

Undergraduate Research Symposium May 17, 2019 Mary Gates Hall

Online Proceedings

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PSYCHOSOCIAL AND PHYSIOLOGICAL DYNAMICS OF RESILIENCE AND WELL-BEING

Session Moderator: Judith A Howard, Sociology

MGH 238

12:30 PM to 2:15 PM

* Note: Titles in order of presentation.

Retrogenerational Impact: The Victory of African American Grandmothers

Bradford (Brad) Howe, Senior, Psychology

Mentor: Peter Vitaliano, Department of Psychiatry and Behavioral Sciences

High psychological resilience has been significantly linked to better medical recoveries, psychological recoveries, and resistance to psychological deterioration. Currently, many African American grandmothers are engaged in emergent childcare due to serious family trauma. I have identified key aspects of the lives of these women which are relevant to their resilience through a literature review, personal cultural experience, and focused interviews. This preliminary research informed my creation of a theoretical model relating resilience to faith, music, and justice. Utilizing thoroughly tested psychological measures which correspond to each aspect of my theoretical model, I am performing a pilot study to determine the strength of the relationships between all four of these constructs. More frequent, and deeply shared, music experience within a family is anticipated to covary with higher scores of resilience. This is due to shared emotional experiences fostering positive attachment amongst the family members. Also, stronger perceptions of injustice as well as doubt in one's faith are both expected to negatively correlate to one's resilience. If a person expects the world to unjustly not return their efforts or expects their personal coping techniques to fail, they will be less likely to utilize these avenues. Immediately, I am returning my findings to support groups for grandmothers and, under the guidance of a psychiatric professor, also sharing general information about resilience. Findings from this pilot study will guide future experiments to determine how best to support grandmothers, concerning resilience. Information yielded by larger scale research of this type will inform the development of fast, inexpensive, culturally appropriate, and non-invasive techniques for detecting individuals with low resilience.

An Investigation of Gender Effects on the Relationship between Adult Attachment Style and Coping Strategies

Savannah Marie Miller, Senior, Anthropology, Psychology

Lena Lucia Snyder, Senior, Psychology, Sociology

Mentor: Katherine Manbeck, psychology

Mentor: Jonathan Kanter, Psychology

Individuals with ambivalent and avoidant adult attachment styles are more likely to use negative coping strategies such as denial and disengagement, while individuals with a secure adult attachment style are more likely to use positive coping strategies such as reappraisal and support seeking. Certain negative coping strategies are linked with mental health problems such as depression and anxiety. Most research regarding the relationship between coping strategies and adult attachment style has been done on undergraduates and veterans. No research to date has examined gender as a moderator of the relationship between adult attachment style and coping strategies. However, research suggests that both coping strategies and adult attachment styles vary by gender. In the present study, a series of multivariate regression analyses were conducted to determine whether gender moderated the relationship between close, and anxious adult attachment styles and emotional support seeking, and substance abuse coping mechanisms. Participants (N=385) completed self-report measures of coping strategies and adult attachment styles online. This project may reveal that gender changes the relationship between adult attachment style and coping strategies. This information may help inform psychological interventions for individuals with maladaptive coping strategies and improve our ability to predict who might engage in maladaptive coping strategies.

Who Can You Trust? Armed Conflict and Social Relationships

Abari Charles, Senior, Sociology

UW Honors Program

Mentor: Nathalie Williams, Sociology and Jackson School of International Studies

Individuals who have experienced armed conflict at some time in their life span up to the millions. Whether its domestic violence, PTSD or war. A small body of research has been conducted to understand self-image and the well-being of survivors of armed conflict. However little is known about the effects of armed conflict on social behaviors and the perception of social relationships. This research is based on interviews and ethnographic data from forty South Sudanese refugees living in Rhino camp, Uganda. Using interviews and qualitative methods this research addresses how armed conflict affects trust of others and social relationships. Key insights from this research will allow us to understand how armed conflict experiences impact one's perception of social relations and how different genders view this same idea. This research addresses social behaviors and perceptions of social relationship which is an important aspect of health, well-being and survival.

Woke About Coke? Investigating Beliefs Surrounding Cocaine Use among College Students

Anna Lea Juliette Lewi, Junior, Sociology, Psychology

UW Honors Program

Mentor: Heather D. Evans, Rehabilitation Medicine

Overdoses induced by fentanyl-laced cocaine are skyrocketing today. Meanwhile, in 2017, cocaine was reported as the fourth most prevalent substance used on college campuses. Even more alarming, research shows a modest decline in young people's disapproval and perceived harmfulness of experimental cocaine use. Favorable depictions of cocaine use in the media contributes to these trends today: the entertainment industry continues to advertise cocaine as a drug of privilege, partying, and success. Conversely, studies investigating Adderall use found college students view cocaine use negatively. Students harshly judged their peers who exposed themselves to cocaine's hazardous nature and high risks. This contradictory evidence makes it difficult to judge how problematic college students' views on experimental cocaine use may be. This study aims at sorting this puzzle. The project tests the hypotheses that students think one-time use results in more benefits than risks to the individual. To assess this hypothesis, I use a web-based survey adapted from the so-called "prototype-willingness model" (PWM). The PWM is built on the idea that young people share very clear social images of risky behaviors. The favorability of these images is positively correlated with willingness to engage in risky behavior. Willingness, rather than planned intent, is the primary factor responsible for engaging in risky behaviors if presented with

the opportunity. I examine the social image of experimental cocaine use and its favorability in order to predict willingness to use. Predicting how a college student may react when given the opportunity to use is crucial for future prevention planning, as cocaine use is a more pressing issue than ever.

Multiple Chemical Sensitivity: Exploring Global Research Inconsistencies and Deficiencies

Tahni C. Mc Gaughy, Junior, Interdisciplinary Arts & Sciences, UW Tacoma

Mentor: Christine Stevens, Nursing and Healthcare Leadership Programs, University of Washington Tacoma

All over the globe, an escalating number of people are developing distressing sensitivities to our environment's everyday intoxicants. Multiple chemical sensitivity (MCS)—also termed idiopathic environmental intolerances (IEI), among other names—is an acquired disorder characterized by a wide range of symptoms and reactions to low-level chemical exposures. Studies conducted in Japan, USA, Sweden, and Denmark found that 12% of the population has been diagnosed with chemical hypersensitivity, while total underreported prevalence is estimated between 15% and 27%. More importantly, research states that prevalence has increased by 300% within the past decade. People diagnosed with MCS experience a range of symptoms, examples including asthma, heart irregularities, headaches, dizziness, confusion, skin irritation, and fatigue. Abundant in our everyday environment, commonly reported triggers include pesticides, building or renovation materials, car exhaust and chemical smog, smoke, perfumes and fragrances, and cleaning supplies, among others. With a myriad of proposed titles, contrasting research perspectives and approaches, and a staggering dissensus on physiology and diagnosis, it is critical that we compare and contrast the existing literature by geographical region. Three primary research hubs generate the majority of contrasting MCS research; these regions include the United States and Canada, Scandinavia, and Japan. The problematic inconsistencies include (1) a lack of consensus definition or diagnosis for the illness, (2) varying perceptions on pathophysiology, and therefore (3) contrasting treatment strategies. This research aims to examine the global, contrasting research approaches, proposals for treatment or action, and subsequent healthcare experiences within the geographical regions of focus. Preliminary results suggest that inconsistencies in the medical diagnosis of MCS lead to deficiencies in research and ineffective healthcare. By any given title, the escalating number of chemically hypersensitive patients is a growing global health concern. Integrating the globally contrasting approaches and diagnosis criterion is the first step to developing efficient healthcare strategies.

The Role of Team Communication in Identifying Potential Social Loafers

Vladka Behrova, Senior, Business Admin (Supply Chain Management)

Mentor: Deanna Kennedy, School of Business, University of Washington Bothell

Team leaders occasionally find themselves managing teams that have a member set on under-performing in the social group, or "social loafing." Many team leaders have difficulty managing this social loafer effectively. In our research, we focus on helping leaders identify social loafers on their team. Our goal is to create guidelines and strategies on how to work with social loafers after they have been identified. We use communication transcripts and performance data, gathered by social behavioral researchers, that conducted a hidden profile experimental simulation with rotating leadership and hidden social loafers amongst project members. This was done over time, as project requirements escalated. By applying recurrence quantification analysis, we gathered metrics on the development of communication patterns across time in terms of: being recurrent, deterministic, and chaotic. Statistical modeling was used with the intention of revealing the types of relationships between the ability to identify social loafers and project success. By providing a way to quantify the properties of dynamic systems, recurrence analysis offers group researchers a new approach for empirically studying group dynamics. Rather than presuming that such systems are linear, researchers can use recurrence analysis to assess the degree to which a system is stable, predictable, and complex. This work will provide value to researchers in demonstrating the application of the recurrence analysis method, and will help team leaders by exemplifying how they can manage tough situations where social loafers exist on a team.