



## **Inaugural Meeting of the Society for the Study of Motivation (SSM)**

The Inaugural Meeting of the Society for the Study of Motivation was held in affiliation with the 20<sup>th</sup> Annual Convention of the Association for Psychological Science (APS) on the 22<sup>nd</sup> of May 2008 in the Sheraton Chicago Hotel & Towers, Chicago, Illinois. The program included two invited presentations by Arie Kruglanski and Judith Harackiewicz, five symposia, a round-table discussion, and a poster session.

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Larry C. Bernard (Loyola Marymount University, USA)  
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Jack van Honk (Utrecht University, The Netherlands)  
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Martin Krippel (Georg-August-University Göttingen, Germany)  
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Jana Nikitin (University of Zürich, Switzerland)  
Eva Pomerantz (University of Illinois, USA)  
Maika Rawolle (Technical University of Munich, Germany)  
William Revelle (Northwestern University, USA)  
Karin Roelofs (Leiden University, The Netherlands)  
Arne Roets (Ghent University, Belgium)  
Richard M. Ryan (University of Rochester, USA)  
Kaspar Schattke (Technical University of Munich, Germany)  
Todd Thrash (College of William & Mary, USA)

## Invited Presentations

*Arie W. Kruglanski (University of Maryland, USA)*

**Multifinality without awareness: How implicit goal activation affects preference and choice.**

*Judith Harackiewicz (University of Wisconsin, USA)*

**Optimal motivation in education: The interface of achievement goal, interest, and expectancy-value theories.**

# **Symposium I - Neuroscience Perspectives on Motivation**

*Chair: Eddie Harmon-Jones (Texas A & M University, USA)*

***Turhan Canli (Stony Brook University)***

## **Brain Imaging of Gene x Environment Interactions.**

Personality traits have a high degree of heritability, but are also influenced to a large extent by the non-shared environment. Thus, both unique life experiences and environmental exposure, alongside genetic factors, shape human personality. In this presentation, I will focus on the personality trait of neuroticism to summarize our current thinking on the role of genes and environment in personality research. Neuroticism, a risk factor for depression, is associated with a repeat length variation in the transcriptional control region of the serotonin transporter gene, which renders carriers of the short variant vulnerable for depression when exposed to life stress. The neural basis of this association is now being unraveled by a number of labs. We investigated the underlying neural mechanisms of these epigenetic processes in individuals with no history of psychopathology, using magnetic resonance-based imaging, genotyping, and self-reported life stress and rumination. Based on fMRI and perfusion data, we found support for a model by which life stress interacts with the effect of serotonin transporter genotype on amygdala and hippocampal resting activation, two regions involved in depression and stress. Life stress also differentially affected, as a function of serotonin transporter genotype, individuals' level of rumination. We conclude that individual differences in vulnerability towards, or resilience against, mood disorders may be mediated by a gene x environment interaction. Neural correlates of these interactions are seen in brain regions previously associated with affective processing and brain response to stress, and may serve as biological vulnerability/resilience markers in future longitudinal studies.

***Karin Roelofs (Leiden University, Netherlands)***

## **Neuro-endocrine control mechanisms in social approach-avoidance behavior.**

Human social skills require the ability to adapt and regulate instinctive reactions to emotional signals, in particular the communicative signals of threat or appeasement conveyed by emotional facial expressions. This ability is not trivial, as shown by the inability of non-human primates to control their approach and avoidance tendencies when engaged in collaborative activities, and it can be dramatically relevant, as shown by psychiatric conditions like social phobia and antisocial behaviors. To study the cerebral and neuro-endocrine control of social approach-avoidance behavior, we applied a computerized approach-avoidance (AA) task, in which participants either approached or avoided visually presented emotional faces by pulling or pushing a joystick, respectively. Findings from an fMRI-study using this task imply that the left orbitofrontal cortex plays a crucial role in the voluntary control of social behavior. Moreover, stress-induced, as well as orally administered cortisol increased the tendency to avoid social threat stimuli (angry faces) on the AA-task, in high socially anxious individuals. Together, these results fit with findings from extensive animal research, indicating that high basal and reactive cortisol levels are associated with increased social submissiveness and avoidance.

***Jack van Honk (Utrecht University, The Netherlands), Erno J. Hermans (Utrecht University, The Netherlands), Peter Putman (Utrecht University, The Netherlands), & Dennis J.L.G. Schutter (Utrecht University, The Netherlands)***

## **Top-Down and Bottom-Up in Motivated Attention to Facial Threat: Insights from Hormone Manipulation and Brain Stimulation.**

Fifteen-hundred years ago, Augustine of Hippo already predicted that emotionally charged stimuli would involuntarily attract attention, especially during emotional states and disturbances. Our attentional systems are however specifically-tuned to perceptual cues associated with threat. Depending on the individual's motivational stance, attention is initially rapidly pre-consciously directed towards - or away from - an emotionally threatening stimulus. However, when consciously processed on higher level cortical levels, the attentional response may undergo cognitive control, in terms of modulation or response inhibition. We have in recent years been addressing the psychobiology underlying motivated attention to angry and fearful facial expressions. This was

done under consciously recognizable and unrecognizable conditions by using supraliminal and subliminal adaptations of cognitive-emotional tasks. We researched the effects of the steroid hormones cortisol and testosterone and of the prefrontal cortex by applying controlled hormone administrations and repetitive transcranial magnetic stimulation (rTMS) in designs that later applied measures of brain activation. Findings supported notions of subcortico-cortical psychobiological interaction models wherein the predominantly subcortical neuroendocrine-mediated emotive-attentive response to facial threat was controlled by cortical higher-order motivational processes. Restrictions for such modulation were that stimuli required conscious recognition while proper subcortico-cortical communication seemed necessary to enable cortical structures to truly get hold on the subcortically-generated emotive-attentive response. Deficits in subcortico-cortical communication may lead to aggression, anxiety and stress-related psychopathologies by bottom-up breaking top-down higher-order cognitive control. A selection of recent data from this line of research will be presented at the symposium.

***Eddie Harmon-Jones (Texas A & M University)***

**Toward an understanding of the emotive functions of asymmetrical frontal cortical activity**

Asymmetrical activity over the frontal cortex has been implicated in the experience and expression of emotions and motivations. Explanations of the research have suggested that relatively greater left frontal activity is associated with positive affect and/or approach motivation, and that relatively greater right frontal activity is associated with negative affect and/or withdrawal motivation. In past research, affective valence and motivational direction were confounded, as only positive (negative) affects that were associated with approach (withdrawal) motivation were examined. Consequently, this research is unable to address whether asymmetrical frontal activity is associated with affective valence, motivational direction, or some combination of valence and motivation. In this talk, I will review research on the emotion of anger, a negative emotion often associated with approach motivation, that suggests that asymmetrical frontal cortical activity is due to motivational direction and not affective valence. Methodological and theoretical implications for the study of asymmetrical frontal cortical activity, and for emotion and motivation more generally, will be discussed.

## **Symposium II - Personality and Individual Differences**

Co-Chairs: Larry C. Bernard (Loyola Marymount University, USA), William G. Graziano (Purdue University, USA)

**Larry C. Bernard (Loyola Marymount University, USA)**

### **Evolutionary Psychology, Individual Differences, and Motivation: A Reapproachment.**

Until recently, motivation science has not benefitted much from advances in evolutionary psychology and evolutionary psychology has rarely employed an individual differences approach to research. A new evolutionary theory of motivation based on individual differences is introduced that may provide common research ground between evolutionary and motivational psychology. The theory posits that 15 independent motive adaptations - derived from evolutionary psychology - are responsible for most purposeful human behavior. The theory also holds that variations in the strengths of these motives are measurable as individual differences dimensions. A series of studies over several years involving more than 2000 participants are summarized, including the latest data demonstrating the utility of the motives in predicting behaviors of some social and cultural significance.

**Kerstin Brinkmann (University of Geneva, Switzerland)**

### **Depression, Motivational Intensity, and Responsiveness to Reward and Punishment.**

In this talk, I will present recent research on individual differences in dysphoria concerning task engagement and responsiveness to reward and punishment. This research has been instigated by the notion that depression and dysphoria are often associated with motivational deficits and with insensitivity to rewarding consequences. Building on motivational intensity theory (Brehm & Self, 1989), we conducted several experiments assessing dysphoric and nondysphoric participants' engagement in different kinds of cognitive tasks under neutral, reward, and punishment conditions. Task engagement was operationalized as participants' cardiovascular response. First, consistent with research on mood influences on task engagement under neutral conditions, dysphoric participants' cardiovascular response was stronger for tasks with easy performance standards but lower for tasks with difficult performance standards, compared to nondysphoric individuals. This suggests that dysphoria is not necessarily associated with a motivational deficit in terms of effort mobilization. Second, with respect to the notion of insensitivity to rewarding or punishing consequences, results revealed that dysphoric participants did not respond to monetary reward or punishment as indicated by lower cardiovascular reactivity in comparison with nondysphoric individuals. These latter findings thus add to the evidence from behavioral and neurophysiological data showing less responsiveness to reward and less approach motivation in depression.

**Charles S. Carver (University of Miami, USA), Jean-Philippe Laurenceau (University of Delaware)**

### **Relationship-specific Incentive and Threat Sensitivities.**

Important individual differences exist in how sensitive people are to threats and incentives. These individual differences are assessed by self-report measures such as the BIS/BAS scales, and by measures of other concepts that are related to this idea, such as extraversion and neuroticism. These various measures and the ideas behind them are to some extent grounded in neurobiological models of behavior. Some neurobiological theorists believe that there are also somewhat distinct approach and avoidance systems that are more specialized to the rewards and punishments that derive from relationships. There are several ways to approach the examination of individual differences in these motivational tendencies. This presentation will address the development and initial testing of a self-report measure intended to serve that purpose.

***William G. Graziano (Purdue University, USA), Meara M. Habashi (Purdue University)***  
**Personality and the Motivational Basis for Prosocial Behavior.**

Prosocial behavior has an odd Janus-like similarity to aggression. Both have social impact, with communal implications. Both probably served functions in environments of evolutionary adaptation. Both are defined by intent. Traditionally, prosocial behavior is defined as activities intended by the actor to provide benefits to others. Similarly, aggression is defined as activities intended to harm another who is also motivated (to avoid such harm). Intent is rarely stated explicitly, and often requires inferential activity from observers. Numerous refinements differentiate varieties of aggression and prosocial behavior. In the case of prosocial behavior, altruistic behaviors can be differentiated from other prosocial behaviors. Altruistic behavior is defined by the actor's motivation to provide benefit to the other without regard to the self. Unlike aggression, this differentiation is controversial with some questioning even the occurrence of genuinely altruistic behavior. Some of the complexity in prosocial behavior can be explained by individual differences in motives associated with self-regulation. Over evolutionary time, demands of communal living gave advantages to organisms that could control frustration generated by goal blockage from other members of the group. Organisms that could not control frustration would be excluded or deprived of communal resources. At least two separate neurobehavioral processes are required in this approach. One system detects discrepancies between goals and outcomes and generates frustration. It does not, however, generate behavioral responses. A second system steers behavioral reactions in response to goal blockage. The second system is responsive to the probable reactions of other group members to efforts to eliminate frustration. This two-system approach is consistent with recent fMRI research showing different neural systems associated with detection of discrepancies and action in response to detection (Eisenberger, Lieberman & Satpute, 2005). Furthermore, the fMRI data showed links between the two processes and two major dimensions of personality. It is not immediately obvious how this system could apply to prosocial behavior and its motive base. At the dispositional level, prosocial behavior is motivated in part by empathy. According to Davis (1996), empathy is itself a multi-component system, consisting of at least three separate sub processes: Personal Distress (PD), Empathic Concern (EC), and perspective taking (PT). The first two are emotional, whereas the third is preponderantly cognitive. These three components form a positive manifold. An apparent anomaly comes from Batson (1991), who proposed that PD undermines prosocial behavior whereas EC promotes it. How can elements of a positive manifold have opposite effects on prosocial behavior? Rather than treating PD and EC as separate entities, they may be two sequentially related aspects of a single, common self-regulatory system. If PD occurs rapidly to detect discrepancies (e.g., an injured conspecific), then resultant differences in prosocial behavior may be due to the lag interval between the onset of EC following PD. PD and EC could be correlated in a positive manifold, but underlying processes are dynamic. This model also explains why many people report ambivalence about prosocial behavior, why PD undermines helping but EC promotes it, and how lag intervals link to personality (e.g., Agreeableness).

***Eva M. Pomerantz (University of Illinois, USA), Qian Wang (University of Hong Kong)***  
**Changes in Motivation During Early Adolescence in the United States and China: Do They Matter?**

There is much evidence that as American children make their way through adolescence, their motivation in school wanes. Little is known as to whether such a trend is evident in China, where school is a major priority that is often viewed as a moral endeavor. We will present research comparing changes in American and Chinese children's motivation during the early adolescent years. A key goal will be to examine if such changes play a similar role in children's achievement in the United States and China.

## **Symposium III - New Directions in Self-Determination Theory**

*Chair:* Richard M. Ryan (University of Rochester)

***Tim Kasser (Knox College, USA)***

### **A Self-Determination Theory Perspective on Goals and Values: Intrinsic Versus Extrinsic Aspirations.**

Self-determination theory distinguishes two types of goal contents. Intrinsic goals (e.g., self-acceptance, affiliation, community feeling) are aims generally congruent with basic growth and actualization motives, and as such provide relatively high satisfaction of psychological needs. In contrast, extrinsic goals (e.g., financial success, image, status) are typically focused on rewards and others' praise, and usually provide little satisfaction in and of themselves. Substantial cross-cultural research supports the distinction between these two types of goals. What's more, a growing body of empirical studies demonstrates that people exhibit greater psychological health, more pro-social behavior, and more ecologically sustainable behavior when they focus on intrinsic rather than extrinsic goals.

***Holley Hodgins (Skidmore College, USA)***

### **The Relation of Autonomy Motivation to Nondefensiveness and Performance.**

A study experimentally tested the hypotheses that primed autonomy motivation leads to lower defensiveness relative to primed control motivation across verbal, nonverbal, and physiological behavior during a stressful interview. Additionally, autonomy was predicted to enhance performance on a subsequent task, with interview defensiveness mediating the effect of autonomy on performance. Seventy-seven undergraduates primed for autonomy or control motivation were videotaped and physiologically monitored during a structured stressful interview and subsequent speech. Videotapes were coded for numerous defensive behaviors. Relative to control-primed participants, those primed with autonomy showed lower holistic verbal defense during the interview, used fewer linguistic terms related to defense, gave longer responses, had shorter response latencies, showed vocal pitch that is associated with lower defensive, used fewer fake smiles, and showed a physiological pattern associated with challenge rather than threat appraisals. During the subsequent speech, relative to control-primed participants, autonomy-primed continued to show physiological patterns of challenge rather than threat and gave better speeches. Interview defensiveness mediated the effect of prime on speech performance. The results show that autonomous motivation allows individuals to experience events with relatively less defensiveness and avoidance, and that nondefensiveness enhances performance. The results are consistent with a Self-Determination Theory view of the self: Activated control motivation makes egoistic self-aspects salient, whereas activated autonomy motivation makes integrated self-aspects more salient.

***Kirk Warren Brown (Virginia Commonwealth University, USA)***

### **Setting the Internal Motivational Compass: The Mindful Regulation of Behavior.**

The basic human propensity toward self-determination, including autonomously chosen and intrinsically interesting activity, has manifold psychological and performance benefits (e.g., Csikszentmihalyi, 1990; Deci & Ryan, 2002). A large research literature has shown that this motivational propensity can be facilitated or undermined by current social and prior conditioning influences (e.g., Ryan & Deci, 2000). The fact that such contingencies exist raises the question as to whether internal factors can support self-determined motivation, even when social and learning influences do not. This presentation will highlight research demonstrating the role of one such internal factor, namely mindfulness, a 'presence of mind' in which attention is receptively attuned to what is occurring in the present, whether that be internal experiences and promptings or social and other external events (e.g., Brown & Ryan, 2003). After briefly outlining the theoretical basis for the mindful regulation of behavior, experience-sampling studies will be described to show that dispositional mindfulness fosters higher levels of day-to-day behavioral autonomy, even when prior conditioning operating at an implicit level would otherwise undercut that salutary motivational propensity. Also described will be experimental research showing that an induced mindful state

can foster intrinsic motivation and positive emotional and task performance outcomes associated with this catalytic form of motivation. Discussion will propose opportunities for further research addressing the role of mindfulness in fostering optimal motivational states and styles.

***Richard M. Ryan (University of Rochester, USA)***

**From Ego-Depletion to Vitality: A Self-Determination Theory Approach to Energy.**

Vitality, or the energy available to the self, is a salient and functionally significant indicator of health and motivation. Previous models (e.g. Baumeister & Vohs, 2007) have suggested how such energy can be depleted but have focused less on how it can be maintained or enhanced. In this paper, Ryan will describe a model of energy and vitality based on self-determination theory. He will present several studies showing that, whereas the self-controlling regulation of behavior depletes vitality and energy, the autonomous self-regulation of behavior does not. Experimental and field studies will also be reviewed that suggest that vitality and energy can be enhanced by activities that satisfy basic psychological needs for relatedness, competence, and autonomy.

## **Roundtable Discussion**

*Organizers:* Arne Roets (Ghent University, Belgium), Eva Dreikurs Ferguson (Southern Illinois University Edwardsville, USA)

*Moderator and Introduction:* Eva Dreikurs Ferguson (Southern Illinois University Edwardsville, USA)

***William Revelle (Northwestern University, USA)***

### **Personality, Arousal and Performance: The ABCDs of personality from a motivational perspective.**

Personality theory is concerned with understanding individuals and individual differences in terms of the coherent patterning over time and space of Affect, Behavior, Cognition, and Desire (the ABCDs). Prior work on the interactive effects on cognitive performance of personality traits (e.g., impulsivity and extraversion) and situational conditions (e.g., time of day, the consumption of caffeine) may be interpreted in terms of the ABCDs. Motivational effects on cognition and behavior may be seen in this framework in terms of the effects of direction and intensity of affect as well as the steering functions associated with higher level goals and desires.

***Anca M. Miron (University of Wisconsin Oshkosh, USA)***

### **A motivational perspective on mobilization and reduction of emotional intensity.**

Various emotion theorists have proposed that emotions have motivational properties. According to Brehm's (1999) theory of emotional intensity, if emotions operate like motivational states, their intensity should be determined by factors similar to those that affect motivation. In the case of motivation, the greater the obstacle to achieving the target goal, the more effort will be mobilized, up to a point where the goal becomes too difficult or impossible to achieve. In the case of emotion, the greater the obstacle to emotion, the more intense the emotion will be, up to a point where the obstacle becomes too great. Evidence for these assumptions is presented with regard to love and prejudiced affect.

***Gerald L. Clore (University of Virginia, USA)***

### **Emotion as Cause and Consequence of Motivation.**

Emotion and motivation are intertwined. They can be difficult to disentangle, because emotions are both causes and consequences of motivation. Thus, objects acquiring positive or negative value from associated positive or negative affect are likely to elicit approach or avoidance motivation. But it is also true that the promotion or obstruction of motivated behavior is a prime source of emotion. As a consequence, the fate of emotion-induced motivation is itself a source emotion. In addition, recent research will be discussed finding that affect regulates the pursuit of both implicit and explicit social goals.

***Arne Roets (Ghent University, Belgium)***

### **On the relationships between arousal, emotion, cognitive capacity, and motivation in human decision-making.**

In a review of the vast literature on human decision-making, four prominent influences on human decision-making were highlighted. Arousal, emotion, cognitive capacity and motivation each have been the subject of well-established research traditions in decision-making research. Evidence for the interrelationships between these variables were considered leading to an overview model of how these influences shape human decision-making. However, the nature of the relation between cognitive capacity and motivation remained obscure in previous research. Therefore, two experimental studies were conducted testing whether cognitive capacity and motivation are independent or causally related in decision-making. Both studies showed that initial cognitive depletion leads to a motivational decline. Moreover, effects of noise and time pressure on motivational decline were partially mediated through cognitive depletion. These findings contribute to our understanding of cognitive depletion based motivational losses and the effects of noise and time pressure manipulations often used in psychological research.

## **Symposium IV - Motivated cognition in the processing of appetitive and defensive information**

Co-Chairs: Alexandra M. Freund (University of Zurich, Switzerland), Andreas Keil (University of Florida, USA)

***Eddie Harmon-Jones (Texas A & M University, USA)***

### **Approach Motivational Intensity Alters the Effects of Positive Affect on Cognition and Attention.**

Over the past 20 years, much research suggested that positive affect causes a broadening of attention and cognition. Examination of this research revealed that the positive affect evoked was low in approach motivational intensity. Positive affects high in approach motivational intensity, such as desire, may instead narrow attention and cognition as the organism approaches the desired goal. New studies will be presented showing that whereas positive affects low in approach motivation broaden attentional and cognitive processes, positive affects high in approach motivation narrow attentional and cognitive processes. Implications for the study of motivation and affect as separable processes will be discussed.

***Andreas Keil (University of Florida, USA)***

### **The role of defensive/appetitive motivation in attention: Cortical networks and perception-action links.**

Emotions can be viewed as action dispositions, regulating and optimizing an individual's response to motivationally relevant stimuli. Physiological work suggests that motivationally relevant cues activate distributed brain networks, which encompass aspects of stimulus representation, memory, physiological responses, and action, among others. In line with this notion, many authors have suggested that motivationally significant stimuli facilitate the allocation of attention, leading to better task performance and more accurate identification of visual stimuli. This presentation focuses on electrocortical networks that mediate performance in cognitive tasks as a function of defensive/appetitive stimulus content. A series of studies will be presented that show dynamic changes in connectivity between visual cortex and large-scale neural networks involved in action planning, motor behavior, and language processing. The electrocortical patterns suggest that action tendencies affect early vision and attention, and that brief exposure to appetitive versus aversive stimuli has differential effects on attentional and task parameters. Behavioral and neurophysiological data converge to suggest that (i) both defensive and appetitive cues facilitate attention and behavioral responding in identification tasks but (ii) only appetitive cues are associated with facilitated response preparation and execution.

***Jana Nikitin (University of Zürich, Switzerland, Alexandra M. Freund (University of Zurich, Switzerland)***

### **The Role of Social Approach and Avoidance Motivation on Processing Emotional Faces.**

Research on social motivation suggests that approach motivation primarily impacts the interpretation of and reaction to positive social stimuli, while avoidance motivation is primarily related to the processing of negative social stimuli. Very little is known about the effects of the co-occurrence of approach and avoidance motivation and possible differences between the explicit and implicit level of motivation on processing social stimuli. To investigate if approach and avoidance motivation show additive or interactive effects and if the effects differ for explicit and implicit social motivation, a series of studies assessing habitual social motivation and the processing of facial expressions was conducted. In one study, partially masked facial expressions had to be categorized as positive or negative. Implicit avoidance motivation was negatively associated with a positivity bias. Co-occurrent approach-avoidance motivation did not show any effects over and above the effect of avoidance motivation. Results of a study using an arm-flexion-tension paradigm, suggest an interactive effect of co-occurrent explicit approach and avoidance motivation that can be interpreted as a positivity bias. The results suggest a dissociation of implicit and explicit social motivation regarding the effects of approach and avoidance motivation and their co-occurrence on the processing of social stimuli.

***Derek Isaacowitz (Brandeis University, USA)***

**Motivated gaze and aging: When and why the older eye looks positively.**

Recent theoretical work has proposed that older adults show a positive preference in their information processing, as a way to achieve the goal of optimizing their current affect. In this talk, recent evidence using eye tracking will be presented describing whether older adults do indeed show positive preferences in their eye gaze, and what if any link such positive gaze preference have to motivation and mood regulation.

## **Symposium V - Motives in Applied Motivational Psychology**

*Co-Chairs: Kaspar Schattke (Technical University of Munich, Germany), Hugo M. Kehr (Technical University of Munich, Germany)*

***Martin Krippel (Georg-August-University Göttingen, Germany), Anne-Marie Elbe (University of Copenhagen)***

### **The Power Motive Scale - Sport - 4 Stages (PMS-Sport-4S).**

In addition to the achievement motive other motives like the power motive can play a role in sports and have an influence on sport performance. Up until now, however, no sport specific instrument to measure the power motive existed (Kuhl & Krug, 2006). This gap has been closed by the development of a new questionnaire that is based on McClelland's four stage model of power motivation (e.g. McClelland, 1975). The four stages consist of a combination of source of power (self vs. others) and object of power (self vs. others). One hundred sixty-two sport students ( $M=22.13$ ;  $SD=2.64$ , men: 86) of the Universities of Potsdam and Erlangen completed the questionnaire. The questionnaire consisted of items relating to the four stages of power and of items generally addressing the power motive. In order to also be able to identify non intended factors and factor structures, data were analysed with an explorative factor analyses with varimax rotation. The result is a four-factor structure (Kaiser-Guttman-Criterion) with different numbers of items per scale/stage. Cronbachs' alphas of all subscales are above .70. The alpha of the whole scale is .80. In addition, significant correlations with different sport achievement parameters as well as correlations between power stages and the types of sports the subjects participate in could be found, which are indicators of the scale's validity.

***Maika Rawolle (Technical University of Munich, Germany), Jürgen Glaser (Technical University of Munich, Germany), Hugo M. Kehr (Technical University of Munich, Germany)***

### **Why Self-Set Goals May Sometimes be Non-Motivating.**

Goals are positive future states a person strives for. The importance of goals for motivated action is beyond doubt. Nevertheless, self-set goals may sometimes be nonmotivating. The talk illuminates this issue from a new theoretical perspective. It integrates various earlier approaches and provides a data review. If we look at the goal itself, it should be specific and challenging in order to be motivating (Locke and Latham, 1990). In addition, the (possibly conflicting) interplay of different goals a person strives for needs to be considered: Goal conflicts may impede a goals motivating potential (Kehr, 2003). Moreover, we also need to examine the implicit needs of the person, since the motivating power of a goal depends on the person's specific needs (Brunstein, Schultheiss & Graessmann, 1998; Kehr, 2004). Finally, the somewhat limited view on a goal as the only motivating agent is extended: Task-intrinsic cues, as well as visions provide two potent alternative sources of motivation. Implications for future research are discussed.

***Todd M. Thrash (College of William & Mary, USA), Anne L. Hurst (College of William & Mary, USA)***

### **Self-determination as a moderator of within-person motive-goal congruence.**

Congruence between implicit and explicit motives or between motives and goals has been an area of active research. Typically, an individual's level of congruence is defined normatively; for instance, one is congruent if one falls at the same position (e.g., 75th percentile) in the normative distributions of the two variables of interest. In the current research, we use longitudinal data to examine individual differences in within-person congruence between motive arousal and goal pursuit; one's level of congruence is defined by the extent to which motive arousal and goal pursuit vary together across time. One-hundred thirteen participants completed the Multi-Motive Grid and a measure of personal goals once a week for five weeks. Multilevel modeling analyses showed that individuals higher in self-determination had a stronger within-person relationship between hope of success and pursuit of approach-focused achievement goals, as well as a stronger within-person relationship between hope of power and pursuit of approach-focused power goals. Consistent with past research on implicit-explicit motive congruence (Thrash & Elliot, 2002), self-determination did not predict within-person congruence between avoidance motives and goals.

These findings have important implications for the meaning of personal congruence and self-regulation.

***Hugo M. Kehr (Technical University of Munich, Germany), Maika Rawolle (Technical University of Munich, Germany)***

**The compensatory model of work motivation and its application to organizational change.**

This talk begins with an introduction of the compensatory model of work motivation (Kehr, AMR, 2004). The compensatory model synthesizes some previously unrelated lines of research to allow an integrated view on structural and functional aspects of work motivation. Structural components of the model are implicit motives, explicit motives, and perceived abilities. Functional processes are volitional regulation (compensating for inadequate motivation) and problem solving (compensating for inadequate perceived abilities). The compensatory model integrates, challenges, and extends existing conceptions. The model has been used as a conceptual framework for management training purposes, notably for personality development (self-management training; SMT) and for situational leadership (leadership by motivation; LbM). SMT and LbM integrate affective, cognitive, volitional, and self-efficacy related approaches to motivation, which in effect permits a more precise and differentiated analysis of the deficiencies of the situation. Yet, SMT and LbM integrate these diverse aspects in a straightforward and transparent manner which makes them a useful tool for practical applications. Recently, application of the compensatory model has advanced to the organizational level. We will report the case study of a company in the financial services sector.

## Poster Abstracts

**Daniel S. Bailis (University of Manitoba), Daniel E. Buchanan (University of Manitoba)**

### **Does goal conflict change the emotional significance of goal-related objects?**

54 students with strong exercise goals completed an exercise survey and received a water bottle, after being primed with academic or exercise words. One week later, participants completed a lexical decision task, with emotional and neutral words. A similar water bottle was present during this task for half the participants. For those whose academic goals were primed when the original water bottle was received, the presence of a similar bottle resulted in slower times to verify emotional words.

**Susanne Bellesario (Murdoch University)**

### **Examining changes in motivation with exercise frequency behaviour.**

Self Determination Theory and continuum motivation in organismic integration theory were used to evaluate motivation in exercise frequency. Changes in motivation continuum and participation motives were hypothesized to vary with exercise frequency and group affiliation. 305 subjects from 4 community groups completed self report surveys. Strong support was provided for internalization along the motivation continuum and grouped participation motives. The results support the theory of internalization with continuum in motivation and for the consideration of their potential cognitive functional differences in future research.

**Kerstin Brinkmann (University of Geneva), Guido H. E. Gendolla (University of Geneva), Dorothea Scheder (University of Erlangen)**

### **Ego-Involvement Moderates the Assimilation Effect of Affective Expectations.**

Two studies manipulated affective expectations (none vs. positive) and ego-involvement (low vs. high) and assessed participants' affective reactions to hedonically neutral stimuli. In accordance with an assimilation effect, affective reactions were more positive in case of positive expectations and low ego-involvement. High ego-involvement neutralized this effect. Our findings suggest that high ego-involvement justifies the high mental effort necessary to detect discrepancies between expectations and stimuli's real affective potential and thus moderates the effect.

**Hanna Brycz (University of Gdansk)**

### **The Accuracy of Ones Own vs. Others Biases' Perception.**

Several studies investigated motivational factors involved in the perception of one's own biases and the perception of bias in others. Factors included episodic vs. semantic memory, experiencing bias in one's own behavior, and the nature of bias experienced. Results indicated that "observers" were able to recognize biases while "actors" were not.

**Estelle Campenni (Marywood University), Lindsay Hall (Marywood University)**

### **Contemplative handwriting as an effective manipulation of attention components of mindfulness.**

Despite increased interest in mindfulness, techniques designed to enhance mindfulness are limited to lengthy programs targeted at distressed populations. Purpose of the present work was to assess efficacy of a handwriting task on attention - a key component of mindfulness. Choice of handwriting as an intervention was based on generalizing research by Kao demonstrating physiological & attention changes following Chinese Calligraphy. Following 20 minutes of contemplative handwriting over six days, significant enhanced attention was found using the Attention Network Test.

**Julien Chanal (University of Geneva), Frederic Guay (Université Laval, Québec), Olivier Renaud (University of Geneva)**

### **Cluster analysis and self-determination theory : A test of antecedents and consequences of profiles.**

The objective of our study was to use cluster analysis to determine self-determined profiles of individuals relatively to their motivation toward physical activity and to compare these profiles. Specific hypotheses made by Self-Determination Theory (SDT, Deci & Ryan, 1985) relatively to antecedents and consequences of motivation were tested in a sample of 522 adolescents. Results

bring support for SDT postulates but also demonstrate the pertinence of the use of profiles to compare individuals.

***Lori R. Cohen (McGill University), Richard Koestner (McGill University)***

**The Integration of Ethnic Identity and Its Effect on Academic Motivation.**

Based on self-determination theory, this study examined the relationship between autonomy-supportive parenting and ethnic identity integration in students at two philosophically different Jewish schools, as well as these students' self-concept and motivation for studies in three different academic areas. Autonomy-supportive parenting was significantly related to more integrated internalization of religious identity, as well as higher self-concept. The study also found that strong motivation for religious studies was significantly related to higher self-concept.

***Regina Conti (Colgate University), Nancy Pruitt (Colgate University)***

**Why do students leave science? Perceived autonomy and persistence in science-related disciplines.**

Efforts to retain students in science-related majors often focus on improving preparedness and the classroom culture. Using self-determination theory, we have identified another factor contributing to attrition: perceived autonomy. Students at the end of their sophomore year indicated that those originally intending to major in science but ultimately choosing another major reported significantly greater increases in feelings of autonomy after switching, relative to students who either persisted in their original choice of major or switched out of non-science majors.

***Joana De Burgo (University of Geneva), Guido H. E. Gendolla (University of Geneva)***

**Do moods have a stable motivational implication on effort mobilization?**

To answer this question 50 participants were assigned to a 2 (mood: negative vs. positive) x 2 (memorizing: intentional vs. incidental) x 2 (time: mood inductions vs. task performance) mixed model design. Effort mobilization was operationalized as systolic blood pressure reactivity. As expected (cf., Mood-Behavior-Model), in the intentional memorizing condition, more effort was mobilized in a negative mood, while in the incidental memorizing condition, mood had no impact. Therefore, mood seems to have no imminent and stable motivational effect on resource mobilization.

***Amanda Durik (Northern Illinois University), Jennifer Storey (Northern Illinois University), Kristopher Kopp (Northern Illinois University), M. Anne Britt (Northern Illinois University)***

**The Combined Effects of Motivational and Cognitive Factors in Predicting Success on a Learning Task.**

This study examined motivational and cognitive factors that contribute to interest in and learning from a tutorial to improve argument evaluation skills. Pre-interest and self-efficacy positively predicted task interest while pre-ability, analytical reasoning, vocabulary, and self-efficacy predicted learning. Consistent with work showing that task motivation depends on prior interest and knowledge, we found that pre-test ability positively predicted post-task interest for individuals with low pre-interest but negatively predicted it for those with high pre-interest.

***Alexandra M. Freund (University of Zurich), Corwin Senko (SUNY New Paltz)***

**Goal Framing: Age-Differential Effects on Persistence (But not on Performance).**

Extending previous research suggesting an age-related shift from growth towards prevention of loss orientation, the present experiment tests the boundaries of this motivational shift by using the mere framing of goals as a manipulation of goal focus instead of inducing an actual loss. Results show the expected interaction of age (young vs. old) and goal-framing condition (gain vs. prevention) on persistence but not on performance. This suggests that the cognitive representation of a task is sufficient to induce age-differential motivational but not performance-related effects.

***Linda Houser-Marko (University of Illinois), Susan Curry (University of Illinois), Sherry Emery (University of Illinois), Oksana Pugach (University of Illinois)***

**Choice in participation: Voluntary vs. mandated participants in youth smoking cessation programs.**

We hypothesized that voluntary and mandated participants of community youth smoking cessation

programs have differing plans and motivation. Using the Helping Young Smokers Quit project, a logistic regression model discriminated membership into voluntary versus mandated participation, controlling for site-level correlations. No differences between the groups were found with regard to smoking behavior and school involvement. The mandated participants showed a lower likelihood of wanting to quit and less intrinsic motivation to quit.

***Chris Hulleman (Vanderbilt University), Judith M. Harackiewicz (University of Wisconsin-Madison)***

**The role of utility value in promoting interest and performance.**

This randomized experiment evaluated whether helping students discover utility value in their coursework via an experimental intervention contributed to their subsequent interest and performance in science. A theoretical process model was also tested that accounted for the effects of such utility value interventions in terms motivational processes. The results indicated that the intervention increased perceptions of utility value, and provided support for the hypothesized process model: perceptions of utility value were related to subsequent interest and performance.

***Veroika Huta (University of Rochester)***

**The well-being benefits of being motivated by pleasure versus virtue: An intervention study.**

People often seek well-being either through hedonia (pleasure, comfort) or eudaimonia (virtue) (Ryan & Deci, 2001). We randomized individuals to increase their eudaimonia or hedonia for 10 days, with follow-up to 3 months. Those in the eudaimonia condition had marginally greater moral elevation (Haidt, 2000) during the intervention and significantly greater moral elevation at 3 months, compared to the hedonia condition. Those in the hedonia condition had marginally greater vitality and significantly more carefreeness during the intervention, but no advantage 3 months later.

***Andreas Kappes (University of Hamburg), Henrik Singmann (University of Hamburg), Gabriele Oettinger (New York University/University of Hamburg)***

**Mental Contrasting Effects on Goal Commitment Mediated by Perceptual Change of Reality.**

The self-regulatory strategy of mentally contrasting a positive future with negative reality produces expectancy-dependent goal commitments; elaborating future only, reality only, or reality and then future does not. Investigating underlying processes, we found that the expectancy-dependent effects of mental contrasting on goal commitment (measured via anticipated disappointment and persistence in goal striving two weeks later) are mediated by the perceptual change of the reality as obstructing the desired future (measured via pleasantness ratings of the reality).

***Maria Kontaxi (University of Thessaly)***

**Teacher renewal and practice, intrinsic motivation and satisfaction at public schools in Greece.**

This study examines intrinsic motivation (self determination theory), job satisfaction and positive affect at school among Greek teachers. The results showed middle levels of autonomy and satisfying levels of competence and relatedness, while psychological needs are associated positively with job satisfaction and positive affects at school. Women reported higher levels of competence than men; elderly teachers appeared to feel more autonomy in their activities than newcomers and elementary teachers showed higher levels of autonomy and relatedness than those in secondary schools.

***Minjung Koo (University of Chicago), Ayelet Fishbach (University of Chicago), Marlone D. Henderson (University of Chicago)***

**How to Increase Contribution to a Group Goal.**

Three studies show that high (vs. low) group identifiers invest more resources (effort, money) depending on how prior progress toward a group goal (e.g., charity donations) is conveyed. Specifically, emphasizing group accomplishments to date (what members have invested so far) increases motivation for low identifiers by signaling that the group goal is important and worth pursuing, whereas emphasizing group accomplishments to be done (what investment remains for members) increases motivation for high identifiers by signaling the need for progress on the important group goal.

**Sylvia D. Kreibig (University of Geneva), Guido H. E. Gendolla (University of Geneva), Klaus R. Scherer (University of Geneva)**

**Psychophysiological Effects of Motivation-Based Appraisals in Differential Emotion Elicitation.**

The Component Process Model (Scherer, 2001) predicts motivation-based appraisals to differentially determine emotion elicitation. Appraisal of self-relevance (SR) and goal conduciveness (GC) was experimentally manipulated by a success-failure paradigm. Given high SR, self-report showed increased disappointment and embarrassment under low-GC and increased amusement and pride under high-GC. SR manipulation affected sympathetic activation; GC manipulation affected respiration and facial expression.

**Lory LaPointe (University of South Dakota)**

**What makes teachers tick: A mixed-methods analysis of environment, motivation and practice.**

This mixed-methods study investigated the relationships between need satisfaction, school environment, and classroom practices. Data indicated that the relationships between these variables, although weak, were supported in the expected direction. However, need satisfaction did not mediate the relationship between the school and classroom settings as expected.

**Jihyun Lee (Sungkyunkwan University)**

**Why motivating self-discovery is needed?**

My research investigated relationships among motivation, self-awareness and self-discovery. Motivation was measured with the motivated strategies for learning questionnaire. Self-awareness was measured with the self-concept certainty scale. Self-discovery was measured with the Meaning in Life Questionnaire. Participants were 100 junior high school students in Korea.

**Donna McMillan (St. Olaf College), Ashley J.P. Allen (St. Olaf College)**

**Priming Sense of Meaning May Increase Intrinsic Motivation.**

This study examined the relationship between sense of meaning and intrinsic motivation by priming participants to think about the meaning of an activity and then assessing their subsequent motivation for that activity. Compared to a control group, participants primed to think about meaning showed significantly greater intrinsic motivation, lending support for exploration of interventions that bring to conscious awareness the meaning of obligatory tasks in order to increase self-determination.

**Sonja Mestre (University of Porto), Pais Ribeiro (University of Porto)**

**Study of motivation in obese Portuguese individuals from a self-determination point of view.**

The aim of this study was to enhance the relation between the motivation's regulation from a self-determination and regulatory focus perspective, experienced by 52 severely obese individuals. The results showed negative associations between the autonomous and controlled scale; mental health was positively correlated with both the motivational foci (promotion and prevention); and a greater competence perception was related to avoidance behaviours on regarding the therapeutic goal.

**Marina Milyavskaya (McGill University), Rachel Litwin (McGill University), Richard Koestner (McGill University)**

**Friend or foe? Priming autonomy supportive and controlling significant others.**

Research has shown that people form schemas of significant others which can generalize to new situations. Our study primed participants with significant others who are perceived as autonomy supportive or controlling. Participants primed with a controlling significant other performed worse at a novel task and reported feeling less choiceful when continuing with the task during a free choice period. These results suggest that people's perceptions of significant others have repercussions for motivation and behaviour when these schemas are activated in novel contexts.

**Daniel Molden (Northwestern University), Gale M Lucas (Northwestern University), J. Keith Murnighan (Northwestern University)**

**Motivations for Reciprocity in Interpersonal Trust.**

Reciprocity following perceived trust was tested in an investment game. The investor chose to “invest” between \$0 and \$10, which was then tripled; the trustee then decided how much money to return to the investor. When high trust was signaled by large investments, trustees motivated by prevention showed increased reciprocity as compared to trustees motivated by promotion. When low trust was signaled by small investments, these motivational differences in reciprocity were not found.

***Michael Nelson (University of Central Oklahoma), Janet White (University of Central Oklahoma), Bryan Duke (University of Central Oklahoma)***

**Control motivation and perceptions of interpersonal relationships in an urban high school.**

We used a self-determination theory framework to investigate associations among high school students' perceptions of interpersonal relationships at school with academic and social control motivation. Participants attended a large urban high school in the south. This sample was of particular interest because of the large number of Latino students that migration and dropout. Conforming to peer's expectations and teacher relations were related to external control, while connectedness with the school and teachers was related to more self-determined forms of control motivation.

***Christopher Niemiec (University of Rochester), Richard M. Ryan (University of Rochester), Edward L. Deci (University of Rochester), Geoffrey C. Williams (University of Rochester)***

**Aspiring to health: The role of health aspirations in facilitating long-term smoking cessation.**

Using self-determination theory, we examined the relation of health values to smoking cessation. We hypothesized that health values would be better maintained over 18 months among smokers receiving an intensive intervention, relative to community care; maintained health values would mediate the intervention effect on 30-month tobacco outcomes; and the relation of maintained health values to tobacco outcomes would be moderated by treatment condition. Results confirmed our hypotheses, suggesting the importance of focusing on health values to promote health behavior change.

***Edward Orehek (University of Maryland), Romina Mauro (University of Maryland), Arie W. Kruglanski (University of Maryland)***

**Prioritizing Instrumentality Versus Value: Regulatory Mode and Goal Systemic Architecture.**

Regulatory mode was manipulated in 2 studies. In Study 1 participants read essays describing the benefits of tomatoes and exercise, each serving either 1 goal or 2 goals. Locomotors had stronger behavioral intentions when the means served 1 goal (vs. 2 goals), whereas assessors showed the reverse pattern. Study 2 conceptually replicated these results with participants generating 1 or 3 goals that computers and college serve and an implicit evaluation of the means serving as the dependent variable.

***Micha Park (Sungkyunkwan University), Mina Lee (Sungkyunkwan University), Soonmook Lee (Sungkyunkwan University)***

**The Role of Learning Motivation on Reading Behavior and Learning in Children.**

The present study explored the relationships between learning motivation, reading behavior and learning difficulties in children. One hundred fifty five sixth graders responded to a learning motivation scale and questionnaires of reading behavior and learning difficulties. We found a significant positive correlation between intrinsic motivation and reading behavior but negative correlations between intrinsic motivation, extrinsic motivation and learning difficulties. The results implicate an important role of intrinsic motivation on reading and learning in children.

***Sunwoong Park (University of Dayton), Jack J. Bauer (University of Dayton), Nicole B. Arbuckle (University of Dayton)***

**Growth Motivation Moderates the Effect of Self-Esteem on the Self-Serving Attribution.**

This study investigated the effects of self-esteem and growth motivation on self-serving attributions. People high in self-esteem had shown a tendency to make external attributions for failures. However, the authors expected that people with high growth motivation would accept responsibility for failures because this is how they correct their mistakes and succeed in the future.

The results showed that people with high self-esteem and high growth motivation made more internal attributions for failures, compared to those with high self-esteem but low growth motivation.

***Suwoong Park (University of Dayton), Jack J. Bauer (University of Dayton), Nicole B. Arbuckle (University of Dayton)***

**Who Has Motivation for Growth and Self-Improvement?**

This study investigates who has motivation for personal growth and self-improvement. One's belief in the possibility of growth and improvement as well as one's locus of control was expected to play a role. The results showed that a unique combination of a growth mindset and an internal locus of control was a strong predictor of four self-improvement measures. Thus, the finding suggest that people who really put effort into growth and self-improvement are those who believe that they can learn and grow and that they themselves are the ones who can initiate change.

***Marlies Pinnow (Ruhr-University of Bochum)***

**To See or Not to See: The Influence of Motive Disposition on Preconscious Processing of Information.**

The experiment reported investigated the influence of aggression and achievement motive on the processing of subliminally presented motive-related words. The analysis of the data revealed for both conditions significant correlations between the motive and motive-related recognition rates. In the case of achievement motive the correlation was positive whereas in the case of aggression this turned to be negative. We regard the last finding as a support of Freud's thesis of an apperception defence mechanism.

***Kelly Richards (Marywood University), Estelle Campenni (Marywood University), Janet Muse-Burke (Marywood University)***

**Mindfulness mediates relationship between therapist well being and perceived importance of self care.**

Frequency and importance of self-care practices, mindfulness, and psychological health were assessed by 139 mental health professionals. Results indicate mindfulness completely mediates the relationship between perceived importance of self-care and psychological health. However, frequency of self care practices did not show this effect. Thus, perceived importance of self care may represent the intention (or motivation) necessary to initiate the effort required to achieve mindfulness.

***Michael Richter (University of Geneva), Guido H.E. Gendolla (University of Geneva)***

**The moderating impact of task context on effort mobilization.**

Drawing on motivational intensity theory's predictions, we investigated the moderating influence of task context on effort. Participants (N = 48) worked on a memory task in a 2 (reward: CHF 2 vs. CHF 12) x 2 (framing: difficulty vs. success importance) between-persons design. As predicted, effort mobilization-operationalized as cardiovascular reactivity-was directly determined by reward value when participants focused on success importance, but not when participants focused on task difficulty.

***Paul Rose (Southern Illinois University Edwardsville)***

**Behavioral Inhibition, Behavioral Activation, Loss Aversion and Gambling.**

Using data obtained from 102 undergraduates, in this investigation I examined individual differences in approach motivation (BAS) and avoidance motivation (BIS) as predictors of gambling. Surprisingly, BAS was unrelated to the amount participants had gambled in the last six months; BIS, however, was a significant (negative) predictor. A mediational analysis suggested that the association between BIS and gambling was mediated by aversion to gambling losses.

***Udo Rudolph (University of Technology, Chemnitz, Germany)***

**Moral emotions: Cognitive antecedents and motivational consequences.**

A series of experiments analyzes the cognitive antecedents and the behavioral consequences of moral emotions (e.g., anger, sympathy, pride, regret), based on a classification of moral emotions according to their target (actor-observer) and their evaluative content (positive-negative). Results confirm that Heider's naïve action analyses and his concepts of ought, goal-attainment and trying

predict both the genesis of specific moral emotions and the behavioral consequences of these emotions.

**Kaspar Schattke (Technical University of Munich), Stefan Engeser (Technical University of Munich), Hugo M. Kehr (Technical University of Munich)**

**Need achievement predicts flow experience in a labyrinth-task experiment.**

The compensatory model of work motivation and volition (Kehr, 2004) states that flow experience results when the task at hand thematically matches the person's currently aroused implicit motives. Since performance feedback in a labyrinth-task experiment provides information about success, feedback should arouse need for achievement and therefore foster flow experience. In our experiment need achievement predicts flow experience. This finding provides first evidence for Kehr's (2004) motive based approach on flow-experience.

**Anja Schiepe (Technical University of Munich), Brigitte Lund (University of Potsdam), Falko Rheinberg (University of Potsdam)**

**Does parental achievement motive training help dyslexic children?**

Dyslexic children suffering from reading and writing dysfunction experience failure which leads to anxiety and low self-confidence. Parental training (Lund, 2001), based on the self-evaluation model (Heckhausen, 1975) and the concept of reference norm orientation (Rheinberg, 1980), should help dyslexic children and their parents to deal with failure (i.e. setting of realistic goals). Two groups were compared. The control group received dyslexic training, only. The experimental group additionally received parental training. Results show improved goal-setting behavior in the experimental but not in the control group.

**Ralph E. Schmidt (University of Geneva), Martial van der Linden (University of Geneva)**

**Rash Actions Result in a Rush of Regrets: Impulsivity, Counterfactual Processing, and Insomnia.**

We tested the hypothesis that when retiring for the night, impulsive individuals engage in sleep-disrupting counterfactual processing. A sample of 101 students completed three questionnaires: the UPPS Impulsive Behavior Scale, the Insomnia Severity Index, and the Bedtime Counterfactual Processing Questionnaire. Results indicated that both urgency and counterfactual processing were related to insomnia severity and that the effect of urgency on insomnia was mediated by counterfactual processing.

**Sana Sheikh (University of Massachusetts Amherst), Ronnie Janoff-Bulman (University of Massachusetts Amherst)**

**Motivational Underpinnings of Guilt, Shame, and Moral Judgments.**

Two distinct regulatory systems underlie morality: appetitive motivations underlie actions one should do (prescriptions) whereas aversive motivations underlie actions one should not do (proscriptions). Three studies support this motivational distinction in moral emotions and judgments: (1) the BAS Scale (Carver and White, 1994) predicted prescriptive while the BIS predicted proscriptive moral judgments, (2) prescriptive moral judgments elicited guilt while proscriptive moral judgments elicited shame, and (3) the BAS predicted guilt and the BIS predicted shame.

**Nicolas Silvestrini (University of Geneva), Guido H.E. Gendolla (University of Geneva)**

**The Joint Effect of Mood, Task Difficulty, and Mood Regulative Incentive on Effort-related Cardiovascular Activity.**

The joint effect of mood, task difficulty, and mood-regulative incentive was tested with a 2 (Mood) x 2 (Task difficulty) x 2 (Incentive: Pleasant vs. Unpleasant) x 2 (Time: Mood inductions vs. Task) mixed model design. In support of our predictions, reactivity of systolic blood pressure indicated higher effort in the negative mood/difficult condition when incentive was positive. Facial EMG reactivity indicated efficient mood manipulations. Findings demonstrate the effect of mood-regulative incentive on resource mobilization in negative moods.

**Hong Soonki (Sungkyunkwan University), Jihyun Lee (Sungkyunkwan University)**

**Influence of confidence on learning motivation.**

It has been proven by various researches that confidence has positive correlation with team output. However, most studies have been conducted only in industrial sites, and there are not enough for learning environment. So, this study was designed to examine confidence in graduate school.

***Christopher C. Stewart (University of Alabama at Birmingham), Rex A. Wright (University of Alabama at Birmingham), Azor Hui (University of Alabama at Birmingham), Angel Simmons (University of Alabama at Birmingham)***

**Outcome Expectancy as a Moderator of Mental Fatigue Influence on Cardiovascular Response.**

We manipulated mental fatigue by having participants perform an easy or difficult version of a scanning task. We then presented participants multiplication problems with instructions that they would earn a strong or weak chance of winning a prize if they attained a modest performance standard. As expected, blood pressure responses in the second work period were proportional to fatigue for the High Chance participants, but low regardless of fatigue for the Low Chance participants.

***Eric Stocks (University of Texas at Tyler), Jessica Cohen (University of Texas at Tyler), Katy Manganella (University of Texas at Tyler), Steven Toews (University of Texas at Tyler)***

**Focus of Attention and Empathic Emotions.**

We investigated the role of focus of attention in inhibiting two forms of empathy, empathic embarrassment and empathic concern. Participants viewed a video of a student describing an embarrassing event. Prior to viewing the clip, participants were randomly assigned to one of three conditions: Control vs. Focus-on-target's-hands vs. Focus-on-target's-eyes. The results suggest that, in order to reduce empathy, the focus shift must avert attention completely away from the target. Implications of these results for empathy and prosocial motivation research are discussed.

***Krzysztof Szadejko (Research Institute CEIS Formazione, Modena), Mario Dondi (Research Institute CEIS Formazione, Modena), Andrea Ascari (Research Institute CEIS Formazione, Modena)***

**Existential meaning and motivation toward antiretroviral therapy in people affected by HIV/AIDS.**

This study examined the relation between the perceptions of meaningful life and motivation toward antiretroviral therapy (ARV) in patients affected by HIV/AIDS. It was suggested that the existential issue and posttraumatic growth could be important factors to predict the motivation toward antiretroviral therapy. The principal result of the research was that internalized motivation toward ARV therapy was predominantly explained by posttraumatic positive changes, while existential meaning did not explain a significant additional portion of variance in self-motivation.

***Genevieve Taylor (McGill University), Andréanne Renaud (McGill University), Richard Koestner (McGill University)***

**Examining The Role of Autonomy, Self-Efficacy and Implicit Intelligence Beliefs in School Persistence.**

The present study examined how implicit theories of intelligence (Dweck, 2006) interact with self-efficacy and autonomy to predict students' intentions to persist in school. Two hundred and eighty-four high school students were surveyed. Results revealed that self-efficacy and implicit theory interacted positively to predict persistence intentions. Interestingly, autonomy and implicit theory also interacted and predicted variance in persistence above and beyond self-efficacy. More specifically, students with low levels of autonomy and an entity theory were least likely to intend to persist in school.

***Janet White (University of Central Oklahoma), Mike Nelson (University of Central Oklahoma), Bryan Duke (University of Central Oklahoma)***

**Belief systems of urban adolescents: Relationships with school belonging and classroom climate.**

This study draws upon Bandura's agentic perspective of self-regulation. We examined underlying control beliefs and academic regulatory life skills in relationship to school belonging and classroom climate indicators, including teacher-student relations and academic press, across 9th through 12th

grade. At 9th grade secondary and relinquish control were significant predictors, while primary control was a significant predictor at 10th grade. Several developmental pattern findings warrant further study as the sample was drawn from an urban school with high mobility and a high dropout rate.

***Anna Woodcock (Purdue University), Ida Ngambeki (Purdue University), Demetra Evangelou (Purdue University), Meara M. Habashi (Purdue University), William G. Graziano (Purdue University)***

**Focus of Interests as Motivation: Men, Women & Engineering.**

Personal interests motivate and drive self-exposure to education and career choices. We report interests in People vs. Things among 900 first year college students. Sex differences in interest are larger for Things than for People. Despite differences, interest in Things predicts intent to stay in engineering in both men and women. Given comparable interest in Things, however, men were more influenced by having an engineer in the family than were women. Implications for diversity are discussed.