



Concurrent Session A Presentations

Friday 11/9
2:30–3:30 PM

A01 - Panel

Kave Ballroom

Presenters:

Moderator: Amit Bernstein, *University of Haifa*

Panelist: Elissa Epel, *University of California San Francisco*

Panelist: Zindel Segal, *University of Toronto*

Panelist: David R. Vago, *Vanderbilt University*

Title: *What Do We Know & Where Should We Go? A Critical Discussion on the Science of Mindfulness & Meditation*

Abstract: Over the past two decades, we have witnessed and contributed to the emergence of a new domain of scientific inquiry—a science of contemplative practices. By investigating practices and ideas emerging from contemplative traditions we have worked to advance understanding of human suffering, resilience, health and wellbeing. The magnitude of growth of mindfulness and meditation research is remarkable. Yet, despite significant progress and promise of this field of research, leading scholars have recently argued that the scope and methodological rigor of research in this field has not improved over time. Thus the field must adopt a more critical perspective on the contemporary evidence base, recognize and correct significant limitations of the methods of extant contemplative science, and tread cautiously with respect to their fast-growing clinical and social applications. Accordingly, this discussion panel is dedicated to exploring the following questions: (1) What are key strengths and limitations of the current state of contemplative science? (2) What are the research practices and directions that may be most important to advance the rigor, discovery and impact of contemplative science? (3) What are the most important questions, goals and outcomes for research on contemplative practices and their clinical and social application in the coming decade? (4) How can

we broaden the scope of research to investigate more varied contemplative practices? Importantly, we will discuss these issues with respect to and across the diverse disciplinary perspective that our speakers bring to the panel, including cognitive, affective, social, and neuroscientific perspectives.

A02 - Panel

Coyote + Buzzard + Eagle

Presenters:

Moderator: Gaelle Desbordes, *Massachusetts General Hospital & Harvard Medical School*

Panelist: Lobsang Negi, *Emory University*

Panelist: John Dunne, *University of Wisconsin*

Panelist: Charles Raison, *School of Human Ecology, University of Wisconsin-Madison; Spiritual Health, Emory Healthcare*

Title: *Advancing the Science of Compassion: Investigating the Role of Mindfulness and Cognition*

Abstract: Recent decades have seen a burgeoning of research examining a wide variety of outcomes and applications of mindfulness-based interventions (MBIs). More recently, the research on compassion-based interventions has also steadily grown. As both fields mature, there is a growing need for clarity about the relationship between mindfulness and compassion. Does mindfulness meditation subsume compassion, or does compassion rest on a foundation of mindfulness practices? Are the two distinct and separable, or are they complementary? As the empirical investigation of contemplative practices matures, the need for greater conceptual clarity regarding these questions will only intensify. While mindfulness meditation is primarily understood as a stabilizing form of meditation, compassion training often involves analytical thinking or reflections designed to promote and sustain cognitive perspectives that support a more compassionate orientation toward self and others. Similar to the relationship of mindfulness to compassion, the relationship of cognition to compassion and the role of cognitive reframing in the cultivation of compassion is an important question that needs investigation in order to enrich research efforts. Moreover, the centrality of analytical thought to certain forms of compassion meditation currently developed in the West poses the important question of how cognition in general, and cognitive reframing in particular, fits with the more accepting/receptive types of mentation that are normative in most mindfulness based programs. In this discussion session, the panelists will draw from their respective fields of expertise—cognitive science, neuroscience, psychology, and philosophy—to address these important questions.

A03 - Panel

Bird + Roadrunner

Presenters:

Moderator: Harold Roth, *Brown University*

Panelist: Adrien Stoloff, *Brown University*

Panelist: Jeremy Hunter, *Claremont Graduate University*

Panelist: Edward Slingerland, *University of British Columbia*

Title: *Wuwei and Flow: Toward a Modern Understanding of a Classical Chinese Phenomenon*

Abstract: Wuwei was a spiritual ideal in ancient China (4th-2nd centuries BCE). Translated as non-action or effortless action, wuwei is defined as responding to any situation effortlessly and perfectly. In its original formulation, wuwei was an ideal that was applied to rulers and sages; the locus classicus for the term is wuwei er wubuwei ("not acting, yet nothing is left undone"). A similar concept, Flow, has been put forward by the positive psychologist Mihaly Csikszentmihalyi. Flow, also known as autotelicity, is defined as the experience of being so deeply involved in a challenging activity that one forgets being conscious of oneself. Those who experience flow are therefore able to attend to an activity with minimal effort. Recently some scholars have proposed parallels between wuwei and the concept of flow. Other scholars have claimed that we can study wuwei from the perspective of cognitive neuroscience, suggesting that it may involve reductions in brain regions such as the default mode network. How are wuwei and flow similar and how are they different? What are the potential benefits and pitfalls of trying to define an ancient Chinese spiritual ideal in Western scientific language? Is wuwei only applicable in the context of leadership (as in its original formulation)? Or is it, like flow, applicable to other contexts (such as artistic creation or athletic performance)? In this panel, scholars of wuwei and flow discuss these questions, aiming to construct a modern understanding of a classical Chinese concept.

A04 - Papers

Komatke A

Session Title: *Experiences From Mindfulness Interventions and Research in American Minority Communities*

Session Abstract: As many health disparities in American Minority Communities (AMCs) are stress-related, there has been an increased interest in the development of mindfulness programs as potential stress reduction measures in the United States. However, the bulk of the extant literature on

mindfulness research and clinical interventions is based upon experiences in the larger White community. This presentation builds on the experiences of researchers who have explored mindfulness in African and Native American communities to provide researchers and practitioners with information regarding key cultural considerations and frameworks for conducting research and developing culturally-salient mindfulness programs with AMCs. We discuss issues around the context and appraisal of stressors, research design and outreach with an emphatic gesture to the priority of protection of the AMC and their participants.

Paper A04a

2:35–2:50 PM

Title: *Considerations for Research and Development of Culturally Relevant Mindfulness Interventions in American Minority Communities*

Presenter: Jeffrey Proulx, Oregon Health & Science University

Authors: J Proulx, R Croff, B Oken, CM Aldwin, C Fleming, D Bergen-Cico, T Le, & M Noorani

Abstract: As many health disparities in American minority communities (AMCs) are stress related, there has been an increased interest in the development of mindfulness programs as potential stress-reduction measures in these communities. However, the bulk of the extant literature on mindfulness research and mindfulness interventions is based upon experiences with the larger White community. The intent of this commentary is to share a framework that includes key cultural considerations for conducting research and developing culturally salient mindfulness programs with AMCs. We build on our experiences and the experiences of other researchers who have explored mindfulness in African- and Native American communities; in particular, we examine issues around community outreach with an emphatic gesture toward emphasizing protection of AMCs and their participants. Discussed are considerations with respect to attitudinal foundations in mindfulness-based research and program development with these communities. However, the overall message of this paper is not to provide a to-do list of research steps, but rather to encourage researchers to turn inward and consider the development of skillful characteristics that will increase the likelihood of a successful research venture while also protecting the cultural traditions of the AMC of interest.

Paper A04b

2:55–3:10 PM

Title: *The Effect of a Brief Mindfulness Intervention on Coping Strategy Preferences Across Stressor Types Among African Americans*

Presenter: Veronica Womack, Northwestern University Feinberg School of Medicine

Authors: V Womack, LR Sloan

Abstract: This study investigated whether a brief mindfulness intervention influenced coping strategy preferences among African Americans across types of stressful situations. One hundred and eighty-six African American college students were randomly assigned to one of the six conditions in a 2 (mindful; control) x 3 (family, race-related, non-social) factorial design. The dependent variables were the coping strategies that were selected after reading the stressor scenario. Endorsement of approach or avoidant oriented coping strategies did not vary by mindfulness manipulation. However, the mindfulness manipulation interacted with stressor scenario type's influence on two approach-oriented coping strategies: planning and active coping. Individuals in the "mindful" x "race-related stressor" condition were significantly less likely to select the planning and active coping strategies to deal with the stressor compared to all of the other conditions. These findings suggest that acknowledging stressor content may be an important consideration for mindfulness-based stress reduction interventions targeting African Americans.

Paper A04c

3:15–3:30 PM

Title: *Mindfulness, Biomarkers, and Culture: Stepping Lightly in Biomarker Analysis*

Presenter: Dessa Bergen-Cico, Syracuse University

Authors: D Bergen-Cico, J Proulx

Abstract: The use of biomarkers to assess the efficacy of Mindfulness-Based Stress Reduction (MBSR) programs for diverse cultures may: a.) serve as objective measures of MBSR program outcomes, and b.) provide consistent measures across cultures when language or validity of psychometric measures present barriers for research and assessment. However, a history of the misuse of biological sampling materials and unethical research involving biological samples, notably that which has been conducted with African American and Native American communities, can erode trust and present substantial barriers to engaging these communities in such research. This paper presents examples of biomarker (e.g. cortisol) and neuroimaging (e.g. functional near-infrared spectroscopy fNIRS) devices and how they may be used effectively and ethically with diverse communities.

A05 - Papers

Komatke B

Session Title: *The NEW Moms Connect Study: An Investigation of Pre- and Postnatal Mindfulness Interventions to Nurture Emotional Well-being in Low Income Peripartum Women*

Session Abstract: Mindfulness-based interventions show promise in promoting mental health. Few studies have examined the benefit of such interventions among peripartum women, especially low-income peripartum women, despite the prevalence of psychological distress and adverse birth outcomes within this population. This panel will present an intervention study comparing the effects of three interventions in a diverse, low-income sample (N=105): a prenatal mindfulness skills development program, which aims to promote mental health and emotion regulation in pregnant women; a similar mindfulness skills development program delivered in the postnatal period; and a mindfulness-based parenting program that facilitates more sensitive, responsive parenting practices. Talk 1 describes the study design and presents information on the acceptability and feasibility of these interventions. Talk 2 explores the effect of the prenatal intervention on infant birth outcomes. Talk 3 examines differential effects of the programs on measures of maternal mindfulness, mental health symptoms, emotion regulation, and resilience.

Moderator: Liliana Lengua

Paper A05a

2:35–2:50 PM

Title: *Conducting Mindfulness Intervention Research in Diverse Populations: The NEW Moms Connect Study*

Presenter: Rebecca Calhoun, *University of Washington*

Authors: R Calhoun, SF Thompson, LJ Lengua

Abstract: While the impact of perinatal stress and mental health challenges on mothers is well-documented, few treatment studies have examined feasible and effective approaches to addressing these challenges in women experiencing economic disadvantage. These gaps in understanding gave rise to the NEW Moms study, which aims to understand if and when mindfulness-based interventions are beneficial to low-income perinatal women. In this presentation, we will describe methods, design and the content of the three intervention programs, noting both adaptations to well-known mindfulness-based childbirth and parenting interventions, and the range of "formal" mindfulness versus informal mindfulness practice within each intervention. The literature suggests that mindfulness-based approaches to reducing stress and increasing well-being are preferred by and effective for pregnant women relative to other treatment options, but much of this research has been conducted within relatively advantaged samples, whereas the participants in the current study are <200% poverty. These high-risk women are sometimes served by intensive interventions such as nurse visiting programs, so it is particularly beneficial to understand how resources might best be employed when only shorter, targeted interventions are feasible. As such, we will discuss the feasibility and acceptability of the three mindfulness-based interventions, as delivered in a group format within the community, to low-income women, based on participation rates and quantitative and qualitative group feedback. Of note, the study is currently underway, but based on

current recruitment and study enrollment, these planned analyses will be conducted on between 75-100% of the sample (N ~=75) for the conference.

Paper A05b

2:55–3:10 PM

Title: *The NEW Moms Connect Prenatal Mindfulness Skills Development Program: Effects on Pregnancy and Birth Outcomes*

Presenter: Robyn Long, *University of Washington, Center for Child & Family Well-Being*

Author: R Long

Abstract: A burgeoning body of research indicates that prenatal stress, defined as the occurrence of negative life events, maternal depression, maternal anxiety, and anxiety related specifically to pregnancy and birth have detrimental effects on both mother and offspring. Unfortunately, clinically significant distress is common among pregnant women (~15-25%) as are anxiety and mood symptoms (18.4%+). Maternal prenatal stress is linked to increased risk of spontaneous abortion, preterm birth, unplanned Caesarean delivery, lower Apgar scores, smaller head circumference, and low birth weight. In addition, prenatal stress is a significant predictor of substance use in pregnancy, a more difficult delivery, and dissatisfaction with the birth experience. Mindfulness-based stress reduction programs targeted at pregnant women have been developed, through research on their efficacy is nascent. These programs may benefit women by reducing maternal distress during pregnancy as well as altering the delivery experience. That is, a tense mindset may slow labor and increase the risk of delivery interventions and complications, whereas a mindful birthing experience may promote calm facilitation of birth, and increased satisfaction with the birth experience. In this presentation we present evidence of the effectiveness of a prenatal mindfulness skills development program in decreasing symptoms of pregnancy-specific anxiety and increasing interoceptive awareness among the ~30 women who received the prenatal intervention. Further, the pregnancy (substance use) and delivery and birth outcomes (rates of preterm, unplanned Caesarean, and low birth weight infants) as well as the birth satisfaction of these women will be compared to the ~60 women who participated in postnatal groups.

Paper A05c

3:15–3:30 PM

Title: *Exploring Differential Effects of Pre- and Postnatal Mindfulness & Parenting Interventions on Maternal Well-being*

Presenter: Stephanie Thompson, *University of Washington*

Authors: SF Thompson, R Calhoun, D Whiley, LJ Lengua

Abstract: Stress, adversity and mental health problems are often stable and pervasive in many families experiencing economic disadvantage from the prenatal period through the infant's first few years of life. One aim of the larger study is to identify the optimal timing and format to support these at-risk peripartum women. Beyond pregnancy, the early postpartum period is often a period of significant stress, and may present a window of opportunity to support maternal stress management and mental health through mindfulness or through behavioral instruction on effective parenting practices. In this presentation we compare the effects of the (1) prenatal mindfulness intervention (2) a similar postnatal mindfulness intervention and (3) a mindfulness-informed parenting program emphasizing sensitive and responsive care of infants. Specifically, we will examine if the programs are associated with similar or differential effects on maternal mental health (symptoms of anxiety and depression), emotion regulation capacity, and resilience. Since the interventions vary in the degree to which they emphasize mindfulness, Talk 3 will conclude by comparing changes in maternal self-report of mindfulness and self-compassion across the three intervention programs. By investigating both the timing (pre- v. postnatal) and targets of intervention (mindfulness v. parenting) these talks will contribute to an understanding of which aspects of targeted interventions promote maternal well-being in the peripartum period.

A06 - Papers

Komatke C

Session Title: *The Impact of Mindfulness Programming in Urban Public Schools*

Session Abstract: Mindfulness in school settings has received a great amount of media attention in the past few years in attempting to address the needs of vulnerable students and stressed teachers. However, along with this increased incorporation of mindfulness programming is a need for rigorous study of the effects that school-based mindfulness programs have on mental health and overall functioning. The goal of this paper session is to discuss three high quality studies in various stages of implementation that are examining the role of mindfulness programs utilizing multiple implementation modalities, including in-class sessions with students and an online mindfulness program for primary school teachers. The potential and examined impact of these programs on psychological functioning will be discussed, as well as challenges of implementation, acceptability of the programs, and future directions of research in this area.

Paper A06a

2:35–2:50 PM

Title: *A Pilot Trial of an Online Mindfulness Program for Primary School Teachers*

Presenter: Lindsey Webb, Johns Hopkins Bloomberg School of Public Health

Authors: L Webb, E Sibinga, T Mendelson

Abstract: Many teachers in urban schools have reported high stress levels due to large classroom sizes, student stress and behavior, and a general lack of resources. Mindfulness practices show a potential for improving stress management for many populations. This study developed and piloted a web-based mindfulness program designed for teachers to use both for self-care practices and in the classroom with students. Participants were 50 teachers recruited from three Baltimore city public elementary/middle schools. Participating teachers filled out self-report surveys at baseline and after the 9-week online program on their levels of mindfulness, stress, sleep quality, and psychological symptoms. Paired t-tests were used to examine changes between baseline and post-program surveys. Approximately half of the teachers participated in focus groups after completion of the 9-week mindfulness program, and themes related to program benefits and website satisfaction were explored. At baseline, the majority of the sample had little or no prior exposure to mindfulness practices. Analyses of the surveys showed significant improvements in work-related stress, overall perceived stress, depressive symptoms, anxiety symptoms, non-judging, duration of sleep, sleep disturbances, use of sleep medication, and overall sleep quality. Focus groups revealed perceived benefits to the program, including improved student interactions, as well as overall satisfaction with the website and suggestions for further improvements. These findings suggest the potential for benefit of online mindfulness programming for classroom teachers. Future, more rigorous research is needed to better understand the program's effect and the potential utility of online mindfulness programming in various populations.

A06b

2:55–3:10 PM

Title: *A Trauma-Informed Intervention With Mindfulness Components to Promote Mental Health and School Success in Urban Eighth Graders*

Presenter: Tamar Mendelson, Johns Hopkins Bloomberg School of Public Health

Authors: T Mendelson, C McAfee, K Rodriguez, M Patti, L Clary, N Lalongo

Abstract: There is a shortage of resources to promote positive youth development in underserved urban communities. Our pilot study indicated that RAP Club, a trauma-informed intervention with mindfulness components, improved classroom behavior and academic competence for urban 8th graders. RAP Club is co-facilitated by mental health personnel and young adult community members to promote student engagement. The study aims are to test whether RAP Club improves emotional, behavioral, and academic outcomes for 8th graders as compared with Healthy Topics, a health program active control condition, and to evaluate program moderators, mediators, and factors related to implementation. Eighth grade students are randomized within schools to RAP Club or Healthy

Topics. Over the course of the study, we will work with 32 public schools serving low-income communities. We will gather data from student surveys and teacher ratings of students at baseline, post-intervention, 4-month follow up, and 12-month follow up. We will also collect students' academic data for their 7th, 8th, and 9th grades. We are currently in the second year of the study. We will describe the intervention conceptual model and core components, summarize our pilot data on RAP Club, and present baseline demographic data for participants thus far, as well as qualitative data on participant experiences with the intervention. A trauma-informed program incorporating mindfulness may offer valuable skills to enhance emotion regulation and stress management, promoting positive youth development. If successful, RAP Club has potential for broad dissemination in urban schools.

Paper A06c

3:15–3:30 PM

Title: *School-Based Mindfulness Instruction Show Additional Benefits for U.S. Male Urban Minority Youth*

Presenter: Erica Sibinga, Johns Hopkins School of Medicine

Authors: E Sibinga, L Webb

Abstract: School-based mindfulness programs can benefit children's mental health. However, there is a dearth of research on potential gender differences in the effects of youth mindfulness programs. This randomized controlled trial (RCT) compared a 12 weekly-session school-based program based on mindfulness-based stress reduction (MBSR) compared with a matched health education course, in which students at three Baltimore City Public Middle Schools were randomized by grade. The sample was ~90% African American, with greater than 95% eligibility for free or reduced meals. At baseline, there were differences by gender in mindfulness, stress, emotion regulation, and negative emotions; therefore, baseline variables were included in models of significant outcomes. Multivariate linear regression models were used to examine intervention effect in each variable of interest, adjusted for age and school. 436 students (52% female; mean age 12.0 years) participated in baseline data collection. Reported previously, the 12-week mindfulness instruction program led to statistically significant improvements in: aggression, rumination, negative emotions, coping, negative psychological symptoms (e.g., self-hostility), anger expression, and post-trauma stress symptoms. Additionally, male participants in the mindfulness program had greater reductions in hostility, higher levels of mindfulness, and a trend toward lower stress. In this RCT of school-based mindfulness programming, not only was the program effective at improving psychological symptoms, coping, and post-stress symptoms, but male students experienced additional benefits, with lower hostility, higher levels of mindfulness, and a trend toward lower stress. Future research should consider potential gender differences when studying mindfulness programming for youth.

A07 - Papers

Ant

Individual Presentations

This session contains individually submitted paper presentations. Details for each paper are listed in the subsessions below.

Paper A07a

2:35–2:50 PM

Title: *Differential Impacts of Mindfulness Training on Teacher Well-being and Classroom Interactions: Results from a Randomized Controlled Trial*

Presenter: Jaiya Choles, *Portland State University*

Authors: J R Choles, N P Rickert, C Taylor, C Pinela, E A Skinner, A J Mashburn, R W Roeser

Abstract: Recent research endeavors have examined mindfulness training (MT) within the context of schools to promote teacher well-being and positive teacher-student interactions. Results from previous studies demonstrate positive impacts of MT on teachers' mindfulness-related skills (e.g., mindfulness, self-compassion) and well-being (e.g., reduced anxiety, burnout); and on measures of teacher-student interactions in the classroom. However, it remains unclear which teachers benefit most from MT. As such, the purpose of this work was to examine two key factors, teaching experience and school structure, that may influence the extent to which MT benefits teachers and their classrooms. We predicted these factors would influence MT benefits because of high attrition rates in early career teachers due to burnout and because middle school contexts (as compared to K-8 contexts) are demonstrably less emotionally supportive for students because of their multi-class structure. Results from a randomized controlled trial indicate that teaching experience and school structure significantly moderate multiple teacher mindfulness and well-being outcomes, in addition to many Classroom Assessment Scoring System indicators of observed teacher-student interactions, four months after MT. Specifically, significant or marginally significant differential impacts on one or both of these moderators were found for teachers' mindfulness, self-compassion, anxiety, depression, and burnout; as well as classroom-level negative affect, teacher sensitivity, behavior management, classroom organization, productivity, negative climate, and student engagement. Implications for these findings suggest MT may be a particularly successful intervention for early career teachers and those who teach in middle school settings.

Paper A07b

2:55–3:10 PM

Title: A07b - Effects of Leader Mindfulness in a Randomized Trial of the Mindful Coping Power Program

Presenter: Caroline Boxmeyer, University of Alabama

Authors: C Boxmeyer, S Miller, H Henkin, D Romero, H Bishop, J Lochman

Abstract: This paper will present findings from a randomized trial comparing an evidence-based cognitive behavioral intervention (Coping Power, CP) to a mindfulness enhancement (Mindful Coping Power, MCP) designed to optimize effects on children's emotional reactivity and aggression. Effects of leader mindfulness on children's emotional and behavioral outcomes will be highlighted. The sample includes 102 fifth grade students (boys and girls, majority Black) from the southeastern U.S. and their parents. Students were identified based on elevated teacher ratings of emotional reactivity and aggression. Students were randomly assigned to CP or MCP in matched pairs at each of 5 elementary schools. Each leader facilitated both the CP and MCP groups at an assigned school. Eighteen total intervention groups (9 CP, 9 MCP) were held across two annual cohorts. Leader mindfulness was assessed via self-report on the Five Facet Mindfulness Questionnaire (FFMQ). An observational coding system was also developed (based upon the FFMQ) to assess leader mindful embodiment during CP and MCP sessions. Greater leader mindfulness (FFMQ-self-report) was significantly associated with improvements in child prosocial behavior (BASC parent and teacher report) and externalizing problems (BASC parent report) at post-intervention. Of the five FFMQ facets, leader nonreactivity, nonjudgment, and describe were most consistently associated with child outcomes. Effects of leader mindful embodiment during CP and MCP sessions (FFMQ-coder version) on child outcomes will also be presented. This randomized trial provides empirical support for the importance of leader mindful embodiment and informs the relative contributions of program content versus leader style.

Paper A07c

3:15–3:30 PM

Title: Contemplative Teaching Competencies: Presence, Relationships and Pedagogies

Presenter: Richard Brown, Naropa University

Author: R Brown

Abstract: In the emerging field of contemplative teaching, there is a growing need for clear articulation of the skills and competencies effective for all levels of classroom instruction. Adapted primarily from Tibetan Buddhist sources, this paper proposes a paradigm of multiple teaching competencies, presented as a progression from inner to outer skills, and divided into three areas: Presence, Relationships, and Pedagogies. Each of these three skills areas is further divided into three levels—indicating increasing mastery. The contemplative teaching competencies have been abstracted from numerous Buddhist sources, including the Ten Vidyas or "fields of knowledge" of the Indo-Tibetan

monastic curriculum adapted to a western liberal arts model. This paradigm articulates these competencies in non-sectarian terms for use in all educational settings, from Pre-K to higher education. Presence competencies arise from the inner disciplines of mindful awareness, sensorial embodiment, compassion, contemplation, and environmental/space awareness. Developing inner holistic skills sustains the teacher and cultivates an effective teaching presence. Relationship competencies build on the teacher's presence to develop interactive and communication skills to deepen instruction and climate. Pedagogy refers to contemplative principles and methods for transforming curricular learning in any subject discipline. These competencies were developed in Naropa University's Contemplative Education department and were integrated into the successful application to the State of Colorado's Department of Education for graduate and undergraduate contemplative teacher licensure programs. This paper illustrates how contemplative practices and activities related to listening skills, a thread within all areas of these competencies, are developed throughout students' educational journeys.

A08 - Papers

Quail

Individual Presentations

This session contains individually submitted paper presentations. Details for each paper are listed in the subsessions below.

Paper A08a

2:35–2:50 PM

Title: *The Association of Compassion, Depressive Symptoms and Psychobiological Stress-Response Following CBCT® for Couples: First Results From the Social Interaction in Depression (SIDE) Study*

Presenter: Corina Aguilar-Raab, Heidelberg University

Authors: C Aguilar-Raab, M N Jarczok, F Winter, M Warth, T Negi, T WW Pace, B Ditzen

Abstract: Compassion can substantially impact the physical and mental health of individuals. However, only few studies have investigated the effects of compassion in depressed couples. Although pair bonding, relationship quality and social interaction are significantly associated to a variety of health parameters, positive social interaction between members of couple relationships has never been tested evaluating a compassion training. Therefore, we hypothesized that a cognitively based compassion training (CBCT®) adapted for couples will increase compassion, reduce depressive symptoms and the burden of the partner which in turn would be associated with an altered psychobiological stress-response during a positive social interaction. Women diagnosed with a

depressive disorder and their male partners were recruited in public and from Heidelberg University Hospital. Until the beginning of 2018, 30 couples were randomly assigned to either a 10 week CBCT® for couples- or treatment as usual- group (TAU). Repeated measures analyses of variance were calculated to test for differences between the two groups from pre-to-post intervention, with a focus on the interpretation of effect sizes in this preliminary sample. Expected outcomes were observed with regard to enhancement of compassion, reduction of depressive symptoms and partner burden following the CBC-Training® and compared to TAU. Its association with stress-response in the laboratory analyzing alpha amylase and cortisol during a positive social interaction task will be discussed. Despite the preliminary character of the data, results indicate that CBCT® adapted for depressed couples has an impact not only on mental but also on physical health parameters relevant for relationships.

Paper A08b

2:55–3:10 PM

Title: *Mechanisms of CBCT® for Depressed Couples: Do Session-Based Changes Over Time Really Matter?*

Presenter: Friederike Winter, *Institute of Medical Psychology, University Hospital Heidelberg*

Authors: F Winter, M Warth, M N Jarczok, T Negi, T Harrison, B Ditzen, C Aguilar-Raab

Abstract: Depressed patients were found to benefit from mindfulness and compassion training with regard to reduced negative affect and depression as well as increased well-being and life-satisfaction. To further investigate the process of mindfulness and compassion based intervention contemplative science has turned the focus on change mechanisms. Yet, few studies have examined change mechanisms of a compassion-based training for couples in a depressed sample. Our research investigates the extent to which CBCT® (Cognitively-Based Compassion Training, a program of Emory University) adapted for couples could serve as a tool to counter depression. We examined change mechanisms over time and in relation to outcome. More specifically, we hypothesized that parallel to relevant outcomes of group therapy, factors like group cohesion or recognizing commonalities will increase over time. Important psychological mechanisms during meditation sessions like decentering or self-regulation will expand session-to-session and in turn be associated with symptom reduction while controlling for home-based practice frequency. Our preliminary results of a first sub-sample shed more light on specific effects of CBCT® as a multi-couple training to treat depression accounting for relevant variables of the social context. We will discuss how these aspects are associated with the enhancement of empathy and compassion, qualities that should have an impact on important relationships in daily life.

Paper A08c

3:15–3:30 PM

Title: *Mindfulness-Based Cognitive Therapy for the Treatment of Current Depression: A Meta-analysis*

Presenter: Simon Goldberg, *University of Washington - Seattle*

Authors: SB Goldberg, RP Tucker, PA Greene, RJ Davidson, DJ Kearney, TL Simpson

Abstract: Mindfulness-Based Cognitive Therapy (MBCT) appears to be a promising intervention for the prevention of relapse in major depressive disorder, but its efficacy in patients with current depression is less clear. Randomized clinical trials of MBCT for adult patients with current depression were included ($k=17$, $N=1,379$). Comparison conditions were coded based on whether they were intended to be therapeutic (specific active controls) or not (non-specific controls). MBCT was superior to non-specific controls at post-treatment ($d=0.65$, 95% CI [0.47, 0.84]), although not at longest follow-up ($d=1.06$, [-0.23, 2.35], mean=6.75 months). MBCT was similar to other active therapies at post-treatment ($d=-0.004$, [-0.33, 0.32]) and longest follow-up ($d=0.22$, [-0.19, 0.64]). Effects of MBCT were not moderated by study quality ($p>0.50$). Evidence for bias was detected through asymmetric funnel plots. However, trim-and-fill analyses did not change significance tests. While MBCT appears efficacious for currently depressed samples at post-treatment (and equivalent to other active therapies at post-treatment and follow-up), the long-term efficacy of this approach is less clear.

A09 - Papers

Horse

Individual Presentations

This session contains individually submitted paper presentations. Details for each paper are listed in the subsessions below.

Paper A09a

2:35–2:50 PM

Title: *Intersectionality and Black Women's Stress: The Positive Role of Contemplative Practices to Address Health Status Inequities*

Presenter: Laurie Nsiah-Jefferson, *Brandeis University*

Author: L Nsiah-Jefferson

Abstract: Intersectionality promotes an understanding of human being being shaped by the interaction of their various social locations (e.g., race/ethnicity, class, sexuality, disability, age, etc.). These interactions occur within a context of connected systems of power and within communities. Black women reside at the intersections of experiencing racial and gendered bias, which fuel health disparities between this group and the general population. Paper Goal: Highlight the role of racial and gendered stress (referred to as gendered racism) and its negative impact on health outcomes for black women, followed by a discussion of how the use of contemplative practices by black women can address/prevent these outcomes. Objectives: 1) Highlight the unique stressors of black women who live at the intersections of experiencing multiple oppressions; 2) Highlight the theoretical underpinnings explaining the mechanism of these raced/gendered stressors on health outcomes, through concepts of embodiment, weathering, the sojourner syndrome, among other theories; 3) Discuss a sample of studies that highlight the relationship between race and gender related stress, experienced by black women and a variety of physical/mental health outcomes; 4) Highlight the key findings from my comprehensive literature review on the role that contemplative practices have played in addressing the health impacts of experiencing gendered racism. The review highlights outcomes from empirical research as well as community and college based interventions, with evaluation data; 5) Address issues of access, and cultural and social relevance of the use of contemplative practices for Black Women and how to address these challenges.

Paper A09b

2:55–3:10 PM

Title: *Minding Your Morals: How Trait Mindfulness Relates to Moral Foundations and Multiple Aspects of Prejudice*

Presenter: Paul Verhaeghen, Georgia Institute of Technology

Authors: P Verhaeghen, S N Aikman

Abstract: In two studies (samples were college students from the South-Eastern USA; n=464 and 434, resp.), we examined how trait mindfulness, broadly defined, relates to moral attitudes (as measured by the Moral Foundations Questionnaire) and (in Study 2) to different aspects of prejudice. With regard to trait mindfulness, we found evidence for a mindfulness cascade: In both samples, two higher-order measures of self-awareness (i.e., reflective awareness and controlled sense-of-self in the moment) influenced two higher-order measures of self-regulation (i.e., self-preoccupation and self-compassion) as well as self-transcendence, which was additionally influenced by self-regulation. Multiple regression and structural equation modeling showed that in both samples self-awareness, self-regulation, and self-transcendence were related to individualizing aspects of morality (i.e., an emphasis on care and fairness); only self-transcendence and social conservatism were related to binding aspects of morality (i.e., an emphasis on loyalty, authority, and sanctity). In Study 2, the individualizing stance, in turn, led to less racist and sexist prejudice, more awareness of white, heterosexual, male, and Christian privilege,

and a higher motivation to control one's prejudiced reactions. The findings suggest that trait mindfulness is associated with what is often seen as 'liberal' moral values and with lower levels of prejudice, and less so with 'conservative' values. The results suggest that training in mindfulness might help individuals to decrease prejudice, be more aware of social justice issues, and be more explicitly motivated to behave in a less prejudiced manner.

Paper A09c

3:15–3:30 PM

Title: *How Mindfulness Practice Can Reduce the Effects of Healthcare Employee Implicit Bias on Patients: An Evidence-based Framework*

Presenter: Diana Burgess, *University of Minnesota; Minneapolis VA Healthcare System*

Authors: D Burgess, M C Beach, S Saha

Abstract: Despite evidence that the healthcare workforce holds implicit (unconscious) biases that contribute to healthcare disparities, little progress has been made in identifying effective bias-reduction strategies. Converging evidence suggests that mindfulness practice can address implicit bias through several pathways: 1) improved responses to stress, which decreases healthcare employee "cognitive load"—the amount of mental activity imposed on working memory—which, in turn, reduces the likelihood that implicit bias will be "activated" in the mind and "applied" to affect behavior towards patients; 2) increased and widened caring responses, including toward members of stigmatized groups; and 3) increased mindfulness skills—which increase employees' ability to become aware of and control their own biases. Recent experiments conducted outside healthcare have also shown that mindfulness practice reduces the activation and application of implicit bias. Mindfulness training may also have advantages over current approaches to addressing implicit bias because it focuses on the development of skills through practice, promotes a nonjudgmental approach, can circumvent resistance some employees feel when directly confronted with evidence of racism, and constitutes a holistic approach to promoting employee well-being. We will present our conceptual framework designed to stimulate future research on the topic, briefly review existing evidence conducted within and outside of healthcare, and discuss our current research agenda. We will also discuss how a mindfulness approach can be practically implemented in healthcare systems and identify potential challenges and research gaps to be addressed.

A10 - Papers

Jackrabbit

Individual Presentations

This session contains individually submitted paper presentations. Details for each paper are listed in the subsessions below.

Paper A10a

2:35–2:50 PM

Title: *From "Yoniso manasikara (wise attention)" to "regulatory flexibility": Harnessing Eastern and Western Wisdoms to Investigate Mechanisms of Contemplative Practices*

Presenter: Nava Levit-Binnun, *Interdisciplinary Center (IDC) Herzliya, Israel*

Authors: N Levit-Binnun, Z Ardi, A Alkoby

Abstract: At its very essence, Buddhist practices involve developing skills for dealing with negative thoughts and emotions in an adaptive manner by cultivating a diverse regulatory repertoire and the ability to flexibly choose the most beneficial response from moment to moment (i.e., yoniso manasikara, or "wise attention"). 2500 years later, contemporary researchers have coined the term "regulatory flexibility" (RF)—the ability of individuals to flexibly and adaptively move between regulation strategies as per contextual demands—and are beginning to appreciate its importance to understand mental health, wellbeing and resilience. We first provide evidence for the Western construct of EF in Buddhist psychology texts and show how it deeply resonates with central concepts in Buddhist psychology. We then present empirical work testing whether mindfulness practice can increase RF abilities involving N=111 participants enrolled into eight Mindfulness Based Stress Reduction workshops that began in either semester A (experimental group) or semester B (control group). After the experimental group finished their workshop and before the control group started theirs, all participants were tested on the Regulatory Choice Flexibility task. The task examined their RF when exposed to negative universally emotion-laden stimuli as well as emotional stimuli related to participants' sociopolitical environment. On both sets of pictures, the regulatory choice patterns of participants who underwent mindfulness training were found to be more flexible than those of control participants, indicated by higher differentiation between strategies when faced with low-intensity versus high-intensity negative emotional pictures. We discuss the implication of this approach in studying contemplative practices.

Paper A10b

2:55–3:10 PM

Title: *A Randomised Controlled Trial Investigating the Impact of Mindfulness-Based Training on Neuropsychological Outcomes among Elderly Diagnosed with Mild Cognitive Impairment.*

Presenter: Kinjal Doshi, Singapore General Hospital

Author: K Doshi

Abstract: The population of Singapore and many other developed nations is aging rapidly. This change will bring with it a host of health-related challenges, among them cognitive decline associated with both normal aging and disease. In our proposed study, we will investigate the effects of mindfulness-based training (MBT), an intervention that has shown significant promise in halting and even reversing age-related cognitive impairment. We aim to investigate its impact on elderly diagnosed with mild cognitive impairment (MCI), a condition marked by deficits in attention, memory and executive function, which may lead to dementia. 66 participants diagnosed with MCI were randomized to one of the following three arms: (i) an 8-week MBT program, (ii) an 8-week cognitive rehabilitation therapy program (CRT; active control), and (iii) no intervention arm (passive control). Assessors, blind to the group assignment of the participant, administered standardized neuropsychological tests evaluating the cognitive domains of attention, memory and executive function prior to and following the 8-week intervention period. Participants who received MBT performed significantly better on tests of delayed memory and executive function; participants who were assigned to CRT or received no intervention exhibited no significant change in their performance on the neuropsychological tests. Results suggest that mindfulness-based training may improve the cognitive abilities of elderly individuals diagnosed with MCI. Current data comprises of one of the most comprehensive interrogations of the effects of MBT on cognitively impaired individuals that can effectively be translated into a program with both clinical and economic impact.

Paper A10c

3:15–3:30 PM

Title: *Neural Mechanisms of Mindfulness and Cognitive Control: A Randomized, Experimental Discordant Twin Design*

Presenter: Todd Braver, Washington University in St. Louis

Authors: T Braver

Abstract: A major challenge in understanding the neural mechanisms by which mindfulness training (MT) may enhance cognition and psychological well-being is that the extant cognitive neuroscience research has not typically employed the most powerful experimental designs or a clear theoretical framework. The current study addresses this gap through the use of monozygotic (identical) twin pairs,

both initially naïve to mindfulness, with one co-twin randomly assigned to a Mindfulness-Based Stress Reduction (MBSR) course, and their co-twin serving as a waitlist control. Both co-twins undergo an extensive assessment protocol before and after MBSR, which includes fMRI neuroimaging with a battery of theoretically-informed and psychometrically-optimized cognitive control tasks. A key hypothesis is that changes in proactive and reactive control, mediated through shifts in dorsolateral prefrontal cortex activity dynamics, are a primary beneficial mechanism of MT effects. We report early preliminary results from this ongoing study (target sample: N=50 twin pairs) that provide suggestive support.

A11 - Papers

Rattlesnake

Individual Presentations

This session contains individually submitted paper presentations. Details for each paper are listed in the subsessions below.

Paper A11a

2:35–2:50 PM

Title: *Examining Adolescents' "Contemplative Capacity" Profiles and Differences in Individual Well-Being*

Presenter: Katie Lenger, *University of Tennessee–Knoxville*

Author: K Lenger

Abstract: The present study sought to determine what types of "contemplative capacity" exist among adolescents and how these typologies differ on adolescent well-being. Data on students' self-compassion, perceived stress, depression, anxiety, life satisfaction, distress intolerance, and resilience were collected from 1,033 middle- and high-school students. First, we conducted Latent Profile Analysis using adolescent self-report of mindfulness, self-compassion, and distress tolerance and determined the appropriate number of contemplative capacity types. According to AIC and BIC fit indices, a five-profile model fit the data best. Profile 1: Moderate Contemplative Capacity (n=341); Profile 2, High Contemplative Capacity (n=289); Profile 3, Low Contemplative Capacity represents (n=114); Profile 4, High Contemplative Capacity and Low Distress Tolerance (n=32); Profile 5, Low Contemplative Capacity with High Distress Tolerance (n=13). However, Profiles 4 and 5 were removed from subsequent tests because the statistical assumption of equality of variance was violated. To examine mean difference among the High, Moderate, and Low Contemplative Capacity Profiles, we conducted a series of Analysis of Variance (ANOVAs) tests. The three profiles differed by perceived

stress, depressive symptoms, anxiety, life satisfaction, and resilience. Post-hoc analyses indicated that all profiles were significantly different across all of the well-being indicators except resilience whereby Moderate and Low Contemplative Capacity were not significantly different. Information about differences in adolescent well-being as a function of "contemplative capacity" and implications for future research will be discussed.

Paper A11b

2:55–3:10 PM

Title: *Person-Meditation Fit: Do Baseline Personality and Meditation Type Interact to Predict Adherence to Practice?*

Presenter: Laura Kiken, Kent State University

Authors: LG Kiken, P Van Cappellen, BL Fredrickson

Abstract: The empirical literature increasingly points to social and health benefits of meditation practice across multiple meditation styles. However, individuals may vary in their inclination to practice a particular style of meditation. The present research examined whether adherence to meditation practice during a socially oriented (lovingkindness) or non-socially oriented (mindfulness) meditation course depends on baseline personality traits. We conducted a secondary analysis of existing data from two longitudinal field experiments (Study 1 N=125, Study 2 N=226) in which community participants were randomly assigned to a multi-week course in either lovingkindness or mindfulness meditation. Both courses prescribed daily home practice. Participants completed a brief measure of Big Five personality traits at baseline and daily reports of meditation practice during the course. In Study 1, baseline agreeableness (e.g., compassion, trust) and extraversion (e.g., outgoing) interacted with meditation type to predict total minutes of meditation practice. Participants higher in these traits practiced more when in a lovingkindness course than in a mindfulness course. The interaction between agreeableness and meditation type was replicated in Study 2. In both studies, there was little evidence that baseline personality predicted adherence to basic study requirements. These results suggest that socially oriented aspects of personality may play a role in the extent to which individuals will practice socially or non-socially oriented types of meditation.

Paper A11c

3:15–3:30 PM

Title: *Suggestion as a Mechanism in Contemplative Practice*

Presenter: Michael Lifshitz, Stanford University; McGill University

Author: M Lifshitz

Abstract: In this talk, I propose that suggestion may play an underappreciated role in determining the experiences and outcomes associated with contemplative practices. I will consider the science of suggestion (including research on hypnosis and placebos) to shed light on emerging findings from the domains of meditation and related practices such as neurofeedback and prayer. Suggestion is the process by which communicable ideas about what one is likely to experience actually shape what one experiences. Suggestions can profoundly modulate a range of physiological and cognitive functions, including processes of autonomic function and attention regulation that have featured prominently in mechanistic models of meditation. The extensive scientific literature on suggestion offers a wealth of useful theories and experimental paradigms for tracing how socially-transmitted beliefs and expectations directly impact the mind and brain. Thus, as scientists come to appreciate the many ways in which sociocultural contexts influence contemplative experiences, suggestion becomes all the more relevant as an explanatory tool. The science of suggestion further emphasizes the critical role of individual differences and thus offers intriguing clues as to why some people seem to have a 'talent' for contemplative experience, whereas others may struggle to achieve the same effects. Carefully considering the role of suggestion can help draw together neural, psychological, clinical, and social perspectives to advance a more integrative approach to the mechanisms of contemplative practice.

A12 - Papers

Gila Monster

Individual Presentations

This session contains individually submitted paper presentations. Details for each paper are listed in the subsessions below.

Paper A12a

2:35–2:50 PM

Title: *Is Vajrayāna Contemplative Ritual a Process of Clinical Spiritual Care: Presenting Results from an Exploratory Qualitative Phenomenological Hermeneutics of Lived Religion Study with the Drukpa Tradition of Vajrayāna Buddhism*

Presenter: Bhikshuni Trinlae, *Mahaprajapati Vihar*

Authors: B Trinlae

Abstract: Chaplains and meditation teachers are challenged to provide an empirical rationale for using traditional resources such as contemplative liturgy (pūjā) as a care modality, and provide translational, critically-established definitions for terms like "psychospiritual growth." I investigated whether the

Tibetan Buddhist Amitāyus contemplative practice is transformative from a clinical spiritual care perspective. Terminology was first critically established using the Nursing Outcomes Classification comfort status measure of psychospiritual well-being along with Western clinical spiritual care and Buddhist scholarly sources. The Amitāyus ritual practice was performed and phenomenological interviews were conducted with IRB oversight and written consent to elicit verbatim reports from 7 participants. A composite phenomenological description of the experience was constructed. The transcripts were searched for indicators of clinical spiritual care constructs. The Tibetan ritual text was also searched for indicators of emic contemplative phenomena. These were further identified in the verbatim reports. The phenomenological reports suggest that there are preliminary grounds for suggesting that the hypothesis is positive. Empirical basis for conducting a larger statistical study is established based on preliminary factor models with relevant prospective measurement indicators produced based on the verbatim data. Spiritual Care constructs are compared with emic contemplative constructs, yielding salient details of their relationship. A contemplative process analysis was also conducted using previous research from hermeneutic phenomenology, linguistics, cognitive science, and constructive developmental psychology to suggest a coherent theoretical rationale for how the contemplative ritual process dynamics can enable positive psychospiritual transformation over time, by enabling progressively coherent, relevant, and significant shifts in epistemological perspectives.

Paper A12b

2:55–3:10 PM

Title: *Facilitating an Ideal Death: Tibetan Medical and Religious Approaches to Death and Dying in Tibetan Refugee Community in South India*

Presenter: Tenzin Namdul, *Emory University*

Author: T Namdul

Abstract: This paper focuses on the continuing debates in studies of death and dying by viewing death and the process of dying through a cultural lens that reflects the intertwined nature of medical and religious practice. The cultural conception of death, as explained in Tibetan medical and Buddhist practice, encourage Tibetan Medical Doctors (TMDs) and Tibetan Buddhist Monks (TBMs) to cooperate in assisting a peaceful death. This paper, therefore, addresses death and dying among Tibetan refugees in India as a culturally orchestrated process involving family members of the dying person, TMDs, and TBMs. In Tibetan culture, death is widely seen as a process of transition from one life to the next through reincarnation, and for advanced practitioners, an opportune moment to emerge into full enlightenment. While TMDs assist in promoting a peaceful and desirable death through herbal remedies and counseling, the TBMs have the task of aiding the smooth spiritual transition between two lives. This synergy between the medical and religious practice motivates the central questions of this paper: 1) How do Tibetan doctors, Buddhist monks, and family members collaborate in preparing a person to die peacefully? 2) How do these actors understand and negotiate their roles in taking care of

a dying person? Based on participant-observation and interviews in south India for 16 months, this paper expounds on the conception of death and dying among TMDs, TBMs, and family members of dying persons; and how such understandings of death and dying influence the facilitation of a peaceful death.

Paper A12c

3:15–3:30 PM

Title: *Turning toward Intersubjectivity: Contemplative Approaches to Dialog*

Presenter: Nancy Waring, *Lesley University*

Authors: N Waring

Abstract: This paper is intended to contribute to emerging dialog on second person contemplative approaches in higher education. It focuses on intersubjective models of dialog set forth by Buddha, David Bohm (1917-1992), western meditation teacher Gregory Kramer, and Brazilian educator and activist Paulo Freire (1927-1991). These models are mutually resonant, and consonant with the idea in intersubjective theory that between two or more people, an intersubjective field forms containing three viewpoints—mine, yours, and, invaluable, ours together. So it is with Bohm’s practice of agenda-free, guide-line-free group dialog, a form whose aim is enhancing mutual understanding and allowing participants to create “a stream of meaning...out of which may emerge some new understanding,” or “a participatory consciousness.” Notably, Buddha’s teachings on wise speech assert that attunement to “the utterance of another” is essential to progress on the eightfold path. Guided by Buddha and Bohm’s wisdom, Kramer developed insight dialog, an interpersonal meditation practice. Following short periods of sitting meditation, participants join dyads, triads, or larger groups to reflect on given contemplations, and to trust what emerges from the process. For Freire, dialogue is “an act of creation...which cannot exist in the absence of profound love of the world and for men.” He articulated a pedagogy of love based on egalitarian teacher/student dialog through which co-learners “become jointly responsible for a process in which all grow.” The paper concludes with reflections about introducing these thinkers’ ideas to graduate students, as both subjects of study and praxis, in a course focused on contemplative dialog.