the reading difficulty in English. Furthermore, the case-study analysis and in-depth study showed that the individualized remedial Intervention is the best in treating the reading difficulty of children. It helped them to build up confidence and motivations to read better/improve their performance. This study has the relevance for teaching practices in English as second language acquisition (ESL).

**OR0781**  
**An integrated dialogical method for the study of teacher identity construction. An application to a case of professional transition**

*Carles Monereo (1), Montserrat Castelló (2)* *1. Universitat Autònoma de Barcelona, Spain; 2. Universitat Ramon Llull de Barcelona, Spain*

This study aims to demonstrate the suitability of an alternative dialogical research method, which we have called the Evi-coidal Method (EM), for the analysis of the teacher identity construction. Based on Hermans and colleagues' Dialogical Self Theory, the EM involves examining how teachers (re)construct their identity positions through obtaining evidence from the institutional, inter-psychological and intra-psychological levels of activity. The EM was applied to an educational transition case study in which the subject was followed during 12 months. The educational transition consisted on changing from teaching in early childhood education in a public institution to teaching at a primary level in a private institution. A combination of tools was employed: Journey Plot, Elicitation cards, analysis of activity systems and Personal Position Repertoire. Results provide evidence of the construction of a new "strategic" identity position related to classroom behaviour management, produced in response to a series of critical incidents.

**OR0782**  
**Applying Research Results of Foreign Language Learning Procrastination Scale (FLPS) to Language Classrooms**

*Keiko Mori* *Waseda University, Japan*

Research has been done on college students' academic procrastination which consists of several types and degrees. College instructors can witness episodes of students requesting the-last-minute extensions for important assignments or of those simply fading away in the middle of the coursework, regardless of fields and degrees. One example is students delaying language studies and prioritizing more "urgent" subjects, which results in retaking required language courses. This presentation discusses research findings using FLPS (Foreign Language Learning Procrastination Scale) implemented to college students taking English or other language courses. The scale focuses on mul-adaptive procrastinations in order to see types and degrees of negative factors each language learner has, and to see what specific emotions and meta-cognitions tend to result into language learning procrastination.

### OR0783

#### **Conscious self-regulation of learning activity: diagnostics and relationship with academic success across students of different ages**

**Varvara Morosanova, Irina Bondarenko, Igor Tsyganov, Olga Eftimova, Margarita Ovanesbekova** *Psychological Institute of Russian Academy of Education, Russia*  
The aim of present study is to represent theory, methods and results of studies of self-regulation as predictor of academic success. We define self-regulation as a system of conscious mental activity used to set educational goals and achieve results, corresponding to those objectives. Individual student self-regulation can be characterized by a self-regulation profile, including indicators of cognitive processes (planning, modeling of significant conditions, programming, results evaluation) and regulatory personal qualities (flexibility, independence, responsibility). An individual standardized survey regulatory profile methods were created for students of different ages. Two experimental computer techniques allow examining manifestations of self-regulation of varying complexity learning situations, relevance and feedback. Empirical studies on sample groups in primary, middle and high school (N=210, 566, 721, respectively) showed that conscious self-regulation is important predictor of academic performance, together with intelligence, motivational and personal characteristics of students. These results firmly appear between different age samples using different methodical tools.

### OR0784

#### **The Trials and Tribulations of Creating a University-Wide Course Evaluation Survey: Getting Stakeholder Buy-in and Best Practices**

**Jennifer A Morrow, Sarah A Nadel, Elizabeth Taylor, Gary Skolits** *University of Tennessee, United States of America*

Researchers have shown numerous shortcomings with student course evaluations and how they are used to evaluate university teaching (Benton & Cashin, 2014; Clayson, 2015; Wieman, 2015). Criticisms focus on issues such as the validity of the instrument, whether one is able to make meaningful comparisons using the assessment, and if results can be used to improve teaching. Our presentation will review the methodology we used to develop a new assessment tool, our methods of validating it, and how we obtained stakeholder buy-in during the development and testing of this new assessment. Our mixed-method, multi-sample assessment approach resulted in data from stakeholders which stressed the importance of having few assessment questions, formulating standard policies on data collection, and how assessment results are used. As part of the presentation we will also discuss best practices in designing and utilizing end of course evaluations in a university setting.

### OR0785

#### **Cognitive processes and Self-regulated Learning: interactions and Impact on General Academic Performance**

**Mariel F Musso (1), Eduardo C Cascallar (2), Monique Boekaerts (3)** 1. *CIIPME CONICET- UADE, Argentina*; 2. *K. University of Leuven, Belgium*; 3. *Leiden University, Netherlands*

Ability and motivation are central to academic performance; however, specific interactions between motivational and cognitive variables have not been fully examined. Objective: to analyze the interactions between Cognitive Profile and Self-regulated Learning (SRL) factors and their impact on General Academic Performance (GAP). Sample: 453 university students, both genders, ages 18-25. Instruments: Attention Network Test; Automated Ospan; Learning Strategies Questionnaire; and Achievement Motivation Scale. GAP was measured by Grade Point Average. Results showed Cognitive Profile has the strongest effect on GAP. Students with high working memory (WM) performed significantly better than students with low WM, independently of Executive Attention. The "use of techniques/tools supporting learning" was the most important SRL factor interacting with Cognitive Profile group on GAP. Positive main effects were found for Attitude, Time Management, Selecting Main Ideas, Test Strategies, Attributions to effort/perseverance/ability, and Task Value on GAP. Results are discussed according to six-component SRL and cognitive architecture models.

### OR0786

#### **Increasing student and staff well-being through a curriculum of giving: A whole-school approach**

**Thomas W Nielsen (1), Jennifer S Ma (2)** 1. *University of Canberra, Australia*; 2. *The Australian National University, Australia*

Student wellbeing persists as a challenge in many schools worldwide. Research has shown explicit programs aiming to enhance social concern and cohesion can improve student wellbeing and school climate (Lovat et al. 2009). In collaboration with the University of Canberra Senior Secondary College Lake Ginninderra, the present project utilised action-based research to evaluate the school-wide implementation of a wellbeing philosophy founded on social concern and 'giving curriculum' (Nielsen, 2011). Qualitative surveys and in-depth interviews were used to assess staff attitudes at baseline and 1 year follow-up. Preliminary results showed a small but noticeable change in staff, evidenced by the adoption of more positive attitudes towards the program and enhanced experiences with students and staff. With a core of teachers working to convert individual efforts into a whole-school approach by communicating and sharing best practice, insights into the facilitators and barriers of the program inform recommendations for future work across schools.

### OR0787

#### **Using Behavioral Data from Computer-Generated Log Files to Understand Complex Problem Solving Performance in a Computer-Based Assessment**

**Christoph Niepel (1), Samuel Greiff (1), Ronny Scherer (2), Romain Martin (1)** 1. *University of Luxembourg, Luxembourg*; 2. *Centre for Educational Measurement at the University of Oslo, Norway*

The current study aimed to explore how students' complex problem solving (CPS) performance evolved on the backdrop of specific overt behaviors during a computer-based CPS assessment. We used data of N = 1,476 Finnish ninth-grade students (mean age = 15.23, SD = 0.47 years). Students participated in a computer-based CPS assessment (MicroDYN) that used log files to capture overt behaviors students showed during the assessment. Results indicated that (1) students who engaged in noninterfering observations of the problem environment showed better CPS performance, whereas (2) students who showed a high frequency of interventions exhibited poor CPS performance. Additionally, (3) the relation between the time students spent on a task and CPS performance followed an inverted u-shape indicating that a medium amount of time was optimal for CPS performance. All

observed effects held after controlling for students' use of a multistep exploration strategy. Findings were discussed.

#### OR0788

##### **Elasticity of College Students' Beliefs about Knowledge Utility**

*Ryota Nomura The University of Tokyo, Japan*

In order to change students' epistemology, it is necessary to identify and then resolve conflicts between a prior view of classes and another view of classes that is emerged from currently participating activities. Thirty-seven (4 male and 33 female) college students attended a class with interventions involving inquiry activities. In this class, a teacher answered the students' questions verbally and in writing. Moreover, the teacher repeatedly conveyed the significance of inquiry activities such that the students could explore and examine their own ideas. Results demonstrated that the percentage of students who were able to answer higher-level questions increased to approximately 60%. A knowledge utility scale also demonstrated that students believe knowledge more objective and applicable compared to the beginning of the semester. However, the changes were not maintained: after a two-month vacation, students returned to their initial state. These results suggest that continuous interventions are important for maintaining epistemological changes.

#### OR0789

##### **Social Support among Student with Borderline Intellectual Functioning Who Won Medals in International Sport Competition**

*Putu A Novia Viorica, Ida Bagus Gde A Yoga Pramana Udayana University, Indonesia*

This research is about a student with borderline intellectual functioning who can be a winner in an International Competition. This research is using qualitative methods with case study approach. Data is collected by interview and observation. The sample in this study is a person who has these characteristic: a female student in special school, has borderline intellectual functioning, won medals in an International Sport Competition. This research shows that social support from significant others helps her to be a winner in an International Sport Competition. Keywords: Social support, borderline intellectual functioning.

#### OR0790

##### **Motivating or distracting? How decorative pictures can foster learning in primary schools.**

*Maria Opfermann, Annett Schmeck, Detlev Leutner University of Duisburg-Essen, Germany*

While instructional pictures that are added to texts are widely accepted (Mayer, 2009), decorative pictures are seen more critically, because they might add cognitive load onto working memory without explicitly fostering knowledge gains. However, such pictures could foster learning indirectly through inducing interest and motivating learners (Lenzner et al., 2013). In this regard, our study investigated the learning of 136 fourth graders who learned about the circulatory system. The text was either presented without pictures or enriched with instructional/explanatory or decorative pictures. In addition, half of the children received metacognitive instructions during learning. A main effect regarding performance showed that decorative pictures outperformed instructional ones and pure text ( $F(2,130)=3.11$ ;  $p=.048$ ). Furthermore, an interaction ( $F(2,130)=3.51$ ;  $p=.008$ ) shows that these benefits are highest, when decorative pictures are presented together with metacognitive instructions and that they are perceived to be more interesting and less difficult. Obviously, decorative pictures are better than their reputation.

#### OR0791

##### **Professional training of psychologists in community contexts on reading and writing teaching and promotion**

*Hilda Paredes Dávila, Carime Hagg Hagg Universidad Nacional Autónoma de México. Facultad de Psicología., Mexico*

The training process of six Master's degree on Educational Psychology students at the School of Psychology of UNAM, is described. These students implement their professional practice in community settings, in the Southern area of Mexico City where they promote, assess and research on the reading and writing processes in preschool and school aged children, their families, teachers and other community members. Master's Degree students should develop professional skills through tutorship and supervision by literacy expert professors. In order for them to show how competent performance of the students evolve, their comments in their journals regarding their conceptualization of the reading and writing processes are considered, their abilities to teach and promote reading and writing in the community and their reflection processes about their being and doing as psychologists.

#### OR0792

##### **Impact of Flipped Instruction on the Learning Outcomes of Primary School Children in India: A Pilot Study**

*Dipti Parida, Atasi Mohanty Indian Institute of Technology Kharagpur, India*

The objective of this study was to compare the impact of flipped and traditional modes of instruction, on the learning outcomes of Grade

VII students in Social Science from Odisha (India); 90 students were randomly assigned to either of control (traditional) or experimental (flipped) group. Pre-test scores of both the groups were compared through 't' test; the obtained "t" value of  $-.019$  was found to be insignificant ( $p > .05$ ) which revealed no significant difference between these groups. Thus, both the groups were assumed to have equal variance and after 02 months their post-test scores were again compared. The obtained "t" value of both the groups' post-test scores comparisons was  $-5.592$ , significant at  $p < .01$  level, and confirmed the difference between Control and Experimental groups. Mean scores of flipped and traditional instructional groups were found to be 64.889 and 45.244 respectively, further strengthened the positive impact of flipped mode.

#### OR0793

##### **Lives and times of children from child-headed households: Implications for educational psychologists**

*Jace Pillay University of Johannesburg, South Africa*

Child-headed households is increasingly becoming a phenomenon in South Africa and various parts of Africa. In undertaking to fill the knowledge void in relation to the experiences of children from child-headed families the author integrates several qualitative studies conducted by him in the last five years. The intention is to present a holistic picture on the lives and times of children from child-headed households within their homes, schools and communities construed through the lens of bio-ecological systems theory. The findings indicate the struggles of the children in terms of their living conditions, changing roles, community fears and school experiences which inevitably affect their psychological well-being. However, the resilient nature of some of these children are highlighted. Several recommendations are made for educational psychologists to promote the adaptations, adjustments and survival mechanisms of children from child-headed households within an African socio-cultural context.

#### OR0794

##### **Cognitive, personality and environmental determinants of early school leavers**

*Artur Pokropek, Marek Smulczyk Polish Academy of Sciences, Poland*

Early school leavers (ESL) or early leavers from education and training (ELET) are individuals that potentially finds problems in adjusting to the social life and the modern labour market. On average ESL & ELET earn less, they are more frequently unemployed and are at more risk of poverty and social exclusion than those who continued standard tracks of

education. In various studies the level of cognitive abilities was recognized as the main determinant of ESL & ELET status. In this analysis we show that personality factors (self-esteem, low anxiety, hope and social skills) as well as environmental factors (social background, peer relations and school type) mediate and moderate the effect of cognitive abilities (IQ) on ESL & ELET risk. The study is conducted on the Polish panel extension of the PISA 2009 study and utilizes data on 4000 of individuals. SEM framework was used for the analysis.

#### OR0795

##### **Academic resilience and school to work transition.**

**Artur Pokropek, Marek Smulczyk** *Polish Academy of Sciences, Poland*

It is well documented that students from low SES families tend to perform worse at school, but several studies also have shown that there is a group of students who are academically successful despite their challenging backgrounds (OECD, 2011; Silas Casillas, 2008). These students are called resilient. In our study we identify factors that play a role in helping socially disadvantaged students to become academically resilient and we check whether being resilient influences school to work transition. Data were collected from 5 203 students in Polish high schools within a panel study between 2009 and 2015. Our study includes individuals who participated in Polish extension of PISA 2009 (the OECD's Programme for International Student Assessment). Correlation and path analysis showed that five factors predict academic resilience: intelligence, self-esteem, low anxiety, hope and social skills. Path analysis also showed that academic resilience significantly predicts academic success and school to work transition.

#### OR0796

##### **The Relationship between Psychological Capital and Student Engagement among College Student**

**Unika Prihatsanti, Ika Zenita Ratnaningsih, Diana Rusmawati, Anggun Resdasari Prasetyo** *Diponegoro University, Indonesia*

Student Engagement is important prediction for academic achievement. Student engagement associated with positive outcomes in academic, such as persistence, challenging and authentic tasks in college. Psychological Capital is a positive psychological capacities of the individual which consists of self-efficacy, optimism, hope, and resiliency. The aim of this study is to investigate the relationship between psychological capital and student engagement among college student. The study involved 406 college student. The samples were taken from universities located in Semarang, Indonesia. Samples were determined using convenience

sampling. Data were collected using the Student Engagement Scale (30 items,  $\alpha = .86$ ) and Psychological Capital Scale (20 items,  $\alpha = .84$ ). Regression Analysis was used to test the hypothesis. The result shows that there is a significant and positive correlations between psychological capital and student engagement among college student ( $r_{xy} = 0.56$ ,  $p < .001$ ). It emphasizes that psychological capital will be able to increase student engagement. The contribution is 31,2%.

#### OR0797

##### **How Indonesian Early Childhood Educators Introduce Alphabet to Kids**

**Acintya R Priwati, Aulia Ariani, Dian N Marissa** *Universitas Gadjah Mada, Indonesia*

The ability to identify the letters of alphabet is one of the best predictors of how readily the children will learn to read (Treiman, Kesler, & Pollo, 2005). Indonesian children learn alphabet at very young age. They learn alphabet with the accompany of early childhood educators. The aim of this study was to understand the way Indonesian early childhood educators introduce alphabet to kids. This study conducted to 260 early childhood educators in Yogyakarta Special Region. The data were collected by open-ended questionnaire. Bracketing in qualitative research was used as a method to analyze the data. The result shows that there are 14 different ways used by Indonesia early childhood educators. Those 14 ways respectively are the use of card, labelling, game, vocal, tracing, writing, making a collage, colouring, draw, read, sorting, et cetera. Keywords: alphabet learning, introducing alphabet, early childhood learning

#### OR0798

##### **Curriculum Flexibility: a multi-level and multi-dimensional model**

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This paper presents a multilevel and multidimensional model to evaluate curricular flexibility of higher education programs from a systematic review made by the authors. The curriculum model has five levels (e.g. supra-curricular, macro-curricular, meso-curricular, micro-curricular and nano-curricular level) and six specific dimensions of flexibility (e.g. curriculum organization, autonomy, teacher profile, training, guidance systems and mobility). The model has a total of 56 indicators. Data collection, through a double-entry matrix, showed a curriculum flexibility multilevel profile, a multidimensional profile and a general profile. They were the result of a quantitative evaluation of the program which identified

institutions weaknesses and strengths. The proposed model is designed to evaluate curricular flexibility of academic programs in higher education institutions in formal settings. The model allows each institution to see the evaluation indicators that are being met and the results - offered from the given profiles- identify the flexibility of its programs.

#### OR0799

##### **Development of a Rating Scale for Culture-Infused Counselling: Counsellor and Client Perspectives** *Michaela Rebus* *University of Calgary, Canada*

This research compared the perceptions of multicultural competence in psychological counselling by Canadian counsellors and clients. Collins and Arthur's (2007; 2010a; 2010b) Culture-Infused Counselling (CIC) model formed the framework for multicultural competence in this study. The results of a pilot study will be reported, using a mixed-method research design with a rating scale (based on the CIC model) for both counsellors and clients, and follow up interviews. Participants rated the degree to which they agreed or disagreed that their counselling experience fulfills the principles of CIC. Follow up interviews with a random sub-set of counsellors and clients explored their responses in depth. The results of this study explored similarities and discrepancies between counsellors' and clients' perceptions of multicultural counselling competency. Implications will be discussed in light of advancing the model of Culture-Infused counselling and how to improve professional education for counselling across cultures.

#### OR0800

##### **The Differential Effectiveness of the Colombian Education System**

**Olga R Rodríguez** *Universidad Nacional de Colombia, Colombia*

Research on school effect and its scientific properties constitutes an important topic in the area of school effectiveness. The scientific properties of school effect are consistency, stability, continuity and differential effectiveness; the latter reports on school effectiveness for different groups of students. In accordance with this line of research, this study estimates the differential effectiveness in the subjects of math and language according to sociocultural and socioeconomic level, gender, ethnicity and disabilities of students. With this purpose, a sample of 1,131 fifth grade schools, 997 ninth grade schools and 5,976 eleventh grade schools, for a total of 512,620 students, was analyzed. By using three-level multilevel models (department, school and student), statistically significant differences for all variables are found, evidencing the differential effectiveness of the Colombian education system and the



inequality in the country. Based on this result, reflections on technical, educational and social aspects are proposed.

#### OR0801

##### **Handedness and Mathematics: The mediating Effects of Age, Task, and Gender**

**Giovanni Sala (1), Giulia Barsuola (2), Martina Bolognese (2), Michela Signorelli (2), Fernand Gobet (1)** 1. University of Liverpool, United Kingdom; 2. University of Milan, Italy

The relationship between handedness and mathematical abilities is controversial. Whilst some researchers have claimed that left-handers are gifted in mathematics (Benbow, 1986) and strong right-handers perform the worst in mathematical tasks (Annett, 2002), it has been more recently proposed that mixed-handers are actually the most disadvantaged group (Cheyne et al., 2010). To disentangle these discrepancies, we conducted five studies in several Italian schools (total participants:  $N = 2,308$ ) involving students of different ages (6 to 17 years) and a range of mathematical tasks (e.g., basic arithmetic and problem-solving). The results show that (a) the percentage of variance in mathematics scores explained by handedness was small (about 5%) but statistically significant, and (b) the effect of handedness on mathematical abilities depended on age, mathematical task, and gender. In accordance with previous research, handedness does affect mathematical skills, but the shape of this relationship seems to be influenced by the above variables.

#### OR0802

##### **The Relationship Between Salary and Pride of The Profession as Early Childhood Education Teachers in Yogyakarta, Indonesia**

**Gunisya K Sari, Annas N Qur'ani** University of Gadjah Mada, Indonesia

Early childhood education (ECE) teachers should be supported by proper salary to stimulate not only their motivation, but may also pride of their profession. This study aimed to investigate the correlation between salary and pride of the profession among ECE teachers in Yogyakarta. Total 155 respondents were required (94,2% females, 5,8% males). The survey showed that 38,1% of respondents got salary less than Rp 150.000,00/month and 24,5% got Rp 150.000,00 - Rp 300.000,00 which is below the minimum standard of regional salary (Rp.1.108.249,00), and just 11% from it got those standard. The data indicates that there is no significant relationship ( $0.250 > 0,05$ ) between salary and pride of the profession. This means that salaries can't predict pride of the profession as ECE teachers in Yogyakarta. Nevertheless, the government and related parties still have to discuss about ECE

teacher's welfare seriously. Keywords : Salary; Pride of the profession; Early childhood education teachers

#### OR0803

##### **Early identification, early intervention: The inclusion of Grade R children experiencing spelling barriers in a dual medium township primary school**

**Catherine D Sekhukhune** University of Johannesburg, South Africa

This ethnographic study provides an account of the spelling difficulties experienced by the grade R (Reception year) children in their first year of schooling in a dual medium township primary school in South Africa. Data was collected through observations, informal interviews, documents analysis and artefacts. Two grade R classrooms were studied and two teachers. The data was analysed using Atlas.ti software and Brewer's steps of analysis. The findings suggest that there were serious learning challenges that both the children and teachers faced in tailoring the early childhood learning with regard to spelling as part of language development and teaching. As a result, early identification and intervention remain to be integral aspects of the entry level of formal schooling as it prepares children for lifelong learning. It also provides the high level of support needed by this specific age group at the appropriate time.

#### OR0804

##### **Effect of the learning process on school-to-work transition.**

**Hsin-Peng Shiah-Hou (1), Chin-Lun Tsai (2), Linting-Chun Lin (1)** 1. Dept. of Business Administration, Fu Jen Catholic University., Taiwan; 2. Department of Psychology, Fu Jen Catholic University, Taiwan

The school-to-work transition and competence development are affected by unemployment resulting from the overeducation and the competence gap between learning and practice. In this study, Participants were one- to three-year college graduates. The process of school-to-work transition was divided into two stages, competence development and the transition stage. In the first stage, under a mediating cognitive effect of career expectations, learning perspective affects knowledge characteristics (of six types). In the second stage, the effect of knowledge characteristics on school-to-work transition and career satisfaction is determined by educational environment characteristics (of four types). The study results indicated that all hypothesis has been supported, also indicated that such employment issues as the education-job mismatch and learning-practice gap continue to be systemic problems. Processes related to school-to-work

transition require a series of studies. Moreover, school policies should aim to consolidate school resources in each sector and provide career planning for different colleges.

#### OR0805

##### **Effect of Academic and Leisure Boredom on Study-Leisure Conflict and Academic Performance: A Moderated Mediation Model**

**Takt Shishido, Hiroshi Watanabe, Atsushi Tsumita, Hidekatsu Hojo** Musashino University, Japan

The purpose of this study is to examine how university student's academic boredom influences their academic performance by jointly investigating the moderating role of leisure boredom and the mediating role of study-leisure conflict. Results obtained from data of 349 undergraduates of a Japanese university showed that an interaction effect between academic and leisure boredom had a significant effect on study-leisure conflict and GPA, and when the level of leisure boredom was higher, academic boredom had a stronger upward effect on study-leisure conflict and stronger downward effect on GPA. A moderated mediation analysis (Preacher et al., 2007) revealed that study-leisure conflict significantly mediated the relationship between academic boredom and GPA, except among students with an extremely low level of leisure boredom. We concluded that the students who felt bored in both study and leisure activities had the strongest internal study-leisure conflict and lowest GPA.

#### OR0806

##### **When will the better-off others be perceived as role models and be motivating?**

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The current studies examined conditions under which a better-off target would increase self-evaluation and be motivating. Study 1 investigated enhanced reflection, a thorough analysis on the personal traits attributable to others' accomplishments. College students ( $N=182$ ) read an article about an outstanding target and were randomly assigned to enhanced reflection (reflecting on the target's achievement) or no-reflection (completing a word-copying task) condition. Students in the former condition evaluated themselves as more challenge-seeking, self-reliant and confident. In Study 2, 269 college students were categorized into high attainability condition (first-year students,  $n=103$ ), low attainability condition (final-year students,  $n=86$ )

and control condition (irrespective of study years,  $n=80$ ). The first two groups engaged in the same reflection task and simulated their own experience with reference to the target's, while the last group completed a neutral task. Students in the high attainability condition allocated more effort to academic study. Findings were discussed with reference to the literature on role-modeling.

#### OR0807

##### Exploring the relationship between social identity factors and academic persistence for historically underrepresented groups at university

*Fortunate T Silinda, Kitty B Dumont University of South Africa, South Africa*

Although universities were successful with removing racial segregation in South Africa, institutional culture segregation seemingly persists, that is, a culture that fails to accommodate and affirm racial diversity and differences (Jansen, 2004). These mentioned challenges may impact negatively on historically underrepresented students' academic persistence if they are not attended to. This paper examines the relationship between social identity factors and academic persistence by exploring the role of academic adjustment and academic motivation from the perspective of Social Identity Theory and Rejection Identification Model. Using data from a correlational survey conducted among undergraduate students from a South African University; the results show a positive and significant link between social identity factors and academic adjustment/motivation and between academic adjustment/motivation and academic persistence for students from historically underrepresented groups but not for students from historically overrepresented groups. These results will be discussed in relation to the ongoing transformation processes at South African universities.

#### OR0808

##### Self-regulated learning strategies and reading motivation as predictors of reading comprehension among Deaf Filipino College Learners

*Christina S Sison De La Salle-College of Saint Benilde, Philippines*

This study looked into the influence of psychological factors such as self-regulated learning strategies and reading motivation on the reading comprehension of Deaf Filipino college students. Using self-regulated learning strategies (Zimmerman, 2005), it is believed that deaf will use appropriate self-regulated learning strategies when they have positive motivation in reading; these factors tend to have positive influence on their reading comprehension skills. Data were gathered from 72

Deaf Filipino College learners by answering the Self-regulated Learning Questionnaire (Al Amari & Mahmoud Ismail, 2012), Inventory of Reading Motivation (Solheim, 2011), and sentence comprehension of the Wide Range Achievement Test 4 (Bijou & Jastak, 1941). Key results indicated that reading self-efficacy as component of reading motivation is a significant predictor of reading comprehension. No significant influence was detected from any of the self-regulated learning strategies.

#### OR0809

##### School performance after experiencing trauma: A longitudinal study of high-school academic performance after the Utoeya island shootings in Norway, 2011

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Studies on students' academic performance following trauma are lacking. This study investigated academic performance and the impact of school support in survivors of a terrorist attack. Data from a longitudinal interview study was linked to officially registered grades of students ( $N=64$ ) who successfully completed 1st-3rd grade of high-school. Statistical tests of mean differences and linear regression were used to compare the survivors' grades with the national grade points average, before and after the event, and to test the association with school support. The students' grades dropped the year after the event and was lower than the national grades compared to the year before the event ( $p<0.001$ ). However, the grades improved the last year of high-school, indicating resilience. Mixed results were found between school support and academic performance. The results indicate that healing takes time, but for students who stayed in school, the school situation improved over time.

#### OR0810

##### Implementation of formative peer assessment in inquiry based elementary mathematics: the role of teachers' needs and subjective theory of formative assessment

*Iva Stuchlikova, Iva Zlabkova, Alena Hospesova, Jana Kourilova, Yvona Mazehoova University of South Bohemia, Czech Republic*

Implementation of formative assessment in inquiry based lessons is rather challenging task. This study presents findings related to Czech teachers' and students' opinions and

needs associated with formative peer assessment. The research was a part of a European project ASSIST ME (Assess Inquiry in Science, Technology and Mathematics Education). Six teachers of primary mathematics worked with researchers on inquiry tasks and methods of peer assessment and implemented them in their classes during eight to twelve hours long teaching units lasting for two months. Teachers' subjective theory of formative assessment was investigated prior and after this period; after finishing it, also the students were interviewed. The results indicate that the teachers need to develop deeper understanding of the role of formative peer assessment in inquiry based instructions. Students mainly described their difficulties related to peer assessment but also appreciated the possibility to share the inquiry tasks solutions in peer language.

#### OR0811

##### Cyber bullying experience of school/college students: An India- Japan Comparison

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Bullying is a serious social problem threatening the schools around the world. Cyber bullying is relatively new form of bullying being similar in its intent to hurt others through power and control, but is different due to the use of these new technologies. There is a great deal of research on cyber bullying throughout the world, in contrast there is a relatively little cross national comparison. The present study is intended to compare the experiences and perceptions of the school/college students about cyber bullying and victimization in Japan and India. The sample for the present study was 400 students (200 India and 200 Japan). It was revealed that the Japanese and Indian cyber bullying has its commonalities that their frequency is highest among middle school students, but the contents or the types of aggression was systematically different according to the cultural backgrounds.

#### OR0812

##### Investigating the Moderator Effect of Relationship between Emotional Intelligence Factors and Academic Readiness in Primary School Pupils

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The purpose of this study was to examine the relationship between general factors of emotional intelligence and academic readiness and to test the moderating effect of gender on this relationship for schoolchildren. Study sample including 278 children (116 female and

162 male) who engaged an entrance exam of a college in Turkey; children responded an emotional intelligence scale and academic readiness test in entrance exam. The results indicated that gender moderated the relationship between emotional intelligence and academic readiness. Relationship between factors of emotional intelligence which are directly related with awareness and academic readiness are stronger for females than males. Implications and suggestions for future research are also presented.

#### OR0813

##### The mediating effects of self-efficacy on the relationship between perceived social support and school adjustment of multicultural children in Korea

*Lihyo Sung Women Migrants Human Rights Centre, Republic of Korea*

Objectives: The objective of this study was to explore the influence of perceived social support from parents, classmates, and teachers on school adjustment of multicultural children, and to identify the mediating effects of self-efficacy. Methods: The survey collected data through a self-completion questionnaire administered by schools and immigrant women's centers. The sample consisted of 160 elementary school students from multicultural families. Multiple regression and path analysis procedures were conducted to test the mediating effects of self-efficacy of multicultural children. Results: Finding showed that self-efficacy mediated the relation between parent and classmate support and school adjustment of multicultural children. Parent and classmate support could directly impact school adjustment. They also had an indirect influence on school adjustment via self-efficacy. Teacher support, however, was not significantly correlated with school adjustment. Conclusions: This result indicated that support from parents and classmates was a crucial force in multicultural children's school adjustment via self-efficacy.

#### OR0814

##### Effects of providing training, written definition, and checklist of bullying characteristics on teachers' bullying identification

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The purpose of this study was to investigate whether teachers' ability to identify bullying incidents can be enhanced by offering bullying identification trainings, clear definition of bullying, or the bullying characteristic checklist. The participants of this study were 410 primary

school and middle school teachers in Taiwan. The participants were provided with 1.5 hours training on bullying definition (Group X), definitions and features of bullying in written form (Group Y), written bullying definitions and the bullying characteristic checklist for each bullying scenario (Group Z), and no definition of bullying (Control Group), respectively. Twelve bullying scenarios were used as the pretest and the other 12 scenarios were employed as the post-test. Results analyzed by ANCOVA indicated that teachers in Group X had significant higher bullying identification scores than others. In addition, teachers in Group Z also had significantly higher scores than teachers in Group Y and Control Group.

#### OR0815

##### The Role of a Teacher as a Facilitator on Students' Habit Creation in Latin Dance Classes

*Emiko Suzuki Keio University, Japan*

Although Latin Dance has been proven to be effective for one's physical and mental health, the process of creating a habit has not been explored. Especially, a teacher may play an important role on facilitating students' participation. The objective of this study was to assess principals teachers do that facilitate habit creation. In Experiment1, students were measured by questionnaires that address types of motivation (BREQ-3) and a psychological need satisfaction (BPNSFP). In Experiment2, teachers were semi-structurally interviewed about teaching. The results indicated that students seek to gain sense of self-direction rather than skill-mastery from the class, which leads them to be motivated intrinsically for upcoming participations. In addition, it suggested a model consists of 2 types of interactions between a teacher and a student. During the interaction, expert teachers may be better at raising students' efficacy beyond initial expectation and make it more memorable, which can facilitate habit creation.

#### OR0816 MEDICINES CAN TEACH A CHILD?

*Maria Lidia S Szymanski UNIOESTE, Brazil*

Basic education in Brazil is worrying: 4,996,791 students were enrolled in the 1st year of primary school in 2004, but 1,930,234 had not completed primary school at the expected age in 2012. This loss accuses serious problems. Even among who have completed primary education properly, we found those that although mechanically pronounce the words when they are reading, cannot understand what these words mean, a problem that reached 68% of Brazilian population. Within these who remain in school without learning reading and writing, many are pointed out by medical reports as dyslexic. But they could learn when properly taught. When they receive a medical certificate as dyslexic, they

are pedagogically abandoned and many times medicated with methylphenidate, and end up becoming really dyslexic. An Extension Project developed between the University and the school during 10 years, proposes a pedagogical work that can contribute, in fact, for these children to learn.

#### OR0817

##### Development of an intervention program based on Creative Problem Solving Coaching (CPSC) in the Creative Flow Scale in Skills and Self-efficacy

*Yoga Tokuyoshi Tohoku university, Japan*

The present study was conducted for assessing the effectiveness of an intervention program which was developed to help trainees to acquire skills and self-efficacy of the creativity. Participants (N=25, Mean age=39.5, SD=12.5) were randomly assigned to one of 2 conditions; Intervention group and Control group. Intervention group was educated about the creativity of Creative Problem Solving (CPS), filled out an interview sheet based on the CPS and then, was interviewed by Coach (Peer coaching). Control group did nothing. Using the Creative Flow Scale in Skills and Self-efficacy (CFS), the intervention was assessed by comparing pre- and post-intervention scores. The total score of the CFS increased significantly from the pre to the post-tests in the intervention group. Control group showed no significant differences in the total score of the CFS. Therefore, the results suggest that the intervention of the program was effective in promoting the flow and self-efficacy of Creativity.

#### OR0818

##### The Effectiveness of Group Intervention on Emotion Understanding in Children with Learning Disabilities in China

*Yuehua Tong, Shanggui Song, Liya He, Zhubai Xie University of Jinan, China*

Research revealed that children with learning disabilities (LD) demonstrated emotion understanding deficits. The present study was to examine the effectiveness of group intervention on emotion understanding in children with LD in China. 30 children with LD participated into the study. The intervention was carried out in groups for ten weeks and was based on modeling, role-play, coaching, and discussion. Each activity lasted for 40 minutes. Emotion Understanding Test was implemented before and after intervention. This test was a well-used instrument in assessing emotion understanding with good reliability and validity in Chinese context. Paired t-test was used to compare the effectiveness of group intervention. Results indicated that children with LD scored significantly higher on emotion understanding after

intervention. It was concluded that group intervention was an effective way to improve emotion understanding in children with LD. Implications for school counseling were discussed.

**OR0819****Should I stay or should I go? Reasons and conditions for the retention and attrition of first and second career teachers**

**Larissa M Troesch, Catherine E Bauer**  
*PHBern University of Teacher Education, Switzerland*

In the context of recurrent teacher shortages, second career teachers (SCT) have become an important recruitment pool for teacher education. Yet, little is known about whether they stay in teaching in the long term and under what conditions. The present study examined the career paths and attrition factors of SCT in comparison to first career teachers (FCT). A sample of 356 teachers was questioned 7-10 years after graduation, 130 of which second career teachers. Although a majority of the responders still worked as teachers at the time of survey, FCT and SCT differed marginally in their career paths, with more SCT having left the educational system completely. The influence of personality and self-efficacy beliefs as well as the reasons for leaving the teacher profession are analyzed, and the findings discussed from a psychological, an education-policy and an economical perspective.

**OR0820****Argumentation Skills for Living in the 21st Century: Instructional Methods to Promote the Quantity and Quality of Students' Dialectical Argumentation**

**Yuri Uesaka, Mika Igarashi, Rei Suet-sugu**  
*The University of Tokyo, Japan*

When deliberating on a topic that has both pros and cons, constructing a dialectical argument that integrates both perspectives is a very important skill to possess in the 21st Century. This study examined the effects of an instructional intervention in which students were taught the use of tables for organizing information in order to construct a dialectical argument. Fifty-eight 8th-grade students participated in a 5-day special course to promote argumentation skills. At pre- and post-instruction, each participant was asked to orally present his/her ideas about a topic after preparing for 10 minutes, and each performance was video recorded for analysis. In between, argumentation instruction was provided in three conditions, two of which included the use of tables. Results showed that post-instruction quality and quantity of dialectical argumentation among participants in the conditions including instruction in the use of tables were higher than in the condition without such instruction.

**OR0821****Integration of Discovery Learning and Direct Instruction in a Class: Applying the "Thinking-after-instruction" Approach in a Mathematics Class and Examining the Effects on Students' Performance and Teachers' Instructional Strategies**

**Yuri Uesaka (1), Tatsushi Fukaya (2), Shin'ichi Ichikawa (1)**  
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Although direct instruction and discovery learning have generally been considered as conflicting teaching strategies (e.g., Lee & Anderson, 2013), the "thinking-after-instruction" approach has been proposed by Ichikawa (2004, 2008) to integrate both strategies in a class. This approach not only combines use of the two strategies in a class but also adds two phases that enable students to check and reflect on their understanding. More concretely, it consists of four phases: teachers' explanation, comprehension checking, deepening understanding, and self-reflection. The present study examined the effects of this approach in educational practices and outcomes in a public elementary school in Japan. All teachers in this school used this approach when teaching mathematics over a period of two years. Achievement tests, administered as pretests and posttests, showed that students' mathematics performance and strategy use were enhanced. Teachers' instructional strategies, assessed by requesting teachers to write lesson plans, also evidenced marked improvements.

**OR0822****The characteristics of teachers' behaviour and attitudes which impact on truancy among secondary school learners**

**Maynard J Van Breda**  
*University of South Africa (UNISA), South Africa*

The aim of this paper was to explore the impact of teachers' behaviour and attitudes on learners' school attendance. Three hundred eighth grade learners in the Metro East Education District (MEED) in the Western Cape, South Africa, participated in a survey measuring learners' perceptions of the effects of unfavourable teacher-learner relationship and its repercussions on school attendance. The research findings suggest that learners' unpropitious school experiences including rejection, discrimination as well as being subjected to undue and humiliating punitive measures could be significant grounds for their deliberate absence from lessons. In presenting the research findings, it is argued that teachers often overlook the effects their class room conduct and attitudes may have on learners' school experiences and their sense of belonging in

their learning environment. Therefore, it is strongly recommended that education authorities take account of the research findings of dysfunctional learner-teacher relationships in addressing school truancy.

**OR0823****Forming a Responsible Personal Position of young people: Experience of the Eco-biological Centres**

**Tatiana Vereitina (1), Victoria Dmitrieva (3), Olga Mikhalyuk (3), Patricia Wazlawick (2), Ricardo Schaefer (2), Dana Namdi (3)**  
*1. Scientific Foundation Antonio Meneghetti, Russia; 2. AMF - Antonio Meneghetti Faculdade, Brazil; 3. St. Petersburg State University, Russia*

Experience in creating and developing eco-biological centres has shown that it can be an effective instrument for forming a responsible person capable of active construction of productive environment. Our studies have involved young people living and working in eco-biological centres "Recanto Maestro" (Brazil), "Diostan" and "Berina" (Russia). The functions of the eco-biological centres were analysed with regards to implementing efficient educational models, such as environmental education and the impact on the eco-biological concept on the efficiency of educational and working activity. The influence of the surrounding conditions was studied in terms of ability to meet human needs in the realisation of their potential and achieving awareness of the responsible position in relation to both oneself and environmental development. The human interaction with the environment influences development of personality, which also determines development of the society, as the results of our studies have shown.

**OR0824****The Development of Flipped Classroom Learning Activities for Enhancing Biology Learning Achievement and Scientific Literacy for Grade 10 Students**

**Panuwat Vethum, Sombat Tayraukham**  
*Mahasarakam University, Thailand*

The objectives of this study to develop learning achievement and scientific literacy of students after learning through flipped classroom learning of high school students between learning through flipped classroom and conventional methods. The samples used in this study consisted 80 students by cluster random sampling technique. The instruments used in this study were lesson plans, Biology-achievement test and scientific-literacy test. data analysis with mean, standard deviation, Paired Samples t-test and Hotelling's T2. The results of the study revealed that 1) The students who learned through the flipped classroom had after learning scores of Biology learning achievement,

and scientific literacy higher than before learning at the .01 level of significance. 2) The students who learned through the flipped classroom had after learning scores of Biology learning achievement, and scientific literacy higher than the students who learned through conventional method at the .01 level of significance.

**OR0825**

**Beyond math anxiety: Positive emotions predict mathematics achievement, self-regulation, and self-efficacy**

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We hypothesize that positive emotions are associated with learning and achievement in mathematics, even when mathematics anxiety is considered. University students enrolled in a college trigonometry course completed the Academic Emotions Questionnaire-Mathematics and scales referring to their self-efficacy and self-regulation in their trigonometry class during the middle of the semester, and their final grade for the course was recorded with their informed consent. Hierarchical regression analysis indicated that their self-reported levels of enjoyment and pride explained a significant amount of variance in the final grades, self-regulation and self-efficacy, even after accounting for the variance explained by gender and mathematics anxiety. Although the results cannot be interpreted as indicating a causal relationship between positive emotions and learning and achievement in mathematics, the results indicate how positive emotions in mathematics learning are important to consider in order to arrive at a more balanced picture of the role of emotions in mathematics education.

**OR0826**

**Positive socialization of young people: problems and modern technologies for their solutions**

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The development of today's youth takes place in the turbulent social and economic environment. Delayed social maturity, social infantilism, learned helplessness, emotional numbness and detachment are the social phenomena that represent dysfunction of socialization of youth. We have developed a social and educational project based on the principles

of ontopsychological pedagogy in several BRICS countries, which can be introduced as one of the technologies of positive socialization of youth. Project aims at developing subject's responsibility, creativity, will for self-realization and becoming protagonist of one's own life, managing it with seriousness and dignity and thereby contribute to development of society. The favorable environment and developing practical skills along with the personal development are key factors for revealing and developing potential abilities of young people. There were obtained the data reflecting the personal and social achievements of young people involved in the project, and identified conditions and psychological mechanisms of youth socialization.

**OR0827**

**The Impact of Resource-Management Strategies for Academic Learning in the University Entry Phase**

*Julia Waldeyer (1), Jens Fleischer (1), Detlev Leutner (1), Joachim Wirth (2)* 1. *University of Duisburg-Essen, Germany;* 2. *Ruhr-University Bochum, Germany*

In science and technology study programs, many students quit their studies prematurely. The reasons for this drop out, however, are still unclear. Academic learning in general places high demands on self-regulation and the strategic-orientation of learning processes. Therefore, in our research we focus on specific learning strategies - in particular resource-management strategies, as important predictors of academic study success. A situational-judgement instrument allowing to assess strategy knowledge as well as specific deficits in strategy usage was developed. This instrument was administered in a longitudinal study assessing N = 200 university students of civil engineering and education studies as two study programs with different performance requirements. First results on the validity of this new instrument will be reported. Furthermore, the result presentation will emphasize the role resource-management strategies play as both predictors of academic study success as well as mediators linking individual learner prerequisites (mainly personality traits) to academic study success.

**OR0828**

**Exploring an integrated framework of coaching psychology and problem-based learning in medical education**

*Qing Wang East China Normal University, China*

The current study aimed to explore a new framework integrating the perspective of coaching psychology and the essential features of problem-based learning (PBL) that

is applicable in the medical educational context. A participatory action research approach was employed. The data was collected and analyzed both quantitatively and qualitatively. The triangulation of sources and member checking were used to ensure the credibility and trustworthiness of the research process. Emerged themes included current experience of PBL curriculum; the roles and relationships between tutors and students; student group dynamics; development of self-directed learning; and coaching in PBL facilitation. The findings underpinned that coaching psychology could be incorporated into the facilitation system in PBL. A systems model of coaching psychology and PBL was developed on the synthesis of empirical results. The integrated framework of coaching psychology and PBL addresses important psychological and learning theories and has its pedagogical potential in medical education.

**OR0829**

**Astonishing Figure: 99.9% of University Students Acquiring Facing-Audience Communication Apprehension**

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Facing-audience communication apprehension (FACA) was presented by Chinese psychologist Wang HongLi in 2007, which was a new conception based on communication apprehension by American psychologist James McCroskey. FACA is comparatively widespread among undergraduates. With stratified random sampling on the status quo of fear in facing public of undergraduates in 12 universities in four provinces in Southwestern China, it was founded that 99.9% of undergraduates have FACA. There are four different aspects: Firstly, 99.5% of undergraduates have the serious interview apprehension; secondly, 99.3% have the fear of communication in groups or outside-campus; thirdly, 97.7% have the apprehension of speaking on stage; fourthly, 95.3% have the apprehension in handling affairs. The degree of apprehension of facing public differs significantly according to gender, grade levels, major, being only-child or not, economic status and parents' education. Our current study also suggested comprehensive prevention and countermeasures for FACA.

**OR0830**

**Family Economic Status and Parental Involvement: Influences of Parental Expectation and Perceived Barriers**

**Yiji Wang, Yi Hu, Ciping Deng** *East China Normal University, China*

Parental involvement is a critical factor associated with children's educational outcomes. However, low parental involvement frequently occurs among low-income families. It is unclear what mechanisms may explain the association between family economic status and parents' involvement. Using a large sample from Northwestern China (N=12,724), we examined the influences of two proximal processes in parents in linking family economic status and the involvement of parents in children's education - expectation for children's highest academic achievement and perceived barriers to involve. We also examined whether these relations may vary by parents' education levels. Results of structural equation modeling showed that parents' expectation and perceived barriers mediated the relation between family economic status and parental involvement. Results also showed that these relations were particularly prominent among high educated mothers. Findings demonstrated underlying mechanisms and highlighted the unique effects of family economic status and parents' education in understanding parental involvement among low-income Chinese families.

**OR0831**

**Identifying school bullying incidents: Connections between teacher background and types of bullying**

**Li-Chun Wang, Li-Ming Chen** *National Sun Yat-sen University, Taiwan*

The aims of this study were to examine whether there were significant mean differences in teachers' bullying identification scores among different background variables (gender, position, highest degree, and training). A total of 112 primary school and middle school teachers participated in this study. The study adopted the 12-item Bullying Situations Identification Scale, which included physical, verbal, relational scenarios for teachers to identify as bullying or non-bullying incidents. Mixed Model Two-way ANOVA was conducted to investigate whether interaction exist between teachers' background (between effect) and their accuracy in identifying bullying incidents (within effect). Results indicated that no interaction was detected between teacher's background and three bullying types. However, we found that the teachers can identify physical bullying more accurately than verbal and relational bullying. In conclusion, it is necessary for teachers to participate in training of identifying bullying and non-bullying incidents, especially on the differentiation of verbal and relational bullying.

**OR0832**

**Research on sources of the vocational college student' job seeking anxiety**

**Jin Wang** *Nankai University, China*

Two studies about the sources of the vocational college students' job seeking anxiety. Study 1 sampled 169 vocational college students to attend test trial for item analysis and exploratory factor analysis, then surveyed 609 vocational students to analysis reliability and validity of questionnaire, finally study 1 develop a formal questionnaire including 5 factors and 22 items. The 5 factors are named social environment, mental adaptation, career choices, job experiences and professional competence. Study 2 analyzed data from 609 vocational college students survey using self-designed questionnaire made in study 1. Results suggested social environment and job searching experiences are main sources of job seeking anxiety. Vocational college students with different genders, professionals, birthplaces and family-incomes had different levels of job seeking anxiety from different sources. So in order to relieve the job seeking anxiety of vocational college students, vocational colleges need specific and different vocational guidance for different group of students.

**OR0833**

**Comparison of students' scientific imagination in Taiwan and Finland: An exploratory study**

**Chia-Chi Wang (1), Hsiao-Chi Ho (1), Ying-Yao Cheng (1), Hannele Niemi (2), Chih-Ling Cheng (3)** *1. National Sun Yat-sen University, Institute of Education, Taiwan; 2. University of Helsinki, Finland; 3. Kaohsiung Medical University, Taiwan*

The current study aimed to verify the scientific imagination process based on the learning progression of scientific imagination (Wang, Ho, & Cheng, 2015) and compare the scientific imagination for Taiwanese and Finnish students. A total of 150 5th and 6th graders were administered the Scientific Imagination Test-Verbal (SIT-Verbal). For analysis, multiple validities of SIT-Verbal were provided using the Rasch partial credit model. Students' differences in scientific imagination between genders, grades, and countries were compared using t-tests respectively. The results indicated that most of the items were hierarchically ordered except for the item of Conceptualization/Organization/Formation. Moreover, no differences in scientific imagination between genders, grades, and countries were found. Suggestions for future research were proposed.

**OR0834**

**Improving the Stability of Child-care Teachers and the Childcare Quality in Japan: Division of Duties at Childcare Centers and Strengthening Teachers' Expertise**

**Naomi Watanabe (1), Nobuki Kawasaki (2)** *1. George Mason University, United States of America; 2. Kansai University, Japan*

The quality of teachers is key to high quality childcare. 80% of retired teachers in Japan left the position within three years of employment due to heavy workload, work stress, and low salaries. To resolve the problem, we reviewed the efforts to improve teacher quality in the U.S. and proposed two strategies applicable in Japan. First, division of duties at childcare centers is needed. Teachers are responsible for not only their regular teacher duties, but also overseeing outreach projects in the community and providing support to parents regarding their parenting practices. Having experts such as counselors and developmental psychologists who are specialized in parenting and child development would lessen teachers' burdens. Second, strengthening teachers' expertise should be achieved through higher education requirements and continuous professional training with a rise in salary for higher qualifications and skills. More public funds should be allocated to support teachers' education and promotions.

**OR0835**

**Development and validation of a measure of academic self-regulated learning among Thai university students.**

**Sittipong Wattananonsakul Srinakharinwirot University, Thailand**

The objective of this study aimed to develop and validate the academic self-regulated learning scale in the university students. The academic self-regulated learning (ASRL) scale was developed through a two-phase process. The first phase involved the generation of an item pool and the second an validation of the psychometric properties of the ASRL scale in Thai version. Exploratory factor analysis and confirmatory factor analysis were employed to evaluate and to validate the factor structure of a Thai version of ASRL scale. Data were gathered from a participant of 480 university students, ranging in age from 18 to 20 years (M = 18.4, SD = .84), in Bangkok, Thailand. Results showed that a eight-factor model of ASRL had a better overall fit to the data. The results were consistent with previous researches in term of the constructs. The findings and implications of ASRL perspective on students' learning are considered and discussed.

**OR0836****Ontopsychological Pedagogy: a functional proposal for the youth education in 21st century**

**Patrícia Wazlawick, Helena Biasotto, Wesley Lacerda, Horácio Chikota, Any Rothmann, Eloy Teixeira, Ricardo Schaefer** Faculdade Antonio Meneghetti, Brazil

Considering the challenges regarding youth formation in a contemporary context, this qualitative-quantitative research, exploratory-empirical, investigated how ontopsycho-logical pedagogy contributes on personal-professional education of youngsters in college education. Forty-nine young south-brazilians graduation students from a private college, were studied in 2 different moments. The following tests were applied: Big Five, Längle's Existential Scale and Forma Mentis. Statistical and content analysis were performed. It was concluded that ontopsycho-logical pedagogy contributes with efficient results in psychological aspects of youngsters, because the dynamics of personality development in the studied period effectively exists, and assists on personal, existential and professional healthy development of students. In a theoretical and practical way, the ontopsycho-logical pedagogy is evidenced as a proposal to refound the current education, showing paths for the construction of the protagonist man, responsible for his own potential and his ability of inserting himself in the environment where he lives with creativity, intelligence and action.

**OR0837****Social media and career counselling: Using Facebook as a tool to enhance the career construction journeys of adolescents**

**Hannes Wessels, Biotumelo Diale** University of Johannesburg, South Africa

A strong need exists in the career counselling profession to create more relevant career counselling theories and practices that meets the needs of employers and reflect the realities of careers in the 21st century. The use of social media platforms, like Facebook, has become part of our daily lives. However, little research is evident about the use of Facebook as part of a career counselling process. This presentation presents the results of a research project that aimed to determine how Facebook could be used to enhance the career construction journeys of grade 11 adolescent learners. The research results suggest that Facebook can contribute to the career construction journeys of grade 11 adolescents by being used to triangulating themes highlighted in other career assessments and supplementing information to emerging career themes. Furthermore, Facebook served as a useful tool to help construct and deconstruct the participants' various career narratives.

**OR0838****A Dual-Factor Model of Mental Health in Chinese High School Students**

**Junmei Xiong (1,2,3)** 1. Central China Normal University, School of Psychology, China; 2. Key Laboratory of Adolescent Cyberpsychology and Behavior (CCNU), Ministry of Education, China; 3. Key Laboratory of Human Development and Mental Health of Hubei Province, China

A dual-factor model of mental health (DFM) incorporates both subjective well-being (SWB) and psychopathology to measure mental health. The present study aimed at testing the existence of DFM with a sample of 1213 Chinese high school students. The SWB, psychopathology, academic stress, and academic emotions were assessed via self-report scales. Mental health groups were classified based on having high or low psychopathology and high or low SWB. The identification of four mental health groups supported the existence of DFM. The means of academic stress and academic emotions differed significantly by mental health status with complete mental health youth reporting less academic stress and negative academic emotions, and more positive academic emotions than the other three groups. DFM is applicable for Chinese high school students and both psychopathology and SWB are important indicators of mental health. Key words: dual-factor model of mental health, academic stress, academic emotions

**OR0839****An Empirical Investigation of Perceived Interaction Quality, Academic Self-Efficacy, Task Value, Academic Emotions and Satisfaction in Different Learning Environments**

**Junmei Xiong (1,2,3), Yi Qin (4)** 1. Central China Normal University, School of Psychology, China; 2. Key Laboratory of Adolescent Cyberpsychology and Behavior (CCNU), Ministry of Education, China; 3. Key Laboratory of Human Development and Mental Health of Hubei Province, China; 4. China University of Geosciences (Wuhan), China

The current study aimed at investigating predictors of student satisfaction in face-to-face and online learning environments. Perceived interaction quality, academic self-efficacy, task value, academic emotions and satisfaction were assessed via self-report scales. Group sampling method was applied to collect data from 783 college students (208 males, 388 studied in face-to-face setting) with a mean age of 19.68 (SD = 1.16). Students in face-to-face setting had higher perceived interaction quality, academic self-efficacy, task value, enjoyment, and satisfaction, while less boredom than

students in online setting. In face-to-face setting, enjoyment and boredom had a mediating role between teacher-student, student-student interaction, task value and satisfaction, respectively; in online learning setting, enjoyment and boredom had a mediating role between student-student interaction, task value and satisfaction, respectively, while teacher-student interaction and academic self-efficacy directly predicted satisfaction. Key words: perceived interaction quality, academic emotions, task value, student satisfaction

**OR0840****Academic self efficacy and parental psychological control as mediators of the effect of family socioeconomic status on high school student test anxiety**

**Xiaobo Xu, Yunying Wang, Weiguo Pang, Wenling Liu, Jiantao Han, Lixia Wang** East China Normal University, China

The present study aims to investigate whether and how family socioeconomic status (SES) affects high school students' test anxiety. More specifically, this study investigated the relationship between family SES, academic self-efficacy, parental psychological control, and test anxiety. The participants were four hundred and sixteen senior high school students from three middle schools. The results showed that: (1) Maternal occupation and maternal education was negatively correlated with students' test anxiety, while paternal education, paternal occupation and family income were not correlated with test anxiety; (2) Students' academic self-efficacy was negatively correlated with test anxiety, and parental psychological control was positively correlated with test anxiety; (3) The relationship between maternal socioeconomic status and test anxiety were mediated by Students' academic self-efficacy and parental psychological control. To summarize, mothers with higher socioeconomic status were more capable in developing children's academic competence efficacy and cultivating warmer family environment, which in turn alleviated test anxiety.

**OR0841****Universalization of elementary school education in india and right to education act- 2009 : issues, challenges and concerns**

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To achieve goal of Universalization of Elementary School Education, Government of India

has recently enforced Right of Children to free and compulsory Education Act-2009, for Free and compulsory Education of Children in age group 6-14 but provisions and norms and standards in Act pose issues, challenges and concerns for different quarters. For example - poor, illiterate parents may not send children in schools until the age of completing primary education. As per this Act School Management Committee comprising 75% parents of children studying in Govt. schools as members. But how poor and illiterate parents can participate in Schools Meetings, can admit their out of school child in his age appropriate class and school has to arrange special classes through special training to bring at par academically with his counterparts? Similarly, there are contextual issues, challenges and concerns having implications for educating children being covered under Right to Education Act, 2009.

#### OR0842

##### **Professional development of school teachers: a step towards quality education in the context of india**

**Rajender S Yadav (1), Parmod Kumar (2)** 1. Kurukshetra University Kurukshetra, Haryana, India; 2. Department of Educational Studies, Central University of Jammu, Jammu & Kashmir (India), India

Teachers are national builders having responsibility to train and prepare the generations for the country's development. Therefore, there is a need to ensure quality education at school level. But it calls for organization of continuous professional development of school teachers through orientation, refresher courses, in-service teacher education programme, seminars and workshops to meet the training needs of working teachers related to curriculum development, curriculum transaction, students' guidance and counselling, teaching competencies, pedagogical issues, evaluation procedure, mobilization of resources, psychology of learners etc. Such academic programmes require systematic planning, need assessment, selection of content areas, various modalities for delivering of content, masters trainers, active participation of teachers, being priority issues. The present paper focuses, besides trends & experiences of existing in-service programmes of teachers, on various issues related to continuous professional development of school teachers in India and role of national Institutes for quality education at school level in the country.

#### OR0843

##### **The effect of variations in scoring rubric for descriptive items on evaluating students' responses in Japanese language comprehension test**

**Kazuhiro Yasunaga** *The University of Tokyo, Research Fellow of Japan Society for the Promotion of Science, Japan*

The purpose of this study was to examine if variations in scoring rubric for descriptive items affect the evaluation of junior high school students' responses in Japanese language comprehension test. The test was based on high school admission test of Kanagawa prefecture. Two types of scoring rubric were used. Rubric A had scores for items with correct and incorrect answers, including no response. Rubric B contained components of rubric A but with inclusion of scores for additional categories of answers. Three descriptive items answered by a number of students, 272 (item 1), 269 (item 2) and 543 (item 3), were examined and graded using both rubrics. It was found that rubric B could gauge more content details of student's answer in a certain item than rubric A. Moreover, when rubric B had a partial score, discrimination value was slightly higher.

#### OR0844

##### **Modeling and Modeling Learning Styles Influences on Divergent Thinking, Artistic Creativity and Scientific Creativity**

**Xinfa Yi (1), Xin Sui (1), Honghong Bai (2)** 1. Shaanxi Normal University, University of Connecticut, United States of America; 2. Utrecht University, Netherlands

The purpose of this study is to examine influences of modeling and learning styles on divergent thinking (DT), artistic and scientific creativity. Two experiments were included in this study. In the first experiment, 138 Chinese middle school students were separated into two groups, with one completing DT tasks and the other completing artistic creativity tasks. Half of each group were exposed to highly creative models beforehand, and half were exposed to no models. Results provide evidence of significant and large modeling effects on both DT and artistic creativity. In the second experiment, 306 Chinese middle school students completed artistic and scientific creativity tasks after being exposed to same highly creative models. Participants were randomly divided into three experimental groups: self-learning, collaborative learning and learning with direct instructional guidance. Results demonstrated that the group in direct instruction environment gained highest scores on two tasks. Other two experimental interventions indicated different impacts.

#### OR0845

##### **The relation between socioeconomic status and academic achievement by quantile regression**

**Jing Yuan, Xiaoxue Zeng** *University of Kentucky, United States of America*

This study investigated the role of student characteristics in student mathematics achievement. The student part of the Program for International Student Assessment (PISA) 2012 survey containing 4,978 U.S. observations was employed in both ordinary least squares (OLS) regression and quantile regression to predict mathematics achievement from mother SES and father SES. The results showed that quantile regression yielded a more comprehensive evaluation at various points of mathematics achievement than OLS regression. The results of the quantile regressions showed that SES have a stronger impact on the math achievement of students who scored lower in the distribution than those who scored higher.

#### OR0846

##### **Reciprocal relationship between self-regulated learning and mathematics achievement: A multilevel cross-lagged path analysis**

**Jinxin Zhu, Magdalena Mo Ching Mok** *The Hong Kong Institute of Education, Hong Kong*

Self-regulated learning is of great importance to academic achievement. Guided by social cognitive theory (Bandura, 1986), this study aims to explore the reciprocal relationships between mathematics achievement and three subprocesses of Hong Kong primary school students' self-regulated learning, namely, planning, monitoring and adaptive self-reaction. The sample comprised 2,972 (1,608 female and 1,364 male) primary school students in Hong Kong. Two waves of data, separated by one academic year, were collected. Multilevel cross-lagged path analysis found that adaptive self-reaction was the only statistically significant predictor of mathematics achievement when statistically controlling for prior mathematics achievement, while mathematics achievement was a statistically significant predictor of monitoring and adaptive self-reaction, but not of planning. Furthermore, planning, monitoring and adaptive self-reaction are statistically significant predictors of each other. The study provided initial empirical evidence in support of a dynamic interaction between the subprocesses of self-regulated learning and mathematics achievement.

#### OR0847

##### **Thinking Outside the Box: the Relations with the Individual, Family and Environmental Factors**

**Irena Zukauskaitė, Sigita Girdzi-jauskienė, Grazina Gintiliene, Kestutis Dragunevicius, Dovile Butkiene** *Vilnius University, Lithuania*

The importance of creativity is growing nowadays. Many efforts are made to develop these skills at school or in extracurricular activities. The aim of the study was to determine the factors related with 'thinking outside the box'



as one of the most important criteria of creativity. Data of 742 Lithuanian pupils from 11 to 17 years from a larger project were analysed. They completed Test of Creative Thinking (TCT-DP) (Urban, Jellen, 1995), SPM test (Ravens et al., 1998) and Adjective Check List (Marinskaite, 2006). Information about the family and environmental factors was presented by their parents. The results showed that 'thinking outside the box' was related with age, school type the pupils attend and amount of friends they have. Moreover it is related with individual characteristics such as general abilities, emotional stability, agreeableness and conscientiousness. The correlations with family factors were not significant.

## POSTER PRESENTATION

### P1157

#### Emotional burnout and emotional health of teachers in higher education

**Zhanerke Aidossova (1), Natalya Khon (3), Maira Kabakova (2), Alla Kim (2), Alexina Li (3)** 1. university, Kazakhstan; 2. al-Farabi Kazakh National University, Kazakhstan; 3. Turan University, Kazakhstan

Our goal was to explore the causes and level of Emotional burnout of University teachers. The study involved 100 teachers from al-Farabi Kazakh National University with different work experience and position. Data collection was carried out on the basis of Mixed-methods approach and included methodology for Emotional burnout according to K. Maslach and O. Jackson., Health and Mood questionnaire and interview for measuring participants' well-being, engagement, job strain and risk for burnout. During the research we found that more than half of all teachers had an average degree of emotional burnout and health related problems. Among those with a high level of emotional burnout, teachers with work experience from 5 to 15 years prevailed. Creative IT-technologies will be implemented to develop EI and to reduce the risk of burnout in current and future university teachers.

### P1158

#### Emotional intelligence and teaching

**Zhanerke Aidossova (1), Natalya Khon (3), Alla Kim (2), Ainur Sadykova (2), Zuhra Sadvakasova (2)** 1. university, Kazakhstan; 2. al-Farabi Kazakh National University, Kazakhstan; 3. Turan University, Kazakhstan

Emotional intelligence (EI) plays an important role in higher education teaching. Research of EI in higher education teachers and administrators revealed specific variables of EI which

should be developed in professional educational programs, such as emotional awareness of oneself and others, ability to use one's own potential for the development, empathy, ability to build satisfying interrelationships, flexibility, ability to solve problems in the field of EI, impulse control (Marcia Hughes et al, 2009). As a result of group training sessions, coaching and individual consultations the most weak part in EI in general has been revealed, it is impulse control. This part of emotional intelligence can not be developed via classical group training or during coaching sessions. The only way seems to be impulse control feedback. In our computer program for EI development this part of EI is supposed to be developed via specific procedures close to biofeedback mechanisms.

### P1159

#### Formation of teacher's personal competence in the learning environment in terms of the multi-leveled program of Cambridge

**Zamira Z Aijanova (1), Zhamiga N Nygmet (2), Manshuk A Kussainova (3), Meruyert S Tileubayeva (4)** 1. CSUTE, Kazakhstan; 2. JSC branch NCIQ 'Orleu' Advanced Training Institute in Aktau, Kazakhstan; 3. Kaz UIRWL, Kazakhstan; 4. KazUIRWL, Kazakhstan

This article focuses on the impact of Cambridge training program to the teachers. The aim of the paper is to study the development of teachers' personal competencies in terms of multi-leveled Cambridge training program. The methodological basis was the combination of methods and techniques adapted to the objectives of the study. Value-semantic component of personal competencies of the teacher, E.A. Klimov's test "The image of the profession", "Study level subjective control" test and "Teacher's self-management" test are used. The study 72 teachers of several secondary educational institutions in Aktau, Mangistau region of Kazakhstan involved in the research. Key words: subjective control, creative solutions, professional development, career development, self-management

### P1160

#### The impact of meta-cognitive strategy instruction on intrinsic motivation - Focus on lesson induction and goal setting -

**Kosuke Akasaka Sagami Women's University Senior High School, Japan**

This study examined the impact of meta-cognitive strategies (lesson induction and goal setting) instruction on learning motivation. Participants were 61 high school students. The participants were divided into two groups, the lesson induction and goal setting groups (n=30), and only the goal setting group (n=31). The results showed that the combination

of lesson induction and goal setting led to more intrinsic motivation than only when the strategy of goal setting was used. Moreover, students who were high in mastery goals were more intrinsically motivated by the combination of lesson induction and goal setting. These findings suggest that the strategy of lesson induction can only be used effectively by students who were high in mastery goals. And the effective use of lesson induction can lead to more intrinsic motivation.

### P1161

#### Emotional Intelligence and Teaching Competencies

**Jamilya B Akhmetova (1), Alla M Kim (1), Zhanerke K Aidossova (1), Natalya N Khon (2), Delwyn L Harnisch (3)** 1. Al-Farabi Kazakh National University, Kazakhstan; 2. Turan University, Kazakhstan; 3. University of Nebraska-Lincoln, United States of America

Today, in the era of globalization required not highly specialized workers who possess a certain set of knowledge, abilities and skills (KAS), but those who have certain personality traits and demonstrate effective behavior in the process of solving the problems of professional activity. Emotional intelligence is one of the key components of highly competent teachers. The aim of the research is to study the extent and nature of the relationship between emotional intelligence and teaching competencies. It's necessary to find various ways of emotional intelligence development to improve the education system. The paper presents a systematic analysis of Western, Russian and Kazakhstan works on the issue of emotional intelligence and teaching, and the following empirical results: first, methodological similarity of systemic approach in Kazakhstan and mixed-method approach in modern Western psychology; second, emotional intelligence is the most important construct that ensures the development of the effectiveness and success in teaching.

### P1162

#### The relationship among the perception of the university entrance exam, career decision self-efficacy, and career outcome expectancy.

**Fumiko Akiyama Gakushuin University, Japan**

This study examined whether perception of the university entrance exam affected career decision self-efficacy (CDSE) and career outcome expectancy (COE). Participants were 231 undergraduate students. Questionnaire used the perception of university entrance exam scale (PUES) that had developed by author. Factor analysis of PUES revealed 3 factors of "effort and successful experience", "anxiety during preparation for the exam", and "failure experience". Results showed that (1)"effort and successful"→CDSE

( $\beta=.49$ ,  $p<.001$ );(2)"anxiety during preparation for the exam" $\rightarrow$ CDSE ( $\beta= -.23$ ,  $p<.01$ ), and (3) $\rightarrow$ COE( $\beta=.26$ ,  $p<.001$ ); (4)CDSE $\rightarrow$ COE( $\beta=.30$ ,  $p<.001$ ). But, "failure experience" was no significant effect on CDSE and COE. Therefore, it was found that perception of the university entrance exam influenced CDSE and COE.

#### P1163

### Vocational Indecision in Japanese University Students: Its Relationship with Supporting Career Shaping by Reminiscence Method

**Soichiro Ando (1), Fumiko Ujiyama (2)**  
1. Kobe Shinwa Women's University, Japan; 2. Gakushuin University Graduate School of Humanities, Japan

Previous studies have often related vocational indecision among Japanese university students to lack of identity formation. However, relationship between vocational indecision and career development among Japanese students who haven't formed identity were yet to be found. In the present study, university students answered a battery of questionnaires which measure identity, vocational identity, vocational indecision, and the factors related to career development such as career decision-making self-efficacy, outcome expectations, and vocational motives. The responses of the group that scored low on the vocational identity scale were examined by means of a cluster analysis in order to determine vocational indecision subtypes. Relationship between subtypes and identity formation, as well as career development were examined. Semi-structured interviews containing questions related to making career choices were also conducted with some of the participants who were classified into each subtypes, in order to characterise the types of vocational indecision.

#### P1164

### The difference in the perception of effective praise between elementary school students and teachers

**Naoko Aoki Fuji Women's University, Japan**

This study aimed to analyze the difference between students' and teachers' perception of effective praise for enhancing elementary school students' motivation to study. Elementary school students and teachers in Japan answered questionnaires and rated the effectiveness of praise. Students were divided into three age groups: lower graders (first and second graders), middle graders (third and fourth graders), and senior graders (fifth and sixth graders). Teachers answered the same questions for all three age groups. The results revealed that teachers rated the effectiveness of praise higher than students did, such as praise in front of other students and praising

students for their weaker subjects. For lower and middle graders, teachers rated the effectiveness of praising good sitting posture higher than students did. For lower graders, students rated praise when they were tired higher than teachers did.

#### P1165

### Japanese teachers' confidence and perceived efficacy to deal with school bullying

**Ikuko Aoyama (1), Kie Sugimoto (3), Junko Aida (2), Hiroko Endo (4)**  
1. Shizuoka University, Japan; 2. Tsukuba University, Japan; 3. Meiji University, Japan; 4. Ritssho University, Japan

School bullying has been serious educational and social concern in Japan; however, scholarly works focusing from teachers' perspectives are limited. Thus, the purpose of this study is to examine Japanese teachers' confidence and perceived efficacy to deal with school bullying. The participants are 315 school teachers (Female=54.9%, 73.7% were in their 30s). We asked questions regarding their confidence and perceived efficacy to deal with bullying. T-tests and ANOVA were conducted to see differences in sex, age group, school type, school size, and teaching experiences. Results show that male teachers, teachers in small size schools, and teachers in the position of student guidance are more confident. No differences between school type, age group, and teaching experiences were observed. In addition, overall teachers' confidence was the lowest in cyberbullying intervention. As for perceived efficacy, male teachers, teachers in the position of student guidance, and high school teachers reported having higher efficacy.

#### P1166

### What does PTA (Parent-Teacher Association) mean for women?: The involvement types in PTA activities

**Akie Arima (1), Yumi Shimojima (2), Miho Takeshita (1)**  
1. Tokyo Woman's Christian University, Japan; 2. Kyorin University, Japan

Most of the Japanese mothers engage in volunteer work at their children's elementary school. The aim of this study is to reveal their involvement types in PTA activities through online survey. Four hundred and fifty mothers who had ever engaged in the activities answered a questionnaire. Five types were found by performing hierarchical cluster analysis: "servant mothers," "anti-PTA," "doing PTA activities for their own sake," "seeking parents and teachers being equal," and "egalitarians of sex-role attitudes". Each of the clusters had remarkable traits. For example, mothers who belonged to "doing PTA activities for their own sake" showed the most traditional sex-role attitudes, and mothers who were "seeking parents and

teachers being equal" were equal partners with teachers when they devoted themselves to PTA activities for children. The results indicate that the attitudes toward PTA activities are different among mothers because of their life style, motivations for the activities, sex-roles, etc.

#### P1167

### The development of a creative leadership program for academically talent students in South Korea

**Ah-Rong Baek, Seon-Young Lee**  
Seoul national university, Republic of Korea

The purpose of this study was to propose the development of a creative leadership program for academically talent students in South Korea. We researched the relevant literatures and conducted the survey for creative leadership program and focus group interview. We did analysis for the survey data from 77 school parents, 69 students and 34 teachers and focus group interview. The suggestions are as follows. First, strengthen virtues, physical education. Intentional art, voluntary service and athletic lesson reinforce morality, creativity and physical fitness. Second, vitalize the gifted education research institute. Cooperative research with universities and graduate follow-up study are very necessary to gifted research and education. Third, reinforce a right national pride, liberal arts and self-research as an elite education. Objective historical cognition derives implication for the future. The suggestions provide the need for elite education with morality and refinement to move away from the entrance exam-oriented education.

#### P1168

### The process of activity of shape constructions on plays with Origami materials and dot stickers for two to three year old children

**Yoshiko Bekki (1), Tomoko Senoo (2), Yoshiko Sawai (3)**  
1. Ochanomizu University Elementary school, Japan; 2. Akita university, Japan; 3. Childlabo, Japan

We observed 2 to 3 year old children playing with origami materials and dot stickers to study the process of activity of shape constructions. One child was attaching dot stickers randomly and repeatedly onto a single piece of origami in the beginning. Then, he found that one sticker coincidentally connected two pieces of origami and then he started to place stickers in order to connect them. He made various shapes and played moving them like cars. Another child rolled up origami materials and managed to fix the shape. She enjoyed acquiring the strategy to make a cylinder with an origami material and dot stickers from which she made a lot of cylinders. This study shows that the intervention of dot stickers in the origami playing enhanced the activity of shape constructions for 2 to 3 year old children.

**P1169**

**A Case Study about a ASD and Intellectual Disabilities Student: Understanding His IEP and Effort to Become Employed by Using 'The Delineation Diagram for Teaching and Learning'**

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The following things should be the premise for developing an Individualized Educational Program (IEP) and for providing support according to the IEP; the student's aspirations for the future and the parents' hope about their children's lifestyle; creating a common understanding between teachers, the parents and the student by mutual participation in drawing the diagram. 'The Delineation Diagram for Teaching and Learning', which is an illustration of the student's future and the plans for education and support in the near future, has been being utilized in this study for the student. By using the DDTL, the student was able to regulate himself with confidence. Furthermore, the cooperation between his teachers and parents helped him to more deeply understand about the nature of work. Learning according to the DDTL finally enabled him to get a job at the restaurant.

**P1170**

**School Bullying and Student Engagement: The Moderating Effect of Teacher-student Relationship**

**Jing Cai, Lingyan Li** *Beijing Normal University, China*

Being bullied in school has severe influence on student development and should be intervened. This study investigated 2532 students (1354 boys and 1178 girls) from grade 7th to 12th in a middle school in Beijing. By using the revised Olweus Bullying Questionnaire (Zhang, 1999), self-revised student engagement scale and self-designed teacher-student relationship scale (higher score means better condition), we find the following results: (1) Boys have experienced significantly more bullying than girls ( $F=89.926, p<0.001$ ) and different grades show significant differences ( $F=17.323, p<0.001$ ). (2) The frequently bullied student group have significantly lower engagement scores ( $t=-8.760, p<0.001$ ). (3) Teacher-student relationship has significant moderating effect on the relation between being bullied and student engagement that better teacher-student relationship will reduce the negative influence of being bullied on student engagement ( $p<0.001, \beta=0.051, \text{adjusted}$

$R^2=36.8\%$ ). These results suggest that improving teacher-student relationship can be considered as one possible way to help bullied students.

**P1171**

**Reading Achievement and Children from Diverse Sociocultural and Linguistic Backgrounds**

**Ralph Carlson, Hilda Medrano, Chia Vang, Ana Molina, Carlo R Flores** *University of Texas Rio Grande Valley, United States of America*

Literature is replete with data on the low level of reading achievement of children from diverse sociocultural and linguistic backgrounds. The purpose of the present study is to provide recommendations based upon empirical research for teaching reading to six, seven, eight, and nine year old Hispanic children whose first language is Spanish and second language is English. Multiple regression coefficients of .76, .72, .63, .60 were obtained ( $p<.05$ ) and thus, 58%, 52%, 40%, 36% of the total variance in reading achievement is accounted for in the six, seven, eight, and nine year old children, respectively. Based upon these results and the standardized regression coefficients, it is recommended that when teaching reading to six and seven year old bilingual Hispanic children, linguistic considerations should be addressed. When teaching eight and nine year olds, socioeconomic and acculturation should be taken into consideration. Specific examples for the above considerations will be presented.

**P1172**

**The Path Analysis of Intrinsic Motivation, Autonomous, Learning Task, and Camp Efficacy in Junior High School Student**

**Hsiu Ju Chang** *National Chengchi University, Taiwan*

This paper presents the path analysis model among the intrinsic motivation, autonomous, content, difficulty, and camp efficacy to support and enhance the perceptible and meaningful information during the camp challenge processes. In this path model, we wanted to insight the sensory information within teaching and learning camp courses in junior high school. Participants were 27 junior high school students (grade 6~8, 11~14 years old, 13 males, 14 females). The model analysis is based on partial least squares (PLS) which is an exploration or construction technology to predict the causal model from the latent variables for reasoning and comparing. And the causal model maintains the relationships among the latent variables and constructs. We found the paths were positive to support the relations among intrinsic motivation, autonomy, content, difficulty, and camp efficacy significantly.

**P1173**

**A Review on Entrepreneurship Competence Research**

**Liping Che** *USST, China*

Abstract Entrepreneurship competence refers to the ability to establish successful enterprise. This paper provides a systematic introduction of entrepreneurship competence researches. And then it overviews relevant theoretical and empirical researches over the past thirty years. It also covers the future trend for entrepreneurship competence researches. The work presented in this paper focuses on the following: multi-dimensional entrepreneurship competence research, entrepreneurship competence research about entrepreneurs' characteristics, relevant abilities and opportunity recognition. Although great progress has been made, some significant issues still need to be explored in the researches: to define entrepreneurship competence in a single standard; to enhance awareness of entrepreneurship competence training; to emphasize entrepreneurs' internal factor; to study entrepreneurship competence with multi-methods based on empirical researches with more scientific measurement tool. Keywords Entrepreneurship Competence, establish enterprise, Entrepreneurs

**P1174**

**Profile of achievement goals in mathematics: A two-year study with cognitive and affective outcomes**

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Goal orientation toward academic achievement has revealed strong association with achievement and psychological well-being. In the current study we aimed to explore the math achievement goal orientation of Grade 7 students in Taiwan ( $N = 488$ ) and how they changed in a year in terms of the classification and profile of achievement goal orientation. The classification of students was conducted based on  $2 \times 2$  achievement goal framework using latent class analysis. In the first year, three math achievement goal profiles were identified: maladaptive, indifferent, and success-oriented. A slight different profile, avoidance but adapting was found in the second year, in addition to indifferent and success-oriented. We also tested whether the classes show difference on self-esteem, math-related motivations, math learning strategies, and math achievement. Gender difference was also discussed. In general, the results provide important insights into the  $2 \times 2$  model of achievement goal orientation.

P1175

### Difficulties, Needs, and Challenges of School-based Psychologists Services: A Perspective of Junior High School Counselors

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To solve the predicament of school counseling and to effectively cope with the student psychological needs in middle school, "School-Based Psychologists Services" is the primary goal of this paper to promote professional counseling services. Using semi-structured interviews, data was collected from 8 guidance workers in junior high schools. The data were transcribed, analyzed, and coded, and grounding theory methodology was used to construct the new working model. Results showed two major themes in the narratives. The first theme involves school expectations toward psychologists, such as "guarantee," "trust" and even "halo effect" and "impressions of being indisputable" as a result of their "license" qualification. The second theme concerns cooperation and partnership between schools and psychologists. Approaches to cooperation models can be divided into professional competition and specialized division of labor; and partnership can be divided into rank relationship such as unequal status and power, and equal status and relations.

P1176

### The Low Arousal Emotions Dominate Academic Delay of Gratification of Junior School Students and the Achievement Goal Orientation Play a Mediating Role between Them

Di Chen Nankai University, Zhou Enlai School of Government, China

**Abstract** The academic delay of gratification is refers to the student to seek for a more valuable long-term result to give up the instant satisfied choice orientation in the study situation. This study based surveys and experiment had discussed the effect of the academic emotion on academic of delayed gratification and the mediating role of achievement goal orientation. The results indicated that: (a) under the different emotional states, delay of gratification was significant difference; negative-low arousal emotions was the most unfavorable to delay of gratification; (b) the learning-prove goal orientation played a partial mediating effect in their relationship of low-arousal emotions and the delay of gratification; and (c) the performance-avoid goal orientation played a partial mediating effect in the relationship of negative-high arousal emotions and the delay of gratification. The low-arousal emotions to academic delay of gratification have a strong predictive power. **Keywords** academic delay of gratification academic emotions achievement goal orientation

P1177

### Discussion on Influences of Mobile Internet and Big Data Analysis Technology Based Information Platform on the Development of Chinese School Psychology

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The current focus of Chinese school psychology is the implementation of various diagnostic assessments, despite the fact that these assessments are not yet comprehensively formalized and systemized. Meanwhile, this subject is facing three major problems in China: shortage of school psychologists, high workload and long evaluation procedures, which are all determined by China's economy, people's education level and population size. This article will discuss how information platform based on mobile Internet and big data analysis technology influences the development of Chinese school psychology, it will also introduce methods of achieving quick evaluation of psychological assessment and data analysis, combining regional resources, promoting online education experiments and the future scope of this subject in China.

P1178

### The Work Adjustment Process of the Director of Counseling Division in High School

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A director of counseling division plays a key role in promoting the counseling services in school system. The current study aimed to explore the work adjustment process of the directors of high schools' counseling divisions. The study invited 7 directors, collected data by in-depth interviews, and analyzed data using the paradigm of qualitative research. The findings of the study indicated a) for new directors, the first difficulty they faced is how to communicate with other administrators in the school system; (b) many directors have to work more than one job because the short of counseling staff, thus affect the effectiveness of administrative work; (c) the recognitions about counseling professional in the school influence the implementation of school counseling; (d) the counselor affiliates of other schools provide administrative experience, as an important supports for the participants. Finally, the implications and recommendations for school counselors' practices and future research were presented.

P1179

### Achievement goals predict students' help-seeking and cheating behaviors in a hierarchical linear model of accounting education

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The current study examined whether achievement goals predict accounting students' help-seeking and cheating behaviors. A stratified sample of 1500 students from 30 classes was analyzed using a two-level hierarchical linear model(HLM). The student level included three variables: student achievement goals, teacher support, and students' help-seeking/cheating behaviors; the variable at the class level was classroom achievement goals. At the class level, the results of the HLM analysis revealed that classroom achievement goals moderated the relationship between student achievement goals and teacher support/inhibition. Classroom achievement goals also played a moderating role in the relationship between teacher support/inhibition and students' help-seeking/cheating behaviors, with classroom achievement goals having a positive effect on students' help-seeking behaviors, but a negative effect on students' cheating behaviors. At the student level, student achievement goals had a positive effect on teacher support. Teacher support played a mediating role in the relationship between student achievement goals and students' help-seeking/cheating behaviors.

P1180

### The Effects of Strength Coaching Program Based on Positive Psychology on Self-Efficacy, Career Decision-Making Types, and Career Decision Levels for College Students

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The purpose of this study is to verify the effects of the one-on-one strengths coaching program based on the positive psychology on self-efficacy, career decision making, and career decision level. A total of 18 college students(8 for experimental group, 10 for control group) participated in this study. The coaching program consisted of six sessions and each session lasted for 60 minutes. The pre-test, post-test, and follow-up test were carried out. The results showed that the coaching program significantly improved self-efficacy and career decision-making. Also the program partly improved career decision level. Finally the effect of the coaching program was found to be sustained for one month after the completion of the program. These findings suggest

that the use of the strengths can be a new alternative to improve career intervention programs for college students.

#### P1181

##### **The impact of the career knowledge on career development.**

*I-Chi Chung, Sy-Feng Wang Dept. of Psychology, Fu Jen Catholic University., Taiwan*

In the past career theory freshman stage career was treated as self-exploration, and was unable to link with the actual state. Based on the career knowledge for the environment (i.e. occupational information), this study considered positive effect of the career knowledge on career orientation, career trajectories, and learning planning. The significance of results of this study also shows the above effect. We designed a career information program which had three stages. At three time points, career knowledge gradually decreasing shows the program to meet the needs of career knowledge for college students. Career orientation, career trajectory, and learning planning gradually rising, also show positive increasing need of career knowledge. In the Chinese world, career guidance courses should be added to the information of environment, which can balance with individual and environment information in order to reduce information asymmetry which brought to career obstacles.

#### P1182

##### **Relationship Between Academic Demands and Academic Self-Efficacy Among Freshmen and Sophomore Students of Philippine Normal University**

*Jean Lois F Condeza, Dezza C Caspe, John Mark C Lugo Philippine Normal University, Philippines*

In preparation for K-12, Philippine Normal University pioneered a curriculum in the Philippines known as the Outcomes-based Teacher Education Curriculum (OBTEC). The changes in the said curriculum intensified the academic demands for the students. This research examined the academic self-efficacy of students under outcomes-based curriculum using the College Academic Self-efficacy Scale by Owen and Froman (1988). The respondents were 300 students composed of freshmen and sophomores of Philippine Normal University. This study affirmed that students under OBTEC have a low academic self-efficacy. Keywords: academic self-efficacy, academic demands, OBTEC

#### P1183

##### **Effects of students' own and their neighbors' attitudes on rule-breaking behaviors in educational settings.**

*Takuhiko Deguchi Nara University of Education, Japan*

This study investigated the effects of students' own and their neighbors' attitudes on rule-breaking behaviors in educational settings (e.g., talking in class). A questionnaire answered by 321 undergraduates measured A) degree of satisfaction (attitude) of classroom neighbors (i.e., people sitting near the respondent) and B) the respondent's own degree of satisfaction in 4 situations where they or neighbors were or were not breaking a rule, and C) frequency of rule-breaking behaviors (talking in class; doing non-assigned work). In addition, the teachers answered whether seating had been assigned. Two-way ANOVAs (attitudes and seat assignment) were conducted. For "talking," students behaved in accordance with only their own attitudes. However, for "doing non-assigned work," students behaved according to both their own and their neighbors' attitudes. In addition, for the two behaviors, the frequency in seat assigned classroom was lower than that in free seating. These results imply that situational factors affect rule-breaking behavior.

#### P1184

##### **Differences in reading motivation of German girls and boys in primary school**

*Martina Endepohls - Ulpe Institute of Psychology, Universität Koblenz-Landau, Campus Koblenz, Germany*

Results of the PISA surveys show considerable gender differences in reading competencies for older students. One explanation for these differences is differences in the reading motivation. In several studies with older but also in some studies with younger students, girls intrinsic motivation to read turns out to be stronger than boys. Up to now it is not quite clear at what age these differences first emerge and which aspects of motivation are exactly involved. In an interview study with 30, and a questionnaire study with 220 primary school children from grade 3 and 4, gender differences in forms of reading motivation - as postulated in the theory of self-determined behavior by Deci and Ryan - , reading interest and behavior are analyzed. Results show only small gender differences in nearly all aspects of motivation, but significant differences in interest in text genres and in connected communication with peers.

#### P1185

##### **Influence of task value and motivational regulation strategies on learning behavior**

*Yukino Endo, Motoyuki Nakaya Nagoya University, Japan*

The present study investigates the relationships between task value, motivational regulation strategies, and learning behavior in situations

likely to produce decreased learning motivation. Such situations may surface when the learner wants to do something else, but has to complete another task such as his/her English homework. A self-report questionnaire survey was administered to 186 high school students. This study examined three types of task values (interest value, utility value for practice, and utility value for entrance examination), four types of motivational regulation strategies (performance, interest enhancement, self-consequating, and cooperative), and three types of learning behavior (persistence in learning, procrastination, and cognitive strategy). The results, analyzed using structural equation modeling, were as follows: (a) the task value predicted the motivational regulation strategies, (b) each motivational regulation strategy promoted learning behaviors in various ways (specifically, interest enhancement strategy was positively related to cognitive strategy, and persistence in learning and negatively related to procrastination).

#### P1186

##### **Changes in classroom atmosphere in a junior high school throughout a year**

*Shuko Esumi, Ichiko Shoji University of Tsukuba, Japan*

This study examined annual changes in classroom atmosphere in a junior high school that has conducted a peer support project. The participants comprised 257 students, who were asked to complete the Classroom Atmosphere scale (14 items, 5-point scale) thrice: May (Time 1; T1), October 2014 (Time 2; T2), and March 2015 (Time 3; T3). In study 1, we conducted factor analyses for each time to reveal differences in factor structure. Only two factors were extracted in T1 and T2, while the following three factors were extracted in T3: supportive atmosphere (SA), apathetic atmosphere, and bullying atmosphere (BA). In study 2, the two-way repeated measures ANOVA revealed that SA had significant main effects of time and class, and BA had a significant interaction effect. These results showed that a bullying atmosphere was promoted in a few classes, but a supportive atmosphere was promoted in all classes.

#### P1187

##### **Comparing Self-efficacy Beliefs between American and Chinese Students: A Qualitative Study**

*Jun Fu Oklahoma State University, United States of America*

This study explored differences regarding academic self-efficacy beliefs between American and Chinese students through a qualitative approach. Participants were 6 American students and 6 Chinese students enrolled in different graduate programs at Oklahoma State University. The researcher conducted

a semi-structured, hour long in-person interview with each participant. Three themes emerged from content analysis: (1) sense, (2) source, and (3) value. Regarding sense of self-efficacy, American students associated adaptive self-efficacy beliefs with accurate calibration of one's capability to perform academic tasks, whereas Chinese students reported modest perception of self-efficacy. In terms of the source of self-efficacy, American students emphasized high self-worth upon success. For Chinese students, the highly competitive examination systems characterizing Chinese schooling produced lots of failure experiences for the general student population. Finally, American students emphasized intrinsic value, while Chinese students put more focus on attainment or utility value of academic endeavors being firmly established by the cultural code.

#### P1188

##### **The relation between class results and cognitive/non-cognitive ability** *Koichi Fujimoto Kobe Shoin Women's University, Japan*

The present study examined the relationship between cognitive/non-cognitive ability and academic grades. 70 first-year female undergraduates have conducted 5 tests of cognitive ability such as Digit-Span / Backward Digit Span / Letter-Number Sequencing / Particular Type of Riddle / Analogy Test. To assess non-cognitive ability, Egogram (EG) test was conducted. These tests on cognitive ability did not indicate significant correlation with academic grades. Particular Type of Riddle and Analogy Test also did not have correlation with academic grades neither. Two elements of Egogram had significant relation between grade scores. FC (Free Child) had a significant negative correlation between academic grades. A (Adult) element indicated a slight significant correlation with academic grades. It was concluded that controlling desire to temptation properly and rational judgement based on long-term prospect are necessary to improve university academic grades. The relationship between this result and Academic Delay of Gratification (ADOG) was discussed.

#### P1189

##### **How do we read expository text with plural maps?**

*Izumi Fukuya, Aiko Morita, Kazuhiro Kusahara, Takumi Watanabe, Yu Osaka Hiroshima University, Japan*

This study investigates the time course and the patterns of processing an expository text with plural maps, such as those in a social studies textbook. Thirty university students read text and maps while their eye movements were recorded, and then completed a reading comprehension test. Half were social studies majors and were considered to be experts. Participants studied text and five maps that were written

about an imaginary land. Each of the five maps included information about geographical features, annual rainfall, population distribution and land use. We focused on the amount of time participants spent on the text and map parts. We also explored their referencing patterns from transitions, both text-map referencing patterns and map-map referencing patterns. The latter pattern is considered to reflect integration information from plural maps. The results showed that the reading strategy of experts was different from that of non-experts.

#### P1190

##### **Effects of Social Distance between Person and School and Home on Depression in China**

*Noriaki Fukuzumi, Shoji Yamaguchi Tokyo Denki University, Japan*

The purpose of this study was to investigate the effects social distance in the framework of "construal level theory" on depression focusing on dimensions of social distance between person and school and home in China. Participants were 851 including junior high school students (n=377) and high school students (n=474) in China. A multiple regression analysis was conducted to investigate social distance between person and school and home. The results were as follows: Social distance between person and school had a positive effect on depression. Social distance between person and home had a positive effect on depression. In conclusion, the degree of social distance between person and school and home predicted the degree of depression.

#### P1191

##### **Developing a sleep, and stress management education program for elementary school students.**

*Maki Furutani (1), Sae Utsumi (2), Daiki Okumura (2) 1. Kobe University, Japan; 2. Elementary School attached to Kobe University, Japan*

Stress is an important factor affecting insomnia. Stress management education is conducted in schools to improve "mental health," however; to date, sleep education has not been integrated as a school subject. Therefore, a sleep and stress management program to promote mental health was developed and its effects were investigated. An investigation was conducted during school and non-school hours, in order to understand the lifestyle of elementary school students. Results indicated that 96% of fourth through sixth grade students attended after school tuition classes; they had short sleep duration, and they suffered from chronic fatigue. Moreover, most common stress coping strategy used by children was to "give-up." Based on these findings, we included sleep management, mental and physical relaxation, different coping methods, and discussions about sustainable methods in this

program. The effects of the program are discussed based on data of sleep logs and physical activities.

#### P1192

##### **Perceptions and final academic results in university students. Does the type of exam matter?**

*Laura O. Gallardo, Angel Castro, Angel Barrasa, Victor Villanueva, Alberto Abarca-Sos, Jose Antonio Julián University of Zaragoza, Spain*

Academic achievement results are one of the main goals of university students. This research focused in accuracy perceptions of youths' academic achievement in exam tasks during university studies. The sample comprised students of psychology and teaching education degrees from 1st to 4th courses. The results showed different process: over-estimation and under-estimation of academic achievement in university students. Indeed, multiple choice exams versus open question exams had different pattern of accuracy self-perceptions of academic achievement. Implications surrounded the exam types for students and professors are discussed.

#### P1193

##### **Effect of relational efficacy on help-seeking in same-sex friendships**

*Ayafumi Goto Mie University, Japan*

This study investigated how relational efficacy affects the frequency of help-seeking and the concern about help-seeking in same-sex friendships. Relational efficacy, which is a shared or intersubjective efficacy of relationship partners, refers to pair's belief that they can mutually coordinate and integrate their resources to prevent and resolve any problems. Participants were 61 same-sex friendships. Multilevel structural equation modeling suggested that relational efficacy promoted the frequency of help-seeking and the concern about help-seeking in same-sex friendships, controlled for relationship longevity. This results are discussed in terms of the association between intersubjective processes in same-sex friendships and the new supports for individuals who hesitate help-seeking toward someone.

#### P1194

##### **Psychological and pedagogical support of students adaptation in the inclusive education conditions**

*Natalia V Grushko (1), Svetlana Chernobrovkina (1), Sergey Ugruyumov (2) 1. Omsk State University, Russia; 2. Omsk College of Professional Technologies, Russia*

Among important educational problems is its accessibility to a number of social groups - namely, people with disabilities. In the college

the target project on inclusive vocational training has been implemented. The research was aimed at studying the students with disabilities adaptation. Researched: personal characteristics; learning motivation, learning process satisfaction - compared groups of students with disabilities and without disabilities. Leading motives - students with disabilities: successful continuing education, obtaining intellectual satisfaction, educational requirements implementation, respect for teachers, tendency to prestigious motivation, focus on the teachers approval. The control group motives: successful training, avoidance motives, achievement motives (high appreciation of classmates); help organize the learning process. The level of personal anxiety of students with disabilities is higher than their classmates' one, they have higher points on the satisfaction of the educational process in the college. Successful adaptation of students with disabilities depends on the individual's and the educational environment's characteristics.

#### P1195

##### **The Effects of Attachment to a Companion Animal (Dog) on Self-Esteem in Elementary School Children.**

*Sayoko Hamano Teikyo University of Science, Japan*

The purpose of this study was to investigate the relationships between attachment to a companion animal (dog) and self-esteem in elementary school children. In this study, 312 schoolchildren in the 4th, 5th and 6th grades in Kanagawa completed a questionnaire, and the data of 59 schoolchildren who had a dog was analyzed. The first section of the questionnaire was the Self-Esteem Scale (Tokyo Metropolitan Board of Education, 2013). Each item was rated on a 4-point likert scale. The scale was 22 items yielded 3 factors: self-acceptance, self in a relationship, and self-assertion. The second section was the Companion Animal (Dog) Attachment Scale for Schoolchildren (Hamano, 2013). Each item was rated on a 5-point likert scale. The scale was 16 items yielded 2 factors: psychological support and comfortable relationship. Covariance structure analysis indicated that psychological support was positively associated with self in a relationship and self-assertion.

#### P1196

##### **Effects of Strategy Attribution for Success/Failure on Self-Esteem** *Michiko Hanaya Tohoku Bunkyo College, Japan*

This study was conducted to explore how an individual's self-esteem is affected by strategy attribution for success/failure. 10 female seniors of university participated, who each took and passed an employment exam to become a regular school teacher. In strategy

attribution for success (SAS) condition, participants were asked to talk about their efforts worked successfully in job hunting, while in strategy attribution for failure (SAF) condition, they were asked to talk about what didn't work. They completed questionnaires on self-efficacy before the interview, and on self-esteem before and after the interview. The results showed a statistically significant increase in the self-esteem in both SAS and SAF conditions, while the self-esteem score in SAS condition was higher than that in SAF condition, the interaction was not significant. The results also showed that the increase in the self-esteem was observed only in the high self-efficacy group, not in the low self-efficacy group.

#### P1197

##### **Predicting school maladjustment of junior high school student : A longitudinal study during the transition from elementary to junior high school.**

*Katsumi Harada (1), Yoshimi Nakashima (2), Ayako Onishi (3) 1. Kanazawa University, Japan; 2. Fukuoka University of Education, Japan; 3. Konan University, Japan*

The problem of school maladjustment increases in the first grade of junior high school in Japan. The primary purpose of this study is to examine the risk and resilience factors that may predict the problem of school maladjustment in the first grade of junior high school. Participants (N=8136) completed questionnaires when they were in the sixth grade (self-efficacy : elementary school) and again when they were in the seventh grade (school maladjustment : junior high school). The results of correlation analysis showed that there was negative correlation between self-efficacy in elementary school (about following the rules, building a relationship with people, consideration for others) and school maladjustment (delinquency, fatigue) in junior high school.

#### P1198

##### **Development of school based suicide prevention program (4): The effect of GRIP program in high-risk adolescents defined by behavioral inhibition and activation systems**

*Chika Harada (1), Keisuke Shiraga (2), Shizuka Kawamoto (3), Miho Hatanaka (1), Kenji Kawano (3) 1. Meijo University, Japan; 2. Joetsu university of education, Japan; 3. Center for Suicide Prevention, NIHM, NCNP, Japan*

Previous research found that combination of high levels of behavioral inhibition system (BIS) and low levels of behavioral activation system (BAS-Drive) predicts suicidal thinking (Rasmussen et al., 2012). In this study,

we examined that the effects of a suicide prevention education program called GRIP for junior high-school students were moderated by risk level of students, regarding a combination of high BIS and low BAS-Drive as a high risk for suicide. A total of 28 high-risk students and 167 low-risk students participated in the program. Participants in intervention and control groups completed self-report questionnaires before and after the intervention. A series of analysis showed following results: (1) low-risk students in intervention group showed higher monitoring skills, positive cognition about seeking support from adults, and help-seeking preference, compared to those in the control group, (2) high-risk students increase the skills, which is needed for establishing supportive relationship, in early intervention stage.

#### P1199

##### **Social skills training including education on information technology ethics**

*Eriko Harada (1), Yayoi Watanabe (2) 1. Tokyo University of Information Sciences, Japan; 2. Hosei University, Japan*

Nowadays students explore the use of Information Technology, and make decisions that require the application of moral judgments in their daily lives. Their decisions concerning the validity of information must be taken in isolation. However, they have few opportunities to learn information ethics. Therefore, the purpose of this study was to examine the effects of social skills training teaching information ethics for the high school students. Five sessions were given to 309 students in order to systematically learn and acquire specific social skills. The four target skills were, a) communicating thoughts and feelings, b) listening, c) controlling emotions, d) showing compassion. The Social Skills Scale was used as an assessment at both pre- and post-test. Results showed that student's decoding and assertive skills increased at post-test, because they had some practices to empathize with another's feelings and circumstances in those sessions. The effectiveness of this program was supported.

#### P1200

##### **Content Analysis Elementary School Science Textbooks and Teaching Methods of teachers based on Epistemological Beliefs Components**

*Soheila Hashemi, Mehdi Khabbazi Kenari, Elahe Sharifi university of mazandaran, Iran*

This study analyzed the content of elementary school science textbooks and teachers teaching methods based on Elder epistemological beliefs components (source, certainty, development and justification). By using purposeful random sampling 6 science textbooks and

19 teachers were selected. Data was collected through content analysis and semi-structured interview and analyzed by qualitative content analysis and thematic coding. Findings indicated, the first grade science textbook had the most attention to the source of knowledge. Other science textbooks had the most emphasis on source, development and justification, whereas the emphasis of them on certainty was not considerable. Interview findings suggested that teachers epistemological beliefs tended to applying student-centered teaching methods to involve students in knowledge construction. Nevertheless, they emphasized mostly on the source, development and justification of knowledge, and they did not pay attention to certainty. It seems providing epistemic climate requires dramatic changes in educational priorities in goal setting and planning.

#### P1201

**After School Hours of Current Junior High School Students and High School Students in Japan**  
**Motoko Hasumi (1), Yasuko Kitahara (2), Kentaro Kawashima (3), Tetsuyasu Sato (4), Shinobu Ikoma (5)** 1. *Kawamuragakuen Woman's University, Japan*; 2. *Kawamuragakuen Woman's University, Japan*; 3. *Tokaigakuin University, Japan*; 4. *Kawamuragakuen Woman's University, Japan*; 5. *Kawamuragakuen Woman's University, Japan*

This study describes after school hours of current junior high school students and high school students in Japan. The main purpose of this study is to develop the reliable and valid questionnaire that is designed for students to allow them to evaluate their after school time by themselves. Findings were based on the answers of 200 junior high school students (the answers were provided by a parent) and 200 high school students. According to the survey in early 2015, key findings included: there were five categories of after school activities: the high frequent activity was spending their leisure time, and there was a significant correlation with study hours and their academic outcome of high school students. To guarantee the variable after school hours for junior high school students and high school students, we need more discussion.

#### P1202

**Development of school based suicide prevention program (3): Evaluation of the effectiveness of the GRIP program among junior high school students in Japan**  
**Miho Hatanaka (1), Chika Harada (1), Keisuke Shiraga (2), Shizuka Kawamoto (3), Kenji Kawano (3)** 1. *Meijo University, Japan*; 2. *Joetsu University of Education, Japan*; 3. *Center for Suicide Prevention, NIHM, NCNP, Japan*

A suicide prevention education program named GRIP was developed, and its target outcomes are to reduce destructive expressions, and to promote understanding about feelings and support-seeking, among other things (Shiraga et al., 2015). The effectiveness of GRIP was evaluated by implementing the program with students in one junior high school (n = 197; intervention group), and a control group (n = 147) of students in a different junior high school. The two groups were compared on several outcome variables assessed with self-report questionnaires, by using a pre- and post-intervention design. Results indicated that the intervention group had higher post-test scores for positive cognitions about support-seeking from adults, help-seeking preferences, and monitoring skills, compared to the control group, after controlling for pre-test scores. These results partially supported the effectiveness of the GRIP program to promote support-seeking behavior and to understand the feelings of others and themselves.

#### P1203

**A Scenarios Experiment about the Influence of Gratitude on Helping Behavior**  
**An-Ming He, Qiu-Ping Hui** *university, China*

To test the prediction of gratitude on people's helping behaviors, and made a more particularly research on the relationship between gratitude, indebtedness and happiness. 367 undergraduates were selected to fill in situational experiment, and the methods of descriptive statistics, covariance analysis was adopted. Results indicate: The gratitude is different from indebtedness and happiness. It is a positive emotional characteristics with value of social morality, rather than indebtedness and happiness, gratitude can predict prosocial behavior such as helping behavior positively.

#### P1204

**The occurrence of specific hearing difficulties and that of coexistence with specific learning difficulties in the regular classroom in Japan.**  
**Rumi Hirabayashi, Kenryu Nakamura** *University of Tokyo, Japan*

People with specific learning difficulties sometimes have special needs for hearing processes. Auditory Processing Disorder is defined as this kind of specific hearing disabilities, those are represented by selective auditory attention and signal detection in noise. Accommodations that utilise technology to clarity of the acoustic signal may fit these people. Although the effects is known in the USA that the tools such as FM hearing system and noise cancelling headphone, the rate of occurrence of specific hearing difficulties is unknown in Japanese regular classroom. The questionnaire for teacher was

developed to shed light on the occurrence of specific hearing difficulties. This study will discuss how many students with a specific hearing difficulty exists in elementary school in Japan. The possibility of coexistence of specific hearing difficulty with specific leaning difficulties also discuss in this study.

#### P1205

**Analyzing the Impacts of Children's Role-taking Ability on the School Adjustment Considering Emotional Engagement and Emotional Adjustment**

**Yuko Honma (1), Ichiro Uchiyama (2)** 1. *Niigata Seiryō University, Japan*; 2. *Doshisha University, Japan*

This study examined the relationships among children's role-taking ability in rule and moral situations, emotional engagement, e.g., friendships, school work, teacher-child relationships, and school belonging and emotional adjustment e.g., school liking or avoidance. Participants were Grade 5 and 6 primary-school students in Japan. We used path analysis to address our research goal examining the effects of role-taking ability in rule and moral situations influenced emotional engagement and emotional adjustment. Regarding the role-taking ability in rule situations, the results show that the indirect effect of role-taking ability in rule situations on school liking via school work, after comparing the goodness of fitness of models of interest. Besides, for the role-taking ability in moral situations, the indirect effect of role-taking ability in moral situations is on school liking via teacher-child relationships, after comparing the goodness of fitness of models of interest.

#### P1206

**Effects of conceptual combination training on technological imagination**

**Ruey-Yun Horng (1,2), Yu-Chuan Hung (1,2)** 1. *National Chiao Tung University, Taiwan*; 2. *National Chiao Tung University, Senegal*

Conceptual combination, linking two or more than two concepts to produce a new concept, is proposed to be the basic cognitive mechanism that underlies imagination. The effects of conceptual combination training on technological imagination were examined with 169 engineering and non-engineering students. Participants were randomly assigned to training or control group. Participants in the experimental group received about one-hour training on five different types of interpretation for conceptual combination (property conjunction, analogy, property transfer, negation, relation). Technological imagination was measured by the originality in a noun combination task and in design of a sleeping device (functional requirements, components of the device, and



the title of the new product). The conceptual combination training materials consisted of remote noun-noun pairs in verbal or visual forms. Data showed that conceptual combination training may enhance technological imagination by producing more original functional requirements. The effect was equivalent for engineering and non-engineering students.

#### P1207

##### **The effect of academic competence on academic attribution**

**Chong-Shiann Hsu** *Chang Jung Christian University, Taiwan*

This study examined the effect of academic competence on the academic attribution. The databases of the Taiwan Education Panel Survey were used. The participants finished the academic competence tests at Grade 7, 9, 11 and 12. The participants at Grade 12 were asked to perform academic attribution. We estimated whether the academic attribution was regressed on the level and the slope of the latent growth of academic competence. In Taiwan, graders 12 were tracked to vocational or academic senior high schools, which were public or private. The Graders 12 from public academic senior high school were recognized as the best academically, among whom the growth model did not predict their academic attribution. Among those from private vocational schools recognized as the worse academically, it was found that the attribution of academic failure to ability, effort, and study habit were predicted by the growth slope of academic competence.

#### P1208

##### **Examining a Model of the Appraisal of On-line Reading Environment and On-line Reading Ability, and the Moderating Effects of Gender of Junior High School Students**

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2. *Fortune Institute of Technology, Taiwan*

This study focused on the relationship between the appraisal of on-line reading environment and on-line reading ability, and the moderating effects of genders on this relationship among the junior high school students. 1,107 junior high school students were collected to examine the relational model. The researchers obtained good fits for structural models suggesting that the positive appraisal toward the on-line reading environment could significantly positive influence the on-line reading ability and the negative appraisal toward the on-line reading environment could significantly negative influence the on-line reading ability. The results of multi-sample analysis indicated that there were significant moderating effects between genders on this relational model, in which the influence of the negative appraisal toward the on-line

reading environment on the male students had more impact on the on-line reading ability than the female students. Several suggestions were offered for further studies.

#### P1209

##### **Influence of Self-Ranking Feedback on Learning Performance and Task Motivation**

**Kenshiro Ichimura (1), Yoshiyuki Ueda (2), Takashi Kusumi (1)**  
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2. *Kokoro Research Center, Kyoto University, Japan*

Good feedback not only facilitates skill learning, but also improves learners' motivation; the present study investigated types of feedback that can achieve both these ends. Participants were given a learning task that involved repeating drills of a new calculation technique for double-digit multiplication. In Experiment 1, we compared feedback of the top 10 self-rankings, the personal best, and the current result. Results showed that the feedback of the top 10 self-rankings led to higher learning performances than others, and higher task motivation than the current result. In Experiment 2, we compared self-ranking feedback with the top 50 and top 10 peer rankings. Results indicated that self-ranking feedback led to better learning performances than the top 50 peer rankings, and better task motivation than the top 10 peer rankings. Self-ranking feedback gives learners achievable goals and enables them to measure learning progress accurately, which may improve learning performance and task motivation.

#### P1210

##### **Six-dimensional life begins after school: research for organizing after-school activities in Japanese undergraduates**

**Shinobu Ikoma (1), Motoko Hasumi (1), Yasuko Kitahara (1), Kentaro Kawashima (2), Tetsuyasu Sato (1)**  
1. *Kawamura Gakuen Woman's University, Japan*;  
2. *Tokai Gakuin University, Japan*

Our research has investigated the after-school life of students of various ages, both empirically and practically. This study conducts the investigation to undergraduates. Five hundred and forty-seven undergraduate students participated in the questionnaire survey about how they spend after-school time. Exploratory factor analysis revealed six factors: physical exercise, inactive rest, studying hard, extracurricular activities, time with one's family, and document editing works. The male students preferred "physical exercise" than the females, and the female students did "time with one's family" than the males. The higher the grades, the more favorable the studying. Social determinants, psychological interpretation, and support strategies for them are discussed.

#### P1211

##### **Effect of upright posture on psychological state and task performance in children**

**Kazuki Inagaki, Yosuke Sakairi** *University of Tsukuba, Japan*

It was hypothesized that physical and psychological "posture" would influence the accomplishment of a task. Thus, objective of the current study was to examine the effects of posture regulation on children's psychological state and cognitive tasks' performance. Thirty-eight boys (mean age: 12.3 ± 0.5 years) participated in this study. A comparative investigation was conducted on the impacts of normal and upright posture on psychological state (vitality and pleasure levels) and cognitive tasks (calculative, listening comprehension, and vocabulary memory). Results revealed that compared with normal posture, upright posture allowed for maintenance of higher vitality and pleasure levels, and upright posture had significantly higher scores for calculative and listening comprehension tasks. A significant correlation was obtained between improved vitality levels due to the upright posture and increased both calculative and listening comprehension task suggesting that children can maintain a positive psychological state and improve their task performance by regulating their postures.

#### P1212

##### **The Extent of the Japanese Word "Ibashi" as a Term Used in Representing Maladjustment.**

**Yuma Ishimoto** *Tottori University, Japan*

This study aimed to comprehend the process of the extent of usage of the Japanese word "ibashi", which originally means the location where one is or whereabouts. Since 1990's, "Ibashi" has been extensively used to describe a place where one can calm down or feel comfortable, or a comfortable relationship. For example, when Japanese people feel maladjusted, they say "I have no Ibashi". I compared the number of times and the ways that "Ibashi" was used in each 5 years in Japanese newspapers. The results are as follows: The number of times that "Ibashi" was used in Japanese newspapers increased sharply from 1990 to 1994, which was considered a response to the usage of this word by the Ministry of Education. Until 2000, in many cases "Ibashi" had been used with the term of "kokoro no", which means "psychological", however now "Ibashi" is often used independently.

#### P1213

##### **Experiential avoidance and coping strategies on academic stressor among junior high school students preparing for high school examination: A Latent growth curve model.**

**Kenichiro Ishizu (1), Yoshiyuki Shimoda (2), Tomu Ohtsuki (3)** 1. University of Toyama, Japan; 2. Saga University, Japan; 3. Waseda University, Japan

The purpose of the present study was to investigate how experiential avoidance affected the coping style with high school examination stress. With use of short time prospective design of three waves, Japanese junior high school students (9th grade,  $N=277$  with a mean age of 14.81 years and  $SD 0.41$ ) were requested to complete the questionnaires consist of coping strategies on academic stressor, stress responses and experiential avoidance. Latent growth curve modeling analyses was used to assess the influence of gender and experiential avoidance on the growth of various strategies of academic coping. It was found that the experiential avoidance affected the slope or intercept, which mean higher level of experiential avoidance was associated with lower level of effectual coping strategies. It was suggested that intervention to experiential avoidance could be important for adolescence to get over the high school examination stress.

**P1214**

**An Examination of the Causal Model for the Relationship among Socially Shared Regulation of Learning, Self-Regulated Learning Strategies, and Autonomous Motivation**

**Takamichi Ito** Kyoto University of Education, Japan

Peer learning should improve students' socially shared regulation of learning and self-regulated learning, but there is little research to relate socially shared regulation of learning to self-regulated learning and motivation. This study aimed to examine the causal relationship among socially shared regulation of learning, self-regulated learning strategies, autonomous motivation, and test scores through the implementation of the method of reciprocal peer tutoring in a psychology class. One hundred fourteen Japanese university students took classes including peer tutoring sessions for four months. Self-regulated learning was measured with MSLQ questionnaires. Socially shared learning strategies contained "socially shared cognition", "socially shared monitoring", and "socially shared effort regulation". Structural equation modeling indicated that socially shared regulation of learning was positively associated with autonomous motivation, mediated by self-regulated learning strategies. Autonomous motivation was positively associated with test scores. These results implicate that socially shared regulation of learning promotes self-regulated learning through peer learning processes.

**P1215**

**Factors contributing to good explanation**

**Takaaki Ito (1), Shinichiro Kakihana (2)** 1. Meiji University, Japan; 2. Koriyama Women's University, Japan

Previous studies suggested that "good explanation" is formed on the common ground (e.g. Clark & Schaefer, 1989) laid between explainer and listener. This study explored factors contributing to "good explanation" focusing on tutor's explanative utterances, and tutor's sensitivity to listener's comprehension level. Twenty university students were asked to read a text about measures of statistical dispersion and then to explain the material to a peer in a face-to-face session. Video-taped explanations were coded according to Ito and Kakihana (2009), and understandability of the explanations were rated by two graduate students. Results revealed that frequency of interpretative utterances was correlated with the understandability score ( $r=.573$ ,  $p<.05$ ). On the other hand, the tutors' sensitivity to the listeners' comprehension level signed by the tutors in the middle of the tutoring session was not related to the understandability score.

**P1216**

**Development of Learning Beliefs in School Scale for Japanese student**

**Shingo Ito (1), Sayaka Matsukura (2), Eiko Hirose (1)** 1. Sophia University, Japan; 2. Ageo Higashi Junior High School, Japan

This study aimed to develop a Scale of Learning Beliefs in school, and also to investigate the differences among the school years drawn from the application of the scale. A 40-item questionnaire on Learning Beliefs was administered to approximately 700 junior high-school students in Japan, through the seventh grade to the ninth grade. Although four factors (Retrieve, Comprehension, Analysis, and Application) had been assumed initially, two new factors have emerged by factor analysis: Acquisition and Collaboration. The 24-item version of the Learning Beliefs in School Scale suggested that the mean for Acquisition factor for the ninth grade students was lower than that for the seventh grade students, although the difference of the mean for Collaboration factor was not significant among the three grades.

**P1217**

**The relationship between non-cognitive and cognitive development of children in the high quality kindergarten.**

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University, Japan; 3. Okayama Prefectural University, Japan; 4. Tokyo Gakugei University, Japan; 5. Japan Women's University, Japan

The purpose of the present study was to investigate the relationship between non-cognitive and cognitive development in early childhood. The participants were the children attending to the quality kindergarten. Vocabulary understanding sub-test of PVT-R, numerical reasoning sub-test of K-ABC and false-belief task were conducted to the children. The mothers were completed the questionnaire of the home environment. The teachers rated the non-cognitive development of the children observed in the kindergarten. The main result was that spontaneity, empathy, positive optimism as non-cognitive variables positively correlated with the vocabulary and theories of mind as cognitive variables in five-year-old children, but no correlation in three-year-old children. In preschool education of Japan, play-based activity and non-cognitive development such as pleasure, a sense of self-fulfillment, spontaneity, autonomy, collaboration is made much of. The findings indicate that non-cognitive development have impact on cognitive development. This study is supported by Grant-in Aid for Scientific Research C26381069

**P1218**

**Family, School, and Psychological Factors Affecting Decision Making to Study in Vocational Education in Thailand**

**Anu Jarernvongrayab Pibulsongkram Rajabhat University, Thailand**

Examined in this research was to study the relationship between intention of secondary education student to study in vocational education and its antecedents. Participants were 880 secondary students and their parents from 3 provinces in lower northern area of Thailand. Students were given questionnaires assessing intention to study in vocational education, perceived parent support, attitude to study in vocational education, continuous education decision making self efficacy, continuous education decision making difficulties, personality (neuroticism and conscientiousness), perceived teacher guidance, perceived peers support, and their parent expectation (expectations for children's academic performance, intelligence, parent efficacy, achievement values). Results from structural equation modeling show that students that had positive attitude to study in vocational education and high self efficacy to decision to continuous study would be high intention to study in vocational education contrast with parent that high expectation for children's academic performance would be low intention to study in vocational education.

**P1219**

**The mediating effects of Self-efficacy between Stress and Subjective Happiness in Korean Nursing Students**

**Kim Jihye, Youngran Tak** *Hanyang University, Republic of Korea*

The purpose of this study was to examine the mediating effect of self-efficacy on the relationship between stress and subjective happiness in nursing students. A cross-sectional correlational design was used to survey a convenience sample of 244 nursing students in Cheongju city. Three instruments were used to collect the data: the Stress Scale (Yoo et al., 2008), Self-efficacy Scale (Sherer et al., 1982) and Subjective Happiness Scale (Lyubomirsky & Lepper, 1999). There were significant correlations between stress and self-efficacy ( $r=-.34$ ,  $p<.001$ ), stress and subjective happiness ( $r=-.37$ ,  $p<.001$ ), and self-efficacy and subjective happiness ( $r=.58$ ,  $p<.001$ ). Also, multiple regression analyses and Sobel test confirmed that self-efficacy mediated the effect of stress on subjective happiness ( $z=-4.772$ ,  $p<.001$ ). Based on the findings of this study, stress management programs focusing on self-efficacy improvement are highly recommended to promote the quality of life in nursing students.

**P1220**

**The effects of autonomy support from university political instructors in China -A comparison with teaching assistants in Japan-**

**Jiang Juming, Tanaka Ayumi** *Doshisha University, Japan*

This study examined and compared the effects of university students' perceptions of autonomy support from political instructors in China and that from teaching assistants in Japan. Self-determination theory was used to derive a model in which autonomy support predicted the satisfaction of three core psychological needs, which in turn led to well-being at school and academic un-procrastination. Additionally, a multiple-group latent difference score model analysis was conducted using structural equation modeling, to evaluate the long-term effects of autonomy support. University students in both China and Japan completed measures of autonomy support, well-being, and un-procrastination on two occasions. Results showed that in both China and Japan, autonomy support was related to well-being and un-procrastination, but only in Japan did need satisfaction mediate the effect of autonomy support. However, while autonomy support, well-being, and un-procrastination showed no significant change in China after two months, all factors showed a significant reduction in Japan.

**P1221**

**Developing a behavioral task to measure procrastination using the delay-discounting paradigm**

**Miho Kaneko, Yoshihiko Kunisato** *Department of Psychology, Senshu University, Japan*

Procrastination has been studied as a psychological trait and questionnaires have been developed to measure it. Many studies have used a procrastination questionnaire; however, few studies have used a behavioral task (van Eerde, 2000). Procrastination can be defined as avoidance behavior towards decision-making (van Eerde, 2000). We developed a new behavioral task to examine procrastination using the delay-discounting paradigm. Our behavioral task measures delay discounting as the number of characters that are required in a university class' report. Seventy-two undergraduates participated in the study and rated the procrastination questionnaire. We calculated the area under the curve (AUC) of our behavioral task, which showed the smaller the AUC, the more discount the number of characters that are required in a university class' report. Results showed that the AUC of our behavioral task was significantly negatively correlated with the procrastination questionnaire. Our behavioral task had strong criterion validity.

**P1222**

**Longitudinal Study of Elementary School Students School Adaptation in the process of School Consolidation**

**Yasuyuki Kaneko** *Tokoha Univ. Junior College, Japan*

The purpose of this study was to investigate the actual situation of consolidation of elementary school and accommodation of elementary school students. In Japan, small elementary school and large elementary school are consolidated. The school consolidation is becoming bigger and bigger issue. But, the realities of consolidation of elementary school had not been investigated in Japan. The participants were 202 students (small elementary school = 67 students (Third grade=18, Fourth grade=16, Fifth grade=16, Sixth grade=17) and large elementary school = 135 students (Third grade=32, Fourth grade=33, Fifth grade=40, Sixth grade=30)) at two public elementary schools. It is difficult for the most of students to adapt themselves to consolidated school life. But, it is turning point for the few students who were maladaptive before school consolidation.

**P1223**

**Examining the proportion of mediator and bystander in school bullying among Japanese children across grade levels.**

**Hirumichi Kato (1), Masayoshi Ota (2), Marcruz Ong (1)** *1. Hokkaido university, Japan; 2. Tokoha university, Japan*

The purpose of this study is to examine how the proportion of mediators (one who intervenes bullying), and bystanders (one who ignores bullying) vary across grade levels. In this study, we administered a questionnaire to 21,346 elementary school students and 19,826 junior high school students. Our findings revealed that the proportion of mediators declined, whereas those of bystanders increased as grade level increases. For instance, the proportion of mediators decreased from 17% to 5%, however those of bystanders increased from 13% to 18% as grade level increases from 4th grade to 9th grade. In addition, the proportion of mediators and bystanders intersect each other at 5th grade level. It is also evident that prior to 5th grade level, teachers play an important role in supporting the mediators, which helps to solve the bullying problems.

**P1224**

**Development of school based suicide prevention program (2): Development and evaluation of short form of GRIP program**

**Shizuka Kawamoto (1), Miho Hatanaka (2), Chika Harada (2), Keisuke Shiraga (3), Kenji Kawano (1)** *1. Center for Suicide Prevention, NIHM, NCNP, Japan; 2. Meijo University, Japan; 3. Joetsu university of education, Japan*

GRIP is a school-based suicide prevention program comprising five programs (Shiraga et al., 2015). In this study, we developed and evaluated a short form of GRIP for a school. We developed two versions: short form 1 and short form 2, each comprising three programs. Both forms were conducted with junior high school students, and 197 students completed a self-report questionnaire. The results revealed that regardless of the short form, students who committed to the program tended to consult their teachers. Furthermore, students who committed to the short form 2 were a tendency to obtain the effect of the program than students who committed to the short form 1. However, students who has committed to the short form 2 also increased resistance toward help-seeking preference.

**P1225**

**Relations between Classroom Teachers' Humor Expressions, Pupils' School Morale and the Element of School Satisfaction**

**Akihiro Kawamura (1), Shigeo Kawamura (2), Yuka Musashi (3)** *1. WASEDA university graduate school of education, Japan; 2. WASEDA university, Japan; 3. MORIOKA university, Japan*

The purpose of this study is for elementary school classroom teacher's humor expression

while using teacher behavior to examine the relations with adaptation, volition and so on, in students' class life. Concretely, with the scale to measure the behavior of teacher's humor of the elementary school, we corroboratively examine the relations with students' school satisfaction and school morale in each 3 types of the teacher's humor expressions that students perceive. Furthermore, we corroboratively examine about features of elementary school classroom teacher's humor expressions that students perceive in his / her class, in each status type of class groups. Pupils classified positively on School Morale (the H group) highly valued 2 types of humor, namely "enjoyment-evoking humor" and "encouraging humor." On the other hand, those classified negatively on School Morale (the L group) did not value those 2 types of humor.

**P1226****Japanese Classroom Dynamism - Communal Life of Learners for the Basis of Active Learning**

*Shigeo Kawamura Waseda University, Japan*

As Johnson, Johnson & Smith (1998) states, cooperative learning, including discussion and group activities, is likely to be the basis of active learning. It is difficult in the school setting, however, to create learner groups which enable individuals to learn cooperatively; that requires learners nurturing mutually beneficial inter-dependence and individual responsibilities. Japanese classroom system consists of a classroom teacher and students sharing a "home base" room where all the learning and life-skill activities occur. Research results of Japanese classrooms revealed that developing a communal mind shared in class through classroom activities was crucial for cooperative learning, and that the role of a classroom teacher sustaining effective class regulations and affective relationships was also important for the optimal learning environment.

**P1227****Causal relationship between scholastic ability and willingness for learning, fundamental learning skill(writing-skill) -astructural equation modeling approach-**

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The purpose of this study was to examine the relationships among willingness for learning,

scholastic ability, and fundamental learning skill. We constructed the willingness scale to predict the scholastic ability of children, which was consisted of learning anxiety (LA) and facing learning difficulties and rules (FA) factors. The 1238 schoolchildren, who belonged to the 4th - 6th grade and proved to be not retardation, participated to our research. The standard measurements of scholastic ability (Norm Referenced Test [NRT]), willingness ratings for learning (Kawasaki, Murakami:2015), and writing-skill scores (Screening Test of Reading and Writing for Japanese[STRAW]) were obtained in all participants. Applying structural equation modeling, the scholastic abilities were predicted by LA factor at the standard weight of 0.31. Moreover, the LA was predicted by FA factor at the weight of 0.41. The result indicated that the learning habit was influenced by the scholastic ability indirectly.

**P1228****The relationship between over-adaptation and school adjustment in Japanese junior high school students**

*Junki Kazama, Kenji Hiraishi Nagoya University, Japan*

This study investigated the relationship between over-adaptation and school adjustment in Japanese junior high school students. We defined over-adaptation as "the condition in which an individual is excessively engaged in self-inhibitive and others-oriented behavior in relationship with others (parents, peers, or teachers)". A total of 1180 Japanese junior high school students completed 2 questionnaires; Over-Adaptation Scale - Relationship Specified (OAS-RS) and subjective adjustment to school scale. OAS-RS consisted of 48 items which were subdivided into the 6 subscales; "self-inhibition towards parents", "parents-oriented behavior", "self-inhibition towards peers", "peers-oriented behavior", "self-inhibition towards teachers", and "teachers-oriented behavior". Participants were divided into 8 groups by cluster analysis on OAS-RS. The results indicated that there were some groups regarded as over-adaptation (e.g., "over-adaptation towards all 3 others", "over-adaptation towards parents"). The results of ANOVA indicated that those over-adaptation clusters showed significantly lower school adjustment than not over-adaptation clusters. We discussed the implications of these findings.

**P1229****The effects of parental involvement on children's perception of utility value: The moderating effect of parent-child relationships**

*Masaki Kera (1,2), Ryo Ishii (1,2), Ryuichi Tamai (1) 1. Nagoya University,*

**Japan; 2. Japan Society for the Promotion of Science, Japan**

Previous studies have revealed that parental involvement in children's learning promotes children's motivation. However, little research has investigated the moderating effect of parental involvement on children's motivation. The present study examines whether parent-child relationships moderate the effects of parental involvement. We conducted a secondary analysis of a social science study whose data was provided by the Social Science Japan Data Archive. A total of 1,554 junior high school students took an achievement test and responded to questionnaires included questions about parental involvement, utility value of school learning, and learning behavior. The results of the path analysis indicated that parental involvement promotes children's academic performance via utility value and learning behavior. Moreover, additional analysis indicated that parental involvement promotes children's utility value only in the group which had good relationships between parents and children. These results suggest the importance of a warm relationship between parents and children for socialization of motivation.

**P1230****Peer-Perceived Characteristics of Creative Students**

*Myung-Seop Kim, Keunchan Baek, Seon-Young Lee Seoul National University, Republic of Korea*

Peer is one of the important environment to influence creativity, especially during adolescents. When peer perceive creative friend as positive, creative person is willing to reveal their talent and develop it. Though peer plays important role in creative development, there has been little attention to the perception of creative person's friends. The purpose of this study was to investigate the peer-perceived characteristics of creative students in Korea. A total 319 middle school students participated in this study. 41 raw responses were collected during preliminarily study. In the main study, students rated how these responses reflected the characteristics of creative student. Factor analysis showed that there were eight characteristics of creative students. These factors were labeled different perspective, knowledgeableness, sociability, uniqueness, talent of art, curiosity, brilliance, and thoughtfulness. Results showed that creative students were not considered as negative. This implies that creative students may be warmly welcomed among their peers.

**P1231****A review of the relationship between academic resilience and academic self-efficacy**

*Jungha Kim, Saetbyul Kim, Seon-Young Lee Seoul National University, Republic of Korea*

The purpose of this study was to review of the relationship between academic resilience and academic self-efficacy. In spite of the adverse and competitive circumstances, some children maintain academic self-efficacy and even high academic achievement but some doesn't. Academic resilience was founded as one of the factors that predicted the maintenance of academic self-efficacy. Recent studies on academic resilience were examined and issues related to the definition of the academic resilience compared with resilience are discussed. In addition, studies on academic self-efficacy in regard to differences between resilient and non-resilient children in educational situations were examined. The final section of this study discussed implications for the programs designed to enhance academic resilience in school and family environment.

### P1232

**How should the scoring components be combined to maximize reliability on the scientific creativity test?**

**Sungyeun Kim (2), Yoonji Kim (1), Seon-Young Lee (1)** 1. *Seoul National University, Republic of Korea*; 2. *Incheon National University, Republic of Korea*

This study analyzed the scientific creativity test with scoring components of flexibility, originality, and elaboration in order to make suggestions for obtaining maximum reliability based on a composite score depending on combinations of each scoring component weights. We analyzed the data from the test scores of 107 middle school students by performing multivariate generalizability analysis. The main results were as follows. First, the optimal weights should adjust to .3, .3, and .4 based on the maximum generalizability coefficient even though the original weights in the scientific creativity test were equal for each scoring component with flexibility, originality, and elaboration. Second, the scientific creativity test using the three scoring components showed higher reliability than using one scoring component. The methodology applied in this study can help determine the optimal weights depending on each scoring component when the tests constructed in various researchers or educational fields are composed of multiple scoring components.

### P1233

**Effects of play experience on class adaptation**

**Masahiro Kinoshita (1), Shigeyuki Mori (2)** 1. *Graduate School of Humanities, Konan University, Japan*; 2. *Faculty of Letters, Konan University, Japan*

We investigated effects of children's perceptions of play experiences on internal class adaptation through external class adaptation. A survey was conducted with upper grade elementary school children (N =234; 114 fifth

graders and 120 sixth graders), using the Multidimensional Perceived Playfulness Scale, the External Class Adaptation Scale, and the Internal Class Adaptation Scale. Hypothesis models were examined through covariance structure analysis. Results indicated the following. (1) Experience of playing games had negative effects on attitudes toward school life; (2) Feeling of catharsis had positive effects on attitudes toward school life, attitudes of following rules, and the sense of comfort in class; (3) Attitudes toward school life had positive effects on the sense of class comfort, and the sense of being trusted and accepted. The above results suggest the passes that feeling of catharsis during play have effects on internal class adaptation.

### P1234

**Learning attitude of freshmen at the entrance relate academic performance.**

**Taichi Kishi Toho University, Japan**

The relationship between content of students' report on accommodation type workshop for freshmen and their academic performance in first year was investigated. 396 students' reports were analyzed. The number of failure of course exam was adapted as indicator of their academic performance. An indicator of their initial learning attitude, the number of characters and whether words which reflect their positive learning attitude (e.g. "make an effort") were used or not were adapted. As result, Spearman's  $\rho$  between the number of character of the reports and the number of fail of the exam was statistically significant ( $\rho=-0.17$ ,  $p<.05$ ). Mann-Whitney test showed that students who used "make an effort" in the report had less the number of failure of exam than student who didn't use ( $U=3550.5$ ,  $p<.01$ ). These results suggested that students' learning attitude at the entrance can predict their academic performance.

### P1235

**Instructional method for generating and answering questions in a university lecture class**

**Hiroko Kobayashi Tokyo Future University, Japan**

The present study designed an instructional method to help students analyze their knowledge gained in a university lecture class. After each educational psychology lecture, students were asked to generate questions addressing the areas that they did not understand. In addition, they were required to share each other's questions and answer them as a group, thrice in each semester. By analyzing the students' questions and answers after the lectures, the instructional method's efficacy was derived through the following findings: (a) the number of lower-order questions that were simply confined to a definition of technical terms decreased, whereas the number

of higher-order questions that connected new information with prior knowledge increased; (b) while answering questions, the students inferred instead of merely summarizing the lecture or text. Therefore, this instructional method can present opportunities for faculty development.

### P1236

**Research into the effects and adjustments related to the consolidation of elementary schools with one local junior high school in Japan**

**Sayoko Kobayashi Hyogo University of Teacher Education, Japan**

In Japan, the educational environment is being changed because of the declining birthrate. Elementary schools, consisting of a few students tend to be consolidated. Recently elementary and junior high schools are increasingly being integrated. This longitudinal study focuses on the support measures for students needed to adjust for the integration of their schools. Over a 7 year period questionnaires were completed by students yearly from the first grade of elementary school to their final grade in junior high school. The questions related to their friendships and school life and this study found that there were positive effects rather than negative effects.

### P1237

**The Effects of Verbal or Nonverbal Reflection on Collaborative Insight Problem Solving.**

**Keiichi Kodama (1), Yoshiki Nakano (2)** 1. *The University of Tokyo., Japan*; 2. *Akita University., Japan*

The purpose of this study was to investigate the effects of verbal or nonverbal reflection on collaborative insight problem solving. We used a puzzle game called "Tangram" as an insight problem, which was consisted of three triangles and four squares. Participants (N=135) were randomly assigned to six conditions each; solo-control, pair-control, solo-verbal, pair-verbal, solo-nonverbal, and pair-nonverbal. They were required to arrange the pieces to the shape of a "lion" in 12 minutes. In addition, verbal and nonverbal conditions were required to reflect on the operation every 3 minutes. As a result, although nonverbal reflection conditions completed more than others, there was no significant difference between solo and pair conditions. Moreover, there was some possibility that completers of nonverbal condition relaxed constraint more than non-completers of nonverbal condition and completers of other conditions. These results suggest nonverbal reflection facilitates insight problem solving regardless of whether solo or pair.

P1238

**Development and validation of Japanese version of Pediatric Daytime Sleepiness Scale (PDSS-J) in school-aged children.**

*Yoko Komada (1), Shun Nakajima (1), Norihisa Tamura (1,2), Hideki Tanaka (2), Yuichi Inoue (1)* 1. Tokyo Medical University, Japan; 2. Hiroshima International University, Japan

The aim of this study was to develop and validate the Japanese version of the Pediatric Daytime Sleepiness Scale (PDSS-J), and investigate associated factors of daytime sleepiness. A multi-step translation methodology was used. After the linguistic validation, we conducted a psychometric validation on 493 students (11-16 years old), using the PDSS-J, Karolinska Sleepiness Scale (KSS), and sleep variables. The translation and the cognitive debriefing process were performed without major difficulties. Internal consistency and the test-retest reliability were 0.77 and 0.88, respectively. There was a significant linear effect between PDSS-J and KSS score. Multivariate logistic regression analysis revealed that both short sleep duration and "social jetlag", the discrepancy of mid-sleep time between weekdays and weekends, were identified as factors associated with daytime sleepiness. The PDSS-J is a reliable and valid tool for the measurement of sleepiness. Not only sleep loss but also social jetlag seems to impact on daytime sleepiness.

P1239

**Contribution of School-Based Structured Activities to University Students' Developmental Outcomes: A Retrospective Study**

*Aiko Komoto* The university of tokyo, Japan

This study examines the developmental outcomes of gakkou gyoji (school events), school-based structured activities in Japanese schools. A questionnaire about secondary school event experiences and participation in extracurricular activities in university was administered to 764 university students. Hierarchical regression analyses revealed that neither engagement nor group assimilation or differentiation in school events were related to autonomy; however, engagement and group differentiation in such events were related to some dimensions of students' organizational citizenship behavior in university extracurricular activities. For individuals involved in a university's low-solidarity activity groups, the relationship between engagement in school events and emotional commitment to university activities was stronger than in those involved in high-solidarity groups. These findings suggest that school events in secondary schools may contribute to university students' organizational behavior; however, for emotional commitment, the effectiveness of school

events depends on the environment of solidarity in the given university.

P1240

**Exploratory research on factors related to responsibility-consciousness to bullying victims-Characteristics of male bullies-**

*Satoko Koyama (1), Yoshikazu Fukui (2)* 1. Koide Clinic, Japan; 2. Konan University, Japan

The recognition of liability for victims of bullying was explored. A questionnaire survey was conducted with university students (N=472). The results indicated participants recognized the victims were also responsible for being bullied by 18.5%. Especially, men that had once bullied, highly estimated the victims' responsibility for being bullied. Moreover, such bullies had a low sense of guilt, regardless of having the experience of getting bullied. It is suggested that their sense of guilt is relieved through justifying their harmful action, and consequently, they estimate victims' responsibility as high. Furthermore, men with bullying experiences had low resilience, whereas their scores for post-traumatic growth were partly high. However, these scores decreased when participants had experiences of both bullying and getting bullied. These results are suggestive of personality factors that characterize male bullies, which increase the responsibility-consciousness to the bullying victim.

P1241

**Why some student teachers want to be a teacher, but others not? An interview study examining their belief becoming a teacher**

*Takahiro Kubo* University of Tsukuba, Japan

After teaching practice, some student teachers want to be a teacher, but others not. The purpose of this study is how they change their belief becoming a teacher through teaching practice. Student teachers (N=16) in an elementary school were interviewed after teaching practice and the verbatim records of those interviews analyzed using M-GTA. The results show three processes distinguished by three motivations. "Become a Teacher" shows they see teaching practice as trying to become a teacher. "Learning Something" shows they want to learn something through teaching practice but not in order to become a teacher. "No Meaning" show they could not find meaning to go to teaching practice. These processes are especially influenced by two common categories: "Confidence of Teaching a Class" and "Communication with Children". These findings show the student teachers' belief about becoming a teacher is influenced by the process of these factors' interaction.

P1242

**Development and the Factor Structure of the Japanese Version of the Teacher Efficacy for Inclusive Practices Scale (TEIP-J)**

*Koji Kudo* Tokyo Gakugei University, Japan

The Teacher Efficacy for Inclusive Practices Scale (Sharma, Loreman, & Forlin, 2012) is designed to measure teacher-self efficacy to teach in inclusive classrooms. The scale consists of three scale factors: efficacy in using inclusive instruction (EII), efficacy in collaboration (EC), and efficacy in managing behavior (EMB). This study developed a Japanese version of the Teacher Efficacy for Inclusive Practices Scale (TEIP-J) and confirmed its factor structure. Teachers (N = 435) at elementary/junior high/high schools, secondary schools and schools for special needs education completed the TEIP-J. The alpha coefficients for the three factors were sufficiently high. As a result of the comparison of three models (one-dimensional model, three-dimensional model, and hierarchical model) by confirmatory factor analysis, hierarchical model was adopted. The result indicated that the TEIP-J had one general factor and three group factors corresponding to each aspect of teacher-self efficacy to teach in inclusive classrooms (EII, EC, and EMB).

P1243

**Research on Burn-out, Self-efficacy, and Self-rated Health Among First- and Second-year Students in Colleges of Nursing: Preliminary Investigation**

*Tamaki Kumagai (1), Kyoko Ueno (1), Kumiko Kotake (1), Kazumi Fujimura (2)* 1. Juntendo University, Japan; 2. Yamaguchi University, Japan

Purpose: This research aims to examine the relationship among burn-out, self-efficacy, and self-rated health in order to check mental health conditions of first- and second-year students in colleges of nursing. Methods: An anonymous self-administered questionnaire was distributed to 525 first- and second-year students in two colleges of nursing in the Kanto area and 199 were returned. One-way analysis of variance and the Pearson product-moment correlation coefficient were used for the statistical analysis. Results: There was a statistically significant difference between first- (3.8) and second-year students (3.5) only on self-rated health ( $p=.006$ ). The correlations of burn-out with self-efficacy and self-rated health were  $-.619$  and  $-.170$ , respectively. Discussion: The score of self-rated health was lower among the second-year students than the first-year students, suggesting that the overall sense of well-being among the second-year students declined due to the increase of learning nursing tasks they had to undertake.

**P1244****Effect of parenting style and parent's motivation on Japanese middle school students' academic motivation along with self-determination theory.**

**Tomoe Kurazumi, Shigeo Sakurai** *University of Tsukuba, Japan*

According to SDT, relatedness is centrally important for internalization of motivation. In this study, participants were 238 students attending middle schools in Japan and their mothers. The students completed a questionnaire that measured their academic self-regulation and the perception of their mother's parenting style. Mothers completed a questionnaire that measured their own parenting style and their self-regulation. Path analysis revealed that mothers' autonomous motivation facilitated several positive parenting styles. Mediated by children's perception, both mothers' educational guidance and teaching the importance of the study positively affected their children's autonomous motivation, and mothers' high autonomy support and low interference affected their children's low controlled motivation. Furthermore, it was shown that mothers' emotional support directly influenced their children's intrinsic motivation. Therefore, some parenting styles influenced their children's academic motivation indirectly, but emotional support influenced without mediating children's perception.

**P1245****Curriculum Development in Programming Education for Elementary School Subjects**

**Naoko Kuriyama (1), Takahiro Saito (2), Hideki Mori (1), Akinori Nishihara (1)** *1. Tokyo Institute of Technology, Japan; 2. Osaka University, Japan*

Recently, programming education is considered to be very effective to gain logical thinking. If students can reproduce the logic in observed natural phenomena by the programming, it may lead better understanding of the science subject. This study aimed to inspect the effect of the programming exercises by school children, especially targeting the first grade of elementary school. Fifty-eight students in the first grade of elementary school were learned "how elephant walks" in the collaboration with the programming learning exercise. Many children described in more detailed aspects about the phenomenon after the programming learning exercise, and noticed that the order in which the legs of an elephant moved was important. We found that the use of programming in the first grade of elementary school can be an effective tool for learning scientific subject.

**P1246****The relationship between the feelings after procrastination and personalities**

**Ryo Kurozumi** *Gakushuin University, Japan*

Many people do procrastination, but there are two kinds of feeling after procrastination; one experience negative feeling, the other experience positive feeling. To explore the way to reduce negative feelings after procrastination, the relationship between the feelings and some personalities was examined. Eighty seven Japanese university students were assigned to a questionnaire including some subscales (depression, trait anxiety, optimism, pessimism, their own procrastination behavior). Confirmatory factor analysis revealed that there were two feelings following procrastination: negative one ( $\alpha = .849$ ) and positive one ( $\alpha = .811$ ). It was showed that negative feeling correlated with pessimism ( $r = .365, p < .05$ ), and positive feeling correlated with optimism ( $r = .219, p < .05$ ). These results implied that having a good expectation reduced negative influence of procrastination and also promoted positive influence of it.

**P1247****The effects and challenges of keeping goats at elementary schools in Japan**

**Shiho Kutsumi, Watanabe Gen, Koda Naoko** *Tokyo University of Agriculture and Technology, Japan*

This study investigated the effects and challenges of keeping goats at elementary schools in Japan. We conducted semi-structured interviews with teachers of three elementary schools which kept goats. The effects of keeping goats showed that children learned to respect lives, and became more active and cooperative through taking care of goats. Goats also became characteristics of schools, and keeping goats united the community because older people as well as children were interested in goats. Moreover, the schools used the goats in class, such as the art class, Japanese class, and the class for ethical training. Meanwhile, the challenges were unestablished goat-care system on weekends and vacation, and insufficient communication with livestock veterinarians. Goats could bring about effects on not only children but also community. More positive impacts could be expected by sustainable keeping of goats. Sufficient supports of keeping goats by children, teachers, parents, and community are also needed.

**P1248****Effect of praise on praiser**

**Kakinuma Kyousuke, Ayumi Tanaka** *Doshisha university, Japan*

Studies have demonstrated that praise influences an individual's achievement motivation.

In these studies, after failure, an individual praised for ability displayed less task persistence and task enjoyment than an individual praised for effort. Moreover, this effect was mediated by achievement goal and implicit theory. We propose that praise may influence not only the praised individual but also the praiser. In this experiment, we examined how praise effected a praiser's achievement motivation. We randomly assigned 77 college students to three conditions (ability praise, effort praise, and no praise). They engaged in matrices tasks with a confederate, and then the subjects of two conditions (ability praise and effort praise) praised the confederate. Next, we measured achievement goal, implicit theory, and motivation (task persistence, intrinsic motivation, and eye fixations on matrices task). The results showed that praise influenced the praiser's motivation. Furthermore, this effect was related to achievement goal and implicit theory.

**P1249****Validating the Inventory of Mathematics Motivation**

**Yi-Mei Lee** *National Taipei University of Education, Taiwan*

The aim of this study is to assess the cross-group applicability of the Inventory of Mathematics Motivation in Taiwanese high school students to construct validation. The IMM measures three subscales: Subjective Competence Scale, Self-determination Motivation Scale, and Test Emotion Scale. 1241 high-school students (642 male and 599 female; 691 normal and 550 gifted students) from 17 high schools in Taiwan were sampled. Results of the IMM had good internal consistency reliability. Confirmatory factor analysis supported the hypothesized three-factor structure. In addition, multi-group confirmatory factor analyses showed factorial invariance across students of different genders. Corresponding to self-determination theory, the results partly verify our moderator's hypotheses, especially for the autonomous motivation. The phenomenon that autonomous and avoidant motivation of gifted students may arouse more strongly the math negative test emotion is worth further exploration.

**P1250****The Influence of Career Calling and Career Attitude Maturity on Life Satisfaction: Testing the Moderated Mediating Effect of the Career Related Emotions**

**Ji-Won Lee, Ki-Hak Lee** *Yonsei University, Republic of Korea*

The purpose of this study was to examine the moderated mediating effect of career related emotions through career attitude maturity on the association between career calling and life satisfaction. A total of 255 undergraduates

were asked to complete the questionnaires and the data was analyzed using SPSS 21.0 and SPSS Macro. The main findings are as follows. First, correlation analysis indicated that career calling, career attitude maturity, and life satisfaction had positive correlations. Second, a test of a mediating model revealed that there was a direct association between career calling and life satisfaction which was partially mediated by career attitude maturity. Third, hierarchical regression analysis showed that career related emotions moderated the effect of career attitude maturity on life satisfaction. Fourth, career related emotions also moderated the mediating effect of career calling on life satisfaction through career attitude maturity.

#### P1251

##### The effect of self-construal and classroom community to learning impact in MOOCs

**Tonggui Li (1), Yaoyao Huang (1,2) 1. Peking University, China; 2. Beijing Key Laboratory of Behavior and Mental Health, China**

The purpose of current research is to invest the effect of self-construal and classroom community on MOOCs. 256 students from some MOOCs on Peking University 2015 spring semester finished all questionnaires. The mean-score of students on MOOCs is regarded as the dependent variable, while self-construal is the independent variable of study, and students' classroom and community is the mediating variables. The results showed that interdependent-construal students with connected-attachment for MOOC have a significant impact for MOOC study. Possible reason is the MOOC course was still in the stage of development, MOOC yet little communication between students and teachers, make independent learner development also pay more attention to learning ability of communication and non-self, thus there was no significant difference. Students in the MOOC community of learning and cannot obtain the effective learning resources, and therefore did not have the effect of intervening variable to influence the learners' learning.

#### P1252

##### Education Levels and Occupational Gender Stereotypes in Taiwan

**Hui-Min Lin, Wen Cheng National Sun Yat-sen University, Taiwan**

This study aims to explore the relationship between individuals' education level and their occupational gender stereotype. The study included 135 (110 females) participants who rated the 51 general occupations via 5-point Likert scales from definitely masculine to definitely feminine. A repeated measure ANOVA was conducted and revealed a significant connection between education levels and the occupational gender stereotypes. The occupational

gender stereotypes of individuals with lower levels of education were distinct (definitely masculine, definitely feminine, or neutral). In contrast, the stereotypes of those with higher levels of education were relatively vaguer, in which they tended to rate occupations from masculine to neutral to feminine to neutral). It was also found that most of the occupations in Taiwan were rated more masculine to the neutral (about 59%), but rare feminine. The findings presented the phenomenon of the occupational gender stereotypes in Taiwan. Keywords: education background, gender stereotype

#### P1253

##### Investigating the Effects of Reading and Writing Integration Instruction to Reading Comprehension and Writing Performance

**Pei Yun Liu National Dong Hwa University, Taiwan**

Reading and writing abilities are complementary two sides of one coin. If teacher organically merge reading and writing in teaching, it not only can integrate reading and writing effectively but also enhance student's competence and ability. This research combines multiple reading strategy in explicit teaching to helping grade 5 students practically improve reading and writing ability progressively. A long term field observation and experiment research is applied to examine the teaching effect. The research has completed development of experimental curriculum and validation and teaching experiment of related research tools. The teaching experiment adopts quasi experimental nonequivalent pretest-posttest design. Quantitative and qualitative data were collected in the classroom in the first semester of the 5th grade year and analyzed statistically. The results find that reading comprehension and writing performance of the experimental group are better than the control group, indicating that the teaching experiment has effectively enhanced student cognitive and psychomotor abilities.

#### P1254

##### Development and validation of the adolescents of the Drowning Risk Perceptions Scale

**Shi Luo, Bin Wang, Shu Bu Central China Normal University, China**

This study aimed to develop and test the adolescents of the Drowning Risk Perceptions Scale to investigate its reliability and validity for assessing drowning risk perceptions in a Chinese adolescent sample. 1508 participants (721 male, 786 female; Mean age=12.94) from three cities living in China were included in the analyses. The results of a confirmatory factor analysis confirmed that a four-factor model was appropriate for the data (goodness of fit index=.94, comparative

fit index=.95, root mean square error of approximation=.046). The Cronbach's alpha coefficient was .83 for the total scale and ranged from .70 to .78 for the subscales. The concurrent validities for the DRPS were also good. Further, the results of a t-test revealed significant gender differences in the DRPS and the total score. These results indicated that the DRPS was a valid and reliable measure for assessing Drowning Risk Perceptions in adolescents sample.

#### P1255

##### Adolescents Drowning Risk Attitudes and High-Risk Behaviors: Moderating effects of Sensations Seeking

**Shi Luo, Bin Wang, Hong-Tao Yu, Chao-Yang Fang Central China Normal University, China**

The purpose of this study was to explore the moderating role of sensation seeking on the relations between drowning risk attitudes and drowning high-risk behaviors in adolescents. 7485 adolescents voluntarily completed questionnaires from fifteen cities in China. Hierarchical regression analysis showed a positive relationship between the drowning risk attitudes and high-risk behaviors. Moreover, this relationship was moderated by an interaction with sensation seeking: drowning risk attitudes were a stronger predictor of high-risk behaviors for adolescents with a low level of sensation seeking than for those with a high level of sensation seeking about high-risk behaviors of drowning. The moderating role of sensation seeking suggests that the level of sensation seeking attenuates the drowning risk attitudes caused by drowning risk attitudes.

#### P1256

##### Design of the Student' Test Anxiety Test Computer Simulation System

**Qi Luo, Jingwen Liu College of Sports Engineering and Information Technology, Wuhan Sports University, China**

In view of the actual demand of the students' test anxiety test, a students' test anxiety simulation system based on the role play games is designed. The overall structure adopts hierarchical design, and a 3D game engine is applied to realize and develop the system functions. Based on the requirements of the professional psychological test, the system can achieve the functions to test the students' psychological, physical and lingual behavior in the simulated situations, which may be referred for psychologists to develop psychological guidance strategies. Key words: test anxiety; simulation system; role-play; psychological test

#### P1257

##### Relationship between the level of viability and coping strategies of teenagers



**Zabira Madaliyeva, Svetlana Puzikova, Aliya Kudaibergenova** *Al-Farabi Kazakh National University, Kazakhstan*

Goal of the research - to determine the preferences of productive and non-productive coping-strategies with different levels of teenagers' viability. Research hypothesis: teenagers with a high level of viability would use high effective coping strategies in stressful situations and teenagers with low viability level would use less effective strategies. Methods: S. Maddi's test of resilience, questionnaire "Strategy of coping behavior by L.I. Wasserman". Research selection was made of 60 people aged from 14 to 15 years. Positive correlation of coping-strategy indicator existing. Planning of problem solving with overall indicator of viability, involvement and control. Coping-strategies as "distancing" and "avoidance" have negative correlation with the general indicator of resilience, involvement, control and acceptance of risk. Conclusion: obtained results confirmed the hypothesis of a positive connection with the preference of coping "planning of problem solving" and negative connection with the use of "distancing" and "avoidance" coping strategies. Key words: viability, coping-strategies, correlation

#### P1258

##### Co-creation and Synchronization

**Yusuke Maeda (1), Taira Suzuki (1), Haruo Okabayashi (2)** *1. J.F. Oberlin University, Japan; 2. University of Yamanashi, Japan*

Co-creation mechanisms between two people, through which new ideas are created autonomously as a result of collaboration, were investigated from the perspective of Dynamical Systems Approach. OECD announced in PISA 2015 proposed implementing measures to assess collaborative problem solving (CPS) competency. The problem solving section conducted by one person and the discussion section conducted by two people were implemented alternately. How ideas are co-created by two people was experimentally examined, using examples of CPS competency (OECD, 2013). In these experiments, the process of self-organization of ideas by solving problems (macro changes) was observed. Simultaneously, changes in thinking patterns in individuals resulting from solving problems (micro changes) were examined by measuring finger plethysmogram and the Largest Lyapunov Exponent was calculated using non-linear analysis. Furthermore, synchronization of rhythms between individuals was examined, based on correlations between synchronization at the micro level, and self-organization at the macro level as suggested by Kelso (1995).

#### P1259

##### Mediators of intervention effects in a brief universal depression prevention program for children

**Kohei Matsubara (1), Miwa Nishida (2), Takahito Takahashi (3), Hiroshi Sato (4), Shoji Sato (3)** *1. Graduate School of Psychology, Kansai University, Japan; 2. Graduate School of Education, University of Miyazaki, Japan; 3. Faculty of Education and Culture, University of Miyazaki, Japan; 4. Faculty of Sociology, Kansai University, Japan*

Objective The present study examined the mediators of intervention effects in a 5-session universal depression prevention program for children. Methods One hundred eighteen elementary school children (9-11 years old; 56 boys and 62 girls) were assigned to an intervention group. The program consisted of social skills training and cognitive restructuring. Ninety-nine children completed assessments at baseline, post-intervention, and 3 months follow-up (FU). Results and Discussion Latent growth curve modeling (intercept, linear, quadratic) was used for mediation analyses. Change in cognitive error ( $\beta = .16$  to linear), negative view of self ( $\beta = .72$  to linear,  $-.75$  to quadratic), and positive view of support ( $\beta = -.15$  to linear) were found to mediate the change in depressive symptoms from pre-intervention to FU. Results indicated that the brief program could reduce negative cognitions and increase positive ones, thereby decreasing depressive symptoms.

#### P1260

##### Development of Interpersonal Acceptability in Elementary and Secondary School Students

**Emi Matsumoto** *Tohoku University, Japan*

The purpose of the present study was to examine the effect of "the experience of the interaction with various people", "the interests", and "the knowledge" on student's interpersonal acceptability. Subjects were 102 fifth grade students and 99 eighth grade students. There were two kinds of interpersonal acceptability: "general interpersonal acceptability" and "peer acceptability". Main results were as follows: (1) Children who had more experience of the interaction with various people possessed higher general interpersonal acceptability. (2) Children who had wider interest possessed higher acceptability both in general interpersonal acceptability and peer acceptability. It was suggested that the general interpersonal acceptability was influenced by the experience of the interaction with various people and the width of the interest.

#### P1261

##### Students' learning strategies: Effect of giving open-ended questions in advance

**Rumi Matsushima, Hitomi Ozaki** *Kyoto Notre Dame University, Japan*

This study examines whether giving open-ended questions beforehand facilitated students' learning strategies, interests in class

contents, and comprehension. In 2015, 60 university students attempted a questionnaire in an educational psychology class. There were 15 classes; the first two and next three classes fulfilled the baseline and intervention conditions, respectively. The participants responded to three scales measuring students' attitude toward their classes, achievement goals, and pre-existing knowledge of educational psychology. In the baseline, students were asked to write about what they learned in class. In the intervention, they were given two open-ended questions beforehand and asked to respond when the class ended. We examined the change in learning strategies, interests of class contents, and students' behaviors for the baseline and intervention data through differences in each student's attitude toward learning. Results indicated that the scores for learning strategies and class interests in the intervention were higher than those in the baseline.

#### P1262

##### How do students perceive experiences of the in-class group approach?

**Kunio Midzuno** *Tezukayama university, Japan*

The present study investigated perception of students about experiences of the group approach introduced into university classes. A total of 548 undergraduates (193 males and 355 females) took part in sessions of the structured encounter group (SEG) in university class. They experienced several communicative exercises such as interviews with one another and consensus tasks in small groups, and shared their own feelings and thoughts with group members. At the end of all sessions, undergraduates were asked to describe freely what they felt affirmatively through experiences of the SEG. Quantitative text analyses were performed to descriptive texts from them. Results of multidimensional scaling and cluster analyses showed that the SEG consists of two dimensions: self-others orientation and perception-expression orientation. It was also revealed that the SEG is perceived as five facets: multiple functions of communication, reduction of nervousness, satisfaction with communication, concern for others, and importance of perceived diversity.

#### P1263

##### The relationship between students' perception of errors and creative behaviors

**Jiyeon Min (1), Eun Mo Yeon (2), Jongho Shin (1)** *1. Seoul National University, Republic of Korea; 2. Yeungnam University, Republic of Korea*

The theory of dual-process attitude-to-behavior that implicit attitude provides for the foundation of explicit outcomes framed the assumption of how one's perception of error

related to their creative behaviors. Researches on Runco Ideational Behavior Scale (RIBS) also supported that one's creative behavior reflects to their perceived ability to be flexible with ideas. Given these findings, it is important to understand how students' implicit attitudes of dealing with problem solving may relate to their problem solving practices. Therefore, this study sought to examine the relationship between one's perception of error and their creative behaviors in a sample of 123 undergraduates from two different universities. The overall results showed that students' perception in preferences for risk-taking was increased creative behaviors whereas perception of learning from errors decreased it. These findings imply the notion that, to encourage creative behaviors, educators need to help students to have positive perception in errors.

#### P1264

### **A Study of First-year University Students' Images of Teaching, Teachers and Children: Examining the Differences between Faculty of Education and Non-Education**

*Tomotaka Mishima Okayama University, Japan*

The purpose of this study was to investigate the first-year university students' images of teaching, teachers and children by focusing on the difference between those in faculty of education and non-education. In total, 160 students participated in a questionnaire. The major findings were as follows. First, students who belong to faculty of education scored higher in "structure" of teaching than those who belong to faculty of non-education. Second, students who belong to faculty of education scored higher in "patient worker and supporter" of image of teachers than those who belong to faculty of non-education. Third, students who belong to faculty of education had more positive images of children more than those who belong to faculty of non-education.

#### P1265

### **How to Make Your Students Active?: Case study of Active Learning in University Class**

*Mami Mitachi Seisa University, Japan*

Recently, Active Learning has been gotten attention at all levels in Japanese education system. However, how to introduce and facilitate Active Learning is still difficult particularly for instructors at higher education since they have been familiar with a traditional one-way teaching style. The purpose of this study is to analyze how to effectively introduce and facilitate active learning in university class. The author applied several different facilitation strategies to achieve this purpose during one semester. The students' behaviors in class were observed by the author, and at the end of the class, the

students were asked to answer the questionnaire about class management as well as their learning style. The results showed that most of them were satisfied with this type of active learning, however, they do not expect that all classes are changed to Active Learning style. Some useful feedback to make class active is obtained from their answers.

#### P1266

### **Relation between teacher's learning motivation on subject instruction, their way of learning and their teaching ability**

*Shuhei Miwa, Miki Toyama University of Tsukuba, Japan*

The purpose of the present study was to investigate the relation between teacher's learning motivation on subject instruction, their way of learning and their teaching ability. Japanese teachers completed a questionnaire about learning motivation (intrinsic motivation, orientation toward children, skill orientation, orientation to approval and comparison, sense of duty, indifference), way of learning (planning and reviewing, ask for colleagues, use of external resources, use of internet) and perception of their teaching ability. Results showed that (a) intrinsic motivation, orientation toward children and skill orientation related to planning and reviewing, (b) intrinsic motivation and skill orientation related to use of external resources, (c) orientation toward children related to ask for colleagues. In addition, (d) planning and reviewing and ask for colleagues related to perception of their teaching ability. From the above results, intrinsic motivation, orientation toward children and skill orientation was a good motivation for teachers.

#### P1267

### **"Smartphone Summit" by junior high school students: Participants' impact expectation patterns toward their peers**

*Motoko Miyake (1), Kazuo Takeuchi (2), Yuichi Toda (3) 1. Okayama University, Japan; 2. University of Hyogo, Japan; 3. Osaka University of Education, Japan*

This study investigated the impact of the practice "Smartphone Summit", an educational project for junior high school students to promote their willingness for appropriate usage of the Internet and communication-equipment such as smartphones (I&S). We were interested in the participants' prospect on the expansion of the practice, trying to see the patterns of their impact expectation toward their peers. Participants were 26 students (7th and 8th grade students, 10 boys and 16 girls) from 18 junior high schools in a western Japanese city. In the project, the participants discussed the pros and

cons of I&S, put together their ideas concerning possible activities to encourage their classmates to use I&S in appropriate ways, and carried out some of their ideas. From the results of the questionnaire survey of participants, we discussed the patterns of their impact expectation toward their peers.

#### P1268

### **Peer support program for junior high school students**

*Motoko Miyake Okayama University, Japan*

In this study, the effects of peer support program carried out for the junior high school students were investigated. Peer support program was consisted of a series of peer support training and peer support activities and 79 seventh grade students participated the program. The contents of the peer support activities were to visit elementary schools and make introduction of their junior high school life to elementary school children at the aim of reducing the childrens' anxiety and increasing the expectation for junior high school life. In the peer support training, students learned about how to take effective communication with younger children. To verify the effect of practice, the students were asked to answer the questionnaire before and after the peer support program. On the basis of the results, the effects of the practice were discussed in terms of improvement of students' social skills and sense of self usefulness.

#### P1269

### **Depressive tendencies and relative factors in high school girls (2)-Focusing on self-reported academic performance and choice of university -**

*Tomohiro Miyamoto, Junko Sagara, Etsuko Suzuki Seitoku University, Japan*

Relationship of depressive tendencies to self-reported academic performance and choice of university in high school girls were examined. A questionnaire survey was conducted in a private school. Third-year students (N=164) responded to the Japanese version of the DSRS-C and reported their academic performance in Japanese, mathematics, and English. The results indicated that among high level students (deviation value of 50 or more) in English, those that perceived they were bad at English showed significantly higher depressive tendencies, compared to those that perceived they were good. Furthermore, classroom teachers evaluated universities which students chose. The results indicated those chose universities that were higher than their abilities showed significantly more depression than those chose universities of a lower level. It is suggested that depressive tendencies might make students underestimate their

own academic performance, but not underestimate their ability to pass the exam to enter universities.

**P1270**  
**The effect of intergroup status among junior high school students on school adjustment, mediated by Social Dominance Orientation**

*Kumpei Mizuno Hokkaido University Graduate School of Education, Japan*

Recently, in Japan, the phenomenon called "School Caste" is getting attention. High status groups behave dominantly in the classroom and they adjust to school more than others. This study looks into the relationships between intergroup status, Social Dominance Orientation (SDO) and school adjustment, focusing on dominantly behavior of high status group. Hence, the goal of this study is to investigate the effect of intergroup status in classroom on school adjustment, mediated by SDO. It was revealed that intergroup status positively affected Group-Based-Dominance (GDB) --which is subordinate conception of SDO-- and school adjustment, while the status affected Oppression-to-Equality (OEQ) negatively, which is subordinate conception of SDO. Moreover, gender difference was revealed; among male students, intergroup status had negative effect on OEQ and positive effect on school adjustment. However, in female students, intergroup status had positive effect on GDB, while nonsignificant effect on school adjustment.

**P1271**  
**The effects of dissociative tendency on perceived loneliness tendency among junior-high and high school students.**

*Ayano Mori Ochanomizu University, Japan*

The purpose of this study was to investigate the causal relation between dissociative tendency and perceived loneliness tendency among junior-high and high school students. A short-term longitudinal study was conducted with Japanese students of 12 to 18 years of age at a private school ( $n = 969$ ; 522 male students and 447 female students). Dissociative tendency was assessed by the Japanese version of Adolescent Dissociative Experiences Scale (A-DES), and perceived loneliness tendency was assessed by the Scale of Maladjustment Tendencies in the School. The average score of the A-DES of the current sample was 2.36 ( $SD = 1.54$ ) at Time1 and 2.02 ( $SD = 1.59$ ) at Time2 respectively. The results of the cross-lagged effect model indicated that dissociative tendency at Time1 directly increased level of perceived loneliness tendency at Time2. These findings suggest dissociative tendency may hinder fostering positive

peer communications and relationships among junior-high and high school students.

**P1272**  
**Increasing the self-efficacy of Japanese junior college students through positive peer appraisal in group work using personal strength cards**

*Jonathan Moxon, Masumi Nagae Saga University, Japan*

This study implemented a program for female junior college students to improve self-efficacy through group work. It has been suggested that self-efficacy can be increased through experience of success, peer observation of our behavior, and persuasive suggestion by peers. In November 2015, 40 female provincial junior college students ( $18.8 \pm 1.2$ : mean  $\pm$  s.d.) used 24 'personal strength cards' in group work to raise awareness of their strengths through peer observation and persuasive suggestion. Their self-assessed self-efficacy was measured using the General Self-Efficacy Scale before and after the intervention. Paired t-tests comparing overall scores and the scores for each of the 16 questions on the questionnaire before and after the intervention showed significant increases for 'possesses an exceptional skill' ( $p=0.019$ ), 'ability to make a contribution' ( $p=0.011$ ), and 'acts positively' ( $p=0.018$ ). Overall scores also showed a significant increase ( $p=0.001$ ), suggesting positive peer appraisal in group work may be an effective means of raising self-efficacy.

**P1273**  
**Less interest and effort, more anxiety in group learning: Experimental evidence on the effects of a dominant group leader**

*Yan Mu, Zijing He, Cong Wang Sun Yat-sen University, China*

Group learning is popular in schools for promoting collaboration and motivation. However, the behavior of group leaders could drastically change the nature of the social interaction in groups and hence the outcome of group learning. We manipulated whether a group leader read instructions with dominant or equal languages and examined the group members' learning interest, effort, math anxiety and performance. Teenagers (16-year-olds,  $N = 160$ ) solved math problems in 4-person groups with balanced genders. One male was chosen as the leader and randomly assigned to dominant/equal conditions. With dominant leaders, male members reported lower interest and higher math anxiety. They also made less number of attempted answers, reflecting a reduced effort. Their performance measured by the percentage of correct answers was the same in dominant/equal conditions. Female members had the same performance as male members, but showed less interest, less effort,

and higher anxiety, regardless of the dominant/equal manipulation.

**P1274**  
**Psychological characteristics of rural school students and teachers in Kazakhstan.**

*Karina Mukeyeva (1), Zhanat Baktybayev (2), Bibigul Almurzayeva (3), Shynar Ungarbayeva (4), Anar Rizuanova (5), Gulmira Skabayeva (6), Olga Aymaganbetova (7), Danna Naurzalina (8), Alexina Li (9)* 1. Turan University, Kazakhstan; 2. ZhSU named after I.Zhansugurov, Kazakhstan; 3. K. Zhubanov ARSU, Kazakhstan; 4. ZhSU named after I.Zhansugurov, Kazakhstan; 5. Atyrau State University named after Kh. Dosmukhamedov, Kazakhstan; 6. KazNAU, Kazakhstan; 7. al-Farabi KazNU, Kazakhstan; 8. Turan University, Kazakhstan; 9. Turan University, Kazakhstan

The psychological and educational diagnosis was attended by 80 students and 20 teachers of small rural schools and resource center. Over 50% of participants show high levels of anxiety (50%) in frustration of needs to succeed. The results of the survey on students' attitude to taught subjects show that 12% have a shallow interest to certain subjects, 27% of them see some subjects as necessity, 29% of students show deep interest in subject and 32% experience an increased cognitive interest. The survey involves rural school teachers who form tiny pedagogical staff. Therefore there is a slight stagnation in creative work implementation and low educational performance indicator (13%). One of the challenges of rural schools is the fact that a teacher usually knows a child and his parents before coming to school. The teachers support informal communication with students that cause difficulties in their work as a "curators".

**P1275**  
**Morphological awareness and literacy skills in Japanese 1st and 2nd grade children**

*Naoko Muroya (1), Tomohiro Inoue (2), Miyuki Hosokawa (3), George K Georgiou (4), Rauno Parrilla (4), Hisao Maekawa (5)* 1. Tokiwa Junior College, Japan; 2. Seigakuin University, Japan; 3. Ibaraki University, Japan; 4. University of Alberta, Canada; 5. Iwaki Junior College, Japan

To investigate the association of morphological awareness with early literacy skills, the relationships between morphological awareness and Japanese Kana word and nonword reading, Kanji reading, text reading, and Kanji spelling were surveyed. One hundred thirty-four children in 1st and 2nd grade participated in this study. We applied the Word Analogy

task to assess children's morphological awareness. General cognitive abilities, phonological awareness, reading speed, reading accuracy, and Kanji spelling accuracy were also measured. Results indicated that morphological awareness in 1st grade was a significant predictor of Kana word reading speed, text reading speed, Kanji reading accuracy, and Kanji spelling accuracy in 2nd grade even after controlling for the effects of general cognitive abilities and phonological awareness. We concluded that morphological awareness has important role in early development of Kana word and text reading fluency, Kanji reading accuracy, and Kanji spelling accuracy.

#### P1276

##### **A study of the relationship of friend groups among elementary and junior high school students**

*Yuka Musashi Morioka University, Japan*

This study aimed to clarify the types of friend groups formed by elementary and junior high school students, and to investigate students' awareness of belonging to a group. For this purpose, an instrument was developed for assessing relationships between groups of friends and its reliability and validity were confirmed. Results of cluster analysis extracted the following four groups; an ambivalent type group, a positive dominant type group, a negative dominant type group, and a passive type group. It was indicated that victimization through bullying occurred in the negative dominant and ambivalent groups. Moreover, the followings factors were suggested as reasons for remaining in a group, despite being victimized. In the negative dominant type group, there was a high tendency toward "exclusive-group orientation," "direct victims of bullying," and "anxiety and solitude," whereas in the ambivalent group, there was a high tendency toward "avoidance of becoming an outcast" and "fixed-group orientation."

#### P1277

##### **Predicting Academic Success: a Cohort Study at a South African University**

*Cecilia Myburgh, David D Marais, Karel Stanz University of Pretoria, South Africa*

Universities in South Africa are under pressure to increase access and enrollments, however the current higher education system is characterized by low participation, high attrition and low throughput rates. Only a small number of students enter higher education and even a smaller group actually succeeds. This is indicative of a dysfunctional system of university processes related to access, throughput and success. Therefore, the study investigates, from a systems perspective, what changes universities can make with regards to admission processes and placements of students to increase throughput. This longitudinal cohort study (N=3637), analyzes the student data over

three years by means of predictive modeling to present a model that can predict academic success. The model can be used for admission policies and regulations at South African universities to increase student success.

#### P1278

##### **A short-term longitudinal study concerning the relationship between social skill and being careful not to be hurt by friends**

*Akiyuki Nagai Chuo university, Japan*

This study aims to clarify the relationship between friendship and social skill for undergraduate students. This study examined short-term longitudinal associations between friendship scales focusing on being careful not to be hurt and not to hurt and social skill. Participants were 180 undergraduate students who responded to a 68 item questionnaire. The results of the structural equation modeling analysis suggested that being careful not to be hurt by their friends (time1) and being careful not to hurt their friends (time1) contributed little to social skill (time2). However, the results showed that social skill (time1) have an effect on being careful not to be hurt by their friends (time2) and being careful not to hurt their friends (time2). Higher skill of reading someone's reaction made higher being careful not to be hurt by their friends. Moreover, higher skill of expressing themselves made higher being careful not to hurt their friends.

#### P1279

##### **The practice and the evaluation of career related course in Japan.**

*Minoru Nagasaku, Eiko Osaka Surugadai University, Japan*

The purpose of this study is to report the practice and the evaluation of career related course carried out at a Japanese private university. The evaluation of the course was examined by Career Action-Vision Test (Shimomura et al., 2009). Participants for this study included 306 undergraduates who took the course in 2011, 2012, or 2013. About half of the students scored lower level both Action and Vision at Pre-test. However, the rate reduced to about 10% at Post-test. In contrast, the students who scored higher increased after the course. Finally, we discussed the limitation of this study and the way of career related education (and career guidance) to promote the career development for undergraduates.

#### P1280

##### **Analysis of the Relationships of Self-Education ability with Experiential Learning in Volunteer Activities and Teaching Practices: From a survey for Japanese university students in a course of teacher training**

*Akiko Nagata (1), Junichi Nagata (2) 1. Yasuda Women's University, Japan; 2. Hiroshima University, Japan*

The ability of Self-Education(SE) is one of the important elements which the teachers at all level of schools are expected to acquire. The close relations between acting and learning have been emphasized in previous works, in which learning improves the quality of the action, and action creates the learning needs. In this paper, the relationships of SE ability with the experiential learning in volunteer activities and teaching practices were analyzed. A survey for Japanese university students who take a course of teacher training was carried out (n=217). Measure Items of questions were as follows; (1) individual attributes, (2) 40 items about the ability of SE, (3) 10 items about volunteer activities, (4) 9 items about the experiences of teaching practices. We found both of the volunteer activities and the teaching practices had significant positive correlations statistically with SE ability, especially regarding a factor of SE, the objectification of oneself.

#### P1281

##### **Investigation of test-related thinking styles among Japanese university students.**

*Karin Nakagawa Graduate School of Humanities, Hosei University, Japan*

Although thoughts and emotion should be considered individually, this point has not been investigated in academic test-related context. The purpose of this study was to validate a new scale for evaluating test-related thinking style (TRTS). The participants were 62 university students (22 males, 40 females; age range = 19-26), and completed newly established 30-items TRTS questionnaire, the existing achievement goals questionnaire (AGQ), and the value of test scale (VTS). Two factors obtained from the TRTS questionnaire by exploratory factor analysis were labeled Test Study Sufficiency (A:  $\alpha = .83$ ) and Ability Development (B:  $\alpha = .79$ ). These factors showed moderate correlation with some factors of both AGQ and VTS such as factor B and Performance Goals ( $r = .54, p < .01$ ) and factor B and Inducement ( $r = .43, p < .01$ ). The findings of this study indicated that the TRTS questionnaire could have criterion-related validity.

#### P1282

##### **The effects of self-compassion on emotion regulation of junior high school students**

*Mihoko Nakamine, Masaya Takebe, Kohei Matsubara, Hiroshi Sato Kansai University, Japan*

Many studies have shown that adolescents face emotion dysregulation problems. Self-compassion decreases depression and anxiety in adolescents (Neff and McGehee, 2010), and plays a central role in emotion

regulation according to the emotion regulation model (Berking et al., 2014). This study examines the emotion-regulating role of self-compassion in adolescents. Six hundred seventeen junior high school students aged 12-15 years completed measures of self-compassion, emotional response (i.e., "irritated-angry" and "depressive-anxious"), and stressors. SEM showed that angry and depressive-anxious responses were increased by emotional dysregulation, and that self-compassion decreased emotion dysregulation. GFI, NFI, and CFI were .99, .99, and .99, respectively, suggesting that the model had good fit. These results indicate that cultivating self-compassion prevents problems related to emotion dysregulation, such as anger, depression, and anxiety, in adolescents.

### P1283

#### The Effects That English Oral Self-expression Has On Self-efficacy And Attitude Toward English For Students At A Japanese Junior College

*Maiko Nakamura, Tomoko Hashimoto Tsurukawa Women's Junior College, Japan*

This study examined the effect that oral self-expression in English has on self-efficacy and attitude toward English. The objective was to see whether public speaking in English on an object one has a strong liking for, would raise their sense of efficacy and amiable feeling towards the language. Upon a preparation time of one month, first year students at a junior college in Tokyo conducted a public speaking activity in English class. Perceived self-efficacy and sentiment toward English were measured before and after this activity for two groups: The participating (N=64) and the non-participating group (N=64). Results indicated a significant rise in self-efficacy and a notable decrease in aversion towards English for the public speaking group. These findings suggest that in order to raise perceived self-efficacy and/or to weaken dislike for English in college students, the experience of orally expressing oneself in the target language may be useful.

### P1284

#### The Effects of a Peer Counselor-training Program for High School Students

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The purpose of this study was to examine the effects of a Peer Counselor-training Program for high school students (N=27). This program was designed by our research team to focus on the development of self-understanding

and active listening. The program included fourteen sessions (from May, 2013 to January, 2014). The Peer Counseling Mind scale was used to assess both the pre-test and post-test. Results indicated a significant rise in self-understanding, active listening skills and self-expression in participants who attended this program. In addition, video-recordings of every session, mental self-evaluation by students, students' works made during sessions, and facilitator observation reports were studied through qualitative analysis. These revealed that effective interference and creative approaches by facilitators have positive influence on training effects.

### P1285

#### The asymmetric feature of causal attribution for success and failure in academic performance

*Yoshifumi Nakanishi Mie University, Japan*

Studies on causal attribution have found that causal attribution for success and failure in academic performance affects motivation for subsequent learning (e.g., Weiner, 1972, 1979). However, few studies compare the causal attribution between success and failure. In the present study, causal attributions for success and failure in academic performance were compared. A questionnaire was administered to participants and open-ended questions were used to obtain the causal attribution for the results of periodic examinations. Results showed that there was a difference between the causal attributions for success and failure, such that failure is more often attributed to the extent of efforts, while success is more often attributed to strategies. Based on these results, the asymmetric feature of causal attribution for success and failure is discussed.

### P1286

#### Classroom practice and its educational effects in an improvisational dance course for undergraduates: Focusing on problem finding and communication skills

*Yuko Nakano, Daichi Shimizu, Takeshi Okada The University of Tokyo, Japan*

How can we encourage undergraduates to acquire important skills like problem finding and communication? This question has drawn increasing attention recently with improvisation skills suggested to have critical overlap. In this study, we designed an improvisational dance course to foster these skills in collaboration with a professional dance choreographer and it was held in the summer semester (2015). We analyzed its educational effects through questionnaires administered before and after the course; and follow-up interviews conducted three months later. The results show that the students enjoyed improvisational dance and

became conscious of their own body and emotions as well as those of other students. Moreover, the students were able to appreciate and consider academic and everyday themes from different perspectives. In conclusion, the designed improvisational dance course has potential to foster the expressivity of students through dance and to improve their daily lives and academic pursuits.

### P1287

#### Motivational intervention with reciprocal teaching

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The aim of this study was to examine the effect of the Reciprocal Teaching (RT) in classroom intervention that incorporates motivational functioning. Seventy-eight 6th graders in a public elementary school in Tokyo participated in this study. In mastery goal focus RT group, the teacher's focus was on the children's effort and various ways of thinking. On the other hand, in the performance goal focus RT group, the teacher's focus was on the children's ability and collectedness of the responses. As the dependent variable, we measured interest (4 items) to figure learning in math. An analysis of variance (group; mastery goal focus RT/performance goal focus RT \* time; pre, middle, post1, post2) revealed that a higher level of interest was seen in the mastery goal focused RT group as compared to the performance goal focused RT group.

### P1288

#### Research on the Effects of a Residential Program on Out-of-school Children and Their Parents

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This paper reports the results of research on a residential program for children who had stopped going to school and their parents. In this research, we measured the emotional states and satisfaction levels of children and their parents who participated in this program before the start and at the end of the program and identified the effects this program had on them. Subjects were 93 children and 77 parents. We distributed questionnaires to children and parents at the end of the program, which was held 11 times during the year, asked them to fill in the questionnaires and collected them immediately. In this research, we found that residential programs of this type have positive

influences on out-of-school children and their parents. Specifically, these types of programs enable children to increase their psychological energy levels and parents to reduce their psychological anxieties, making them less concerned and tense.

**P1289**

**The regional characteristics of psychological vital sign (PVS © Mie-chuo MC) of nursing and midwifery students in National Hospital Organization (NHO).**

**Yoshie Naruse (1), Yoshinobu Takeoka (1), Ryo Sewake (1), Tomomi Aoki (1), Hitomi Kaneda (1), Hisae Oriyama (1), Youko Nonokawa (2), Miwako Miura (3), Yachiyo Takemori (4), Kumi Nishide (5), Miho Oono (6), Noriko Murai (7), Keiko Ando (8), Masatoshi Kawai (9), Shigeki Tanaka (1), Hatsumi Yamamoto (1)** 1. Mie chuo Medical Center, Japan; 2. School of Nursing and Midwifery, Kyoto Medical Center, Japan; 3. Nursing School of Shizuoka Medical Center, Japan; 4. Okayama Nursing and Midwifery School, Okayama Medical Center, Japan; 5. Yokohama Nursing School, Yokohama Medical Center, Japan; 6. Ooita-chuo Nursing School, Beppu Medical Center, Japan; 7. Nursing School of Osaka Minami, Osaka Minami Medical Center, Japan; 8. Zentsuji Nursing School, Shikoku Medical Center for Children and adults, Japan; 9. Clinical Developmental Psychology Institute for Education, Mukogawa Women's University, Japan

The self-recovering power from the various mental stress is prescribed by the interaction of resources, such as personal psychological characteristics and stress tolerance. This research investigated the variations of psychological vital sign (PVS © Mie-chuo MC) of 500 students in 7 nursing and midwifery schools using the Japanese version of Profile of Mood State (POMS), Stress Self-Regulation Inventory (SSI), Monitor-Blunter Style Scale (MBSS) questionnaires, and stress degree. The regional difference of PVS © of students in 7 nursing and midwifery school was statistically confirmed. Based on these results, we tentatively determined the standard boundary of PVS © value of the students in these schools, because the dynamic measurement of PVS © is useful to estimate the individual mental condition of students. Our future subject is to design and to check feasibility of the automatic self-check system of PVS © Mie-chuo MC. (Supported by NHO Network Joint Research no. H27-NHO(Multi-Joint)-01)

**P1290**

**A Function of Studying for High School Entrance Examination**

**Takuma Nishimura (1), Kentaro Komura (2)** 1. University of Tokyo, Japan; 2. University of Tsukuba, Japan

The present study investigated the function of studying for high school entrance examination on academic performance and depression. A total of 331 junior high school students in 9th grade (boys = 163, girls = 148, Mage = 14.72, SD = 0.45) participated questionnaire survey. The result of factor analysis revealed a potential five functions of studying for high school entrance examination: enhancing motivation, meta-cognitive attitude, social comparison, thinking about career, and controlled feeling. In addition, path analysis indicated that the function of enhancing meta-cognitive attitude was positively correlated with academic performance and the enhancing controlled feeling was positively correlated with depression. Discussion describes the role of studying for entrance examination beyond a view that the entrance examination for high school is good or bad thing.

**P1291**

**A multilevel study of individual characteristics and classroom climate in explaining bystander behavior in bullying situations**

**Yasuyo Nishino Hiroshima Shudo University, Japan**

This study investigates whether passive bystander behavior in bullying is related to individual characteristics and classroom climate. The sample consisted of three hundred and three Japanese elementary school students (mean age=10.7 years) and five hundred and forty-five junior high school students (mean age=13.7 years), who were nested within thirty-four classrooms in five schools. The results from multilevel analyses show that school climate has statistically significant intraclass correlations and only for junior high school students peer pressure and moral disengagement also have. Moreover, at the student-level, individual correlates (peer pressure and moral disengagement) and classroom climate (self-disclosure and order) help explain passive bystander behavior in bullying, and at the classroom-level only for junior high school students, self-disclosure is associated with bystander behavior in bullying. The findings suggest that for early adolescence the more positive school climate they have, the less bystander behavior they might take. Implications of these findings are discussed.

**P1292**

**Applying Epistemology of Ecological Agents to Instructional Design and Practices**

**Ryota Nomura The University of Tokyo, Japan**

According to the idea of Valera's (1991) enactive approach, cognitive structure emerges via

a feedback loop of action and perception in which "the recurrent sensorimotor patterns enable action to be perceptually guided." Thus, for all ecological agents, knowing is to form significant (i.e., adaptive and meaningful) patterns in a manner consistent with the ambient world. Based on a comprehensive review of literature, the author provides principles how to apply this epistemology to instructional design and practices. The instructional design should ensure autonomic explorations by ecological agents (e.g., child and students). Moreover, instructors must monitor the degree of freedom for exploration in problem space and, if necessary, control it by changing constraints of learning environments. Therefore, it is needed for teachers to be sensitive to how ecological agents are knowing the world at every moment as well as the stabilized action-perception patterns (i.e., knowledge).

**P1293**

**Effective methods for moral education in Japan: Focusing on competence types and morality of human relations**

**Jun Numata (1), Hiroyuki Okuno (2)** 1. Doshisha University, Japan; 2. Soai University, Japan

The purpose of the present research is to investigate effective methods for moral education in Japan by examining the relationship of competence types and morality of human relations with the data from 257 Japanese university students. By combining the tendency to undervalue other people and level of self-esteem, the participants were classified into four competence types: self-esteem, assumption, omnipotence, and atrophy. Besides, the participants completed scales of multidimensional empathy and critical thinking, which were related to morality of human relations. The results indicated that those classified as self-esteem type tended to think from various perspectives and show interest in others' difficulties more than other types. Assumption type tended to show displeasure at others' sufferings and ignore diverse opinions. Those of omnipotence type tended to have stronger self-centeredness, whereas those of atrophy type had a greater tendency to be affected by others than other types.

**P1294**

**Effect of strength approach on strength knowledge and use in children**

**Ryuji Oguni graduate school of clinical psychology, Kawasaki University of Medical Welfare, Japan**

The purpose of this study was to investigate effect of strength approach on children's strength knowledge and use in children after they had been promoted. The participants were elementary school fifth and sixth

graders at the beginning of the study. A waiting list control design was used, in which the children were assigned either to a strength approach group (n=65) or a waiting list control group (n=64); the latter group was given identical strength approach after the first group had been trained. The strength approach was conducted class-wide (45 minutes per session), and included 3 components. The results suggested that the strength approach was significantly effective increase the extent of the children's strength knowledge. On the other hand, strength approach was no effect of the children's strength use. These results support for the efficacy of the intervention on strength knowledge.

**P1295**  
**Verbal Fluency Tasks Related to the Knowledge of Childcare Environments: The Role of Practical Experience.**

*Yuko Ohgami Wayo Women's University, Japan*

In order to develop a simple index for measuring an individual's stage of learning as a childcare worker, we conducted verbal fluency tasks with two groups. The first group had several practical experiences in childcare. It comprised 90 individuals in their third year of a childcare worker training course. The second group (N=74) had no such experience base. Four verbal fluency tasks (nursery room items, playground items, animals, and a phonemic category (words beginning with the syllable ka.)) were conducted. In all the tasks, the experienced participants produced more words than those in the inexperienced group. Furthermore, the words produced by the experienced participants included not only items for children (e.g., toys), but also daily necessities for childcare workers (e.g., cleaning rags). These findings suggest that the knowledge structure had changed for the experienced individuals.

**P1296**  
**A meta-analytic review of the relationship between metacognitive skills and learning performance.**

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This study is a meta-analytic review in the relationship between metacognitive skills and learning performance. Metacognition is the higher order cognition and one of the most significant predictors of learning performance. The purpose of this study was to 1) examine the degree to which metacognitive skills predicted learning performance controlling for intelligence; and 2) examine the measurement of metacognitive skills (on-line vs off-line methods) as a moderator in the relationship between metacognitive skills and learning performance. The on-line method refers to the

method measures on-line metacognitive skills by such as think aloud. The off-line method refers to the measurement such as questionnaires. The result of meta-analysis was 1) metacognition moderately predicted learning performance even controlling for intelligence. 2) The on-line measurement predicted better performance than the off-line measurement.

**P1297**  
**Effect of service learning for college students -Activities on the educations for "Mental Supporter"-**  
*Ryota Okabe (1), Reiko Yoshikawa (1), Morihiro Okada (2) 1. Tokai university, Japan; 2. University of Tokyo Health Science, Japan*

Service Learning (SL) was developed at the United States of America around the time of 1980. It was based on traditional concept of volunteer job, however, in addition, connect college learning to volunteer activities, led student can increase their learning effectiveness. This research is to investigate the effectiveness of SL. For 27 college students who received several times training workshop, and then went to 2 junior high school's classes and one education support center (for truancy students) in Kanagawa Prefecture Japan as "Mental Supporter". The questionnaire was measured at before and after the volunteer job. As a result, the significant differences was obtained at the category of "the feeling of self-growth", "orientation to sharing happiness", "the prove of own ability by social", "Sensitivity", "Reformative and adjust Self-control". This effect suggested that activities of mental supporter can lead college students to feel more development about themselves.

**P1298**  
**Predicting friendship quality of junior high school : A longitudinal study during the transition from elementary to junior high school.**

*Ayako Onishi (1), Yoshimi Nakashima (2), Katsumi Harada (3) 1. Konan University, Japan; 2. Fukuoka University of Education, Japan; 3. Kanazawa University, Japan*

The problem of peer relationships such as bullying increases in the first grade of junior high school in Japan. The primary purpose of this study is to examine the risk and resilience factors that may predict the problem of peer relationship in the first grade of junior high school. Participants (N = 8136) completed questionnaires when they were in the sixth grade (self-efficacy : elementary school) and again when they were in the seventh grade (quality of peer relationship : junior high school). Results of the study revealed (1) positive correlation between self-efficacy in elementary school (about following the rules, building a relationship with people, consideration for others) and

friend support in junior high school, (2) negative correlation between self-efficacy (about following the rules, building a trust relationship, consideration for others) in elementary school and victimized by friends (relational bullying, direct bullying) in junior high school.

**P1299**  
**A Study of relationship between Non-proactive attitude in academic and Narcissism of contemporary Japanese students.**

*Kyoko Onishi Tokyo Gakugei University, Japan*

This study investigated the relationship between non-proactive attitude in academic and narcissism of contemporary Japanese students. Tsuchikawa (1990) has pointed out the typical student apathy is based on the narcissistic personality disorder. Compared with the student apathy, Non-proactive attitude exhibits relatively mild behaviors. Research of self-administered questionnaire with 284 students (male 133; female 147; unknown 4 / average age 19.86; SD=1.38) was done. Considering from correlation between the scale of non-proactive attitude in the academic (Onishi, print in) and the narcissistic personality inventory (NPI-S) (Oshiro, 1998), student's non-proactive attitude in academic is not necessarily related with the narcissism, not like the student apathy. Also from result of cluster analysis, there is the difference of the narcissism between each group.

**P1300**  
**Effect of Question-Based Instruction with Collaborative Learning in an elementary school ethics class**

*Yoshinori Oyama Chiba University, Japan*

This study analyzed the effect on elementary school learners of providing question-based instruction about ethics. The instruction consisted of two lessons. In the first lesson, pupils read information material and were asked to generate questions (e.g., What is true "friendship"?). In the second lesson, pupils were grouped based on the questions they generated during the first lesson, and were asked to discuss their questions in the group. This study hypothesized that providing learners with question-based instruction (QBI) promotes their critical thought and they participate with more positive attitudes in class compared to when traditional teacher-centered instruction is provided. For comparison, some elementary school learners were provided traditional teacher-centered instruction (Control). The learners' questioning attitude, quality of group discussion, and quantity of expressed opinions during the class were compared according to instruction provided. Results

revealed differences between the QBI and Control groups in the quality and quantity measurements of their discussion.

### P1301

#### Self management Skills and Subjective Well being Among Undergraduate University Students

**Daniela Pauknerova, Eva Jarosova, Tereza Lhotanova** University of Economics, Prague, Czech Republic

The purpose of this study was to identify which self management skills of undergraduate students are most strongly associated with subjective well being. In a mixed methods design, sixty semistructured interviews with undergraduate students were conducted to uncover self management skills of students. Themes that emerged during interviews were following: good sleep hygiene, healthy eating, stress management, time management and social contacts with family and friends. 182 students then completed self report measures of subjective well-being and self management skills. Findings indicated a significant positive relation between self management skills and subjective well being. Gender differences emerged: the strongest relations with subjective well being were found in a group of female students between social contacts with family and friends and good sleeping hygiene, whereas stress and time management scored in a group of male students.

### P1302

#### Facing Student Counseling Legalization Progress: High School and Elementary School Newly Appointed Counseling Administrators and School Counselors Pre-service Training Planning Study

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Student Guidance and Counseling Act had passed in Taiwan in 2014 which stipulated the task and labor. Based on these guidelines, the competent authority for schools shall arrange at least 40 hours pre-service basic training courses for newly appointed counseling administrators and school counselors. This study aimed to explore the practices and needs of it. Purposive sampling was used as eight program planners, executors, and course lecturers (average years of relevant work are 18.25, SD=10.3) were interviewed, utilized document analysis for collecting information. The results concluded that pre-service training should 1) help to prepare, cooperate, learn work responsibilities and tasks; clarify work ethics; enhance

the sense of mission; provide emotional support and problem solving; 2) provide holistic thinking and professional team; combine cognitive, affective and implement purpose; 3) consider the mission and seniority of participants, distinguish conceptual and practical curriculum courses, use multiple teaching methods to encourage positive development.

### P1303

#### The effect of Format and Instruction on the argumentative use of tables and graphics

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The paper deals with how senior high school students and university undergraduate students use evidence to write an argumentative text. They were presented a dilemma with 4 sets of data (2 pro and 2 anti-nuclear energy). Half the sample was given the data in graph format and the other half in table format. The four sets of data differed according to their complexity. We analyzed the structure of argument, the use of the evidence according to the participants' position on the dilemma, and the presence of confirmation bias. Our results show a good argumentative competence that does not seem to be affected either by the students' educational level or by data format. Regarding the use of provided evidence, we found higher confirmation bias for the texts in the table condition, and higher counterargumentation. Apparently tables not eliciting deep processing and thus, becoming more difficult to rebut (Kosslyn, 2008).

### P1304

#### Children integration through language learning in the SOFT project in different countries

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The paper presents the results of the SOFT project aiming at improving immigrant and autochthone children's language competences, integrative needs in multi-ethnic educational contexts. Migratory flows towards European countries determine the need of providing adults and children with positive social, cultural and educational tools for mutual integration. SOFT tested an intervention addressed to preschools and primary schools in five

European countries within inclusive classrooms having relevant percentages of immigrant children. The programme included the application of a language teaching model (the Narrative Format) and the implementation of home-school activities involving parents, teachers and children. The effects of this implementation have been investigated by means of different perspectives and methodological tools (interview, questionnaire, observation and test) and have shown changes in children's language mastery, in adults' representations and attitudes towards multilingualism and multiculturalism at school and at home. The outcomes offer keys for connecting children, parents, teachers, policy makers and educators.

### P1305

#### Learning physics with angry birds videogame: an epistemic approach

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Despite the interest aroused by ICT and, more specifically, by videogames in educational settings, research shows a limited and variable effect of ICT on learning in different domains, that apparently does not depend on the mere use of ICT but on the learning processes it activates. On this study, we used a very popular videogame (Angry Birds) for helping secondary students to learn physics, establishing several experimental groups. While some students just played with a pragmatic goal (reach the next screen), others practiced with an epistemic goal (to explain how the videogame works, what are the physical principles that lie beneath it). Finally, a control group studied physics without playing Angry Birds. The results showed that epistemic group students improved their physics knowledge in comparison to the control group, while there were no significant differences among pragmatic and control groups, supporting an epistemic approach in the educational use of ICT.

### P1306

#### The approaches to the humanization of physical culture

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There are two tendencies in education. The first one is connected with the orientation towards the innovation models. The second one is oriented towards the traditional model. In our research we took as a basis the position that focuses the attention on the fact that the difference between the humanistic and the traditional models of education is to be sought not in the contents of the programme but in the methods of management and direction of the students' educational activity. The realisation of the innovation programme of physical



lessons for school-girls which was oriented towards the interests, needs and values of the youth who have humanistic aims. In the experimental groups most of the students point to the fact that the role of physical lesson in the development of social activity, interest to creative activity, in the rise of self-confidence, belief in one's own possibilities is really significant.

### P1307

#### **Emotional intelligence: meaning and development at the University of Kazakhstan**

**Zuhra Sadvakasova, Zabira Madaliyeva, Altynai Zhaitapova** *Al-Farabi Kazakh National University, Kazakhstan*

Goal of study: revealing the specifics of the emotional intelligence of teachers, different levels of efficiency activity, its interrelation with successful professional activity. Conclusions: Emotional intelligence is the capability to consciousness, acceptance and adjustment of the emotional state and feeling of other people and itself, the key components of which include the empathy, tolerance, self-concept; emotional intelligence development level. Specific of the emotional intelligence of teachers relate to the most important professionally substantial characteristics of personality and medium the performance efficiency: for the teachers who have not achieved the top professionalism in their work, the emotional intelligence is expressed in a process of teachers' communication but not affect the training processes; orientation to the performance improvement not taking into account personal specific features of the school students is attributable to the adult or elderly teachers, who keeps the monologic and authoritarian forms of pedagogic interaction. Key words: emotional intelligence

### P1308

#### **Depressive tendencies and relative factors in high school girls (1)-Focusing on self-evaluation and academic performance -**

**Junko Sagara, Tomohiro Miyamoto, Etsuko Suzuki** *Seitoku University, Japan*

This study examined the relationship between self-evaluation, academic performance, and depressive tendencies in high school girls (ages 15-18). A questionnaire survey was conducted in a private school. Students (N=493) responded to five scales: the Japanese version of the Depression Self-Rating Scale for Children (DSRS-C), self-worth evaluation, social competence, academic performance and self-reported academic performance. As the indices of academic performance, the total standardized score of Japanese, mathematics, and English from an achievement tests were used. A multiple regression analysis was conducted with depressive tendencies as the dependent variables, and self-worth evaluation,

social competence, academic performance, and self-reported academic performance as independent variables. Results indicated that self-worth evaluation and social competence affected depressive tendencies, whereas both objective and self-reported academic performance were not related to depression. It is suggested that high self-worth evaluation and high social competence might be factors that inhibit depression.

### P1309

#### **The study of professional motivation among future psychologists in post-soviet kazakhstan**

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The purpose of the research is the professional motivation of future psychologists in post-Soviet Kazakhstan. In order of research the issue, the following tests "An orientation on professional self-realization", "Satisfaction with the chosen profession" and "Motivation of achievement of professional success" were applied. Research shows that the majority of students-psychologists have the average level of professional motivation. Low and high expressiveness levels of professional motivation by Fischer criterion shows that 3 year students have lower level of an orientation on professional self-realization ( $F=5,25$ ;  $F=2,25$ ); among 4th year students ( $F=2,83$ ;  $F=5,54$ ) and motivation of achievement of professional success ( $F=4,06$ ;  $F=8,23$ ). Thus, the above-mentioned aspects could be the determining factors that could promote optimization of all processes of Kazakhstani students' professional education.

### P1310

#### **A study on university students' awareness through interactive lessons with elementary school students -Intergenerational communication through "Children's Physical Play"-**

**Koichi Saito, Kaori Muramatsu** *Tokai University, Japan*

This study conducted a subjective-opinions survey of university students to collect data on intergenerational communication as promoted by "Children's Physical Play" in a practice-oriented curriculum. Assessments provided by the teacher of the curriculum and by student-organized event participants were analyzed together with the survey responses,

yielding these results: 1) University students earning a particular letter grade shared specific characteristics: "A students" had good grades and were ambitious with regard to volunteer activities in the future. "B students" were highly interested in children, but tended to be passive and not enthusiastic about talking with children. "C students" were proactive in communicating, but showed little positive attitude with regard to volunteer activities outside class. 2) Generally, the university students were impressed by the intergenerational communication promoted by the interactive lessons. Survey outcomes suggest that the practice-oriented curriculum helped the university students to develop various competencies, each at their respective levels of performance.

### P1311

#### **Social capital as protective factor of Japanese students' mental health: Comparison between schools in Japan and Japanese schools overseas**

**Ayumi Saito (1), Kikuyo Aoki (1), Megumi Koshi (1), Kae Asahi (1), Minoru Kobayashi (2)** 1. *Ochanomizu University, Japan*; 2. *Kyoto University of Education, Japan*

The population of Japanese students living abroad has been steadily increasing. Several studies have reported social capital as a protective factor of students' mental health (e.g. Sun & Stewart, 2007). This study investigated the functioning of social capital that is focused on the community connectedness for Japanese students in Japan and overseas. There were 724 participants in Japan and 880 participants in Japanese schools overseas all from grades 4-9. The study collected self-reported responses to variables of mental health; resilience; relationships with friends, family, and teachers; school connectedness; and community connectedness as social capital. Hierarchical multiple regression analyses were conducted to test the relationships between students' mental health and various protective factors. Statistically significant differences were found between the two groups. Results suggest that the functioning of community connectedness as a protective factor for students' mental health differs according to cultural contexts.

### P1312

#### **Epistemic practice to improve elementary students' construction of scientific arguments: A case analysis of the effects caused by commenting on peers' arguments using epistemic criteria**

**Miki Sakamoto, Etsuji Yamaguchi** *Kobe University, Japan*

This study examines how epistemic practice contributes to improvement in scientific argument construction. In this study, epistemic

practice included instruction of epistemic criteria, argument construction, and reciprocal review. Thirty-eight fifth-graders' repeated the practice four times. To examine the effects caused by commenting on peers' arguments using epistemic criteria, we analyzed students' comments in reciprocal reviews. We also scored the argument construction tasks conducted before and after the practice. We extensively analyzed four students that showed progress in their argument score from pre- to post-test. Two of them had shown a gradual increase in comments regarding epistemic criteria. This showed that commenting on peers' arguments directly related to improved argument construction in the post-test. However, the other two did not increase such comments. These cases suggest the possibility that receiving reviews from their partners influenced their argument construction. The relationship between epistemic practice and scientific argument construction was also discussed.

**P1313****A study of difference in activities between "initial planning" and "writing" in second language writing**

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This study examined differences in the frequency of activities between "initial planning" and "writing" during writing. One female undergraduate student who used English as a second language participated in this study (age=21, English writing level above CEFR B2 (higher level)). She was asked to write an essay in 300 words, and soon after initial planning and writing, she was also asked to answer questions about the frequency of writing activities (e.g. idea generation, idea selection, thinking about the text structures). Each was rated in 5 point scales, from 1(Never) to 5(Often). Results showed the followings; while she marked higher scores of 4 or 5 on idea generation and idea selection both in initial planning and writing, she marked lower score of 2 in initial planning and marked higher score of 5 in writing on "thinking about the text structure", which might be some kinds of differences between initial planning and writing.

**P1314****Personal characteristics of school teachers with varying degrees of emotional burnout syndrome**

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Objective: Determination of correlation between emotional burnout and personal characteristics of school teachers in Kazakhstan. In first phase of study the average level of emotional burnout was revealed among school

teachers with 5 years of experience: 80.5 in control group and 157.6 in experimental group. Attributes of emotional burnout were strongly marked in the experimental group. Due to a scale of occupational stress high average values were obtained: 19.3 in the experimental group and 13 in the control group. The school teachers with high level of emotional burnout also performed high level of occupational stress. School teachers with severe emotional burnout expressed such personal characteristics as depression and paranoid accentuation. At the same time, there were not revealed significant statistical differences between samples of school teachers on such scales as hypochondria, psychopathia, hysteria, schizoid accentuation, psychasthenia and hypomania. In order to prevent psychological aberrations teachers were introduced with the methods of psychic self-regulation

**P1315****The process of activity of shape constructions on plays with Origami materials for two to three year old children**

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We observed 1 female infant (hereafter, Child A) and 1 male infant (hereafter, Child B) playing with Origami materials. The study of these two children enabled the process of activity of shape constructions. Both children initially took two or three pieces of Origami, put one piece between the other pieces, and folded them by likening the Origami pieces into a concerted shape. Child A showed a development of unfolding the parallelogram Origami that was coincidentally created. Child B repeated the folding actions of taking several sheets of parallelogram Origami and putting them between his hands, likening it to a plane. Afterward, there was a development in which the child unfolded and crumpled the parallelogram Origami to make animals. It was suggested such activity fosters the ability to construct shapes from a flat surface into a three-dimensional one by enabling the children to spontaneously remove restrictions through repeated trials and errors.

**P1316****An Examination of Factors Related to Taiwanese Adolescents Time Management and Academic Procrastination**

*Shu-Shen Shih* National Chengchi University, Taipei Taiwan, Taiwan

As a universal human foible, procrastination is by no means an unusual phenomenon in academic context. The vast majority of existing research, however, focuses on college students samples. There is shortage of studies

that explore adolescents' academic procrastination. To address this paucity, the present study attempted to examine the mechanisms determining Taiwanese adolescent students' time management and academic procrastination. Four hundred and five eighth grade Taiwanese students completed a self-reported survey assessing their perceptions of classroom structure, parental expectations, parental criticism, perfectionistic tendencies, time management, and academic procrastination. Results of hierarchical regressions suggested that perceived classroom structure, parental expectations, and adaptive perfectionism positively predicted students' time management behaviors. In contrast, parental criticism negatively predicted time management. With regard to procrastination on homework and examination preparation, parental criticism and maladaptive perfectionism were positive predictors, whereas parental expectations and adaptive perfectionism emerged as negative predictors. Also, time management negatively predicted academic procrastination.

**P1317****Factors determining students' class satisfaction level: A comparison among expectancy disconfirmation, alternative attractiveness, and self-image congruity**

*Hideaki Shimada* Shinshu University, Japan

In a research of hairstyling service, customers' self-image congruity was a more important factor of their satisfaction than expectancy disconfirmation or alternative attractiveness (Yim et al., 2007). This study investigated which factor of the above three affected students' satisfaction in university classes. First, participants (N=139) who were sophomores were required to recall any one of their classes that they had taken in the past years. Next, they completed a questionnaire, in which the questions that evaluated the degree of the three factors and the satisfaction level of the recalled class were included. A regression analysis revealed that alternative attractiveness and self-image congruity had significant effects on the satisfaction level but disconfirmation didn't. The result suggests that not only self-image congruity but also alternative attractiveness is a factor determining students' class satisfaction level.

**P1318****The difference of children of day-care in Finland and Japan**

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Finland is famous for social welfare, child welfare, and maternity protection policy. On the other hand, Japan is an egalitarian democracy country in Asia, and putting strength into child welfare original including child welfare policy these days. Shimoda (2008) has conducted longitudinal studies of observation of Day-nurseries. In this research, it was observed that child-rearing method and the teaching method, degree of freedom of its curriculum, class organization, the difference of view on meal, the difference of parents going to meet children, flexibility of parents' work, the difference of the relationships of teacher and parents. The difference of the play is mainly outdoor, running in shoes / indoor, sitting without shoes (Finnish / Japanese). It is considered that 1) education of the exercise mainly, 2) education with the consistency regardless of weather and teachers, and 3) liberal upbringing, effect on growing up in good health.

#### P1319

##### **Relations between monitoring processes and utterances in reciprocal teaching.**

*Keita Shinogaya Nihon university, Japan*

This study developed a questionnaire about meta-cognitive processes in collaborative learning situations and examined relations between learners' monitoring and actual utterances. In study 1, Japanese high school students (N = 796) answered to twenty three items about what they monitored during collaborative learning. Confirmatory factor analysis revealed that four factors model ("own understanding", "others' understanding", "common understanding", and "engaging in the activity") showed good fit to the data (GFI = .927, AGFI = .903, CFI = .910, RMSEA = .061). In study 2, Japanese college students (N = 22) participated in a reciprocal teaching and answered to the questionnaire after the activity. Correlations between scores of meta-cognitive processes in the questionnaire and actual utterances in the activity showed that monitoring of others' understanding negatively related to "explanations without elaboration" in docents and positively related to "complemental explanations" in listeners.

#### P1320

##### **Development of school based suicide prevention program (1) : Overview and constructs of the program in Japan**

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Suicide prevention for young people has become a major issue in Japan, and an important strategy is suicide prevention education in schools. Practices for effective suicide prevention education have gradually spread to Japan from the United States, but there is currently insufficient verification of their effectiveness. To practice and evaluate suicide prevention education programs, it is necessary to define the goals of the program and to examine the concepts and constructs underlying the goals of suicide prevention education. The purpose of this study was to confirm the validity of the constructs for a school-based program that we made based on this background of suicide prevention education in Japan. Participants were junior high school students who had enrolled in a suicide prevention education program. As a result of this study, the validity of the constructs was confirmed. These findings will contribute to more effective suicide prevention practices in Japanese schools.

#### P1321

##### **Acquisition of mathematical literacy of beginners in Japan: via an analysis of answers to a non-routine word problem**

*Kana Suematsu Ochanomizu University, Japan*

Most studies about mathematical literacy conducted in Japan during 10-odd years focused on teachers, as a result, educational objectives, teaching method and teaching material have been examined. However, it isn't examined how children as a beginner acquired literacy. The purpose of this study was to examine how beginners acquired mathematical literacy through learning, and what kind of support was necessary for them. 29 first graders who belonged to one class participated. The data were collected through the observation of the class and the interviews to the children. Children could solve a non-routine story problem in informal mathematics, however they couldn't formulate that. In conclusion, the support of the teacher which encourages children pass the boundary between informal mathematics and formal mathematics is needed for beginners to acquire mathematical literacy.

#### P1322

##### **A case study to promote deep understanding in history: Developing skills to construct causal comprehension through cognitive counseling**

*Rei Suetsugu The university of tokyo, Japan*

In learning history, understanding historical contexts is an important perspective for students to gain. However, many Japanese students tend to only memorize historical events as fragmented knowledge. The present study investigated a way of addressing this problem

through a case study in cognitive counseling (Ichikawa, 1993), which is a kind of personal tutoring based on models of cognitive psychology. This approach aims to foster self-regulated learners, who can deal with cognitive problems in learning, such as memorization and motivation. The counseling client was a 2nd-grade male student in high school. He was instructed by the counselor to use scheme, and other specific learning strategies for constructing causal understanding. Results of analyses of protocol and note-taking data revealed that this client came to recognize the importance of historical contexts. After the cognitive counseling sessions, he not only referred to historical events but also the background factors and result of those events.

#### P1323

##### **The study regarding several types of both goal consciousness to the future and participation in extracurricular activity in high school life**

*Saimi Saganuma Chuo University, Japan*

The purpose of this study was to investigate the differences of high school students' sense of self-fulfillment in goal consciousness to the future and the commitment to extracurricular activity in high school life. A questionnaire was administered to 649 students. As the result of analyzing answers by KJ method, it showed that students who have dream such as entering university and future's dream regard continuing striving steadily toward review of class and test as attaining dream. While, the results revealed that students who do not have future dream make small goal at every club activity contest and test and lead their full life by accumulating efforts. In the future, research is needed to investigate the difference of changing process of high students' sense of self-fulfillment in goal consciousness to the future and the commitment to extracurricular activity.

#### P1324

##### **Retrospective reports of preventive psychosocial education experiences and its relationship between perceived effectiveness and openness to diversity among Japanese university students.**

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This present study examined how often college students had chances to learn preventive psychosocial education in their elementary, middle, and high school and if these experiences were perceived effective. This study also investigated the relationship between these educational experiences and the openness to

diversity. The participants were 385 Japanese university students. They were asked about their past experiences on ten preventive psychosocial educational programs (e.g., assertive training & SST) and effectiveness of each program. Openness to diversity and challenge scale was also used. The results show that most of the participants have received various preventive psychosocial education programs at least once. Education focusing on the value of life is the most common in elementary and middle school. In high school, human rights education was most common. Perceived effectiveness of human rights education ( $r=1.28$ ) and education focusing on the value of life ( $r=1.36$ ) were correlated with openness to diversity and challenge.

**P1325****Effect of counterfactual thought on self-regulated learning and motivation**

*Yuu Sugiyama, Motoyuki Nakaya Nagoya University, Japan*

The purpose of the present study was to examine how upward counterfactual thought affected self-regulated learning and motivation. Counterfactual thought would be considered as a factor of self-reflection step in self-regulated learning process. In this study, we focused on control perception of counterfactual thought contents, regret which was generated by counterfactual thought, and academic competence. One hundred and sixty-nine junior high school students were answered the below questionnaires after middle exam and after final exam: (1) counterfactual thought and control perception (2) regret about learning (3) learning strategies: constructed from meta-cognition strategy, memorizing-repeat strategy and understanding-oriented strategy (4) academic competence and (5) intrinsic motivation. The result of the path analysis revealed that control perception of counterfactual thought affect positively to metacognitive learning strategies and intrinsic motivation. These findings suggested that promotion of counterfactual thought would have important influence to academic motivation and learning behavior in self-regulated learning process.

**P1326****Creativity and School Adjustment of First and Second Graders in Japan**

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This study examines the relation between creativity and school adjustment of first and second graders in Japan. In July 2005, four first and second grade teachers were asked to complete questionnaires about their students' creativity and school adjustment ( $N = 140$ ). The

results show creativity to consist of three factors: "curiosity and openness", "willingness to explore" unlikely connections and ideas, and "concentration and persistence". Compared to the second graders, the first graders exhibited higher "curiosity and openness" and "concentration and persistence", but lower "willingness to explore". "Curiosity and openness" were related negatively to school adjustment in the first grade, but were positively related to academic adjustment in the second grade. "Concentration and persistence" and "willingness to explore" were related positively to school adjustment in both grades. These findings suggest that as students progress from the first grade into the second grade and become better adjusted to school, their originality declines.

**P1327****A Qualitative Analysis of the Influence of Role models on Teachers Career Development**

*Pei-Chi Sung National Taiwan Normal University, Taiwan*

Many factors influence teacher training, and role models are a crucial one. The purpose of this study was to examine the influence of role models on teacher's career development in Taiwan. The grounded theory methodology was adopted, and a semi-structured interview was conducted with six high school teachers. The results revealed that a hierarchical theoretical model was generated. There are three domains at the top of the model: the relationship between the self and others, professional identity, and self-identity. Since role models have a significant impact on the development of teachers, in teachers' professional development, it is suggested that teachers can focus primarily on the development of these three areas to have a positive influence on students.

**P1328****Do the contexts of subjects affect pupils' problem solving abilities? Interpretation of a graph in the context of mathematics and social studies**

*Go Suzuki Graduate School of Education, The University of Tokyo, Japan*

This study investigated how the contexts of subjects affect pupils' problem solving abilities. Fifth graders ( $N = 91$ ) and sixth graders ( $N = 94$ ) were randomly assigned to three conditions. All the pupils solved the same problem about a truncated bar graph showing an exaggerated difference between the consumption amounts of two cities. In total, 74 pupils were asked to solve it a mathematics problem (M-condition); 64 pupils were asked to solve it as a social studies problem (S-condition); and 44 pupils were asked to solve it without any clue about the subject (N-condition). Among fifth graders, more pupils in the S-condition group solved the

problem using the exact number of the consumption amount. In the M-condition group, more sixth graders solved the problem using the exact number. The results showed that the effect of context is dependent on which grade they are in.

**P1329****The relation between emotions after receiving test results and learners' review activities**

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This study examined the relation between emotions after receiving test results and learners' review activities, such as correcting errors, by analyzing both inter-individual (i.e., between persons) and intra-individual (i.e., within a person) covariations. Participants were 90 high school students. Surveys were conducted four times in the second term of the academic year using self-report questionnaires. Participants were asked to report about the state of their emotions immediately after receiving their test results, and their review activities one week after receiving the results. We examined the correlations between emotions and review activities based on a two-level model with assessments nested within persons. Level 1 shows intra-individual correlations while Level 2 shows inter-individual correlations between the aggregated variables. The results showed that there is no intra-individual relation between emotions and review activities; however, inter-individual relation between these variables is significant. Specifically, both positive and negative emotions were positively related to review activities.

**P1330****The study of examining the effect of educational intervention facilitating the expressive awareness for undergraduate in music majoring**

*Yuriko Takada The university of Tokyo, Japan*

The purpose of this study is to examine the effect of educational intervention facilitating the expressive awareness. Twenty-eight undergraduates, majoring music, individually participated in experiment. Each one was assigned to one of four experimental groups: the Instruction group, the Improvisation group, the Instruction and Improvisation group, or the control group. It was hypothesized that educational interventions such as helping them matching of the expression ways of musical contents and methods or the experience of improvisation would facilitate their expressive awareness. Analysis of questionnaires and verbal protocols indicate that instruction and

improvisation facilitated a change in the participants' mental representation of performance through the following two cognitive processes: recognizing the way of matching music contents and methods about performance, and experiencing improvisation to express new ideas. The result was that every group heightened the expressive awareness in the post-test than pre-test.

**P1331****Levels of generalized self-efficacy and self-esteem among Japanese sports university students**

*Ryosuke Takahashi, Akari Kamimura, Yujiro Kawata, Yuko Nakanishi, Minako Suzuki, Masataka Hirose* Juntendo University, Japan

Generalized self-efficacy (GSE) and self-esteem (SE) are assumed to be influenced by sports experiences. Therefore, this study attempts to clarify the actual levels of GSE and SE among Japanese sports university students. We administered a questionnaire including GSE and SE measures to 1014 such students. Results showed that women scored higher than men on GSE, but men scored higher than women on SE. Students who participated in sports scored higher on GSE and SE than students who did not. Senior students scored higher on GSE and SE than freshmen, sophomore, and junior students. These results shed light on the actual levels of GSE and SE among Japanese sports university students.

**P1332****The analysis of items related to teaching evaluation questionnaire in the university students.**

*Naoki Takahashi* Niigata University of Health and Welfare, Japan

In the present study, I conducted research on teaching evaluation questionnaire, for the university students. Specifically, I was subjected to analysis for the eight items based on the "impression of the class," "transfer of syllabus," "teaching skills". As a result, the item "whether was easy to understand lesson" was most associated with the comprehensive evaluation of the lesson. On the other hand, the item "whether enthusiasm of teachers has been transmitted" was not the most associated with the comprehensive evaluation of the lesson. In the future, it appears that further insights can be obtained by increasing the field at the overall evaluation of the teaching. In this study, I have found that the practice of "easy-to-understand lesson" is very important in the overall evaluation of the lesson.

**P1333****A Trial Method of Understanding the Past Disaster: A Case Study Using Fixed-Point Photographs at Kobe Port island**

*Junko Takamori, Tomohide Atsumi* Osaka University, Japan

This study introduces a trial method of learning about the experiences of disaster, which makes unique use of Fixed point photographs taken by disaster survivors. In 2015, we formed a workshop with Kobe-gakuin university students who studied disaster prevention and who were without direct experience of Kobe earthquake. In this workshop, we asked them to take pictures at past photographer's fixed points. We observed that, throughout the workshop, the participants were naturally imaging about past disaster and flow of time from the disaster. This is because that participants sensed past disaster survivor's viewpoints physically. We think that this could be a useful introduction to study disaster prevention.

**P1334****Analysis of Personal Construct about an image of group learning in class**

*Toshimitsu Takeuchi (1), Kondo Kazuya (2)* 1. *Kawaijuku, Japan*; 2. *Graduate School of Psychology, Fukushima College, Japan*

The aim of this study is to examine the perception of a Japanese cram school teacher about group learning in class. Personal Attitude Construct (PAC) analysis (Naito, 1993) was used to analyze the perception. The subject was a Japanese teacher teaching English at cram school for university entrance examinations with a teaching experience of 20 years. The procedure was as follows: 1) presented the stimulus sentence asking how the subject sees group learning in class, 2) required to order the cards of association according to importance, 3) instructed to estimate the distance of similarity intuitively, comparing all pairs of cards, 4) Cluster analysis by Ward was administered, 5) asked to describe the image about each cluster. The results revealed that the subject sees group learning in class -- 1) cost and time consuming, 2) dependent on students' condition in class, and can 3) reduce the disadvantages of lecture-style class to some degree.

**P1335****The attitudes of parents of nursery school children towards making the transition to a primary school next spring**

*Keiko Takiguchi* Kanazawa University, Japan

Moving from nursery to primary school is an important matters for both children and parents. The present study examines the attitudes of parents of nursery school children entering a primary school next spring. The parents from 2 nursery school completed questionnaires in March 2014. 45 percent of parents

said they had an anxiety about the transition to a primary school, 41 percent of parents didn't have an anxiety about that, and 14 percent of parents said they don't know about that. Parents had higher anxiety about "relationships among children in a primary school" (M = 2.4; 1-4 point scale) and "study" (M = 2.3) than "meals" (M = 1.8) and "group action" (M = 1.8). This research is an important step towards developing plans providing adequate information and support for parents of preschoolers.

**P1336****The effects of aggression on mental health in female undergraduate students**

*Takehiro Tamaki* Mukogawa Women's University, Japan

The objective of this study was to investigate the effects of aggression on mental health in female undergraduate students. This study was conducted using 290 female students in their freshman to senior year. Final analysis was conducted based on questionnaires from 243 subjects after eliminating questionnaires with incomplete answers. In order to examine the effects of aggression degree on mental health, subjects were classified into the high group, who had aggression scores equal to or more than the average, and the low group, who had aggression scores less than the average. In order to examine the difference in mental health between high and low groups within the same aggression category, analysis of variance was conducted. As a result, there was a significant group effect both in expressive aggression and inexpressive aggression. This study showed that there was a clear difference in effects on mental health between high and low groups.

**P1337****Development and evaluation of a digital device that responds to the learner's gaze.**

*Yoshiyuki Tamamiya* Dokkyo university, Japan

Looking up a word in a dictionary is known to cause psychological stress for some learners. To resolve this problem, we developed a computer-assisted learning system that responds to the learner's gaze. In this system, an eye tracker constantly monitors learners' eye movements while they read a text on a computer. The system automatically displays the meaning of a word on which a learner fixates. The system was tested in an experiment wherein university students were asked to summarize English text with the system and evaluate the system via a questionnaire. The results showed that participants preferred the system to a traditional paper dictionary.

P1338

### Structure and comparison of Australian and Japanese junior high school students' interest in science

**Etsuko Tanaka (1), Emmanuel Manalo (2), Rachel Dryer (3)** 1. Nagoya university, Japan; 2. Kyoto University, Japan; 3. Charles Sturt University, Australia

Students' interest in science has previously been shown to be comprised of six factors based on experience, amazement, accomplishment, knowledge acquisition, thought deepening, and daily life relationship (Tanaka, 2015). The purpose of the present study was to examine whether the science interest of Australian junior high school students has the same structure, and to compare the levels of interest in Japan and Australia. Five-hundred-and-eighty-six Australian students and 757 Japanese students (grades 8 to 9) were asked to answer the questionnaire about their science interests. Confirmatory factor analysis using covariance structure analysis showed that the science interest of Australian and Japanese junior high school students has the same six-factor structure (CFI=.91; RMSEA=.05), and there were no significant differences in the subscales correlations. A two-dimensional analysis of variance (country×kind of interest) also revealed that, except for accomplishment-based interest, the Australian students possessed higher levels of interest in science.

P1339

### The effect of serial order on crowd-sourced creative ideation

**Yuko Tanaka (1), Yasuaki Sakamoto (2)** 1. National Institute of Technology, Japan; 2. Stevens Institute of Technology, United States of America

Recent advanced technology enables us to collect wisdom from crowds for solving various problems. However, collecting a large number of ideas does not always result in useful wisdom. One major impediment is that, without proper management of crowds, low quality ideas tend to dominate crowdsourced ideation. Thus, it will be fruitful to design a creative ideation environment based on empirical studies. Many previous crowdsourcing studies by assigning each crowd a nominal task imply that it overloads a crowd to generate several ideas. On the other hand, recent studies on creative ideation have shown the serial order effect, which means that later ideas tend to become more creative. Here, we report our study examining whether the creativity of later ideas decreases or not.

P1340

### A study of initial adjustment of undergraduates

**Saea Tohira (1), Mayuko Matsumoto (2), Takeyuki Oba (3,4), Natsuki Saito (3), Yuko Sugiura (5), Kazumi Kohmura (1)**

1. Aichi Institute of Technology, J; 2. Kobe Shinwa Woman's University, a; 3. Nagoya University, p; 4. JSPS, a; 5. Aichi Shukutoku University, n

Drop-out rates are high at the moment. The major reason for leaving university is "personal," including interpersonal, academic, and economic issues. Most of these are issues we can help with. To explore the effective way to support, we tried to find effective factors of school adjustment at initial stage. We focused on the relationships between the subjective adjustment feeling and the satisfaction in the relationship with friend(s) and teacher(s), and the engagement in academic and non-academic work. The data were obtained at three points in the first semester; in April, May, and July. As results, the satisfaction in the relationship with friend(s) was highly positively correlated and weighted to the subjective adjustment feeling at any time. On the other hand, the relationships between the subjective adjustment feeling and other factors differed depending on the sampling point. These results might help us find out the real needs of undergraduates.

P1341

### Investigation on the model associated with students' observational learning in everyday life.

**Naomi Tomioka (1), Naohiro Minagawa (2)** 1. Hyogo University of Teacher Education, Japan; 2. Naruto University of Education, Japan

Social Cognitive Theory (SCT; Bandura, 1986) suggests that we should learn many things through the reciprocal interactions between personal, behavioral and environmental factors. One prediction shows that one is motivated by observing successful others who are similar to oneself. The present study proves the prediction by dealing with the day-to-day university students' environment. 288 participants were asked to observe people around them and submit weekly reports for three weeks. The results derived from KJ method showed that students observed three categories of behaviors (29 types) at two categories of places (7 places). Those behaviors are categorized by the feeling how the observers felt. Students' observation of behaviors brought them positive feeling and motivation to imitate the others who are similar to oneself at a particularly place that students belongs to such as university classroom. The results confirm that students are inclined to observe and imitate a similar person.

P1342

### Views of Female Freshmen Majoring in Childcare about Piano Lessons: Comparing April with July

**Naoko Tomiyama** Tokyo Seitoku University, Japan

The purpose of this study is to investigate factors which concern continuation of a motivation to piano practice from views of female freshmen majoring in child care study. Because, they must have piano techniques to acquire the license for the childcare. As a result, it was revealed the relationship of keeping the motivation to piano practice with improvement of piano technique during first 4 months. It was also revealed the influence of an arrival target of learning, such as "for future opportunity". Then, the key for a motivation to piano practice will be acquirement the successful experience from piano lessons and the cognition of actual technique ability.

P1343

### An Educational psychology study on the occupational readiness and learning motivation of Chinese and Japanese college students

**Enka Tomono** Kyushu Women's University, Japan

With the decline of the birth rate creating an increase in college entrances, a problem has arisen concerning youth's initial adaptability to society due to the gap between college life and life after joining the work force. Therefore, there is an increased necessity for improving the quality of career assistance for college students. In this study, we focused on juniors and seniors. Using questionnaires, we asked them about their motives for studying, and their readiness for joining the workforce. Based on the acquired data, we performed statistical analysis in the hopes that this study could be used as an educational resource for social adaptability after college. With the recent increase in expectation for the role of women in Japan, and the increased role of women in Chinese society, we have focused on female Japanese and Chinese college students for their similarities and differences.

P1344

### Relationships between motivational regulation strategies and learning engagement of children in home study

**Takatoyo Umemoto (1), Kenshiro Tanaka (2)** 1. Kyoto University of Foreign Studies, Japan; 2. Nagoya University, Japan

The purpose of this study was to examine the relationships between motivational regulation strategies and learning engagement of children

in home study. In study 1, self-report questionnaire with open-ended questions was administered to 187 elementary school students in the 4th through 6th grades. The findings were used to develop a scale of motivational regulation strategies in home study. In study 2, self-report questionnaire was administered to 190 elementary school students in the 4th through 6th grades. Factor analysis revealed a five-factor structure of motivational regulation strategies in home study. Multiple regression analysis revealed the use of value and efficacy enhancement strategies positively predicted behavioral and emotional engagement. In contrast, the use of mood-changing strategies negatively predicted behavioral and emotional engagement. In light of the present findings, the effects of motivational regulation strategies on learning behavior of children in home study are discussed.

#### P1345

##### **Why do under-achievers in small schools in rural areas have had the feeling of joy in learning from 3rd grade onwards, compared to big schools in urban areas?**

**Maori Urakawa (1), Rio Yoshitake (2)**  
1. Nagasaki Junshin Catholic University, Japan; 2. Keio University, Japan

Since positive psychology has emerged, the importance of having joy while learning is realized again in school, motivating children to study. We investigated the factors related with joy in learning. The subjects were 439 elementary school students from 2nd to 6th grade. Results are as follows: In 2nd grade there was no difference in the feelings of joy between high-achievers and low-achievers in academic score regardless of school size. However, in big schools, low scorers from 3rd grade onwards felt less joy than high scorers (3rd :  $F=5.17, p<.05$ , 4th:  $F=16.08, p<.01$ , 5th:  $F=4.29, p<.05$ , 6th :  $F=6.87, p<.05$ ). On the other hand, in the small schools, both high and low scorers enjoyed learning from 3rd grade onwards. We did content analysis on their stories of joy to clear why low scorers also had fun in learning in small schools. We discussed useful teaching strategies using mental rewards and learning through experience.

#### P1346

##### **The Relationship between Self-Regulation and Self-Esteem in the Middle Childhood**

**Yuka Urata (1), Yuka Yoshihashi (2), Sayaka Takura (3), Masako Nagata (4)**  
1. Nagoya University, Japan; 2. Gifu Shotoku Gakuen University, Japan; 3. Nihon Fukushi University (~31 Mar. 2015), Japan; 4. Nagoya University Psychological Support & Research Center for Human Development, Japan

This study examined the relationship between self-regulation and self-esteem of elementary school children in their middle childhood. Self-regulation was defined to be consisted of 2 dimensions which are self-assertion and self-control, by Kashiwaga (1988). Especially, according to Harada, Yoshizawa, & Yoshida (2008), this study focused on Social Self-regulation, the ability to inhibit or assert oneself, depending on various needs in the social settings. The participants were 985 of 3rd to 6th graders in elementary schools in Japan. The results showed the score of self-assertion, self-control and self-esteem were significantly correlated with each other. Children were divided into 4 groups ("self-assertion, self-control"= "High, High", "High, Low", "Low, High", "Low, Low") with mean of 2 scale scores. The results of ANOVA revealed the main effects of self-assertion and self-control were significant. This study suggested children who can assert and control themselves have a high self-esteem in comparison to children with imbalanced self-regulation.

This study investigated moderator effects of integrating conflict resolution skills in relation to fear of negative evaluation by others and adjustment among early adolescence. Pupils ( $N=530$ ) in fifth through ninth grades in school participated in this study. Hierarchical multiple regression analysis indicated that if children scoring high on fear of negative evaluation by friends used integrating conflict resolution skills, social avoidance and distress were decreased. On the other hand, if children had integrating conflict resolution skills, children scoring high on fear of negative evaluation by parents had higher tendency to be absent from school than children scoring low on fear of negative evaluation by parents.

#### P1347

##### **Integrating conflict resolution skills moderates fear of negative evaluation by others and adjustment among early adolescence**

**Hitomi Usukura, Yoshikazu Hamaguchi**  
University of Tsukuba, Japan

This study investigated moderator effects of integrating conflict resolution skills in relation to fear of negative evaluation by others and adjustment among early adolescence. Pupils ( $N=530$ ) in fifth through ninth grades in school participated in this study. Hierarchical multiple regression analysis indicated that if children scoring high on fear of negative evaluation by friends used integrating conflict resolution skills, social avoidance and distress were decreased. On the other hand, if children had integrating conflict resolution skills, children scoring high on fear of negative evaluation by parents had higher tendency to be absent from school than children scoring low on fear of negative evaluation by parents.

#### P1348

##### **Changing teacher student beliefs about teaching and learning in transition from student beginner to student graduate: a longitudinal perspective**

**Vlasta Vizek Vidovic (1), Vlasta Vizek Vidovic (1), Vlatka Domovic (2)**  
1. Institute for social research in Zagreb, Croatia; 2. Faculty of teacher education, University of Zagreb, Croatia

The aim of the study was to examine whether the key beliefs that teacher students have about teaching and learning transform during their initial professional education. The assumption was that due to the educational experience in five year study programme the teacher students' intuitive beliefs about teaching and learning at the beginning would be gradually transformed into more professional understanding of teacher role by the end of the programme. If the students' beliefs are overlooked by teacher educators during initial education they might continue to influence the shaping of their professional identity and behaviour in the classroom. The longitudinal approach and qualitative methodology were used for examination of student teacher beliefs. The results do not support the expectations that educational experience during the five-year studying have considerable effect upon student teacher beliefs about teaching and learning. The findings are discussed in the light of the curriculum implementation.

#### P1349

##### **Relations among Parental Attachment, Separation-Individuation, Self-Discrepancy and Ego Identity Statuses in University Students**

**Shuqing Wang, Jing Feng**  
School of Education and Psychology, University of Jinan, China

In the mechanism of ego identity formation, the researcher focuses on how the combined impacts of family environmental factors and personal factors affect identity formation. This study investigated the mediating effects of self-discrepancy among parental attachment, separation-individuation and ego identity statuses by the Structural Equation Modeling. 576 university students from freshman to senior participated in the questionnaire investigation. The results indicated that: (1) besides the directly positive effect on identity achievement status, parental attachment positively influenced identity achievement and foreclosure status, while had negative effect on identity diffusion status by the mediating role of self-discrepancy. (2) self-discrepancy played a mediating role in the relationship between separation-individuation and ego identity status. Positive separation-individuation negatively predicted the self-discrepancy, while negative separation-individuation

positively predicted the self-discrepancy, which mediated the association between separation-individuation and ego identity statuses. (3) parental attachment's effects on ego identity statuses were strongly mediated by separation-individuation and self-discrepancy in turn.

### P1350

#### Give me proper cues: Reasonable attention-guiding means better text-diagram integration

**Fuxing Wang, Heping Xie** *Central China Normal University, China*

To achieve optimization of text-diagram integration in multimedia learning, presentation of visual cues among the diagram and auditory cues plays an important role in spoken text. Two experiments were conducted to examine what extent of presentation of visual and auditory cues in spatial (experiment 1) and temporal (experiment 2) ways in multimedia learning. The present study manipulated matched or mismatched cues (experiment 1) and synchronized or non-synchronized cues (experiment 2), both of which had a control group with no cues. Results showed that both spatial-matched and temporal-synchronized cues improved learning outcomes, which were positively predicted by participants' fixation duration or fixation count on corresponding text elements. Meta-analysis of experiment 1 and 2 revealed strong pooled effect sizes of such reasonable spatial and temporal cues on attention shifting and learning performance, rather than unreasonable cues. These findings suggest that only reasonable attention-guiding means better text-diagram integration.

### P1351

#### The Relationship between Study Procrastination and Time-management Disposition of Chinese Senior High school Students

**Han Xiaohong, Liu Yu, Pan Yun** *Guizhou Normal University, China*

Adopting the study procrastination of high school students' questionnaire and time-management disposition of teenage questionnaires, choosing 256 senior high school students as participant, the research investigated the relationships between study procrastination and time-management disposition. The results indicated that: (1) the score of two dimensions of study procrastination, locking schedule and insufficient operation, were the highest on senior one students. (2) the two dimensions of study procrastination including locking schedule and insufficient operation were negatively related with the culture degree of parent. (3) one of the time-management disposition dimension named time control had the highest explained variance to study procrastination.

### P1352

#### Effects of attachment styles on loneliness and coping behaviors toward loneliness among Japanese university students

**Ying Xie (1), Yujiro Kawata (1,2), Akari Kamimura (1), Masataka Hirose (1,2)**

1. *Graduate School of Health and Sports Science, Juntendo University, Japan*; 2. *School of Health and Sports Science, Juntendo University, Japan*

This study examined the effects of attachment styles on loneliness and coping behaviors toward loneliness among Japanese university students. In total, 499 Japanese students responded to the following questionnaires: the UCLA Loneliness Scale, the Coping Behaviors toward Loneliness (CBL), and Experiences in Close Relationships Inventory-The-Generalized-Other-Version (ECR-GO). Participants were divided into 4 groups based on the ECR-GO (Secure: N=59, Dismissing: N=17, Preoccupied: N=29, Fearful: N=22). Results showed that there was significant difference in Loneliness between the four groups. The Preoccupied Group showed the highest loneliness, while the Secure Group showed the lowest loneliness. There were also significant differences in the CBL. The Secure and Dismissing groups showed lower "patience and endurance" than the other groups. The Dismissing and Preoccupied groups showed lower "personal contact" than the other groups. We concluded that attachment styles affect loneliness and coping behaviors toward loneliness among Japanese university students.

### P1353

#### The Effects of Field dependence/independence on Hypermedia Learning: A Moderating Effect of Tolerance of Ambiguity

**Lei Xu (1,2), Huashan Liu (1)** 1. *Central China Normal University, China*; 2. *Jiangnan University, China*

This study analyzed the moderating effect of the tolerance of ambiguity in the relationship between learners' field dependence/independence and their hypermedia learning achievement. A total of 285 Chinese college students were asked to measure their tolerance of ambiguity with a Ambiguity Tolerance Scale, cognitive style of field dependence/independence with a Cognitive Style Figure Test. Then they were asked to study through a hypermedia system which we made it ourselves. Then, their hypermedia learning achievement was measured with a knowledge test. The results were as follows: (1) Tolerance of ambiguity significant predicted learners' hypermedia learning achievement while the impacts of cognitive style were controlled ( $\beta=.154, p<.05$ ). (2) Tolerance of ambiguity moderated the relationship between cognitive styles and hypermedia learning achievement ( $\beta=.171, p<.01, \Delta R^2=.30$ ). For

low and medium tolerance of ambiguity learners, cognitive style significant predicted their hypermedia learning achievement. While for high tolerance of ambiguity learners, cognitive style can't predict the achievement.

### P1354

#### Procrastination under examination context and its metacognition

**Haoqin Xu** *East China Normal University, China*

The objective of this research is to explore the procrastination during academic exam review and its metacognition. The research adopted interview survey and there were 3 undergraduates attended the interview who were selected by Procrastination Assessment Scale for Students (PASS). The results suggest that the procrastination in exam review has positive impacts including improving part of metacognitive function, such as self-cognition and self-monitoring. Active procrastination is considered as an ideal procrastination situation that could promote performance and metacognition strategies subjectively. In the meanwhile, peak experience, sense of achievement and others which were appearing on procrastinators will help subjects to get self-confident and moderate feeling of superiority, which will be beneficial to review task. It is significant to consider whether the negative influence is greater than positive impacts in procrastination has significant.

### P1355

#### Exploring the Relationships on the Interpersonal Self-Support, Friendship Quality and Cooperative Skill in College Students

**Qi Yahui, Xu Hui, Yao Jinjuan, Gen Qingling, Sun Xiaopei, Zhang Lixin, Qian Yueyuan, Yu Meifang** *Jiangnan University, China*

The aim is to explore the relationship on the interpersonal self-support, friendship quality and cooperative skill in college students. In order to identify the cooperative ability, the paper supplied the empirical support based on college students' cooperative ability. And a total of 662 college students were assessed. The results were as following, firstly, interpersonal self-support, friendship quality and cooperative skill had significant correlation. Secondly, relational toughness, significantly predicted interpersonal helping ( $\beta=.260, p<0.001$ ) and organizational leadership ( $\beta=.228, p<0.001$ ); interpersonal flexibility had significant prediction to emotional regulation ( $\beta=.184, p<0.001$ ); appreciation and reliance exerted positive prediction to conflict management ( $\beta=.280, p<0.001$ ). Thirdly, friendship quality played a partial mediating role between interpersonal self-support and cooperative skill, its mediating effects of the total effect ratio was 55.8%. Our results contribute to a better



understanding of the interplay between interpersonal self-support, friendship quality and cooperative skill in college students, and support the need for the promotion of cooperation in universities.

### P1356

#### Effects of junior high school students' resilience on their career image

*Tomoyuki Yamada Joetsu University of Education, Japan*

Junior high school students in Japanese experience many stressful conditions. Resilience is considered important for overcoming such stressful conditions. This study investigated correlations between junior high school students' resilience and career image. Students responded to the Resilience Scale and the originally developed Career Image Scale. Career image was assessed using 10 types of pictures. Multiple logistic regression analysis was conducted with resilience as the independent variable and career image as the dependent variable. Results indicated that positive activity, which is a subscale of resilience had positive effects on the Cycle story. Moreover, self-disclosure, which is a subscale of resilience had self-disclosing effects on the Road story, the Choice story, the Accumulation story, and the Climbing story. Results also indicated that optimism, which is a subscale of resilience had an optimistic effect on the Accumulation story. These results suggest that resilience is somewhat related to the career image.

### P1357

#### Psychological statistics education using R

*Tsuyoshi Yamada (1), Jun'ichiro Murai (2), Taketoshi Sugisawa (3), Atsushi Terao (4)* 1. Okayama University, Graduate School of Education, Japan; 2. Bunkyo Gakuin University, Japan; 3. Niigata University, Japan; 4. Aoyama Gakuin University, Japan

To collect a wide variety of cases of psychological statistics education using R, we carried out semi-structured interviews with several university teachers who teach psychological statistics using R. In the interview, we asked several questions about how to use R in their classes, as well as the ones about teachers' background and general topics related to the psychological statistics education. Qualitative data analysis of interview data revealed that (a) there were a variety of teaching forms and curriculum, (b) statistical literacy of students were also diverse, and (c) teachers tried to consider teaching method according to best suitable for the statistical literacy of their students. Commonly-observed and rare but suggestive troubles in teaching were extracted. Based on these results, we could summarize teaching methods for developing teaching materials.

### P1358

#### Effects of retrieval practice for learning of foreign language vocabulary in Japanese university student

*Yohei Yamada Nara University of Education, Japan*

In memorization of words, retrieval practice of previously studied items can produce better long-term retention than restudying the same items (retrieval-induced facilitation). However, retrieving a subset of learned items also impairs recall of related items from the study phase (retrieval-induced forgetting). Thus, efficient condition of memorization by retrieval practice was not clear. The current study examined a boundary condition that people efficiently develop their vocabulary in a foreign language. Specially, I focused a semantic similarity between retrieved words and non-retrieved words. Participants studied Japanese-English word pairs and then retrieved some of the studied pairs. Finally, a cued-recall test of all the studied pairs was conducted. For high similarity condition, retrieval-induced facilitation was observed. On the other hands, retrieval-induced forgetting was observed for middle similarity condition. This finding suggests a boundary condition that people develop richer foreign language vocabularies.

### P1359

#### Effects of somatic psychoeducation for Japanese college students.

*Hiroki Yamaji Nagasaki University, Japan*

The development of generic skills including social and emotional competence has become an important objective in today's higher education. Somatic psychoeducation may contribute to this new endeavor by fostering somatic awareness and trust in the organism to promote holistic development of the student. This research, therefore, examined the effects of a somatic psychoeducation course offered at a Japanese university. In a two-wave 8-week RCT, several variables were measured, including somatic awareness, trust in the organism, mindfulness, stress resilience, interpersonal empathy, responsibility for self-care, and generic skills for learning and relating. Results showed the positive change in somatic awareness and mindfulness, but not in other measures. Their correlations suggested that the heightened somatic awareness and mindfulness could positively affect stress resilience, which in turn could help improve generic skills. Future directions are discussed, including the optimal length and the learning content of somatic psychoeducation for college students.

### P1360

#### Possible support for first year high school students to use structure strategy while comprehending expository text: Processes of the

#### signaling effect depending on their strategy use.

*Hiroki Yamamoto Ritsumeikan University, Japan*

This study examined signaling effect on first year high school students' use of structure strategy while comprehending expository text. Materials are texts describing a thought formation process of a philosopher from a "ethic" textbook. The participants were first year high school students. They were assigned into the signaling group or the no-signaling group. Each group was divided into high use group or low use group of the structure strategy. Results showed as follows. 1) Signaling has the effect to structure identification in the high use group through comprehending. 2) Signaling has an effect to use of the structure strategy in the high use group through comprehending. 3) Processes of the signaling effect are different between the high and the low use group. The processes of the different signaling effect were shown depending on their use of the structure strategy while comprehending, and possible supports were discussed from these results.

### P1361

#### The Effect of Developmental Support in Preschool, Demonstrated by Changes in the Draw-A-Man Test of Mental Age

*Yukie Yamashita (1), Hideko Oyama (2)* 1. The University of Shimane Junior College, Japan; 2. Elementary School of Kawamoto Town in Shimane Prefecture, Japan

In the DAM-IQ (Goodenough test) study, 6-year-old children were compared two times to ascertain the effect of developmental support in preschool classes. Twenty-one mainstream class preschool pupils took a Draw-A-Man test and a Social Maturity test in Japan. In the test, six pupils' DAM-IQs were below 85, and two pupils' SQs (social maturity quotient) were below 85. These eight pupils were grouped as "border special needs." The nursery educators did not see the results, but could consult about daily developmental support with an elementary school special needs educator. Six months later, the pupils took a DAM intelligence test again. A paired t-test showed a significant increase ( $p < 0.0001$ ) in cognitive ability in the "border special needs" group. There was no group difference in the second DAM-IQ test. This result showed the effect of developmental support mediated by nursery educators in inclusive mainstream preschool classes.

### P1362

#### Effects of perceived teacher's motivation on expectancy formation: social contagion of motivation model

*Kanako Yanagisawa, Motoyuki Nakaya Nagoya University, Japan*

The purpose of the present study was to examine whether learners' expectancy of activity is affected by the perception of the teacher's intrinsic motivation. We hypothesized that learners perceiving "teacher did this activity because it was enjoyable" had more expectancy of task involvement and interpersonal relations (i.e., interest and autonomy support). Fifty-three undergraduate students were randomly assigned to two conditions (being taught in an intrinsic condition or in a controlled condition). Then, they received instructions about teachers' motivation (differed from condition to condition) and studied with the teacher for about 20 minutes. The results showed that the participants who were taught by an intrinsically motivated teacher reported higher expectancy than participants who were taught by a controlled condition teacher ( $t(51)=5.09$ ,  $p<.001$ ). Thus, our hypothesis was supported by our findings. Future research should examine whether such expectancies affect learners' perceptions after study sessions, their learning behaviors, and their performances.

#### P1363

##### **The Structural Relationship among School Basic Psychological Needs, Self-Directed Learning, and Classroom Engagement**

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Based on self-directed learning theory researches that students are more likely to engage in classroom activities when they have initiative responsibility for learning, this study examined the structural relationship among school basic psychological needs (competency, relations, and autonomy), self-directed learning, and classroom engagement of students, and analyzed the mediating effects of self-directed learning between students' school basic psychological needs and classroom engagement. For this study, 301 4th, 5th, and 6th grade students from elementary school were participated. The overall results show that students' school basic psychological needs were positively influenced on students' classroom engagement and mediating effects of self-directed learning were found between these relationships. According to the results, it is proved that students' school psychosocial basic needs are important for classroom engagement and it may vary depends on one's self-directed learning ability. These findings suggest that it is necessary to educating students to practice self-directed learning.

#### P1364

##### **A Study on Implicit Knowledge of Experts Creativity: Development of Creativity Education Program for Gifted Students in Arts**

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The purpose of this study was to examine the unique characteristics of creativity in different domains of arts to develop a specialized program for creativity of gifted students. Based on the implicit theory of creativity researches that people are more likely to interpret the nature of creativity over what they explicitly recognized, we assumed that what experts perceive and how they encourage creativity would help to investigate the authentic notion of creativity to develop the specialized programs for their creativity. Twenty five experts who major in music, visual art, and dance were participated by answering structured questionnaires. The overall results showed domain differences: experts in music and dance showed a significant importance on practice time while experts in visual arts showed more importance on imaginations for empowering creativity. These findings suggest that educators need to consider different instructions to encourage creativity of gifted students in arts depends on their domains.

#### P1365

##### **The Influence of Stress-Coping Strategies on Career Adaptability** *Kieun Yoo, Jiyeon Kim Yonsei University, Seoul, Republic of Korea*

The purpose of this study was to examine the relation between stress-coping strategies and career adaptability and how the three sub-factors (seeking for social support, problem solving, and avoidance) of the stress-coping strategies specifically affect career adaptability. A total of 334 undergraduates were asked to complete the questionnaires. Major findings of this study were as follows. First, correlation analysis indicated that social support, problem solving stress-coping strategies and career adaptability have positive relationship. However avoidance stress-coping strategy was negatively correlated with career adaptability. Second, further multiple regression analysis revealed that career adaptability was positively associated with problem solving stress-coping strategy and negatively associated with avoidance stress-coping strategy. However, there was no significant association between social support stress-coping strategy and career adaptability. The results of this study were different from past studies in that were revealed the association between avoidance, social support and problem solving stress-coping strategies and school adaptability.

#### P1366

**Changes in Self-Awareness Among University Freshman.**  
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In this study, we investigate two-self-awareness concepts as indicator related to school adaptation in university: one is assumed-competence and the other is self-affirmation. From a longitudinal point of view, we also consider how these two concepts are affected by initial enrollment intention in April, participation in extracurricular activities, and communication frequency with other people. The results imply that assumed-competence could be directly affected by initial enrollment intention in April, and that self-affirmation could be directly affected by communication frequency with other people. These relationships change over time. Moreover, we concluded that the relationship between the two self-awareness concepts and communication frequency is indirectly influenced by participation in extracurricular activities.

#### P1367

##### **What factors influence Joy in learning in elementary students? -In the view point of grades, approval from teachers and classes, subjective and objective school achievements and other variables-**

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Joy in learning is essential for children to study. As a child-centered approach, we asked students from six countries to write their enjoyable moment in learning. The subjects in Japan were 681 elementary students from 2nd to 6th grade. We examined the relationship between joy and variables (sex, grades, social skills, class atmosphere, approval from teachers and class, motivation, students' own subjective perceptions of school achievement, academic scores evaluated by teachers, school size, and economic backgrounds). We did both qualitative and quantitative analyses. Results were as follows: Students with better class-atmosphere and approval from teachers and class have higher joy in learning. Next, students with higher subjective perception of school achievement have higher joy. Subjective perception was more important than objective school achievement evaluated by teachers. Moreover, students in 5th and 6th grades are more likely to have less joy in learning. We discussed useful teaching strategies in joyful learning.

#### P1368

##### **The effects of power and grit on satisfaction and apathy in academic settings**

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Power is often defined the ability to control resources, own and others, without social interference (e.g., Galinsky, Gruenfeld, & Magee, 2003). In spite of an impressive array of research on the psychological consequences of power, little has known the effects of power on the academic settings. In this study, the effects of power and grit on satisfaction and apathy were examined in academic settings. 71 undergraduates were participated in this study. They were divided into two groups whether they had goals in future life. The analyses were conducted by group. Multiple regression analyses explored that there were differences in influences of power and grit on satisfaction and apathy between groups. The courses and meaning of these differences were discussed.

#### P1369

### A Ground Theory of Factors Influencing Adolescent's High-risk Drowning Behavior

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High-risk drowning behavior is a global public health issue, which can increase the risk of drowning or death. The aim of this study is to investigate the factors influencing adolescent's high-risk drowning behavior. The study used grounded theory method. The sample included 21 adolescents and 3 swimming teachers in China. This research discovered that the influencing factors of adolescent's high-risk drowning behavior include personal factors (swimming ability, safety knowledge, risk perception, perception pursuit, gender, self

efficacy and self resistance) and environmental factors (family, peer, school, natural settings). The factors can be categorized into two main dominants and 11 sub-dominants, forming into a complete model of factors influencing adolescent's high-risk behavior. Further research to explore the interaction of the two main dominants, develop intervention tool of Safety Training Standards Concerning Drowning and increase environmental education mode is warranted.

#### P1370

### What Stops You from Being Happy?----Chinese Graduate Students' Psychological Safety Influence Factors

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Psychological safety is important to Chinese graduate students. Without psychological safety, the graduate students' sense of well-being might decrease, and it would cause the psychological problems. This study focused on Chinese graduate students' psychological safety and its influence factors. Based on Chinese graduate students' daily life and situation, the authors explored the influencing factors of graduate students' psychological safety. As the conclusion from the data analysis, this research showed that there are eight factors affection Chinese graduate students' psychological safety. The eight factors are unexpected life events, confusion in self-development, the pressure of thesis, individualization dissatisfaction, environment, school exams, realistic goals confusions and person economic pressure. These eight factors

are the main reasons making Chinese graduate students feel unsafe or unhappy, which cause negative influence on their psychological well-beings.

#### P1371

### The Effects of Teacher Leadership Style on Students' Creative Problem Solving: Mediation of Approach Motivation and Academic Emotions

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This work explored the effects of teacher leadership style on students' creative problem solving. In study 1, 102 middle school students in classrooms of different headteacher leadership styles, democratic or authoritative which was assessed by the method of expert evaluation, finished two creative problem solving tasks, brain-teasers puzzles and Remote Association Tests (RATs). In study 2, 230 middle school students that were primed using contextual stories about democratic or authoritative teachers, finished the surveys of approach motivation and academic emotions and the same two creative problem solving tasks. Study 1 found that the accuracy of brain-teasers puzzles in democratic style was higher than that of authoritative, but there was no significant difference in RATs. Study 2 showed that both approach motivation and academic emotions had the partial mediation on the relationship between leadership styles and brain-teasers puzzles but no mediation effect between leadership styles and RATs.