Graduate Poster Submissions

G01 - An Alternative to the Traditional 12 Step Mode

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Faculty Advisor: *Michael McClellan, Ph.D.*

The first 12-step program, Alcoholics Anonymous, began in 1935. One common criticism of the 12-step model is that non-religious addicts in recovery are sometimes dissatisfied with the religious undertones of the traditional 12-step model (Magura, 2007). A large portion of the 12 steps involve giving one's self over to a higher power; specifically, God. To address this issue, some wording modifications were made to the Alcoholics Anonymous book including the addition of "We Agnostics" in chapter 4. While this is said to eradicate the issue of religious differences within the model, "God" continues to be mentioned within 5 of the 12 steps. About 60% of clients in substance abuse treatment consider the religious aspect of 12-step groups to be an obstacle to participation, and about 50% believe that the emphasis on â€˜powerlessness' can be unhelpful (Magura, 2007).These perceived obstacles may be further compounded by shifting demographic and religious trends within the United States. The Pew Religious Landscape Study (2014) found that newer generations are becoming increasingly more religiously unaffiliated. For example, Pew found that 17% of Baby Boomers identified as religiously unaffiliated. Within the same study, 23% of Generation X and 36% of younger millennials identified as being religiously unaffiliated. The rates of those who identify as atheist are also on the rise. For example, the Barna Group (2018) found that 6% of the general population identified as atheist compared to 13% of Generation Z. Future addiction treatment models should account for this ideological shift or risk further isolating this growing segment of the population.Alternatives to the traditional 12-step model are described in the literature (Buddie, 2004). For example, Self-Management and Recovery Training (SMART) does not emphasize religion and focuses instead on self-empowerment of addiction-related symptoms (Buddie, 2004). Penn, Brooke, Brooks, Gallagher, and Bernard (2016), however, noted the following criticisms of the SMART model: SMART (a) had no progress milestones, (b) meetings were not as numerous/available, (c) had no sponsors to provide group member support, and (d) meetings were occasionally critical of 12-step programs. These data suggest that there is currently no panacea of addiction-related group treatments and that more work needs to be done.The proposed study seeks to determine whether altering the language utilized in the traditional 12-step recovery program will be more accepted by those that are not religiously affiliated. This will be accomplished by deemphasizing the model's reliance on a higher power and emphasizing self-empowerment. We hypothesize these revisions will be more appealing to a sample of millennial-aged college students who report no religious affiliation. We further hypothesize that millennials who report religious affiliation will prefer the traditional 12-step model.

Graduate Poster Submissions

G02 - A Bayesian Approach to Mediation

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Bayesian statistics provide researchers a powerful tool when analyzing data. The purpose of this project is to provide an example as to how psychological researchers can improve their research analyses using Bayesian theory and methodology. This project conducted two simultaneous mediation analyses to test the hypothesis that relational interdependent self-construal's effect on an individual's self-perceived romantic relationship quality is explainable by perceived partner's romantic relationship quality. Analysis 1 was conducted using traditional maximum likelihood estimation (ML). Analysis 2 was conducted using a Bayesian Markov Chain Monte Carlo (MCMC) method. The results of this project offer a stark example of the benefits which MCMC provides over ML when conducting mediation analysis. This project concludes suggesting that psychological researchers can better the statistical quality of their studies by embracing Bayesian theory about how data can be analyzed.

G03 - Associations of childhood trauma on adolescent acceptance of negative emotions

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Faculty Advisor: *Dr. Shari Kidwell*

In recent years, greater attention has been paid towards aversive childhood experiences and their impact on later functioning. Not only does exposure to such experiences appear to be fairly commonplace, but repeated exposure to traumatic life events has been associated with increased risk in both mental and physical health domains (KyBRFS, 2015). The present study explores connections between Adverse Childhood Experiences (ACEs) and adolescent's acceptance of negative emotions such as sadness and anger. As part of a larger longitudinal study, 11 teens (mean age 16 years) from Eastern Kentucky were administered the Transition to Adulthood Attachment Interview (TAAI: Crittenden, 2006) and an emotions interview based on the work of Katz & Gottman (1996). These were coded for ACEs and acceptance of negative emotions, respectively. Although coding is still underway, the authors hypothesize that adolescents with higher exposure to adverse life events will be less accepting of their negative emotions.

Graduate Poster Submissions

G04 - Driving Behaviors in Young Adults with Varying Levels of Callous-Unemotional Traits

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Faculty Advisor: *Michelle M. Martel, Ph.D.*

Various factors have been found to impact one's driving behavior. However, one factor that remains relatively unexamined is CU traits and it is unknown whether these traits would exhibit mediating or moderating effects. Thus, testing these effects was the goal of the present study. Participants were 379 (n = 257 female) young adults with a mean age of 19.62 (SD = 1.61). Hierarchical linear regressions were used to examine the relationship between CU traits and driving behavior. The SPSS PROCESS macro was used to examine if CU traits mediate the relationship between externalizing behaviors and safe driving. A significant relationship was discovered between CU traits and safe driving. A significant interaction occurred between CU traits and irresponsibility. Lastly, CU traits partially mediated the relationship between safe driving and (a) self-reported antisocial behavior and (b) delinquent peer behavior over 1 and 6-month durations. Clinical and theoretical implications are discussed.

G05 - Mental Contamination Predicts Increased Disgust after Recalling Memories of Interpersonal Violence

Melanie Berexa, Alyssa C. Jones & Alex Brake - University of Kentucky

Faculty Advisor: *Christal L. Badour*

Mental contamination (MC; i.e., feelings of dirtiness without physical contact) is often reported after interpersonal violence (IPV) and is positively associated with posttraumatic stress symptoms (PTSS). The present study examined how MC predicts emotional responding to IPV memories by asking 29 adult women with IPV histories to complete measures of PTSS and MC, followed by a recorded 5-minute oral recall of an IPV experience, which they subsequently listened to via playback. Participants rated intensities of negative emotions before and after the task. MC predicted increased disgust (but not changes in other emotions) after the task ($\hat{I}^2 = 0.43$, p = .02), controlling for PTSS, IPV type (sexual vs. physical), and change in anxiety (full model: R2 = .35, F(4, 24) = 3.28, p = .03). Findings suggest MC, regardless of PTSS and trauma type, may be a risk factor for trauma-related disgust which is distinct from traditional anxiety-related PTSS symptoms.

Graduate Poster Submissions

G06 - A Prototype Analysis of Scientists

Sarah R. Schiavone - University of Kentucky

Faculty Advisor: *Will M. Gervais*

Scientists are widely stereotyped as odd, robotic, geniuses in lab coats (Fort & Varney, 1989). Although scientists are generally believed to be trustworthy and competent (Fiske & Dupree, 2014), they are also seen as morally questionable and potentially dangerous (Rutjens & Heine, 2016). This study used prototype analysis to acquire a comprehensive understanding of the features commonly associated with scientists. In Study 1, participants (N = 347) described characteristics they associated with being a scientist. Coding of the open-ended responses resulted in 58 features. In Study 2, participants (N = 254) rated how central each feature was to being a scientist. Ratings were used to identify features more centrally and peripherally associated with scientists. Central features were overwhelmingly positive (e.g., smart, curious, analytical). Peripheral features were more varied (e.g., skeptical, good at math, wears goggles, old). Overall, this research sought to provide a more diverse understanding of perceptions of scientists.

G07 - Optimism and Pain Interference in Aging Women

Stephanie T. Judge, Jody L. Clasey, & Leslie J. Crofford - University of Kentucky

Faculty Advisor: *Suzanne C Segerstrom*

Pain limits individuals' ability to engage in activities that promote well-being. This longitudinal-burst daily diary study tested reciprocal relationships among pain, optimism, pain interference, and activity in older women. Multilevel models tested between- and within-person relationships among these variables. Pain best predicted interference (person: $\hat{\gamma}_{001}$ = .227, SE = .022, p < .0001; wave: $\hat{\gamma}_{010}$ = .267, SE = .014, p < .0001; day: $\hat{\gamma}_{100}$ = .246, SE = .010, p < .0001); optimism best predicted activity ($\hat{\gamma}_{002}$ = .684, SE = .101, p < .0001). In linear regression models, baseline optimism ($sr2$ = 0.560, p < .0001), less interference ($sr2$ = 0.064, p < .0001), and more activity ($sr2$ = 0.015, p = .013) predicted higher end-of-study optimism. Ultimately, more optimistic women were significantly more active than less optimistic women, and less interference and more activity promoted increased optimism, creating a virtuous cycle that enhances well-being among older women.

Graduate Poster Submissions

G08 - Neurocognitive Effects of Moyamoya Disease and Concomitant Epilepsy: A Case Report

Elizabeth R. Wallace - University of Kentucky

Faculty Advisor: *Lisa M. Koehl*

Moyamoya disease (MMD) is a rare degenerative cerebrovascular disorder characterized by the blockage of the internal carotid artery leading to recurrent infarcts, transient ischemic attacks, and/or hemorrhagic bleeding. Treatments for MMD include indirect bypass surgery (encephaloduroarteriosynangiosis; EDAS) aimed at revascularization of the occluded vessels. While disease and surgical sequelae often include cognitive changes, few studies have examined neurocognitive functioning in adults with MMD. This case report reviews the neuropsychological evaluation of a 53-year-old Caucasian male with history of post-EDAS MMD and recurring seizures. Results revealed weaknesses in verbal learning, verbal processing speed, and motoric speed. Impairments in visual memory and phonemic fluency reflect executive dysfunction. Results reflect the vulnerability of subcortical-frontal neural networks to ischemia via MMD regardless of their location in the brain. Further, such a prolonged experience of seizures and difficulties with management likely further affected high reported affective and functional burden. Implications for clinical care are presented.

G09 - Healthcare Access and Quality in Cervical Cancer Survivors with a History of Smoking

Will Bowling, Gabriella Puleo, Jessica Rivera, Tia Borger, Devin Montgomery, & Jessica Burris - University of Kentucky

A landmark report suggests cervical cancer (CC) burden is disproportionately shared by rural and socioeconomically disadvantaged women (Freeman&Wingrove, 2005). Like CC, smoking (2nd leading cause of CC) is disproportionately shared by rural, poor women. This mixed-methods study describes the healthcare of CC survivors (CCS) who smoked at diagnosis; 50 CCS completed questionnaires and 21 an interview. Participants (M age=45 years) were predominantly White (94%). Ninety-two percent had a primary doctor and medical insurance. Participants reported high comfort with and trust in their doctor (Ms > 3.4, 0-4 scale). Few identified cost (16%) and travel (26%) as barriers to healthcare. Though participants described moderate healthcare satisfaction, most did not receive evidence-based smoking cessation treatment (despite being current smokers). Interview themes were frustration with smoking cessation, high cost of smoking cessation treatment, and lack of meaningful conversations with doctors about smoking cessation. This study highlights room for improvement in cervical cancer prevention/control.

G10 - Context Matters: Behavioral Healthcare in Rural Appalachia

Jennifer A. Schager, M.A., Amber J. Gorzynski, M.A., Kayla D. Nichelson, M.A., Tia Hunziker, B.A., & Haley Beisler, B.A. - Spalding University

Faculty Advisor: *Norah A. Chapman, Ph.D.*

Statement of the ProblemIndividuals living in the eastern region of Kentucky (also known as "Appalachia") experience higher rates of medical and mental health issues compared to the rest of the nation (Zhang et. al, 2008). Indeed, research has found Appalachian Kentucky to be in significantly poorer health than the rest of the country, with higher rates of cancer, heart disease, and premature mortality (Appalachian Regional Commission, 2017). This population faces multiple barriers to receiving medical and mental health care, including limited access to care, transportation, and financial difficulties, as well as significant stigma regarding mental health services (Phelps, 2014; Waters, 2011, Zhang et al., 2008). One solution to these barriers is implementing behavioral health services within integrated care. As such, the current study partnered with Remote Area Medical (RAM), a non-profit organization that provides free medical, dental, and vision services via mobile clinics to rural, isolated communities since 1985. The purpose of this study was to evaluate biopsychosocial correlates with mental health concerns in this population, as well as evaluating needs for improved behavioral health services in rural Appalachia. Services also included brief mental health consultation and psychoeducation services to RAM participants. Specific study hypotheses include (1) higher ACEs with more health conditions, (2) higher ACEs with higher levels of anxiety and depression, (3) more health conditions with higher anxiety scores, and (4) concrete needs being ranked higher in priority than mental health.MethodsParticipantsParticipants in the current study are individuals who attended the RAM clinic in Hazard, Kentucky. Individuals have the right to decline participation in the survey and are eligible to receive services even if they decline to participate in the survey. There were 76 participants total in the study.MeasuresThough not required to receive services, participants were given the opportunity to complete a packet including the informed consent document, demographics questionnaire, the Adverse Childhood Experiences Questionnaire (ACE; Felitti et al., 1998), Patient Health Questionnaire 9-item Scale (PHQ-9; Kroenke, Spitzer, & Williams, 2001), and Generalized Anxiety Disorder 7-item Scale (GAD-7; Spitzer, Kroenke, Williams, & Lowe, 2006). ProceduresData collection and services took place at the RAM clinic in Hazard, Kentucky in June 2018. Data were collected in one of three ways across the two day time span, including a) during individual brief consultative services (via behavioral health consultant model within the medical and dental clinics), b) resource tabling, and c) recruitment while patients were waiting for their medical services. Participants who volunteered for the study (and were not recruited from the brief consultative services) were informed about mental health resources, including telehealth services and consultation for specific needs.Results & ConclusionsData analysis is in progress. Preliminary results indicate significant relationships between anxiety, depression, and ACEs, as well as correlations with specific medical conditions. Qualitative data from participant comments and on surveys are also discussed.

Graduate Poster Submissions

G11 - Prayer Experience's Role in the Association between Private Prayer and Brooding Rumination

Abbie Sell, Benjamin Jeppsen, Patrick Possel, Stephanie Winkeljohn-Black - University of Louisville

Faculty Advisor: *Patrick Possel*

Incorporation of relevant religious and spiritual issues such as prayer has been identified as an essential part of culturally competent counseling. Previous research exploring the relation between private prayer and mental health has revealed mixed results. Acknowledging that there are many different types of prayer and that individuals may have different experiences during those types of prayer may be essential. This study explores the relation between four types of private prayer, brooding rumination, and the receptive experience of prayer (i.e. "prayer experience") to provide clarity of using prayer as a tool in counseling. Consistent with our hypotheses, prayer experience moderated the relation between three out of four types of prayer and brooding rumination. The results of this study highlight the need for counselors to understand what their spiritual and/or religious clients experience during prayer rather than only focusing on what types of prayer they engage in.

G12 - The Effects of Disabillities on Depression: A Meta-Analysis

Khrista Neville, Emily Mink, & Bailey McGuffin - Eastern Kentucky University

Faculty Advisor: *Dr. Richard Osbaldiston*

Physical and mental disabilities have the capacity to affect a person's everyday living. The purpose of this meta-analysis is to evaluate the effect disabilities have on depression. In order to evaluate this relationship, we located 20 articles that reported relationships between physical or mental disabilities and depression. These articles were coded, and their overall effects sizes were calculated. The results of the meta-analysis revealed an overall weak relationship between disabilities and depression in general, a strong relationship between mental disabilities and depression, and a weak relationship between physical disabilities and depression. This research provides evidences that disabilities and depression are positively correlated.