Access, Wellness, And Relational Determinants of Student Success (AWARDSS)

UROC: Undergraduate Research Opportunities Consortium 2018

Taylor Roloff



"Juvenile Drug Courts: The Process of Integrating and Implementing Best Practices"

ABSTRACT: The need for substance abuse treatment programs for adolescents is a national public health concern. The link between juvenile criminal offenders and adolescent substance use disorders (SUD) is strong and well established. The Juvenile Drug Courts (JDC) were designed to target interventions and prevention efforts to ensure youth had appropriate treatment that aligned with their needs. Organizations such as the OJJDP and NADCP pushed for JDCs to implement best practices including the Strategies in Practice and the evidencesupported Reclaiming Futures model. There has been a lack of research determining fidelity and overall effectiveness of the JDCs ability to implement the two integrated models. The purpose of this study is to determine how well JDCs are implementing the JDC/RF integrated model and to determine the similarities and differences across individual JDC sites. The researchers designed an integrated logic model: Normative Expectations of the Integrated JDC/RF Drug Court Logic Model that describes the integration of JDC:SIP and RF and includes components described in 16 key activities. The results of this study indicate that although JDCs score 80 percent effectiveness in implementing the 16 key activities overall, there are wide discrepancies among individual JDC sites and their ability to implement each key activity equally. This is an indicator that alternate resources may be needed, such as funding and training. This underscores the success of a program being dependent on its implementation process. Thus, the integration and implementation process requires thoughtful planning and is especially critical to program sustainability.

Robert Conde



" Training in Culturally Responsive Teaching Practices for Professional Growth and Critical Awareness in Tucson, Arizona"

ABSTRACT: With the elimination of Mexican American studies through the passing of Arizona house bill HB2281 2012, the Tucson Unified School District (TUSD) banned any classes that: advocate ethnic solidarity, are designed primarily for students of a particular race, promote resentment towards a certain ethnic group, and promotes overthrow of the U.S. government. Consequently, a greater emphasis was added to importance of CRT training. The current study seeks to assess the effectiveness of CRT (Culturally Responsive Teaching) training on teachers' beliefs and ideas regarding minority students. It aims to answer the following question: Is CRT training improving teachers' critical cultural awareness?

The current study uses a post training three question survey to gauge critical awareness indicators in TUSD high school teachers. Sabino, Catalina, Rincon and Tucson Magnet High school will be correlated based on neighborhood location and income per capita. A sequence of four post training surveys were collected after every session throughout the 2017 school year. The current study seeks to qualitatively assess participants responses based on themes expressed in these responses. Transcription of the responses and thematic coding is currently in progress. Transcription and coding is expected to be complete in the next two weeks.

The ultimate goal of CRT training is to reduce achievement disparities. This study argues for the effectiveness of CRT training in the TUSD as a tool to help reduce the achievement gap in Latino students.

Rebecca Perez



"The Impacts of United States-Mexico Border Infrastructure on Threatened Mammal Populations' Movement Abilities"

ABSTRACT: Border infrastructure along the United States-Mexico international boundary bisects the ranges of many species and threatens to reduce connectivity of threatened species populations. Connectivity is essential for the preservation of biodiversity found along the U.S.-Mexico border. Movement ability measures the ability of species to access vital resources like food, water, and potential mates and is an important measure of connectivity. The purpose of this study is to evaluate the risk of loss of threatened species population connectivity due to range bisection by U.S.-Mexico border infrastructure by analyzing the movement ability of several threatened populations of mammals. Understanding the impacts of border infrastructure on movement ability of species is nessary for the conservation of threatened species as border security and infrastructure increase along the U.S.-Mexico border. Final data collection and analysis will be completed in the Fall of 2018.

Natalie Larez



"Symptomatic Effects of Childhood Trauma: Resiliency as a Mediator in Relation to Trauma Exposed Adolescents' School Outcomes among Youth with Type 1 Diabetes "

ABSTRACT: Childhood trauma is a pervasive problem in the lives of children. Research has demonstrated that complex trauma contributes to difficulties in attention, emotion, and behavior regulation. These challenges may lead to lower school performance, challenged peer relations, and disruptive classroom behaviors. Chronic illness, a medical condition lasting three or more months, may be considered a traumatic event. Post-traumatic stress symptoms that result from trauma exposure may contribute to poor school outcomes. The present study sought to examine the symptomatic effects of childhood trauma exposure in adolescents with type 1 diabetes mellitus between the ages of 10 – 17 years old. The first aim, which was the focus of this presentation, was to determine the relations between trauma-related symptoms and resiliency. The second aim will be to examine resiliency as a mediator for the symptomatic effects, in relation to adolescents' school outcomes. Results yielded that trauma-related symptoms reported by the adolescents on average was 13.48, with a range of 0 – 58 and a standard deviation of 15. The DSMV considers clinically significant PTSD symptoms to be at least 1-2 symptoms endorsed from the four available clusters, with each symptom being scored as 4. A Pearson correlation found that higher severity of trauma symptoms, specifically the dimension of hyper-arousal, significantly related to higher rates of vulnerability, greater levels emotional reactivity, and less mastery skills. Parents reported fewer traumatic stress symptoms, but their reports also significantly related to aspects of resiliency. These findings provide a precursor for further review of these adolescents' school outcomes.



Brena Andrews

"Where Digital Storytelling meets Immersive Virtual Environments: Using Virtual Reality to inform users about the Harlem Renaissance"

ABSTRACT: The Virtual Harlem Project is a fully immersive, interactive virtual environment that is a digital representation of Harlem, New York during the period known as the Harlem Renaissance. This paper presents the plans for a case study that will utilize the Virtual Harlem environment to explore the ways in which digital stories can be configured through avatars, quests, and interactive activities within a virtual environment in order to introduce users to the history of African Americans during the Harlem Renaissance.

Mariana Teposte



"Autobiographical Memory and Aging"

ABSTRACT: The effects of aging on the brain can affect many aspects of autobiographical memory (ABM) including one's behavior, multidimensionality, one's self-continuity over time, self-knowledge, and self-esteem (Grilli & Verfaellie, 2016; Marquine et al., 2016; Palombo, Sheldon, & Levine, 2018). In order to understand these effects, this study aims to focus on how the brain is able to organize and retrieve autobiographical memory in young adults (ages 18-30) through a series of neuropsychological tests designed to measure ABM. What is important to note in this study is that we are looking at typical aging in the human life span, which means no perceivable developmental pre-dispositions to cognitive impairment (such as intellectual developmental disability) or traumatic brain injury (PI: Matthew Grilli). Autobiographical memory in humans is a unique ability to recall knowledge with interindividual differences in both quantity and quality of experiences (Palombo, Sheldon, & Levine, 2018). Autobiographical memory envelopes many important memory activities encompassing: the recollection of personal past, present, and future-thinking of events, knowledge about oneself-personal traits and social roles, identity continuity over time, the uniqueness of an individual's multidimensionality (Grilli & Verfaellie, 2016; Marguine et al., 2016; Palombo, Sheldon, & Levine, 2018). Despite the knowledge of autobiographical memory in individuals, there is insufficient amount of empirical research discussing both behavioral and neural processes of autobiographical memory (Palombo, Sheldon, & Levine, 2018). The significance of this study is to establish an understanding of ABM throughout the human life span in order to understand the aging process.

Souksavanh T. Keovorabouth



"Two-Spirit Identity Among Tribal Communities: The Effects of Intergenerational Trauma on Queer Native Youth Well-Being"

ABSTRACT: Although many Native American nations have oral traditions that feature stories of two-spirit individuals who were highly respected in the community; today, there are many two-spirit youth who have experienced trauma to their physical, mental, and spiritual well-being. Reports show that Navajo youth who identify with the LGBTQ+ or twospirit community are 3x more likely to attempt suicide than their non-Navajo counterparts (Navajo LGBTQ Report, 2015). This study will focus on two-spirit youth (ages of 16 to 24), and will document and analyze the relationship between their two-spirit identities and the trauma that many of them experience. The dissemination of the findings will bring social awareness about the lack of indigenous knowledge, even among Native American nations. The data will be collected via survey through REDCap, a University of Arizona's confidentiality survey generator, and video chat interviews to receive a more accurate understanding of the two-spirit experience. Data collection is pending IRB approval of the research and survey questions, once approved, surveys will be disseminated via email listservs within Native American centers. Anticipated limitations of the research will be finding participants who identify with two-spirit or LGBTQ+ identity and are comfortable enough to share their understanding of their well-being. The findings of the study will challenge Native American communities to create an environment of acceptance to lower rates of suicide, self/physical harm, and many other factors that impact two-spirit youth's health.

Kelly Carroll



"Investigating the Relationship between Physical Activity and Neuropathy in Ovarian Cancer Survivors"

ABSTRACT: Background Chemotherapy-induced peripheral neuropathy (CIPN) is an increasingly important public health issue due to the expanding numbers of cancer survivors and the high prevalence in those who receive taxane-based chemotherapy. CIPN lowers the quality of life (QOL) and increases the risk of falls and utilization of healthcare. There is currently no cure although exercise interventions have been shown to increase QOL and improve balance and strength in survivors. Methods The Lifestyle Intervention for oVarian cancer Enhanced Survival (LIVES) study randomizes participants into either a diet and physical activity intervention or general health education coaching. The neuropathy data were derived from the MDASI-OC questionnaire, which asked participants to rate the severity of their symptoms in the 24 hours preceding the questionnaire on a scale of 0 to 10. Physical activity data were extracted from the APAQ and reported in metabolic equivalents (METs). Means and standard errors were estimated for continuous variables and percentages calculated for categorical variables. Results 388 baseline participants completed all questionnaires. A total of 314 (78.9%) women experienced numbness or tingling in their hands or feet (score of ≥ 1). Those who had neuropathy symptoms had an average of 261.8 total MET hours/week compared to those who did not with 37.6 hours/day. Those with mild, moderate, and severe neuropathy had 266.7, 263.9, and 259.0 total MET respectively. hours/week. Conclusions The current work describes basic physical activity in ovarian cancer survivors with and without neuropathy. Future assessments will include further analysis of the different categories of physical activities.

Amber Iman Soublet



"A Comparative Analysis of the Referral Process of Adverse Childhood Experiences (ACEs)"

ABSTRACT: Adverse Childhood Experiences (ACEs) are defined as traumatic events in a person's childhood that can sometimes result in the development of adverse health problems in adulthood. (SAMHSA, 2018). Given the extensive research on the relationship between ACEs and chronic health issues in adulthood, there is currently a public health initiative encouraging the screening for ACEs in pediatric and adult primary care settings. However, current ACEs research fails to acknowledge the most important component of ACEs screening, the referral process, which is the mediating factor between ACEs and the development of chronic health issues in adulthood. This gap between the ACEs screening and referral process raises several important questions, specifically; What is the best practice for ACEs referral after screening? This study uses data collected from an ACEs Pima County Environmental Scan to determine the availability of trauma-informed care services for individuals with elevated ACEs scores in Pima County, Arizona. The purpose of this study is to inform mental health care providers on the importance of referral practices, the availability of trauma-informed care and to determine the best referral practice for individuals with elevated ACEs scores. Plans for the completion of this project include the development and publication of a literature review focusing on ACEs screening practices. This literature review will identify research on ACEs screening processes which will lead to the identification of current screening initiatives nationwide and the documentation of their referral processes. Information on current screening initiatives' referral procedures will be collected through interviews or surveys.

Gabby Struve



"Influence of Social Media Among Men Pertaining to Muscular Drive"

ABSTRACT: Social media in the recent years has turned into the new, modern mass media as it has increases in popularity for obtaining information. As social media is increasing in popularity, it is becoming an integral part of young adults' lives and it is impacting and affecting many facets of their lives such as health, wellness, and lifestyles. There has been some research that has shown social media can affect health habits and body image satisfaction among women in a negative way; however, it is not completely clear how social media will affect health habits and bodily concerns among men. The purpose of the study is to explore the effects of social media networks on men when it comes to muscular drive. The study aims to investigate the possible link between men's social media use, with a focus on popular visual-based social media platforms, and their exposure to certain health and fitness content on social media, and their health and fitness habits. An online survey was conducted on young adult males to see whether social media affected men's muscular drive and health habits. It is hypothesized that men who have high social media exposure to health and fitness related content, who use and devote a lot of time on social media, and who are active in online health communities will have a higher muscular drive and body dissatisfaction. Final results are pending as data is still being collected. Final data collection and analysis is to take place in winter of 2018.

Leila Castro



"Complex Relationship Between Education and Labor in Nogales, Sonora, Mexico"

ABSTRACT: Foreign companies located along the U.S.-Mexico border, also known as maguiladoras were established in Northern Mexico because of the cheap labor and less restrictive laws in 1965 as an attempt by the Mexican government to create employment opportunities for its citizens (Cañas et al., 2013). Maquiladoras are assemblage factories where materials and components are assembled and exported (Carrillo & Zárate, 2009). Since the emergence of the industry the greater part of education and labor opportunities in border towns have oriented towards the maquiladora industry's demands. However, within the last two decades there has been a shift in the aspirations of college graduates. Many are parting from the maguiladora industry and are seeking nontraditional careers such as social psychology, medicine and law. This study aims to understand the emerging education and employment opportunities that recent college graduates are pursing, in addition to understanding why the shift is occurring. The overall methodological approach used for this study was ethnography and the methods used included participant observation at various informal and formal community events and semi-structured interviews with participants in Nogales, Sonora. This study is ongoing and will be completed by October 2018. Between August through September, participant observation will take place in classrooms and other locations at institutions of higher education in Nogales, Sonora and will conduct semistructured interviews with students and recent graduates who are working in Nogales.

Alyssa Mitchell



"A Comparative Analysis of the Function of Behavior Screening Tool for Medical Professionals (FOB-MED) and in-Vivo Functional Analysis Methodology for Childhood Challenging Behavior "

ABSTRACT: The Function of Behavior – MEDICAL Screening Tool (FOB-MED) was developed for medical professionals to administer in a primary care setting. The FOB-MED consists of eight questions and takes approximately fifteen minutes to complete in interview form. The FOB-MED identifies the hypothesized function (reason why) of behavior, where there are four possible functions: Escape, Automatic, Tangible, and Attention. Once the function(s) are identified, the medical professional will provide treatment recommendations to parents based on research. The study will compare the results from the FOB-MED to the results from a functional analysis (FA), which is considered the "gold standard" for understanding the function of a challenging behavior (Sturmey, 207, p. 461) because the FA identifies function 91.7% of the time (Beavers, Iwata, & Lerman, 2013). A functional analysis takes approximately two hours to complete and must be conducted by a professional (Roane, Ringdahl, & Falcomata, 2015). Currently, we are awaiting IRB approval. Once we have received approval, we will begin recruitment of clinical patients between the ages of two and fourteen. The goal of this tool is to provide medical professionals with an evidenced based screening tool that can assist in identifying the function of a child's challenging behavior, which will increase parent/caregiver access to treatment.