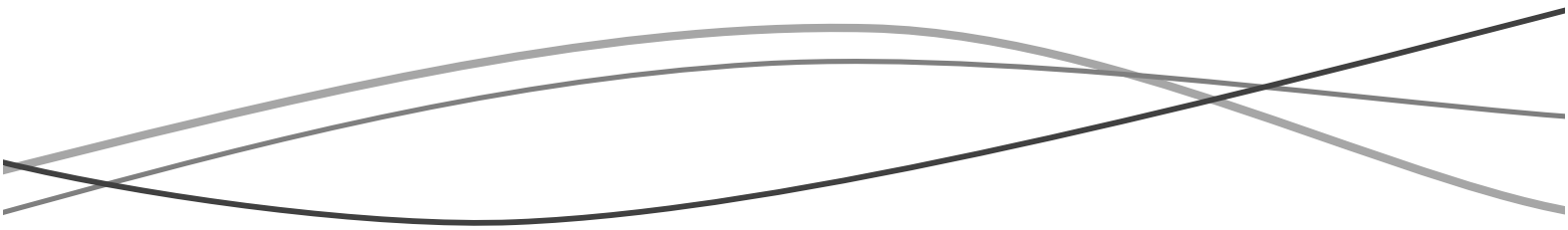
5th Annual

Positive Emotions

Pre-Conference

of the Society for Affective Science



April 26, 2018

Los Angeles, CA

SCHEDULE

9:00 – 9:10am COFFEE AVAILABLE

9:10 – 9:15am WELCOME REMARKS

9:15 - 10:35am SESSION A

Lisa Williams, University of New South Wales
Looking Past Anxiety and Fear: Positive Emotion in Blood Donation

Brett Ford, University of Toronto
How does reappraisal promote well-being?

Sara Algoe, University of North Carolina
A new perspective on the social functions of emotions: Gratitude and the witnessing effect

Aaron Weidman, University of Michigan
Do People Use Positive Emotions as Tools?

10:35 - 10:50am COFFEE BREAK

10:50 – 12:10pm SESSION B

Daryl Cameron, Pennsylvania State University
Caring is costly: People avoid the cognitive effort of compassion

Sophie Scott, University College London
Cortical responses to laughter, and the role of individual differences

Christian Waugh, Wake Forest College
People are better at maintaining positive than negative emotional states

Alan Cowen, University of California, Berkeley
Mapping the varieties of humor signaled by different laughs

12:10 - 1:00pm LUNCH

1:00 - 1:45pm POSTER SESSION

1:50 - 2:45pm SESSION C

Wendy Berry Mendes, University of California, San Francisco
Affect Contagion: Physiologic synchrony among close others

Brooke Jenkins, Chapman University
Mean Positive Affect Moderates the Association between Positive Affect Variability and Immune Response to the Influenza Vaccination

Jared Martin University of Wisconsin, Madison
Smiles of Evaluation: Differentiated Physiological Responses to Reward, Affiliation, and Dominance Expressions as a Function of High-Frequency Heart Rate Variability

2:45 – 3:00pm COFFEE BREAK

3:00 - 4:00pm KEYNOTE ADDRESS

Jess Tracy, University of British Columbia
Pride's Place in the Positive Emotion Pantheon

Posters

1. **Positive Affectivity Distinctly Influences Negative Interpretation Bias in Individuals with Remitted Depression**

Kahrilas, I.J., Dickson, D.A., Lee, C., & Silton, R.L.

Objective: The influence of negative affectivity (NA) on cognitive processes contributing to depression has been studied at large. However, low positive affectivity (PA) may be a risk factor for recurrence of depression. The present study evaluated whether low PA is associated with increased negative interpretation bias for individuals with a lifetime history of depression.
Participants and Methods: Fifty college students participated in the study. Twenty-five met criteria for past major depressive episode (MDE), and 25 did not meet criteria for current or past MDE. Affectivity was assessed using the Mood and Anxiety Symptom Questionnaire. Psychiatric history was obtained via the MINI diagnostic clinical interview. Interpretation bias under cognitive load/no-load conditions were assessed using the Scrambled Sentence Test.
Results: Low PA predicted increased negative interpretation bias under cognitive load ($p < .05$) after accounting for NA and anxiety. This effect was larger for individuals with past MDE ($p < .05$). Regardless of depression history, NA did not predict interpretation bias after accounting for PA and anxiety.
Contribution to Positive Emotions Literature: Low PA may be a unique risk factor for negative interpretation bias, particularly for individuals with a history of depression. Future basic and translational research should consider the distinct role of low PA on dysfunctional cognitive processes contributing to depression.

2. **Resting Parasympathetic Activity Relates to *Orbicularis Oculi* Size and Movement During Positive Emotion**

Kosik, E. et al.

Positive emotions are dynamic events associated with smiling and parasympathetic nervous system activity. Smiling is often accompanied by activation of *orbicularis oculi*, a facial muscle that engages the eyes. Here we examined whether resting respiratory sinus arrhythmia (RSA), a measure of parasympathetic activity, was related to the size and movement of *orbicularis oculi*. We measured RSA in 23 healthy adults during a resting baseline period and coded smiling behavior in the participants while they viewed photographs that elicit nurturant love, a positive emotion. Participants also underwent structural brain MRIs, and the volume of 12 facial muscles was calculated from manual tracings of the facial musculature. Linear regressions revealed that higher resting RSA was associated with smaller *orbicularis oculi*. This association was selective, and RSA was not associated with the volume of any other facial muscles. Furthermore, smaller *orbicularis oculi* was associated with more nuanced smiling behavior (i.e., more second-by-second variability in smile intensity) while participants viewed the nurturant love photographs. These results provide evidence for a connection between the parasympathetic and skeletomotor systems and suggest that tight linkage of the heart and the face promotes nuanced facial expressions during positive emotion.

3. **Caring Synchrony and Mutual Gaze in Married Couples**

Lai, J., Otero, M.C., Wells, J.L, Levenson, R.W. & Fredrickson, B.L.

Positivity resonance is defined as an individual's positive emotions that simultaneously evoke and are evoked by another's positive emotions (Fredrickson, 2016). It is characterized by shared positive affect, biobehavioral synchrony (i.e., unintentional coordination of movement and physiology), and mutual care (i.e., an investment in the well-being of the other). Synchronous mutual care behaviors, referred to as "caring synchrony" and "mutual gaze", are characterized by nonverbal gestures (i.e., simultaneous head tilts, nods, smiles, and body lean forwards) and prolonged eye-contact between individuals. Positivity resonance is hypothesized to support positive relationships and well-being, particularly in romantic dyads. We hypothesized that caring synchrony and mutual gaze would be associated with marital satisfaction. We examined caring synchrony and mutual gaze behaviors in long-term married couples (N=153). Trained coders coded for evidence of caring synchrony and mutual gaze in videos of the couples engaging in a 15-minute conversation about a marital conflict. Couples completed surveys assessing their marital satisfaction. Results indicated that greater moments of caring synchrony and mutual gaze are associated with marital satisfaction. These findings suggest that nonverbal displays of care in social relationships may be an important building block for relationship quality and health.

4. **Perceived Positivity Resonance and Its Association with Well-being**

Le Nguyen, K.D.

Positivity resonance is theorized to be consisted of shared positive emotions, mutual care and concern, and biobehavioral synchrony during interpersonal interaction. In three studies (N1=176; N2=120; N3=173) perceived positive resonance was assessed by a trait-based questionnaire and at the episode level using the Day Reconstruction Method. Preliminary analyses reveal Multilevel factor analyses suggest one strong factor and construct validity with evidence that perceived positivity resonance is 1) more closely associated with pleasant emotions experienced socially than non-socially, and 2) positively associated with the extent to which people interacted face-to-face, but not with remote forms of interaction. Primary analyses reveal that perceived positivity resonance is positively associated with several wellbeing measures, including depression, flourishing, and loneliness, even when controlling for daily pleasant emotions or frequency and quantity of social interaction.

The results support that shared positive emotions are a feature of positive resonance, that real-time sensory connection is crucial for positivity resonance to occur, and that positivity resonance is predictive of wellbeing above and beyond positive affect.

5. **Feeling safe in the moment: An experience sampling study**

6. *McManus, M.*

Safety and security are understood to be fundamental human needs, yet there is very little research on the inner experience of feeling safe in the moment. After Gilbert and colleagues (2008), we adopted the term "safeness" to distinguish feeling safe in the moment from other concepts such as safety and security. To investigate safeness we used the experience sampling method, testing whether the momentary experience of feeling safe would vary between people, vary from moment to moment within individuals, and be related to other momentary emotional states. We also tested the possibility that existing conceptualizations of security would adequately account for variability in safeness. Survey responses were collected randomly throughout the day over the course of one week from 43 participants. We found, as predicted, differences in levels of feeling safe between people and within people. Feeling safe was positively related with low-arousal positive affect, negatively related to negative affect, but not related to high-arousal positive arousal affect. Measures related to safety and security, including attachment style, psychological safety, and social safeness, were not related to individual averages of feeling safe in the moment. Implications for safeness as an aspect of low-arousal positive affect will be discussed.

7. **Following Pride Down the Wrong Path: Hubristic Pride is Associated with Lying about Performance on a Cognitive Task**

Mercadante, E.J., & Tracy, J.L.

Previous research has found two distinct pride facets: authentic and hubristic (Tracy & Robins, 2007). Authentic pride is prosocial and achievement-based, whereas hubristic pride is more self-aggrandizing and associated with anti-social behaviours; yet both forms of pride have been theorized to promote social rank attainment (Cheng, Tracy, & Henrich, 2010). This raises the question: If hubristic pride foments anti-social behaviours, how does it help individuals attain status? We hypothesize that hubristically proud individuals are motivated to pursue extrinsic rewards, such as social approval and higher rank, in order to validate their overly inflated and grandiose self-concepts, and will use strategic dishonesty to facilitate this goal. To test this prediction, we examined whether trait hubristic pride predicted participants' tendency to exaggerate their performance on a cognitive task (N = 476). Results showed that individuals prone to hubristic pride were more likely to lie to a partner about their performance, and they were particularly likely to do so if they were led to believe that their partner had high status. Together, these findings suggest that individuals who feel hubristic, but not authentic, pride are willing to lie to attain an extrinsic reward, namely a boost in reputation.

8. **Caring Synchrony and Perception of Personality: The Link Between Personality Traits and Mutual Care in Long-Term Married Couples**

Nakahara, E., Otero, M.C., Lai, J., Wells, J.L, Levenson, R.W. & Fredrickson, B.L.

One component of positivity resonance is caring synchrony, synchronized nonverbal caring behaviors (i.e. smiles, head tilts, forward body leans, and head nods) between individuals. Together, they may foster positive interpersonal relationships, as nonverbal expressions of love are important to the stability and health of long term relationships (Gonzaga & Keltner, 2001). Our study investigated whether perceived personality traits were associated with greater caring synchrony in 107 long-term married couples. Trained coders coded for caring synchrony in videos of couples having a 15-minute conversation about marital conflict. Couple's perception of self/partner's personality was assessed using the Adjective Check List (Gough, 1960). Results indicate that greater caring synchrony is associated with greater wives' perception of husbands' agreeableness (r=.289, p=.003) and openness (r=.223, p=.021), and lower perception of husbands' neuroticism (r= -.211, p=.029). Caring synchrony is also positively associated with husbands' self-perception of openness (r=.219, p=.027). Findings indicate a link between caring synchrony and couples' perception of positive partner and self personality traits.

9. **Positivity Resonance vs. Shared Positive Affect as Indicators of Long-term Marital Satisfaction**

Otero, M.C., Wells, J.L, Chen, K., Brown, C.L., Levenson, R.W. & Fredrickson, B.L.

Previous research suggests that shared positive affect facilitates social relationships. More recent theory extends this idea to suggest that positivity resonance (i.e., shared moments of positive affect plus mutual care and biobehavioral synchrony) is important for building relationship resources that contribute to greater relationship satisfaction and health (Fredrickson, 2016). We developed a novel behavioral coding system to quantify the global construct of positivity resonance and achieved coder reliability (intraclass correlation coefficient = .80)). We then examined whether more frequent moments of positivity resonance between long-term married partners during dyadic interactions were related to couple marital satisfaction above and beyond shared positive affect. Our sample included 148 long-term married couples. Couples took part in a 15-minute conversation about a topic of disagreement while being videotaped. Trained coders rated the video recordings for moments of (a) positivity resonance using our new global coding system and (b) shared positive affect using the Specific Affect Coding System (SPAFF). Marital satisfaction was measured using the Locke-Wallace Marital Adjustment Test. Results indicated that behaviorally coded positivity resonance predicted long-term marital

satisfaction more strongly than shared positive affect coded with SPAFF (beta = .242, p= .013; beta= .059, p= .537). The finding highlight the value of assessing positivity resonance, above and beyond shared positive affect to understand marital satisfaction.

10. **Health-related behaviors among adolescents: Effects of positive emotion dissociation and social influence**

Rice, E.L, Klein, W.M.P., & Ferrer, R.A.

Positive emotion dissociation (i.e., behavioral displays that do not match experienced positive emotion) may predict worse psychological functioning as a consequence of disrupted social connection (Mauss et al., 2011). Here, we explored the implications of positive emotion dissociation and disrupted social processes for peer influence on behavior among U.S. adolescents. Data from the Family Life, Activity, Sun, Health, and Eating (FLASHE) study (N=1,787; ages 12-17) revealed that (consistent with prior research) positive emotion dissociation was associated with heightened loneliness (β=0.16, p<.001). Further, in the contexts of eating fruits and vegetables (β=0.30, p=.002) and being physically active (β=0.19, p=.02), adolescents who reported greater positive emotion dissociation demonstrated a stronger association between their peers' behavior and their own behavior. This interaction did not emerge for corresponding unhealthy behaviors, nor did any such interactions emerge for negative emotion dissociation. These results suggest that positive emotion dissociation may uniquely disrupt social processes, rendering teens more susceptible to peer influence.

11. **To Share or Not to Share? The Effects of Sharing Gratitude on Actors and Targets**

Walsh, L.C. & Lyubomirsky, S.

A growing literature has examined the benefits of expressing gratitude via writing (and at times delivering) a letter of gratitude to a benefactor. Yet the separate impacts of the gratitude sharing process on "actors" expressing gratitude (i.e. writing a gratitude letter that is kept private), sharing it (writing a gratitude letter and sharing it), and on "targets" (benefactors) receiving gratitude (from sharing actors) remain unknown. To address these questions, undergraduates (N = 403) were randomly assigned to one of four conditions in a 2 x 2 design. They wrote either a gratitude letter or a letter about their daily activities to a parent, who also participated in the study (N = 225). Half shared their letters with their parents, and half did not share. Among students, expressing gratitude led to greater improvements in mood and life satisfaction than writing activities letters. Yet sharing gratitude produced a wider array of benefits (e.g., greater relationship closeness and self-improvement motivation) than merely expressing gratitude. Interestingly, parents paired with a child who wrote a gratitude letter experienced well-being benefits whether their child shared their gratitude or not.

12. **Beyond "feeling good": Experiencing a variety of positive emotions is beneficial for wellbeing, above and beyond positive emotion intensity**

Willroth, E.C., Flett, J.A.M., Conner, T.S., & Mauss, I.B.

Increasingly, research on positive emotions suggests that discrete positive emotions (e.g., contentment vs compassion) confer unique benefits. Thus, experiencing a variety of discrete positive emotions should promote psychological health, above and beyond mean intensity of positive emotions. We tested this hypothesis in an American community sample (N = 244) and a New Zealand undergraduate sample (N = 1440). In both samples, the propensity to experience a variety of positive emotions was assessed with a trait questionnaire and daily positive emotions were assessed with daily diaries for two weeks. Wellbeing was assessed as a composite of life satisfaction and reverse-scored depressive symptoms. At the trait level, the number of positive emotions experienced was positively associated with greater wellbeing in both samples, over and above mean positive emotion intensity. This association was replicated at the daily level in the larger Sample 2 and was found to be of equal magnitude in Sample 1, but did not reach statistical significance due to the smaller sample size. These results suggest that experiencing a variety of positive emotions—independently from the intensity of positive emotions—is beneficial for wellbeing.
theory of positive emotions. According to this theory, positive emotions broaden people's momentary thought-action repertoires and enhance their motivation, thus influencing their work engagement. We propose that individuals are influenced by these ambient emotions expressed by others through emotional contagion processes and these emotions then influence their subsequent decisions.

13. **Catching emotions: The effects of primitive emotional contagion**

Younge, A. & Melwani, S.

While most studies have focused on emotional contagion, the automatic process by which people "catch" others' emotions, occurring in face-to-face interactions, recent evidence highlights that emotional contagion can occur outside of in-person interaction. We explore this process in greater depth, specifically examining the role of two oppositely valenced emotions, anger and happiness. Undergraduate students (N=157) participated in this experimental study, which included the confederate's emotion (anger vs. happiness vs. no emotion) as a between-participants variable and idea evaluation as a dependent variable, as well as participants' own emotion ratings. While participants read through a proposal idea, a confederate received a phone call next to them. As predicted, even though participants were not directly interacting with the confederate, they experienced emotional contagion; this process then predicted the degree to which participants liked the proposal idea. The link from positive emotions to task engagement can be understood from the perspective of the broaden-and-build

theory of positive emotions. According to this theory, positive emotions broaden people's momentary thought-action repertoires and enhance their motivation, thus influencing their work engagement. We propose that individuals are influenced by these ambient emotions expressed by others through emotional contagion processes and these emotions then influence their subsequent decisions.

14. **Unpacking the downside of valuing happiness: Capturing concern about happiness versus need for happiness**

Zerwas, F.

Correlational and experimental evidence suggest that valuing happiness to an extreme degree may be associated with lower well-being. Much of this research has assessed the tendency to value happiness along a single dimension. However, valuing happiness may be best represented by multiple facets that might have discrete associations with well-being. To examine this idea, we analyzed the factor structure of seven to nine items capturing valuing happiness and their well-being correlates in four samples (N_{total} = 1606, Ns > 159). Our analyses indicate two distinct facets: One facet represents the tendency to form negative evaluations about the degree to which one has achieved happiness ("*concern about happiness*"). The other facet represents the tendency to want and strive for happiness ("*need for happiness*"). The concern about happiness facet correlated negatively with well-being, including when controlling for a general tendency to worry, whereas the need for happiness facet did not. These findings suggest valuing happiness entails multiple facets that vary in their implications for well-being. Specifically, whereas being concerned about happiness is associated with negative outcomes, needing happiness is relatively innocuous.

2018 Positive Emotions Pre-Conference Organizers

Jennifer Stellar
University of Toronto

Christopher Oveis
University of California, San Diego

Lisa Williams
University of New South Wales

Thank you to IPPA for a generous donation to support the SAS Positive Emotions Pre-conference!!