UG33 Trait and State Stress as Predictors of Physical Illness

Rebecca Barron, Jonathan S. Gore, Ph.D. – Eastern Kentucky University

This research examined how trait and state stress uniquely contribute to physical illness. Trait stress was defined as negative affect in Study 1 and as neuroticism in Study 2. State stress was defined as perceived stress and we also controlled for health-related covariates (i.e., exercise, nutrition, substance use, and BMI). In both studies (ns = 271 and 577), participants completed online surveys for course credit. Results in both studies showed that trait stress and state stress contributed to symptoms of physical illness. In Study 2 an additional interaction between Neuroticism and Perceived Stress was found. This research shows how both trait and state stress explain symptom reporting and should be considered in medical settings in regards to treatment and intervention.

UG16 Impact of Peritraumatic Dissociation on Posttraumatic Stress Symptoms: The Indirect Effect of Dysfunctional Coping

Tessa R. Blevins, Caitlyn O. Hood, Christal L. Badour, Ph.D. - University of Kentucky

Prior research indicates that dissociation experienced at the time of a trauma (i.e., peritraumatic dissociation) relates to subsequent posttraumatic stress symptoms (PTSS). Peritraumatic dissociation and PTSS may be indirectly related through dysfunctional coping strategies. Thus, this study aimed to examine whether peritraumatic dissociation had an indirect effect on PTSS via facets of dysfunctional coping. Participants include 143 college-age women who reported experiencing physical or sexual assault as their most distressing trauma. Ratings of peritraumatic dissociation, PTSS, and dysfunctional coping strategies were assessed. The indirect effects of peritraumatic dissociation on PTSS via self-distraction, substance use, and self-blame were significant. Peritraumatic dissociation and PTSS did not significantly relate through denial, behavioral disengagement, or venting. These findings suggest that specific dysfunctional coping strategies may be deleterious for women who experienced dissociation during a physical or sexual assault.

UG02 Memory Complaints and Neuropsychological Testing of African-Americans

Morgan Bailee Boggess, Justin M. Barber, Allison Caban-Holt, Ph.D. - Georgetown College, Sanders Brown Center on Aging/University of Kentucky

The relationship between subjective memory complaints (SMCs) and neuropsychological testing was examined in Caucasians (n = 4,856) and African-Americans (AAs; n = 941) older adults (aged 65 to 80) in research centers across the U.S. Based on prior research, it was hypothesized that as test performance decreased for AAs, the likelihood of reporting SMCs would decrease. Logistic regression was used to analyze how test performance predicted likelihood of reporting a SMC between groups, controlling for demographics, medical history, and SMC motivators. As test performance on measures assessing working memory and global cognitive functioning decreased, AAs were less likely to report SMCs. The inverse was seen in tests assessing episodic memory and attention. As performance on these decreased, likelihood of reporting increased. The results inform the neuropsychological assessment of AA older adults in relation to SMCs. Future directions discussed.

UG19 Minor Questions About Research Methods

Mya E. Bowen, Timothy K. Daugherty, Bethany S. Jurs, Ph.D. - Transylvania University

Though the undergraduate psychology major has increasingly become the focus of scholarly and professional efforts, the psychology minor has received little sustained attention. With interest in and applications of psychology continuing to grow, proactively managing and assessing the psychology minor may produce far-reaching benefits. In this study, we examined the curricula from 50 flagship universities and found that, while the majority offer a psychology minor, none publicly declare specific goals or learning outcomes for the program. In addition, fewer than half of those minor programs require a research methods course. We also asked both students and faculty to assess the curriculum and goals of a proposed psychology minor program and found that students and faculty appear to differ in their thinking about the psychology minor; students favor an emphasis on interpersonal skill development, while faculty favor an emphasis on research skill development.

UG28 When the Going Gets Ruff: Effects of Short-Term Dog Therapy and Mindful Meditation on Perceived Stress

Will Bowling, Wendy R. Williams, Ph.D. - Berea College

Per the Collegiate Center for Mental Health (2016), we know that academic distress is one of the highest self-reported issues in college students, surpassing anxiety and depression. Polheber and Matchock (2014) are part of a movement trying to relieve stress with dogs, finding a significant decrease in cortisol levels in the presence of canine companions compared to even other humans. Mindful meditation is also finding its footing in this body of stress reduction research, with Schreiner and Malcolm (2015) finding that meditation can significantly decrease overall feelings of distress. The current study seeks to examine short-term stress relief options, including both dog therapy and mindful meditation. Based on the literature, the researcher hypothesized that there will be a main effect in stress relief by implementing a therapy dog condition and a main effect in implementing a mindful meditation condition. The participants consisted of a sample taken from 43 college students. Each participant was asked to take a pretest of stress-level, then exposed to the counterbalanced conditions, either dog therapy (or control) and one of two YouTube videos (meditation or control). Finally, participants were required to take a post-test of stress-level. Results supported the hypothesis that dog therapy would result in a main effect, but no main effect of mindful meditation was found. It is important for colleges to understand the best and most efficient ways to reduce stress on a campus, and this study would suggest dog therapy as a possible solution for short-term stress reduction.

UG18 Looking at Others Got You Down? Can Brief Infographics Reduce Negative Body Image Effects from Model Exposure?

Jessica G. Cox, Wendy R. Williams, Ph.D. - Berea College

Exposure to advertisements and idealized images of models is associated with higher rates of disordered eating behaviors and decreased self-esteem in women (Grabe, Hyde & Ward, 2008). Eating disorders are estimated to affect 20,000,000 women at some point in their life (National Eating Disorders Association, 2016). Within psychology, both social comparison theory and cognitive-behavioral therapy may offer

ways to minimize these effects. Thus, the present study examines whether brief exposure to online infographics featuring either information based in cognitive-behavioral therapy (CBT) or a control condition (featuring memory improving techniques) would minimize the impacts of seeing models of three different body sizes (thin, average, "plus-size"). A main effect of condition was expected with CBT participants reporting higher body satisfaction than the control condition. Participants seeing average or "plus-sized" models were expected to report higher body satisfaction than those seeing extremely thin models (a main effect of model body size), and those seeing plus-size models were expected to have the highest satisfaction. Seventy-six female participants took an online survey, read infographics, viewed sample magazine covers, and provided body image information. A 2x3 between-subjects factorial ANOVA was run, and no significant differences were found. Despite the non-significant effects, this study adds information about what may make therapies for body image issues more effective, as well as offering insight into how women may respond to images of different sized models. Better interventions and treatments will mean therapists decrease eating disorder prevalence and help people improve their self-esteem.

UG24 Sleep Deprivation and its Effect On Memory

Robert Crockett, Alissa Woods, Nicoline Joenborg, Richard Osbaldiston, Ph.D. - Eastern Kentucky University

We have all fallen victim to the tolls of sleep deprivation, but what effects does that have on your memory? For this meta-analysis, we located 20 research articles, from PsycInfo, that measured sleep deprivation's effect on various forms of memory. Sleep deprivation has a very large effect on short-term memory ($d = 1.04$), a large effect on retention ($d = 0.75$), and a moderate effect on long-term memory ($d = 0.51$). These results indicate that sleep deprivation has the greatest effect on short term memory.

UG10 Differentiating between Feigning and Non-feigning Response Styles Using the MMPI-2-RF, SIRS, and PAI.

Justice M. Cundiff, Alexandra J. Berry, Richard Osbaldiston, Ph.D. - Eastern Kentucky University

Feigning is a serious concern for clinicians in forensic and medical settings. The current study examines differences in response style for feigning vs. non-feigning groups on three commonly used measures: the Minnesota Multiphasic Personality Inventory (MMPI-2-RF), the Structured Interview of Reported Symptoms (SIRS), and the Personality Assessment Inventory (PAI). For this meta-analysis, we found 17 studies that compared respondents who were legitimately mentally ill to respondents who were asked to fake or feign their responses. Overall weighted average effects sizes (Cohen's d) were calculated for each measure. Very large effect sizes were found across all three measures, with the overall d-values for the MMPI-2-RF, SIRS, and PAI being 1.72, 1.71, and 1.06 respectively. Our research shows that there are measurable differences between feigning and non-feigning groups on all three of the measures tested, but that those differences are larger for the MMPI-2-RF and the SIRS.

UG04 Ball is Life: Can Stress Management Reduce Competition Anxiety?

Breanna Dunning, Wendy R. Williams, Ph.D. - Berea College

Sports are a huge part of today's entertainment, and because of this athletes are expected to perform at elite levels at all times. Yet, athletes can experience competition anxiety, and players need effective stress management treatments in order to reduce that anxiety. Competition anxiety is composed of both cognitive and somatic anxiety, including dealing with negative thoughts and physiological arousal (Martens et al., 1990a; 1990b). Past research has looked at stress management techniques, like progressive relaxation, and have found them to be effective at reducing somatic anxiety in athletes (LaGrange & Ortiz, 2006). Although not examined much in past psychological research, yoga may also be an effective way to reduce stress and anxiety because it can calm both thoughts and physiological arousal. In the current study, the researcher hypothesized that there will be a crossover interaction between the yoga intervention and the stress managements techniques on both somatic and cognitive anxiety, but no main effects. Participants from different sports teams at Berea College filled out an anxiety questionnaire (cognitive and somatic) as a pretest and then performed yoga (ashtanga or vinyasa) and a stress management technique (progressive muscle relaxation or imagery) followed by a posttest anxiety questionnaire. A 2x2 MANOVA was run, but no significant differences were found from the pretest to posttest for either cognitive or somatic anxiety. Despite not finding any significant differences, this study adds to the literature on competition anxiety and stress management techniques that may help reduce the anxiety by showing which techniques are not effective for college athletes. Longer and more sport-specific interventions may be more effective at decreasing competition anxiety felt before games.

UG08 Caffeine Effects on Academic Performance

Mallory Easterling, Lilly Bennett, Sabrina Wallace, Richard Osbaldiston, Ph.D. - Eastern Kentucky University

Caffeine is extremely addictive and is consumed by over 78% of college students. Does this affect their GPA? The purpose of this meta-analysis was to evaluate the relationship between caffeine consumption and academic performance. To do this, we located 8 studies that reported correlations between caffeine consumption and academic performance. We coded these articles and recorded the effect sizes (Cohen's d) for the relationship. The results of this study showed a moderate effect size between caffeine and academic performance (d = -.51). However, one study showed a very strong effect (d = -0.58) and a very large sample size (N = 7377). With this study omitted, the overall average weighted effect size decreased to d = -0.16. These results suggest that caffeine consumption has a small effect on academic performance or GPA in college students.

UG15 Attitudes toward Persons with Disabilities

Bethany Engler, Janet Dean, M. Div, Ph.D. - Asbury University

This study examined the nature of attitudes toward persons with learning disabilities versus persons with physical disabilities as well as the effects of religion and self-esteem on those attitudes. The 61 participants were divided into physical disability groups and learning disability groups and completed a

survey measuring religiosity, self-esteem, and attitudes toward persons with disabilities. Results showed no significant difference between attitudes toward learning versus physical disabilities; however, an interaction was found between religiosity and positive attitudes toward persons with disabilities. Limitations include a small sample size and low external validity.

UG23 Parental Factors as a Predictor of Student Educational Aspirations

Steven Hansman, Dan Florell, Ph.D. - Eastern Kentucky Univeristy

There are many factors that affect a student's decision to pursue further education. Finding out which factors closely correlate to a student pursuing that education is important to know. Educators and leaders can use this information to push for better policy and institute better practices to benefit education. The purpose of this study was to examine the relationship between different parental factors and how they relate to a student's educational aspirations. The study tested the hypothesis that parental educational involvement at home, parental educational involvement at school, parental supportive messages, and authoritative parenting style are all significant predictors of educational aspirations. Participants (n = 158) were high school students who completed a questionnaire.

UG03 "To Spank or Not to Spank": Does a Parent's Race and Style of Parenting Influence Acceptance of Corporal Punishment?

Mellanee Hendricks, Wendy R. Williams, Ph.D. - Berea College

Corporal punishment (CP) has detrimental effects on child development (Gershoff, 2002). Yet, Deater-Deckard and Dodge (1997) proposed cultural normativeness theory which says that corporal punishment has fewer negative effects on children in cultures where it is seen as normative. For example, Black parents use CP more frequently than White parents (Straus, 1994). In a separate line of research, Baumrind (1966) proposed three parenting styles, two of which, authoritarian (AN) and authoritative (AT), are both high in control, but one is high in warmth (AT). Baumrind (1972) also found that Black parents tend to have more authoritarian and authoritative styles of parenting resulting in positive child outcomes than White parents. Despite the consistency of these findings, practitioners are still ambivalent when advising Black parents on their use of CP (Schenck, Lyman, & Bodin, 2000). Thus, the present study examines the effect of parent's race and style of parenting on acceptance of CP. Hypotheses are as follows: (1) higher ratings reported for Black parents than for White parents, (2) higher ratings reported for authoritative than for authoritarian parenting, and (3) regardless of parenting style, use of CP by Black parents would be acceptable, whereas CP would only be acceptable for White-authoritative parents. Sixty-eight participants were randomly assigned to four conditions: black-authoritarian, black-authoritative, white-authoritarian, or white-authoritative parent. Participants were asked to pose as a therapist, read a scenario, and rate acceptance of the use of CP by the parent in the scenario. A 2x2 factorial ANOVA was run, and only the main effect, style of parenting, was supported. These results may indicate that style of parenting has a stronger effect on acceptance of corporal punishment than race of parent. Although the effect of parent's race on acceptance of CP was not found, the concept of cultural competency still remains, and practitioners still have a duty of being educated in a parent's racial background, beliefs, values, and interests.

UG06 Stop Trying to Escape! The Effects of Perfectionism and Self-Evaluation on Hopelessness

Bethany Howard, Wendy R. Williams, Ph.D. - Berea College

As suicide rates continue to increase, it is important that we understand why people become more willing to commit suicide (Curtin, Warner, & Hedegaard, 2016). Baumeister (1990) proposed a revised model of the Escape Theory of Suicide that leads to an increase in a person's willingness to commit suicide. The six step process includes characteristics similar to perfectionism (steps 1, 2, and 3) and self-blame (step 2). In addition, hopelessness is related to the 4th step in the process, and it has also been found to be a stronger predictor of attempted suicide than depression (Minkoff, Bergman, Beck, & Beck, 1973). This study examined how different types of perfectionism and self-evaluation affected levels of hopelessness. Two main effects were hypothesized such that socially prescribed perfectionism (expectations of others) and self-criticism would lead to higher levels of hopelessness than self-oriented perfectionism (expectations of self) and self-praise, respectively. Sixty-five participants filled out an online survey that instructed them to either focus on socially prescribed perfectionism or self-oriented perfectionism. They were then instructed to engage in self-criticism about how they failed to meet previous expectations or they were instructed to engage in self-praise about how they met those expectations. Finally, participants were administered a revised version of the Beck Hopelessness Scale (1974). No difference was found between the groups; participants' levels of hopelessness did not differ between those that criticized their failures and the group that praised their efforts. Despite no significant differences, this information could be used to develop future therapy techniques that focus less on attributes of perfectionism and self-evaluation as ways of reducing hopelessness.

UG01 College Students' Well-Being: Use of Counseling Services

Morgan Huenergarde, Eric Stephens, Ph.D. - University of the Cumberlands

A significant number of college students experience varying levels of stress, anxiety, homesickness, and depression which may negatively impact their academic performance or personal functioning. While these are prevalent issues, many college students do not seek professional help from campus counselors. Recent research supports the effectiveness of counseling centers in reducing the above-mentioned issues. The following study included college students at the University of the Cumberlands who have attended counseling, or are currently attending counseling through the services provided by the University, or from any outside service. The research looked at the varying levels of mood and academic performance and if they differ between the samples. The study investigated demographic information and potential hindrances to treatment to gather a broader scope of knowledge. Finally, the study provided further insight into the counseling program at the University of the Cumberlands and generated a better understanding of who attends and the barriers that impede others.

UG05 Evaluating the Efficacy of the Senaptec Training System

Paige Kellam, Emmely Ovalle, KatieAnn Skogsberg, Ph.D. - Centre College

Sports related concussions may result in sensorimotor and visual attentional deficits that can be assessed by computerized tasks (McCrea et al., 2003). The Senaptec Sensory Station is a commercially available visual attention system targeted towards improving athlete performance but it may also detect

concussion related attentional deficits. Concussed and nonconcussed athletes from Centre College completed 3 Senaptec tasks that focused specifically on visual attention. The results of statistical and correlational analysis suggest the Senaptec Station may not be sensitive enough to recognize subtle cognitive impairments due to sports related concussion.

UG07 Substance Use and Stigma: The effect of Cooperation and Equal Status on Stigma

Maria Lewis, Wendy R. Williams, Ph.D. - Berea College

According to the National Survey on Drug Use and Health, 91.3% of people who have a substance use problem do not seek out or receive treatment (Substance Abuse and Mental Health Services Administration, 2016). One reason may be stigma towards substance use. Literature on substance use stigma is rare, as are interventions to combat this stigma (Brown, 2015). The current study looks to examine the effects of two components of the contact hypothesis (equal status and cooperation) which may be effective in reducing substance use stigma. Past research supports the contact hypothesis which proposes that when an in-group comes in positive contact with an out-group, the in-group's attitudes will improve (Allport, 1954). Forty Berea College students were exposed to a video of a woman revealing her "drug use" problem who was currently in recovery. The participants were then assigned to one of four conditions that manipulated cooperation and equal status, and filled out a social distance survey (SDS) as a measurement of stigma. The researcher hypothesized that (a) there would be lower stigma toward substance use for those in the equal status condition compared to those in the unequal condition and (b) those in the cooperation condition would have lower stigma towards substance use than those in the competition condition. No interaction between cooperation and equal status was expected. There was a main effect of equal status, however, the highest scores of stigma were in the equal status condition rather than the unequal condition. In addition, there was a main effect of cooperation with cooperation showing lower stigma scores, and no interaction. Future research should look at the effect of contact on substance use stigma by using a sample of people who do not know someone who is in recovery from substance use.

UG21 The Mediating Role of Shame in the Relationship Between Thoughts about God and Mental Health

Alyssa D. Martin, Janet B. Dean, M.Div., Ph.D. - Asbury University

Previous research has revealed evidence indicating a relationship between perceptions of God and mental health outcomes; research has also provided evidence that each of these concepts may be related to shame in some manner. The purpose of the current project is to strengthen evidence regarding these relationships, particularly providing evidence for the mediating role of shame in the relationship between thoughts about God and mental health. Participants consisted of 82 undergraduate students who completed measures for the constructs of perceptions of God, internalized shame, psychological distress, and well-being. Results supported the hypothesis in indicating that shame reduces the predictability of psychological distress by thoughts about God by serving as a mediator in this relationship.

UG09 College Students' Experience and Attitudes Towards Public School Sex Education

Kennedy Morin, Sara Incera, Ph.D. - Eastern Kentucky University

There has been a heated debate surrounding sex education in public school for decades (Cornblatt, 2009), but this debate has been confined to parents. The college students that are putting their sex education experience to the test in the high risk sexual environment of universities (Chappell & Maggard, 2010), have not been asked to include their voice in the conversation. The present pilot study measures self-reported sex education experiences and preferences by directly asking college students. The vast majority of participants (69 out of 71) supported comprehensive sex education. An unexpected finding was that 34 participants reported receiving comprehensive sex education, a disproportionate amount given that the study took place in Kentucky. College students might not know what comprehensive sex education is. It is important to consider students' opinions when debating sex education. Research in this area will help us better understand what college students know and want.

UG20 The Associations between Gaming, Heart Rate and Cortisol Production

Katie Neff, Christy Wolfe, Ph.D. - Bellarmine University

Behavioral addiction has only recently gained the attention it needs. Until very recently, gambling addiction was the only behavioral addiction listed in the DSM (Diagnostic and Statistical Manual of Mental Disorders) as a disorder. At first glance, this area of addiction appears to be behaviorally based, but upon further inspection, there are complex physiological processes involved in this and other addictions (Deroche-Gamonet et al., 2017; Ko et al., 2016; Zack et al., 2016). For example, research has shown a correlation between gambling addiction and cortisol production (Meyer et al., 2016). Cortisol is known as a stress hormone, as it is released by the sympathetic nervous system in response to a real or imagined stressor. It is also associated with substance addictions with both long-term and short-term effects (Lovallo, 2016). The current study investigated potential associations between cortisol and internet gaming. For this experiment, 8 Bellarmine students took a survey to assess their level of engagement with gaming. They were then asked to play 3 games of varying difficultly and intensity for 15 minutes, with a 15 minute break in between. Every 15 minutes they were asked to provide a saliva sample. After the session, the subjects took another survey on how stressful they found each game to be. Salivary cortisol levels were hypothesized to correlate with the subject's self-rated "addiction to" internet gaming, as well as how stressful they rated the session. Internet Gaming Disorder (IGD) is currently in the DSM as a "Condition for Further Study". It has gained more recognition in recent news, but until the new DSM is released it will not be considered an official disorder. This experiment hopes to contribute to the knowledge of IGD so that there can be more accurate diagnoses and treatments in the future.

UG32 Neurodiversity in higher education: College student attitudes toward behaviors characteristic of high functioning Autism Spectrum Disorder

Haley Oliver, Susan Bell, M. Ed. Ph.D. - Georgetown College

An increasing number of students with high functioning Autism Spectrum Disorder (ASD) are enrolling in 4-year colleges and universities, but literature on the social experiences of these students has lagged behind. In order to explore the social acceptance of neurologically diverse peers in higher education, 144 students at a 4-year liberal arts college completed the Multidimensional Attitudes Scale Toward Persons with Disabilities (MAS) in response to a vignette character displaying behaviors characteristic of high functioning ASD. Half of participants were exposed to the vignette character with a label of high functioning ASD while the other half received no label. Students in the label condition reported more positive attitudes toward the vignette character than students in the no-label condition. Male students reported more positive emotional attitudes than females, and students with a social science major displayed more positive cognitive attitudes than students in natural science or math. Participants also completed the open-mindedness subscale of the California Critical Thinking Disposition Inventory (CCTDI). Higher open-mindedness scores were associated with more positive behavioral attitudes in the no-label condition, indicating a potential mediating effect of open-mindedness on actions toward individuals displaying behaviors characteristic of high functioning ASD in the absence of a diagnostic explanation for atypical behavior.

UG30 Does Empathy Affect Bullying Behaviors?

Morgan Price, Richard Osbaldiston, Ph.D. - Eastern Kentucky University

Bullying is very common, but the underlying causes of it are unclear. The purpose of this project was to determine the relationship between empathy and bullying behaviors. In this meta-analysis, 20 studies were located that compared empathy scores to bullying behavior. Two moderator variables were examined: 1) type of empathy, including affective, cognitive, and total, and 2) type of bullying behavior, including bully, victim, defender, and bystander. The results showed no relationship between empathy and both victimization and bystander behavior. However, a small negative correlation was found for the relationship between empathy and bullying ($r = -0.16$). A small positive correlation was found for the relationship between empathy and defender ($r = 0.21$). The more a child participates in bullying, the less empathy they feel towards others, and the more a child participates in defending, the more empathic they are.

UG31 Deaf Culture and Identity

Jessica Ritzmann, Jonathan Gore, Ph.D. - Eastern Kentucky University

Bicultural Identity Integration (BII) is the result of how much a bicultural individual may feel that their two cultures cohesively work together, such as Chinese and American cultures (Benet-Martinez & Haritatos, 2005). Its effect on self-esteem has previously been looked at with immigrant families but has

not really been looked at in regard to that of Deaf individuals with Deaf culture and hearing culture. The current study's goal was to investigate the relationship between BII and a Deaf individuals self-esteem. It was hypothesized that 1) a Deaf individual's level of BII will be positively correlated with their self-esteem. 2) those with marginalized identities will have lower self-esteem than those with integrated identities. Participants for this study (N=13) were recruited from different Deaf social within Kentucky and Ohio. The participants were recruited using American Sign Language and were given a survey to complete. Data was analyzed using a Pearson's r correlation and a One-Way ANOVA. Preliminary results suggest a positive correlation between BII and self-esteem, supporting hypothesis one. However, hypothesis two was not supported by the results.

UG12 Literature as therapist: The effects of bibliotherapy on depression, stress, and anxiety

Cayla Robinson, Richard Osbaldiston, Ph.D. - Eastern Kentucky University

Society is well aware of the positive effects of literature and reading, but a lesser-known fact is that literature also has therapeutic effects on negative emotional states. This meta-analysis looks at bibliotherapy's effects on negative emotional states such as depression, stress, and anxiety in different populations. Sixteen studies were gathered from databases such as PsychInfo and Academic Search Complete, and Cohen's d effect size was computed for each study. In pre-post research designs, Bibliotherapy was shown to be effective for reducing depression (d ranging from 0.63 to 1.11), stress and anxiety (d = 0.60), geriatric depression (d = 0.66), and affective disorders and schizophrenia (d = 0.11). Bibliotherapy was shown to be as effective as treatment-as-usual in experimental designs. These findings support the creation of in-house bibliotherapy groups for all ages in university and public libraries to help aid against depression.

UG26 The Effects of Non-verbal and Verbal Teacher Immediacy on Student Motivation

Jessica Sidebottom, Katie Baumann - Eastern Kentucky University

Student motivation is a crucial aspect of student success, but what affects student motivation? The purpose of this meta-analysis is to determine if teacher immediacy affects student motivation. Using Psych Info and EPSB, we located 15 studies that measured teacher immediacy and motivation. The overall weighted average effect size between teacher immediacy and motivation is d = 0.52. We examined two moderator variables: type of immediacy (non-verbal vs. verbal) and type of motivation (state vs. trait). We found that verbal immediacy had a larger effect on trait motivation compared state motivation (d = 0.89 vs. d = 0.37), and non-verbal immediacy also had a larger effect on trait motivation than state motivation (d = 0.56 vs. d = 0.34). The results suggest that students who receive non-verbal immediacy as well as verbal immediacy from their teacher are likely to have a higher state as well as trait motivation level.

UG25 "The effect of age on second language acquisition: A meta-analysis"

Bailey Spalding, Richard Osbaldiston, Ph.D - Eastern Kentucky University

There is a popular notion that younger individuals learn a second language (L2) easier than older individuals. This meta-analysis seeks to explore the veracity of that claim: Does age affect second language acquisition? We located 10 studies that examined age of learning L2 and L2 proficiency. Overall, we found a moderate effect of age on L2 proficiency, r = -.30. The effect was stronger for studies that had younger samples (age < 25, r = -.42) compared to older samples (age > 25, r = -.22). No meaningful differences were found for type of L1 (L1 Asian-based language r = -.32, L2 European-based language r = -.29). These results confirm the popular notion that younger individuals learn a second language more easily.

UG11 Does Bullying Affect Academic Achievement?

Christa Stringer, Dalton Thomas, Richard Osbaldiston, Ph.D. - Eastern Kentucky University

The effect of bullying on children's emotional state is well-known, but what about their academic achievement? The purpose of this research was to analyze the effects of bullying victimization on students' academic achievement. A meta-analysis was conducted using 18 studies from PsycInfo and ERIC databases. The overall average weighted effect size was r = -.17, which is a moderate effect. Type of bullying was an important moderator; victimization had a much stronger effect on achievement when it was physical (r = -.35) than either verbal or cyber (r = -.14, -.13). Grade level also moderated the relationship, with it being strongest for early primary students (r = -.24), moderate for late primary (r = -.15), and weakest for middle school (r = -.12) and high school (r = -.12). For students to do their best in school, we have to find a way to reduce the impact of bullying.

UG34 Linking Job Satisfaction and Organizational Commitment

Lauren Sundberg, Richard Osbaldiston, Ph.D. – Eastern Kentucky University

Do you love or hate your job? Do you think about staying forever or never going back? Do you ever think about why? This study is intended to answer that industry old question: Is there a link between job satisfaction (JS) and organizational commitment (OC)? A meta-analysis of 19 studies from across the world covering 9,917 employees from a multitude of industries shows a strong correlation between JS and OC, r = .50. This relationship was moderated by the strength of JS; samples with a high JS had a much stronger relationship (r = .58) than samples with low JS (r = .45). Globally, the largest differences in effect size were between North America (r = .60) and Asia (r = .41). Employers take note: satisfied employees may result in lower turnover, which effectively decreases overhead and recruiting costs.

UG17 Let's Face It: The Effects of Disclosure Type and Modality on Student Comfort

Caitlin Taulbee, Wendy R. Williams, Ph.D. - Berea College

Given that individuals with mental health disorders face barriers in accessing treatment (Mental Health America, 2017), the use of technology to deliver services is increasing. Mental health providers may question the efficacy of this model, given the importance of the therapeutic relationship for comfort in client disclosure (Stiles, 1987). Previous research on clinical populations and the use of technology, such as videoconferencing, found that videoconferencing was just as effective for overall improvement in treating mental health issues and reducing symptoms compared to traditional face-to-face therapy (De

las Cuevas, Arredondo, Cabrera, Sulzenbacher, & Meise, 2006). Outside of clinical populations, results about comfort in self-disclosure in online forums is mixed (Joinson, 2001; Taddei, Contena, & Grana, 2010). This study examines the perceived comfort in self-disclosure in a non-clinical population of 41 college students. Students were placed in either face-to-face (f2f) or video chat conditions where they had to use one of two types of disclosure. Specifically, open frame (impersonal information) or hidden frame (personal information), were elicited in a short conversation with the researcher. Consistent with hypotheses, two main effects were found with increased comfort for both the open frame disclosure and video chat conditions. Although the best scores are for open frame and video chat (i.e., an additive effect), the results also indicate that individuals would be more comfortable in disclosing sensitive information via video chat compared to f2f. Future research should consider how technology could be used to influence help-seeking and positive therapeutic outcomes in non-clinical, low access populations.

UG27 Threat to Justice: Shared Experience and Empathy

Renesha Todd, Wendy R. Williams, Ph.D. - Berea College

This study examined social distance towards stigmatized groups and two prejudice reduction techniques - shared experience and empathy. Shared Experience Theory claims that stigmatized groups who share an aspect of identity or experience with another stigmatized group will form positive evaluations of the other stigmatized group as a result (Allport, 1954). Empathy Theory claims that one will exhibit more positive evaluations of a stigmatized group as a whole when one empathizes for a member of the specific stigmatized group (Coke, Batson, & McDavis, 1978; Scotland; 1969). To examine these theories, the current study had Black individuals (a stigmatized group) watch a video of a convicted felon telling his story and report their desired social distance from convicted felons (another stigmatized group). Individuals were also asked to either empathize with the person in the video or remain objective. The subjects responded to a social distance scale towards both the individual convicted felon in the video (narrow evaluation) and then towards convicted felons as a group (broad evaluation). The researcher predicted two main effects for both sets of evaluations: those in the shared experience condition will desire less social distance than those in the not shared experience, and those asked to empathize will have less social distance than those asked to be objective. Black Participants who have not been convicted of a felony (N=42) were randomly distributed into four groups: (1) shared experience/high empathy (2) shared experience/low empathy (3) no shared experience/high empathy (4) no shared experience/low empathy. The results in this study did not align with the prior research. Instead, participants reported less social distance in the not shared condition than in the shared experience condition, but only for the broad evaluations. Aligning with the research and predictions, high empathy did report less social distance than the low empathy, but only for the narrow evaluations. There was no interaction. In conclusion, this research indicates that the use of empathy may be effective for reducing prejudice for individual people and lack of shared experience may be useful when attempting to reduce prejudice towards the stigmatized group as a whole.

UG22 Internal Working Models, Relationship with God, and Well-Being

Savannah Williams, Jonathan Gore, Teri Nowak, Ph.D. - Eastern Kentucky Univeristy

Past research has indicated that an individual's attachment style can influence their relationship with God and well-being. Religious participation has also been found to influence well-being. The goal of this study is to investigate the mediating role that relationship with God had on attachment style and well-being. Participants (n=412) completed an online survey measuring their attachment style, relationship to God, and well-being. It was hypothesized that (1) secure and insecure internal working models will both positively correlate with having a secure relationship with God, (2) Secure internal working models and (3) relationship with God will positively correlate with well-being by (4) controlling for religious participation, (5) all hypothesis will remain significant while controlling for religious participation. The results revealed that the model was mostly supported, while secure attachments did not correlate, insecure attachments negatively correlated with relationship with God.

UG13 Parental Divorce and Child Well-being: A Meta-Analysis

Brianna Williamson, Richard Osbaldiston, Ph.D. - Eastern Kentucky University

Forty to fifty percent of marriages in America result in divorce. This study examines the effects of parental divorce on child well-being (CWB). Twenty studies were located that reported the correlation between parental divorce and various factors of CWB. The effect sizes for each study were found and the weighted average effect size was computed. Parental divorce had a small to moderate effect on overall CWB (d = -0.35). Relations with others and self-esteem produced the most significant effect sizes of all of the CWB factors that were analyzed (d = -0.61 and -0.46, respectively). Parental divorce should continue to be studied on an individualistic basis to better understand the factors that lead to common long-term negative effects for the children involved.

UG14 The Impact of Divorce on College Students from Appalachia

Brianna Williamson, Steffen Wilson, Ph.D. - Eastern Kentucky University

The purpose of this study was to determine if being raised in Appalachia, a region with generally high divorce rates, is correlated with more negative outcomes for children of divorce compared to those raised outside of Appalachia. In this study, various outcomes were assessed in relation to parental divorce in college students that were raised both in and out of the Appalachian region. The results showed that child outcomes only vary slightly between the two groups. However, post hoc results found that if participants rated their parents as having managed the impact of the divorce well, they also indicated a higher rating (more positive) when asked how they felt that their parent's divorce affected them. Additionally, there was a negative correlation between the answer on the aforementioned question and participants rating of their parents arguing frequency. These findings prompted an ongoing study to investigate the concept of a "reconciled divorce".

UG29 When the Shooter Knocks: Bullying and Self-esteem in Young People

Austin Yowler, Lela Peppi, Richard Osbaldiston, Ph.D. - Eastern Kentucky Univerity

In light of recent school shootings, bullying has recaptured the public attention as a major influence on the mental health of the shooters. This meta-analysis examined twenty studies (n = 24,670) on the relationship between bullying and self-esteem. The articles were gathered from the PsychINFO database

and coded for relevance. The average age of participant was 14 years old. One study had as many participants as the rest of the studies combined (n = 13,122), and was a major outlier (r = -0.97). The results for overall correlation was calculated with and without this outlier. The relationship between bullying and self-esteem without the outlier showed a weak negative correlation between bullying and self-esteem (r = -0.21). With the outlier included, the relationship between bullying and self-esteem showed a moderate correlation (r = -0.37).