# ILLOWA 2023

48<sup>th</sup> Annual Illinois-Iowa Undergraduate Psychology Empirical Research Conference Saturday, April 15, 2023

Keynote Address: Dr. Jordan Wagge Avila University

Things That Surprise My Students



Hosted by Department of Psychology Eureka College, Eureka, IL



### **CONFERENCE HISTORY**

ILLOWA is one of oldest continuing undergraduate psychological research conferences in the United States. Established 1973, ILLOWA was created when James Joyce and Kermit Hoyenga of Western Illinois University, Dean Wright of Monmouth College and Gary Francois of Knox College established a mechanism by which local colleges and universities could enhance interaction with each other and provide an educational research experience for their students.

ILLOWA has since expanded over to include nine educational institutions in Illinois, Iowa and Missouri. ILLOWA established its first website in 1998, at Culver-Stockton (Mo.) College. Since fall 2001, undergraduates who present at ILLOWA can also submit their papers for possible inclusion in the Journal of Psychological Inquiry.

The conference's programming format has remained relatively unchanged over the years in that only undergraduates are allowed to present their findings from empirical research projects. The host institution provides lunch, a visiting keynote speaker and absorbs the cost of the convention. The convention's site of is on a rotational basis. The date of the convention, if scheduling permits, is the Saturday before the Midwestern Psychological Association's annual convention.

The ILLOWA conference has been mentioned in Teaching of Psychology, Eye on Psi Chi and in the APA Monitor. Additionally, ILLOWA has been cited as one of the major undergraduate conferences in the United States. See: Smith and Davis (2010) The psychologist as a detective: An introduction to conducting research in psychology (5th Ed.).



#### **CONFERENCE LOCATIONS**

- **Augustana College** 1976, 1986, 1990, 1995, 2004
- Cornell College 1985
- Culver-Stockton College 1998, 2007, 2013, 2020\*
- Eureka College 2003, 2012, 2018, 2023

University

- Knox College 1977, 1980, 1984, 1988, 1993, 1997, 2002, 2009, 2015, 2019
- **Monmouth College** 1975, 1978, 1982, 1989, 1994, 1999, 2006, 2011, 2017, 2022
- **St. Ambrose University** 1981, 1992, 2001, 2008, 2014
- Western Illinois University 1974, 1979, 1983, 1987, 1991, 1996, 2000, 2005, 2010, 2016, 2021\*

University

<sup>\*</sup> ILLOWA was cancelled in 2020 and 2021 due to the COVID-19 pandemic.

### **KEYNOTE ADDRESS**



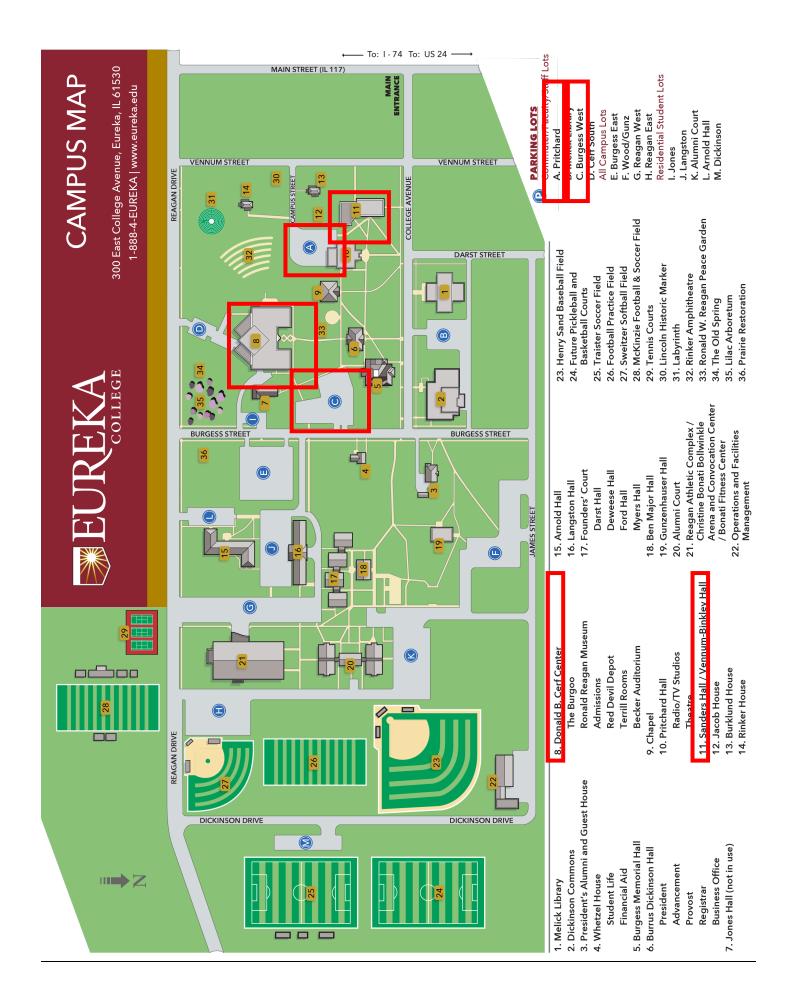
Dr. Jordan Wagge
Professor, Avila University
Director of the Collaborative Replication Education Project (CREP)

Title of Keynote Address: Things That Surprise My Students

Throughout the past couple of decades, I have taught some courses in research methods and statistics. Students might describe these as "tough," "boring," or "awful" when they register, but ideally there is some sort of magic that happens in the class that elevates these courses up to categories like "okay," "useful," or "not my least favorite thing" for these students. Most of them do not leave my class and immediately spend all day doing research or dreaming about doing research, but I do hope that they achieve some of my informal goals for them, such as "understand that it's okay to hate it sometimes." In this talk, I will discuss some of these goals, and some things I have told my students throughout the years that surprise them and make them feel more confident in their research skin. It is my hope that you will leave this talk with a sense that it was not awful.

## ILLOWA 2023 Schedule of Events

Time	Event	Location
11:45 AM – 12:30 PM	Registration and Refreshments	Cerf Center – Moser Lobby
12:30 – 12:40 PM	Opening Remarks	Cerf Center –
		Becker Auditorium
12:45 – 1:45 PM	Session 1	Sanders Hall
	A – Social I	Room S308
	B – Social II	Room S309
	C – Social III	Room S207
1:50 – 2:40 PM	Session 2	Sanders Hall
	A – Social IV	Room S308
	B – Health	Room S309
	C – Social V	Room S207
2:40 – 3:00 PM	Break	Cerf Center – Moser Lobby
	Faculty-only Meeting	Cerf Center – Terrill Rooms
3:00 – 3:50 PM	Keynote Speaker:	Cerf Center –
	Dr. Jordan Wagge	Becker Auditorium
4:00 – 5:00 PM	Paper Session 3	Sanders Hall
	A – Cognitive	Room S308
	B – Social VI	Room S309



#### Paper Sessions at a Glance

### Session 1: 12:45 – 1:45 PM

#### A – Social I

#### Sanders Hall Room S308

#### B – Social II

#### Sanders Hall Room S309

#### 12:45 – What Effect did the COVID-19 Pandemic Have on the Depression and Anxiety Rates in Young Adults?

Author: Macey Whisker Sponsor: Alexander Swan Institution: Eureka College

## 1:00 – The Effects of Romantic Relationships in College

Author: Grace Dearhamer Sponsor: Alexander Swan Institution: Eureka College

### 1:15 – Homesickness Increases Stress and Anxiety in Students' Lives

Authors: George Kanatas Sponsor: Alexander Swan Institution: Eureka College

#### 1:30 – Planned Exercise Outside of School Athletics Affects Perceived Stress

Author: Carson Gregory Sponsor: Alexander Swan Institution: Eureka College

## 12:45 – The Relationship Between Sleep Quality and Processing Speed

Author: Danielle Morgan Sponsor: Melissa Holt

Institution: Culver-Stockton College

## 1:00 – The Relationship Between Self-Esteem and Social Anxiety

Author: Mallory Deming Sponsor: Melissa Holt

Institution: Culver-Stockton College

#### 1:15 – The Relationship Between Post-Secondary Education Satisfaction and Academic Motivation

Authors: Joey Novick Sponsor: Melissa Holt

Institution: Culver-Stockton College

#### C - Social III

#### Sanders Hall Room S207

## 12:45 – Creation of the Subjective Gender Identity Interview

Author: Beck Baird Sponsor: Andrew Hertel Institution: Knox College

## 1:00 – Disabilities and Perceptions of Quality of Life

Author: Kaitlyn Fox Sponsor: Joan Wertz

Institution: Monmouth College

#### 1:15 – Trait Emotional Intelligence, Motives for Social Media Usage and Frequency of Social Media Usage

Authors: Aloaye Abdul-Saliu Sponsor: Cynthia Bane Institution: Wartburg College

#### Paper Sessions at a Glance

### Session 2: 1:50 – 2:40 PM

A – Social IV	B – Health
Sanders Hall S308	Sanders Hall Room S309
1:50 – Moral Decision-making & Demographics Author: Sophia Simonis Sponsor: Alexander Swan Institution: Eureka College	1:50 – Food Cue Reactivity in Response to Stress Author: Mehrshad Bashang Sponsor: Shaheen Munir Institution: Wartburg College
2:05 – The College Student Catch-22: The Impact of Number of Hours Slept on Self-Reported Mood in Eureka College Students Author: Audrey Welch Sponsor: Alexander Swan Institution: Eureka College  2:20 – How Does 10 Minutes of Art Affect One's Emotional State? Author: Leona Reedy Sponsor: Alexander Swan Institution: Eureka College	2:05 – Coping Strategies and Burnout: The Mediating Role of Self-Esteem Author: Kaitlyn Tran Sponsor: Andy Hertel Institution: Knox College  2:20 – Stress and Alcohol Consumption in College Students Author: Erin Ott Sponsor: Dennis Dew Institution: Mount Mercy University

### C – Social V

#### Sanders Hall Room S207

## 1:50 – Relationship between Self-compassion and Family Emotional Involvement and Criticism

Author: Lucy Williamson Sponsor: Melissa Holt

Institution: Culver-Stockton College

## 2:05 – The Relationship Between Mindfulness and Emotional Regulation

Author: Elaysia Rasmussen Sponsor: Melissa Holt

Institution: Culver-Stockton College

#### 2:20 – The Fear of Criticism and its Effect on One's Enjoyment of the Creative Process

Author: Keri Schindler Sponsor: Melissa Holt

Institution: Culver-Stockton College

# Paper Sessions at a Glance Session 3: 4:00 – 5:00 PM

Session 3. 4.00 – 3.00 1 M			
A – Cognitive	B – Social VI		
Sanders Hall S308	Sanders Hall Room S309		
4:00 – Music and How it Can Affect Studying and the Ability to Learn For College Students Author: Christion Beamon Sponsor: Alexander Swan Institution: Eureka College  4:15 – Effect of Color on Recall Author: Merik Flatt-Beer Sponsor: Alexander Swan Institution: Eureka College  4:30 – How Does Distance from Parental Figures Affects Anxiety and Depression Rates in College Students Author: Hayden Skaggs Sponsor: Alexander Swan Institution: Eureka College	4:00 – Relationship Between Parenting Styles and Attitudes Towards Marijuana in Adolescents Author: Jacob Essex Sponsor: Ryan Colclasure Institution: Monmouth College  4:15 – Affordance Management and Stereotypes About Schizophrenia, Sex, and Age Author: Peyton Osgood, Marissa Barauskas, & Shelby Nash Sponsor: Guy Boysen Institution: McKendree University  4:30 – Data Reliability When Using Different Online Data Collections Author: Emily Markowski		
4:45 – How Sugar Affects Types of Dreams Author: Annalse Siegler Sponsor: Alexander Swan Institution: Eureka College	Sponsor: Katrina Okerstrom-Jezewski Institution: St. Ambrose University		

### Paper Session 1A 12:45 – 1:45 PM Sanders Hall Room S308 SOCIAL I

### 12:45 – What Effect did the COVID-19 Pandemic Have on the Depression and Anxiety Rates in Young Adults?

Author: Macey Whisker Sponsor: Alexander Swan Institution: Eureka College

It is widely recognized the detrimental health effects COVID-19 had on the physical body, but the mental health aspect is severely lacking. The pandemic slammed the young adult population with social isolation, closure of academics, athletics, entertainment, family, and friends. Social isolation alone can lead to a barrage of severe mental health deficiencies such as depression, anxiety, insomnia, and even chronic stress. In this study, I am attempting to show a correlation between COVID-19 caused social isolation and depression and anxiety presently within the young adult population. Through a survey regarding risk factors, loneliness, anxiety, and depression through both the pandemic and presently, it is hypothesized that the depression and anxiety rates of young adults has increased significantly. Currently, the results propose a correlation between the depression and anxiety rates of young adults increasing during COVID-19, but show a decrease presently.

#### 1:00 – The Effects of Romantic Relationships in College

Author: Grace Dearhamer Sponsor: Alexander Swan Institution: Eureka College

Romantic attachment, both positive and negative, can have a significant impact on a student's mental health and college career. While in college students must find a balance between their social life, family connectedness, work, and studying. Adding any kind of romantic attachment to this already long list may have a significant impact on one's mental health, stress levels, and academic performance. The present study will survey Eureka College students who are single and in a relationship to examine the impact that romantic relationships may have on one's college career. My hypothesis is that the results will show that romantic relationships have a negative impact on college careers.

#### 1:15 – Homesickness Increases Stress and Anxiety in Students' Lives

Authors: George Kanatas Sponsor: Alexander Swan Institution: Eureka College

Research suggests that homesickness increases stress and anxiety in students' lives. College students that leave their homes for the first time in their lives are facing homesickness which leads them to grow their symptoms of anxiety in their everyday lives (Landa et al.,2020). Homesickness has serious psychological effects on college students. One of the reasons why this is happening is the struggle of the students to adapt emotionally and socially to their new environment (Landa et al.,2020). I hypothesize that all the students who experience homesickness will have elevated stress and anxiety levels.

#### 1:30 - Planned Exercise Outside of School Athletics Affects Perceived Stress

Author: Carson Gregory Sponsor: Alexander Swan Institution: Eureka College

This study aimed to examine the effects of the amount of exercise a student does on their perceived stress. The participants were Eureka College students who were attending during the 2022-23 school year. The participants were given a survey that asked about their exercising habits and the Perceived Stress Scale (Cohen et al.,1983) that the provost sent out to the student body. There were a total of 117 responses to the survey. Results suggested that stress does not have as much of a correlation with exercise among Eureka College students as hypothesized. It seems that most students experience a moderate or high amount of stress regardless of the amount or type of exercise. These findings suggest that exercise does not have a large effect on the perceived stress of Eureka College students.

### Paper Session 1B 12:45 – 1:45 PM Sanders Hall Room S309 SOCIAL II

#### 12:45 – The Relationship Between Sleep Quality and Processing Speed

Author: Danielle Morgan Sponsor: Melissa Holt

Institution: Culver-Stockton College

The present study examined the relationship between processing speed and sleep quality. This study was a cross-sectional design with 29 undergraduate students ranging from 18 to 22. The hypothesis was the better the sleep quality, the better the processing speed. The participants took two assessments: one being a 4-point Likert scale on sleep quality and the other being an interactive Stroop task to measure processing speed. Data was collected and organized using SPSS Version 27. The results from the current study were not significant which was not in favor of the hypothesis.

#### 1:00 – The Relationship Between Self-Esteem and Social Anxiety

Author: Mallory Deming Sponsor: Melissa Holt

Institution: Culver-Stockton College

The present study was conducted to investigate the relationship between self-esteem and social anxiety. The sample of the study consisted of 52 undergraduate students (40 females and 12 males) ranging in age from 18-22. The Rosenberg Self-esteem scale (Rosenberg, 1979) and the Liebowitz Social Anxiety scale (Liebowitz, 1987) were used to evaluate the levels of self-esteem and social anxiety that the participants had. Statistical analysis was done through SPSS, and a Pearson correlation coefficient was used to determine the results. The results from the study indicate that self-esteem was negatively correlated with social anxiety. Furthermore, the results revealed that people who have low self-esteem may have more anxiety in social situations.

#### 1:15 - The Relationship Between Post-Secondary Education Satisfaction and Academic Motivation

Authors: Joey Novick Sponsor: Melissa Holt

Institution: Culver-Stockton College

The growing need for a college degree has put a spotlight on the collegiate system. The current study focused on post-secondary education satisfaction and how it related to students' academic motivation. The current study sampled 60 post-secondary students ranging in age from 18 to 22. A cross-sectional survey method was used to collect data on the participants. The surveys used were the Student University Satisfaction scale (SUSS) and the Academic Motivation scale (AMS). It was found that there is a significant relationship between post-secondary education satisfaction and academic motivation. The areas where the strongest correlation is how intrinsic motivation is related to curriculum, teaching and university climate.

Paper Session 1C 12:45 – 1:45 PM Sanders Hall Room S207 SOCIAL III

#### 12:45 – Creation of the Subjective Gender Identity Interview

Author: Beck Baird Sponsor: Andrew Hertel Institution: Knox College

As of 2021, an estimated 1.2 million people identified as gender non-binary. Considering the nature of the word "non-binary" —existing anywhere outside of the description of "man" and "woman"—the lumping of all non-binary individuals into a "third-gender" category is not sufficient to adequately quantify the gender of and study the experiences of an already marginalized portion of our population. The present investigation aims to create the Subjective Gender Identity Interview (SGII), a structured interview which can measure gender experience in non-binary persons. The aim of the SGII is to distinguish non-binary genders in a matter which is meaningful for analysis (unlike the low ns and vague responses which appear in open-ended label identification) and does not minimize gendered individuality (unlike in "third-gender" or "other" categorization). Participants were recruited from Prolific (n = 22, >18 years old, not cisgender or binary transgender, able to participate in video interviews) for three interviews. Each interview decreased in length from interview one to interview three (one hour, thirty minutes, and fifteen minutes respectively) with the aim of creating a measure which could efficiently capture the meaningful aspects of gender individuality expressed by participants in the first interview in ½ of the time. The resulting mixed-measures interview captures the gender of non-binary persons through quantitative gender-focused self-attitude scales and a short qualitative interview aimed at capturing how the individual conceptualizes their gender within and outside of their descriptions of "men" and "women."

#### 1:00 - Disabilities and Perceptions of Quality of Life

Author: Kaitlyn Fox Sponsor: Joan Wertz

Institution: Monmouth College

Does an increase in experiences with disabled individual impact the perceived quality of life living with a disability? This questions the relationship between having a connection to the disabled community and how it impacts an individual's judgement. This judgement will be based off perceived quality of life living with a

disability. The current hypothesis assumes that if an individual reports having more interactions with disabled individuals. Furthermore, when analyzing demographics another hypothesis is that those with more education will report a higher perceived quality of life living with a disability. Through this study, there will be data to analyze the connection between interactions with the disabled community and their perceived quality of life from an outsider.

## 1:15 – Trait Emotional Intelligence, Motives for Social Media Usage and Frequency of Social Media Usage

Authors: Aloaye Abdul-Saliu Sponsor: Cynthia Bane Institution: Wartburg College

Past research concerning emotional intelligence and social media usage has mostly focused on the relationship between trait emotional intelligence (TEI) and Problematic Social Media Usage (PMSU) and the consensus is that there is a relationship between low TEI and PSMU (Sural et al., 2018; Kircaburun et al., 2018; Arrivillaga et al., 2022). The present study investigated the relationship between trait emotional intelligence, social media usage motives, and frequency of social media usage. 65 undergraduate students from a small midwestern college completed a questionnaire comprising of Trait Emotional Intelligence Questionnaire Short Form (TEIQue-SF; Petrides, 2009), Social Media Motives Scale (SMMS; Al-Menayes, 2015), and the Social Media Usage Questions. Spearman's rho correlation coefficient analyses showed that trait emotional intelligence and well-being were positively correlated with the frequency of posting, whilst self-control is negatively correlated to the frequency of daily hours spent on social media. Simple linear regressions found no predictability between trait emotional intelligence and the social media usage motives of information seeking and altruism respectively. Most participants described themselves as passive users and used Snapchat more than any other platform. Also, most students were reported to spend 3 to 4 hours daily on social media but most only post every other month. This study provides evidence that trait emotional intelligence and different factors of trait emotional intelligence are related to the frequency of social media usage but not to the motives of using social media, which shows the importance of considering different types of social media usage.

> Paper Session 2A 1:50 – 2:40 PM Sanders Hall Room S308 SOCIAL IV

#### 1:50 - Moral Decision-making & Demographics

Author: Sophia Simonis Sponsor: Alexander Swan Institution: Eureka College

Moral decision-making involves a complicated process of deciphering the ethical connotations of a decision and deciding how to appropriately respond with ethics in mind. Past research has found some correlation between moral decision-making and thought processes with demographic factors. The purpose of this study is to see if any patterns exist between demographic characteristics and moral decision-making. The sample consists of Eureka College students who were recruited using a random sampling method. Participants completed a survey that asked for their demographic information and to make a decision on five moral dilemmas. A factorial analysis of variance will be conducted on the data to determine if any correlation between the variables exists.

## 2:05 – The College Student Catch-22: The Impact of Number of Hours Slept on Self-Reported Mood in Eureka College Students

Author: Audrey Welch Sponsor: Alexander Swan Institution: Eureka College

A study done in 2016 explored the connection between possible connections between mood, pain, and sleep. The data these researchers were able to gather showed connections between interrupted sleep and higher pain perceived. They concluded that there was a negative correlation between the amount of sleep and the amount of pain perceived. But, found much weaker connections between mood and uninterrupted sleep (Harrison et al., 2016). A similar study was conducted in 2019 in which participants around the ages of 20 and 60 underwent uninterrupted or interrupted sleep. The next morning, they were asked to rate their mood and complete a few memory tests. These researchers came to the conclusion that age had more of an impact on mood and memory than sleep did (Liu et al., 2019). Because both of these studies attempted to draw connections between multiple variables. In this study, I will be taking inspiration from previous experiments. But, I will be simplifying the number of variables involved to attempt to answer the simple question: Does the amount and quality of sleep impact mood the following day? By asking participants about their sleep the previous night and mood following that sleep, I predict that I will find a positive correlation between quality of sleep and perceived mood on the day of the survey.

#### 2:20 - How Does 10 Minutes of Art Affect One's Emotional State?

Author: Leona Reedy Sponsor: Alexander Swan Institution: Eureka College

Studies have shown that participating in some type of art medium can help improve a person's emotional state. Producing a piece of art can help a person analyze their feelings from an external perspective. In my study I am focusing on how 10 minutes of art affects a person's emotions. I hope to see a positive change in participants' mood. To begin my research I put participants in two different groups 1. Coloring 2. Not Coloring. Participants were given a survey about their mood. Then participants in the coloring group were given a box of crayons and a coloring sheet and instructed to color for 10 minutes. Participants in the non coloring group sat for 10 minutes. When the time was up participants were given the mood survey again and then given compensation for participating.

Paper Session 2B 1:50 – 2:40 PM Sanders Hall Room S309 HEALTH

#### 1:50 – Food Cue Reactivity in Response to Stress

Author: Mehrshad Bashang Sponsor: Shaheen Munir Institution: Wartburg College Researchers have looked into a variety of factors of food consumption in response to stress. Although stress can present itself in a variety of ways, someone who has been subjected to emotional stress is more prone to overeat. Edmond and colleagues conducted research similar to my research, to investigate the effect of stressful stimuli on calorie consumption by offering food to participants while they watched stressful or neutral films. While watching a video representing academic stress, participants who were classified as "stress under-eaters" consumed fewer calories than those who identified as "stress over-eaters." The present project's goal was to investigate the impact of stressful events on food consumption. In my current study, I provided three conditions in the form of video clips through a between-subjects design to generate emotion. Each video clip has the same duration of three minutes, with background music given in each video, with the intent of eliciting three separate emotions: stressful, neutral, and relaxing. The research had found two significant results using a One-way ANOVA, between the stressful condition and the relaxing condition and a Bivariate Correlation significance score in depression score and skittle consumption. Several implications were found throughout the operation of the study. One of the numerous limitations was the small sample size, which provided insufficient statistical power.

#### 2:05 - Coping Strategies and Burnout: The Mediating Role of Self-Esteem

Author: Kaitlyn Tran Sponsor: Andy Hertel Institution: Knox College

Previous studies suggested a predictive role of coping strategies on burnout and self-esteem and of self-esteem on burnout. Different coping strategies may result in different levels of burnout and self-esteem, and self-esteem was negatively correlated with burnout. The present study aimed to experimentally investigate differences among the effect of four coping strategies (focus on positives, support coping, active coping, evasive coping) on burnout and self-esteem and the potential mediating role of self-esteem on the relationship between burnout and coping strategies. College students (N = 42) were randomly assigned to one control group and four experimental groups. Experimental participants used an assigned coping strategy over a week. Self-esteem and burnout scores were collected and analyzed via multiple linear regression and mixed 5 x 2 ANOVA procedures, which suggested a negative correlation between self-esteem and burnout, significant effects of time on burnout and self-esteem, and no significant differences in the effects of different coping strategies. Overall, the study suggested no significant differences between college students' change in self-esteem and burnout levels in response to the usage of different coping strategies.

#### 2:20 - Stress and Alcohol Consumption in College Students

Author: Erin Ott Sponsor: Dennis Dew

Institution: Mount Mercy University

College students have been known to go and participate in drinking due to the rising levels of stress. There has been research that shows that alcohol has a neurological impact on how the brain makes decisions and how to cope with stressors (Collins and Kirouac, 2013). College drinking has many negative impacts, including missed class and low grades (Wechsler, et al, 1995). With frequent consumption of alcohol on American college campuses, binge drinking has become known as a serious problem (Kuo, et al, 2003). Thirty-one college students, athletes and non-athletes, were a part of a convenience survey (n=31). Participants completed a 26 question survey that asked about stress and alcohol consumption. Each survey that was sent to each participant was the same every time. The participants answered questions on a sliding scale from never (0 points) to very often (4 points) for the portion about stress. Then the participants answered multiple questions for the portion about alcohol consumption, measures including never (0 points) to daily or almost daily (4 points). Participants results from the survey showed a positive correlation between alcohol consumption and stress levels. It has been shown that college students drink more alcohol when they are under stress. A limitation that had occurred

during the process of collecting data was that some of the participants did not answer all the questions and had to be removed from the averages of the Pearson correlation.

### Paper Session 2C 1:50 – 2:40 PM Sanders Hall Room S207 SOCIAL V

#### 1:50 – Relationship between Self-compassion and Family Emotional Involvement and Criticism

Author: Lucy Williamson Sponsor: Melissa Holt

Institution: Culver-Stockton College

Background- The current study was conducted to understand if there was a relationship between self-compassion and family emotional involvement or criticism. The current study consisted of 41 participants. The two hypotheses were that the more self-compassion a person had, the more emotional involvement the person felt from the family and the less criticism they experienced.

#### 2:05 – The Relationship Between Mindfulness and Emotional Regulation

Author: Elaysia Rasmussen Sponsor: Melissa Holt

Institution: Culver-Stockton College

The present study was to investigate the relationship between mindfulness and emotional regulation. Here, two facets of emotional regulation were measured: cognitive reappraisal and expressive suppression. The hypothesis was that mindfulness and emotional regulation would be positively correlated. The study was carried out using a cross-sectional design with undergraduate students. Participants (N = 60) filled out an electronic survey that took approximately ten minutes to complete. The measures used were the Mindfulness Attention Awareness Scale (Brown & Ryan, 2003) and the Emotional Regulation Questionnaire (Gross & John, 2003). The results of this study were not significant.

#### 2:20 – The Fear of Criticism and its Effect on One's Enjoyment of the Creative Process

Author: Keri Schindler Sponsor: Melissa Holt

Institution: Culver-Stockton College

A between subjects experiment was conducted to see if the fear of criticism affects an individual's enjoyment of the creative process. The study had 40 participants recruited by convenience sampling at Culver-Stockton College and then randomly assigned to one of two groups. Both groups were asked to paint for ten minutes then complete a survey. Group one was the control group and instructed that paintings created would not be shown to others. Group two was the experimental group that was instructed that the painting created would be displayed for public viewing. The mean anxiety for individuals with the potential for the fear of criticism were not significantly different from the control group. The fear of criticism did not have a significant effect on an individual's enjoyment of the creative process.

### Paper Session 3A 4:00 – 5:00 PM Sanders Hall Room S308 COGNITIVE

#### 4:00 - Music and How it Can Affect Studying and the Ability to Learn For College Students

Author: Christion Beamon Sponsor: Alexander Swan Institution: Eureka College

My study was about music and its impact on the ability for college students to learn efficiently. This study was done because of growing interests in music and how it affects us mentally and also based on observations made by me about the overall campus lifestyle. I used a reading that I found that was relevant to the idea of changing societal norms and values to catch the attention of my participants on a topic that would be fairly new to them. I used classroom settings to make the school feeling more real to replicate the actual processes of our study habits as closely as possible. Music was my main focus to show multitasking skills and how well we can handle that type of situation. I gathered my results from a reading comprehension quiz done after the participants finished the reading and a distractor task. The results showed a lot of variations of scores that were very interesting to me. They also gave me the ability to tie in things I had not even thought before doing the experiment and so there is much to say about the results this experiment gave me.

#### 4:15 - Effect of Color on Recall

Author: Merik Flatt-Beer Sponsor: Alexander Swan Institution: Eureka College

Students of all ages study to get through school all their lives. These materials are often bland, black and white representations. Studies show that expressing creativity by adding colors to study materials can aid recall, specifically red and blue, and colors with higher valence for the participants had higher effects. Participants were given a slideshow of terms in different colors- red, blue, green, and black- and, after a buffer period during which they were given a puzzle to solve, were asked to write down as many words as they could remember off of the slideshow. A one-way analysis of variance and a correlation analysis were conducted, and showed that red and green study materials had the highest rate of recall, and that personal valence did not have an effect on score.

## 4:30 – How Does Distance from Parental Figures Affects Anxiety and Depression Rates in College Students

Author: Hayden Skaggs Sponsor: Alexander Swan Institution: Eureka College

This study examined whether the distance a student is from the parental figure, both perceived and actual, in college correlates to levels of depression or anxiety. This study was done by surveying college students at Eureka College on the Mini-Mood and Anxiety Questionnaire (Mini-MASQ), and the distance, in miles, they are from who they consider to be their parental figure and how far they feel to be from these figures. This survey allowed for the collection of data on the rates of depression and anxiety in students over the last past week prior to taking the survey. The key finding is hypothesized to be that the perceived distance one is from parental figures while in college will have an increase in the rates of anxiety and depression for the same college student.

#### 4:45 – How Sugar Affects Types of Dreams

Author: Annalse Siegler Sponsor: Alexander Swan Institution: Eureka College

Sugar affects your body in many ways. Not much is known of how sugar effects the types of dreams you have. In this research study, I wanted to find out how high sugar intakes before bed affects the dreams. The design of this experiment was a four day sleep study. The first night there was no sugar intake, second night was 19gs of sugar, third night was 43gs of sugar, and the final night was 63gs of sugar. The participants ate the snack around 8 p.m then went to bed no later than 11 p.m. My hypothesis is that as sugar intake increases, the more vivid and weird the dreams will be.

### Paper Session 3A 4:00 – 5:00 PM Sanders Hall Room S309 SOCIAL VI

#### 4:00 - Relationship Between Parenting Styles and Attitudes Towards Marijuana in Adolescents

Author: Jacob Essex Sponsor: Ryan Colclasure Institution: Monmouth College

Parenting styles vary in the amount of demandingness and responsiveness. Research shows that there is a relationship between parenting styles and the attitudes of their children. Parenting styles are one of many factors that can have an ever-lasting effect on children and their usage of drugs. Parenting style research has shown differences in drug usage in their children as they grow into adolescents. This cross-sectional study examines the relationship between parenting styles and attitudes toward marijuana use in adolescents. A convenience sample of college students was recruited via email. Recruits were asked to complete an online survey that measured participant's parenting styles, using a parenting style questionnaire (Based on Robinson et al., 1995), and their attitude toward marijuana, using an expectancies toward marijuana use survey (based on Malmberg et al., 2012). Results are still being analyzed at the time of submission. The abstract will change once the data is reviewed.

#### 4:15 – Affordance Management and Stereotypes About Schizophrenia, Sex, and Age

Author: Peyton Osgood, Marissa Barauskas, & Shelby Nash

Sponsor: Guy Boysen

Institution: McKendree University

Schizophrenia is among the most stigmatized of all mental disorders. According to affordance management theory, this stigmatization is explained by the stereotype that people with schizophrenia threaten the fundamental goal to maintain physical safety. The current research examined if stereotypes about sex and age affect perceptions of the physical threat associated with schizophrenia. Overall, the results of the studies supported affordance management theory predictions about schizophrenia stereotypes and perceived threat to

physical safety goals. Although the effects of sex and age stereotypes were less consistent, evidence also emerged that people perceive schizophrenia as more threatening when diagnosed in men and young people.

#### 4:30 – Data Reliability When Using Different Online Data Collections

Author: Emily Markowski

Sponsor: Katrina Okerstrom-Jezewski Institution: St. Ambrose University

Objective: Based on a previous study using an online data collection website with adults, the quality of online data collection methods has been questionable. As online data collection sites make studies more accessible, the quality of the received data should be questioned.

Methods: Study 1 recruited participants (n=846) from an online data collection source called Amazon Mechanical Turk (MTurk). Study 2 recruited participants (n=77) from a convenient sample—undergraduate college students. Both groups of participants were asked to complete an online questionnaire that was originally part of a larger study. One of the resources within the questionnaire was the Big Five Inventory-2 (BFI-2). We evaluated the reliability of the BFI-2 in both studies with different data exclusion criteria, including quality control questions. These quality control filters included the amount of time taken to complete and reading comprehension questions.

Results: We will report descriptive statistics for both studies, using Cronbach's alpha and split half reliability for the BFI-2. We also will take note of the rate of exclusions within both samples. By using comprehension checks and other exclusion criteria, we will be able to maintain the quality of the data as well as see how many participants thoroughly follow the directions of the study.

Conclusions: The results of this study adds to a better understanding of what might occur when using online data collection. A future direction that would be interesting to look at is the different quality control exclusion criteria that can be used in online survey data collection.

## Thank You!

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