

21st Annual   
Capstone Conference



Saturday - April 23, 2022  
9:00AM - 5:00PM

Via Zoom

University Honors Program  
McNair Scholars Program

California State University, Stanislaus  
 One University Circle, Turlock CA 95382

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**Acknowledgements**

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Sarah Bissonnette (Biological Sciences), Andrew Conteh (Politics and Public Admin), Jennifer Cooper (Biological Sciences), Jessica De Silva (Mathematics), Jose Diaz-Garayua (Geography), Andrea Duroy (Psychology), Jason Emory (Psychology), Steven Filling (Accounting and Finance), Deborah Forester (Psychology), Garrick Garcia (Psychology), Suditi Gupta (Psychology), Ayat Hatem (Computer Science), Erin Hughes (Politics & Public Admin), Wura Jacobs (Kinesiology), Sarbijt Johal (Politics and Public Admin.), Meggan Jordan (Instr. Faculty), Kyu Han Koh (Computer Science), Vincent Laus (Sociology), Ryan Logan (Anthropology), Victor Luevano (Psychology), Mirta Maldonado-Valentin (English), Amanpreet Manchanda (Chemistry), Sari Miller-Antonio (Anthropology), Brian Morsony (Physics), Dana Nakano (Sociology), Jamila Newton (Biological Sciences), Grace Paradis (Psychology), Jennifer Peltier (Nursing), Jason Pourtaverdi (Criminal Justice), Scott Russell (Chemistry), Jeffrey Scales (Biological Sciences), Staci Gem Scheiwiller (Social Sciences), Susan Stephenson (Art), Kaylee Tanner-Dillashaw (Public Health Promotion), Wing To (Physics), Megan Thomas (Computer Science), Gerard Wellman (Politics and Public Admin.), Gary Williams (Psychology), Nan Zhang (Mgmt. Operations and Marketing),

**The following faculty taught in the Honors Program this year:**

Ralph Becker (Social Sciences), Ellen Bell (Anthropology), Tom Carter (Computer Science), Robert Frost (Honors), Suditi Gupta (Psychology), Joshua Kerr (Honors), Jamila Newton (Biological Sciences), Richard Randall (Political Science), Chad Redwing (Honors)

***Seniors in the Honors Program*** *are encouraged to tackle complex problems using methods and knowledge drawn from relevant disciplines. Honors Program faculty and research mentors offer critical feedback and guidance along the way. The main objective is for students to explore, gather and analyze information effectively, and to reflect on the implications of what they have discovered. Group discussions help to promote thoughtful questioning. The goal is to communicate knowledge, judgments, and original perspectives based on careful inquiry, exploration and analysis.*

*The Ronald E. McNair Postbaccalaureate Achievement Program is federally funded through the U.S. Department of Education.*

**2022 Capstone Conference Schedule**

Saturday - April 23, 2022

9:00AM - 5:00PM

9:00AM Welcome

9:00-10:45AM Senior Research Presentations

*\*15 Minute Break\**

11:00AM-12:30PM Senior Research Presentations

*\*30 Minute Break\**

1:00-2:45PM Senior Research Presentations

*\*15 Minute Break\**

3:00–3:40PM Junior Research Presentations

*\*5 Minute Break\**

3:45-4:30PM Junior Research Presentations

5:00PM Conference concludes

**Senior Capstone Presen****tations**

**9:00 AM – 2:45 PM**

*Moderators:*

*9:00-12:30 PM: Dr. Jamila Newton (Biological Sciences), HONS 4960 Instructor*

*1:00-2:45 PM: Dr. James Tuedio (Philosophy), CAHSS Dean, Honors Co-Director*

9:00-9:15 AM

**Jessica Pacheco Cordova** (Biology): Female Mate Choice in the California Ground Squirrel (O. Beecheyi)

**Faculty Mentor:** Dr. Jennifer Cooper

9:15-9:30 AM

**Angel Reyes** (Biology): Understanding the Characteristics and the Method of Transmission for Gallbladder Disease Within Families

**Faculty Mentor:** Dr. Sarah Bissonnette

9:30-9:45 AM

**\*Julien Alfaro** (Physics): Designing and Testing Novel Antennas for In-Ice Neutrino Experiment

**Faculty Mentor**: Dr. Wing To

9:45-10:00 AM

**Lucie Jegoux** (Biology): Can Acupuncture help my neck pain?

10:00-10:15 AM

**Elizabeth Davies** (Art): The Effects of Art Therapy on Symptoms of Post-Traumatic Stress Disorder

**Faculty Mentor:** Ms. Susan Stephenson

10:15-10:30 AM

**Erica Nixon** (Psychology): Excessive Screen Time and its Effects on Mental, Physical and Physiological Health

**Faculty Mentor:** Dr. Jason Emory

10:30-10:45 AM

**\*Isaac Lopez** (Psychology): The Effects of Music on Human Comprehension

**Faculty Mentor:** Ms. Deborah Forester

***10:45-11:00 AM***

***15 Minute Break***

11:00-11:15 AM

**Vivian Aguilar** (Psychology): The Effect of Image Priming on Consideration Towards the Environment

**Faculty Mentor:** Dr. Victor Luevano

11:15-11:30 AM

**Lizeth Sanchez Espinoza** (Business): A Companies Impact and Response to the Environment

**Faculty Mentor:** Dr. Nan Zhang

11:30-11:45 AM

**Carmen Galvez** (Sociology): The Relationship Between Homelessness and the Socioeconomic System in the United States

**Faculty Mentor:** Dr. Andrew Conteh

11:45-12:00 PM

**Candace Stubblefield** (Criminal Justice): A Critical Comparison of the American and Nordic Prison Systems

**Faculty Mentor:** Mr. Jason Pourtaverdi

12:00-12:15 PM

**Rachel Merritt** (Sociology): Public Opinion on Inmate Reentry: Reducing Recidivism vs. Indefinite Punishment

**Faculty Mentor:** Dr. Vincent Laus

12:15-12:30 PM

**Brian Meginness** (Computer Science): The Polarizing Effect of Social Media and its Users

**Faculty Mentor:** Dr. Ayat Hatem

***12:30-1:00 PM***

***30 Minute Break***

1:00-1:15 PM

**Johanna Pena** (Psychology): Resources for Children with LGBTQ+ Parents

1:15-1:30 PM

**Jordyn Boone** (Liberal Studies): Language Teaching Variables and Their Effect on Student Proficiency in English

**Faculty Mentor:** Dr. Mirta Maldonado

1:30-1:45 PM

**Melissa Almeida** (Psychology): COVID-19 Imposed Digital Learning Environment: The Relationship Perceived Educator Attitude and Student Acceptance

**Faculty Mentor:** Dr. Harold Stanislaw

1:45-2:00 PM

**\*Danny Tovar Franco** (Psychology): COVID-19: How Did it Affect Students Academics and Mental Health

**Faculty Mentor:** Ms. Deborah Forester

2:00-2:15 PM

**Guadalupe Marquez** (Sociology): The Relationship Between First-Generation Status and Academic Success

**Faculty Mentor:** Dr. Dana Nakano

2:15-2:30 PM

**Corrine Stevenson-Mushaw** (Psychology): Are We Really Just Platonic? The Study of Cross-Sex Relationships

**Faculty Mentor:** Dr. Victor Luevano

2:30-2:45 PM

**Alexis Martinez** (Psychology): Power of Emotion

**Faculty Mentor:** Dr. Gary Williams

**\*Denotes McNair Scholars**

**Junior Research Poster Session**  
**3:00PM – 4:30PM**

*Moderator: Prof. Suditi Gupta (Psychology), HONS 3990 Instructor*

3:00-3:05 PM

**Araceli Munoz** (Political Science): Soviet Union Ideologies

**Faculty Mentor:** Dr. Sarbjit Johal

3:05-3:10 PM

**Madison Wingate** (Psychology): Minimalism and its Effects on Well-Being

3:10-3:15 PM

**Delton Boswell** (Computer Science): EV Charging Desert: The Challenges with Electric Vehicle Charging in Stanislaus County

**Faculty Mentor:** Dr. Jessica De Silva

3:15-3:20 PM

**Ben Witort** (Computer Science): The Effects that Deep Learning A.I. Have on the Video Game Experience

3:20-3:25 PM

**\*Raymond Duenas** (Mathematics): Artificial Intelligence Capacity to Re-Phrase Complex Language

**Faculty Mentor:** Dr. Kyu Han Koh

3:25-3:30 PM

**\*Mauricio Corona** (Physics): Modeling the Afterglows of Gamma Ray Bursts

**Faculty Mentor:** Dr. Brian Morsony

3:30-3:35 PM

**\*Sasha-Kay Thompson** (Art History and Communications): How do we Analyze the Aesthetic Perspective Framework of Artists Defined and Undefined Works and How it Serves as an Effective Guide for Social or Civic Intentions

**Faculty Mentor:** Dr. Staci Gem Scheiwiller

3:35-3:40

**\*Bethany Saint-Smith** (Social Sciences): Representations of Skin Tone Thwart the Social Mobility of Black Women, as well as Increase Abuse Between Women

**Faculty Mentor:** Dr. Staci Gem Scheiwiller

***3:40-3:45 PM***

***5 Minute Break***

3:45-3:50 PM

**Nathan Meginness** (Business Administration): Teenage Tribulation: How Tobacco Companies are Targeting Adolescents Through Advertising

3:50-3:55 PM

**Michael Clamp** (Geography): Violations of Cigarette and Liquor Stores in Modesto School Buffer Zones

**Faculty Mentor:** Dr. Jose Diaz-Garayua

3:55-4:00 PM

**\*Cristian Silva-Toro** (Criminal Justice and Psychology): The War on Drugs and Militarization: The Case of Modesto

**Faculty Mentor:** Dr. Sebastian Sclofsky

4:00-4:05 PM

**Adorina David** (Political Science): Effects of the Foster System

**Faculty Mentor:** Dr. Gerard Wellman

4:05-4:10 PM

**Chantell Castillo** (Psychology): The Effects Social Media has on Narcissism

4:10-4:15 PM

**Emma Antonio** (Sociology): The Relationship Between Persons with Intellectual Disabilities and Employment

4:15-4:20 PM

**\*Ashley Borjon** (Sociology): The Social Phenomenon Surrounding Black Cosplay

**Faculty Mentor:** Dr. Meggan Jordan

**\*Denotes McNair Scholars**

**Abstracts of Senior**

**Capstone Presentations**

**The Effect of Image Priming on Consideration towards the Environment**

Vivian Aguilar

The purpose of this study was to examine the effect of image priming on consideration towards the environment. It was hypothesized that images of people who are victimized by climate impacts will elicit more environmental consideration compared to images of climate impacts only in nature, and images that do not relate to climate change. A sample of 49 students were recruited through the CSU Stanislaus Department of Psychology online participant pool (SONA). Participants were randomly assigned to one of three conditions (Human, Nature, or Non-climate) and were presented with six images that related to their condition’s theme. After viewing each image, participants were asked to rate how sad, angry, and relaxed the image made them feel on a 4-point Likert scale. After completing the image priming section, participants were asked to complete an Environmental Consideration Task where they had to distribute $400 among 4 different charities (environmental, education, health, animal sanctuary). Results indicated that there was no significant effect found between image condition and the amount of money distributed to the environmental charity. These findings may have been limited by a small sample size confined to one college campus setting. Future research should have in-depth, qualitative designs that examine people’s reasonings for supporting or not supporting climate change mitigation and people’s responses to different climate change images.

**Designing and Testing Novel Antennas for In-Ice Neutrino Experiment**

Julien Alfaro

Neutrinos are fundamental particles that are uncharged and only interact through the weak force. This makes them ideal messenger particles because they can propagate over cosmological distances undeflected and unimpeded. The highest energy neutrinos are produced in interactions involving high energy cosmic rays and therefore provide important information about the most energetic acceleration processes in the universe. In-ice radio arrays can detect ultra-high energy (UHE) neutrinos in the PeV to >10 EeV range by detecting radio emission produced in showers when UHE neutrinos interact with the ice. This project aims to design, build, and test horizontally polarized antennas for improved gain and angular resolution in order to reconstruct neutrino arrival direction. We compare several designs including helical, folded dipoles, halo antennas, and sinuous antennas, evaluating each antenna for its gain, efficiency, and reproducibility. Designs are simulated using the XFdtd electromagnetics software and constructed in the lab, enabling a comparison of the performance of the realized antenna with models.

**COVID-19 Imposed Digital Learning Environment: The Relationship Perceived Educator Attitude and Student Acceptance**

Melissa Almeida

Frequent note of educator and faculty resistance or concerns regarding online education platforms is found in past research. However, because of the pandemic, both educators who champion new learning technologies and those with concerns about the efficacy and value of online learning were suddenly teaching remotely. This provided an opportunity to ask if students' perceptions of educator attitudes toward digital learning environments influence the student’s acceptance of these platforms. This question was addressed via a quantitative correlational survey design to measure the strength of association between educator attitude and student acceptance as a mean across the scale of course platform and design categories: ease-of-access, comfort, and confidence in the platform effectiveness as implemented in two specific instances - their best and worst online course experiences. In both the pilot study and preliminary data analysis, the measurement tool categories were found to be strongly correlated and thus a summated score was used to compare to the Test of e-Learning Related Attitudes (TeLRA) scale measure of teacher attitudes towards e-learning. The Pearson’s correlation coefficients were computed for the preliminary analysis of 56 respondents. For both best and worst courses the student acceptance category had a weak, positive, relationship with the perceived educator attitude scores. There were no statistically significant correlations between acceptance, previous online course experience, or age. This suggests that students who report a positive perception of the educator's attitude will also report slightly more positive acceptance levels.

**Language Teaching Variables and Their Effect on Student** **Proficiency in English**

Jordyn Boone

Schools across the United States are growing culturally and linguistically more diverse with every passing day. This explosion of linguistic diversity raises the importance of understanding the variables that influence the English proficiency of students. This study used a systematic literature review that analyzed 15 articles with years ranging from 2010 to 2020. The articles were analyzed to discover what variables within a teaching method positively influence students’ English proficiency. Once the variables were identified they were cross-examined with literature further explaining their impact on English language proficiency. The variables that have been identified in this paper are limited to those that teachers can mold and implement in their personal classrooms. Through this methodology, five variables that positively affect students' English proficiency were identified. The variables that have been identified so far are as follows: the four basic language skills were met during instruction, students experienced genuine communication in the English language, students were motivated to learn English, students were able to translate between their mother tongue and English, and they were taught in a healthy, welcoming environment. The findings of this research will inform educators of the language variables that affect proficiency so that they can tailor their instruction to the needs of the individual classroom and student.

**Female Mate Choice in the California Ground Squirrel (O. Beecheyi)**

Jessica Pacheco Cordova

In this study, we will be assessing female mate choice decisions in the California ground squirrel through the construction of pedigrees using genomic sequencing while taking into account male parasite load, male body condition, and relatedness. We intend to demonstrate that females are actively choosing to mate with males that provide benefits to themselves and to their offspring. The benefit for offspring being explored is good genetic quality, as that will give them an advantage for survival. Indicators of good genetic quality are high body condition and low parasite load. Good genetic quality is also emphasized by heterozygosity, where heterozygosity is an indicator of low inbreeding. Inbreeding avoidance through mating with unrelated males would improve chances of viability and therefore offspring survival.

**The Effects of Art Therapy on Symptoms of Post-Traumatic Stress Disorder**

Elizabeth Davies

This project explores the effects of art therapy on individuals experiencing symptoms of post-traumatic stress disorder (PTSD) and related symptoms. My hypothesis is that art therapy will reduce the symptoms of PTSD. I have learned that art therapy is a nonverbal therapy and that individuals experiencing symptoms of PTSD are often unable to express their traumas. Thus, I hypothesized that art therapy is a logical approach for individuals experiencing symptoms of PTSD. This research is important because it will help therapists determine how to best approach their patients. The expected results for this project are that art therapy will have a positive effect on individuals experiencing symptoms of PTSD. For this project, I used a systematic literature review design. The keywords “post-traumatic stress disorder”, PTSD, and “art therapy” were used. Thirteen clinical trials, literature reviews, and other types of studies on the topic of the effects of art therapy on the symptoms of PTSD have been collected. Six variables were collected: type of research design, number of participants, inclusion/exclusion of a control group, reduction/no reduction of symptoms, therapy type, and dropout rate. These variables helped determine if an article should or should not be included. The results indicate that art therapy does have a positive effect on individuals experiencing symptoms of PTSD. More significantly, the results demonstrate that when art therapy is integrated other evidence-based therapies, the two therapies working together are more effective than the evidence-based therapy or the art therapy by itself.

**A Companies Impact and Response to the Environment**

Lizeth Sanchez Espinoza

Throughout time companies have been the largest contributor to the environmental situation we are in. With plastic being the largest waste among companies; this will be a literature review. Going through the largest company that contributes to water pollution and water waste; Nestlé. The large Swiss water company will be the main topic of discussion throughout this paper; with thousands and thousands of water being pumped and sold to the public many must know the impact they are making to the environment. This literature review will talk about the impact that a lot of large companies have on the environment, and how they’re not being held accountable for this. Mental health, overall health and the environment is constantly being polluted by these big corporations. A lot of big names that we buy from unknowingly Greenwash a lot of products, services and even themselves as a company. Greenwashing is also a big term that I use throughout the presentation and we are affected by it unknowingly.

**COVID-19: How did it Affect Students Academics and Mental Health**

Danny Tovar Franco

With the COVID-19 pandemic sweeping around the world, academic institutions have adapted to this by switching from face-to-face instruction to online classes. As such, researchers have examined how this switch may affect a student’s academic performance, as well as their overall mental health and well-being. The purpose of the present study was to examine factors pertaining to the effects of the transition from in-person classes to online classes on college student’s academic performance based on reported GPA and overall mental health and well-being. A sample of 87 undergraduate students (78 female, 18 male) from CSU Stanislaus were asked to indicate what their GPA was in March of 2020 as well as what it is currently and to complete a modified version of the World Health Organization Five Well-Being Index (WHO-5) which was designed to assess their mental health status from March of 2020, and their present mental health status. It was hypothesized that participants will report lower levels of academic performance and mental health well-being at present as compared to their levels in March of 2020. Data were analyzed using a repeated measures ANOVA. As expected, a significant effect was found, F (2.463, 211.848) = 77.432, p = <.001, ηp2= .474. As hypothesized, on average, participants reported lower levels of current academic achievement as well as mental health well-being (N = 87, M = 2.97, SD = 0.64; N= 87, M = 3.60, SD = 0.90, respectively) as compared to at the beginning of the pandemic (N = 87, M = 3.02, SD = 0.63; N= 87, M = 4.39, SD = 0.82, respectively). These findings imply that the COVID-19 pandemic has had a significant effect on students’ ability to excel academically and even more specifically has impacted their mental health and well-being. Limitations to this study include a small sample size that consisted of mostly students enrolled in psychology courses restricted to one college campus. Future researchers should strive to use a larger and more diverse sample size from various college campus that will include more students from various disciplines.

**The Relationship between Homelessness and the Socioeconomic System in the United States**

Carmen Galvez

In this research study, I will explore the relationship between unhoused adults and the socioeconomic system in the United States. Previous research has pointed to the way that homelessness is a result of moral failings. In this research study, I will argue that homelessness is a product of the socioeconomic system because it fails to recognize the right to housing, enables the criminalization of unhoused people, and incentivizes jobs that aggravate the issue of homelessness. The research problem I have proposed is: Is there any evidence that the present United States socioeconomic system increases homelessness among adults in the United States? The design I will use in this study is a qualitative phenomenological research design. This study will be conducted utilizing the Qualtrics survey software. The main reason for this study is to uncover a similar pattern within the socioeconomic system utilizing the lived personal experiences of unhoused people, which could reveal how economic inequality and homelessness are correlated. I will survey approximately 20 (18–64+) unhoused individuals, defined by how often an individual has access to adequate shelter (weekly). There will be 9 open-ended questions. There are 3 neutral questions, and also 3 questions made to discuss negative experiences of being homeless, as well as 3 questions about the positive experiences unhoused people have had. The significance of my argument is that homelessness is a human rights violation. My hypothesis is: How do unhoused individuals experience economic inequality in the United States?

**Can Acupuncture help my neck pain?**

Lucie Jegoux

Acupuncture is a Traditional Chinese medicine practice that is said to restore the qi in the body and let energy flow through the body. The practice involves inserting very thin needles into specific points of the body. We will be finding whether or not acupuncture is a valuable resource to help treat bodily pains. In the research we will not only be talking about the physical effects, but we will also see the mental effects acupuncture can have on patients as well. I hypothesized that acupuncture is a valid treatment for people with pain. This research will help many people to find a different method to help their pain that western medicine may not be able to heal. I am hoping to confirm that acupuncture is a valid medical practice to treat pain and to show others that as well, I believe this will be my outcome.

**The Effects of Music on Human Comprehension**

Isaac Lopez

Music is a tool that can be used proactively in many kinds of environments. People use it to work out, to bring out emotions, and empower themselves. Music causes changes within us that can either improve or decrease our intended purpose of what we are trying to achieve. The purpose of this study was to examine the effects of lyrical and non-lyrical music on reading comprehension. It was hypothesized that individuals who listen to a lyric-less version of a song while reading an essay prompt will report higher levels of comprehension performance as compared to those who listen to a lyrical version of the song. A sample of 72 participants (53, female, 19 male) recruited from CSU Stanislaus were randomly assigned to either a lyrical or non-lyrical condition where they were asked to complete a reading comprehension test. To determine whether there were differences in reading comprehension scores between music with lyrics and music without lyrics, data were analyzed using an independent samples t-test. The research hypothesis was not supported.

**The Relationship Between First-Generation Status and Academic Success**

Guadalupe Marquez

First-generation college students may face more disadvantages than their non-first-generation counterparts. Large amounts of literature report that first-generation students have lower GPAs than their non-first-generation counterparts. The purpose of this study is to examine the differences between first-generation students and non-first-generation students regarding their academic achievement and the obstacles they encounter attending a post-secondary institution. The survey will be distributed through Qualtrics available to CSU Stanislaus students on a social media platform. Using a modified version of the Student Experience in the Research University Survey, students will report whether the obstacles listed in the survey have impacted their academic success. We will be using a non-experimental, correlational design to assess the responses given by CSU Stanislaus students. This will help determine whether there is a correlation between obstacles and academic success and which association is stronger between first-generation students and non-first-generation students. Keywords: First-generation, non-first-generation, student, academic success.

**Power of Emotion**

Alexis Martinez

The purpose of the present study is to see if there is a relationship between emotions and academic motivation in students. In theory, people that are more positive, tend to be motivated to accomplish things. This is especially true for students. The more positive they are, the more they would be motivated to do well in school and get good grades. Past research has shown that students that had a positive emotion throughout the week, had high levels of academic motivation. In contrast to people having a negative emotion, there motivation was low. I have conducted a survey to determine if there is a relationship between both variables. I will be using the Positive and Negative Affect Schedule, which will help me determine the score of students affect score. I will also be using the Academic motivation scale, to determine the students’ academic motivation level. Based on my current findings, there was a positive correlation with positive emotions with motivation towards achievement in students. Thus supporting my hypothesis that there is a relationship between positive emotion and academic motivation. r (45) = .51, p <.001, 95% Cl [.25,.69]

**The Polarizing Effect of Social Media and it’s Users**

Brian Meginness

Social media curation algorithms are designed to create subtle echo chambers for their users in which groups of users tend to mainly interact with other users that share similar opinions on topics they express interest in. As a result, I hypothesize that these algorithms have a deterministic effect on users, causing them to form more polarized views on certain topics the more they’re exposed to them. To test this, I am working on analyzing user data from two types of social media platforms: those that I am considering “opinion based” and are driven by posting what they think and feel such as Facebook or Twitter, and those that are “objective oriented” with content based around certain goals or interests like Twitch or GitHub. When I finish my analysis, I’m expecting to find that, based on metrics such as transitivity, average clustering coefficient, diameter, and the size of the largest community, “opinion” networks will be less connected than “objective” ones, meaning they tend to be clustered in a larger number of groups than “objective” networks but with each cluster being smaller and with little interconnection between clusters.

**Public Opinion on Inmate Reentry: Reducing Recidivism vs. Indefinite Punishment**

Rachel Merritt

Since the 1970's, the American Criminal Justice System has utilized a “tough on crime” approach to deter people away from committing crimes. The product of this ideology is overcrowded prisons and economic strain. The United States houses more prisoners and has higher recidivism rates than any other country. Our current system is ineffective at reducing crime in communities; a topic that is universally important to most all Americans. The purpose of this project is to gain knowledge about public opinion regarding the American Criminal Justice System and the associated outcomes of the formerly incarcerated. The United States has shown minimal attention to the rehabilitation and the successful reentry of inmates. It is theorized that when people are offered facts about high levels of incarceration, the percentage of inmates that will be released, extreme rates of recidivism (a return to incarceration) and the associated costs of the Criminal Justice System, most people will favor a rehabilitative model that attempts to reduce recidivism. I also expect to find respondents being more empathetic towards people who commit drug-related and white-collar crimes when compared to violent crimes, with demographical patterns. Replacing political rhetoric with facts will provide an effective starting point to this conversation. Public support of a rehabilitative model begins with an effective analysis of the facts and how those facts affect us. This study begins important and necessary public discourse on this topic, in a logical way.

**Are We Really Just Platonic? The Study of Cross-Sex Relationships**

Corrine Stevenson-Mushaw

The social aspect of western culture has created a normality of non-sexual relationships with members of the opposite sex. These relationships are being supported through educational institutions, workplace environments, and even online communities. When forming these platonic relationships, specific feelings of attraction may cause difficulties in remaining platonic. Past research suggests that when straight male and females form friendships it is highly likely that the male will experience feelings of physical or romantic attraction. This study will not only focus on straight male and females but will also focus on gay and lesbian relationships and the various categories of attraction that can be found when these relationships are formed. These categories include subjective attraction - feeling physically or sexually attracted to the other person. Objective attraction - thinking the other person has attractive qualities but not to oneself. Romantic attraction - wanting to form a romantic relationship and friendship attraction - feeling close as friends and nothing more. This research is examining these several types of attraction along with the incorporation of sexual orientation, gender, and their impact with cross-sex relationships. Through a constructed survey, a collection of participants will complete a questionnaire with questions focused on their relationship with an opposite sex past platonic friend. The results of this questionnaire will determine what type of attraction is present in these relationships. By conducting this research, the findings can help contribute to the study of platonic relationships and the types of attraction that are present in these relationships.

**Excessive Screen Time and its Effects on Mental, Physical and Physiological Health**

Erica Nixon

Abstract Screen time exposure can be deemed a necessity in many modern-day societies. Many parents use screen time to entertain their toddlers and children while they manage household duties. Furthermore many adolescents and adults rely on screen time for school, work, socializing and managing their day-to-day life. In this study a closer look at screen time habits were examined to gain clarity on what the effects of the rise in screen time usage has on the general populations overall health. With technology continuing to advance, the more reliant it is presumed society will become on it. For this reason alone, its impact on mental, physical, and physiological health should be monitored closely. Previous research has found throughout the decades, with the establishment of the television, there has been an increase in lack of exercise, as well as aggressive behavior in children. Additionally, with current research today on the impact of the internet and smart devices many studies have linked both mental and physiological health to adverse reactions with excessive screen time consumption. Using a meta-analysis research design this study will explore how excessive screen time exposure has been impacting society over that last few decades in negative ways due to the nature of its intensity in everyday usage. Keywords: Screen time, mental health, internet, adversity, digital device.

**Resources for Children with LGBTQ+ Parents**

Johanna Pena

Children with LGBTQ+ parents have an increased risk of bullying compared to their peers who have heterosexual cisgender parents. Previous research has shown that children from these diverse backgrounds thrive when they have a strong family dynamic with their parents. Prior research has also shown that children from this background thrive when they know peers who are like them. Another point prior research brings is that school environments which appear to be welcoming to the LGBTQ+ community have also had a positive effect on the well-being of children from these backgrounds. The method used for this research was anecdotal evidence through an interview process. A person from a family with one lesbian mother and one bisexual mother was interviewed. Through the process of interviewing, this research provided insight on what community resources are lacking for this population, as well as the importance of a strong family dynamic for the well-being of the child.

**Understanding the Characteristics and the Method of Transmission for Gallbladder Disease Within Families**

Angel Reyes

To protect one’s lifestyle one should not only focus on their own health, but the health of their family members. In this project several members of the control family suffer from gallbladder disease, a major digestive disease known to affect millions of Americans, and for the control family it is not only important to know the factors of gallbladder, but to understand how these factors present themselves and how their presence can increase susceptibility to gallbladder disease. Analysis of personal and medical information gathered from interviews, conducted over the phone or through zoom, will be used to construct pedigrees for each family involved. These pedigrees will follow certain family lines showing gender, offspring or parent, living or deceased, and those affected by gallbladder disease or other aliments in relation to gallbladder disease. With the visual representation of the information I can determine the risk factors that can result in the greatest susceptibility toward gallbladder disease within a family and between families. This reveals the importance of understanding the medical history of one’s own family to ensure the health of future descendants and to preserve one’s own health.

**A Critical Comparison of the American and Nordic Prison Systems**

Candace Stubblefield

The American criminal justice system must focus on a near-total overhaul of present sentencing practices and prison reform to lower the world's greatest prison population, recidivism rates, and prisoner violence. With a humanitarian approach, the Nordic (or Scandinavian) jail system is made up of five member nations that continuously reduce and rehabilitate their offenders. A meta-analysis and interpretive qualitative secondary data analysis were used to better comprehend the American-Nordic jail system relationship. The focus was on recidivism, prison violence, and the differences between punitive and rehabilitative techniques. The Nordic system abolished capital punishment and decreased the maximum sentence to 21 years with the promise of rehabilitation. Everything is built for rehabilitation, from the architecture to employee training. Prior to release, each offender is provided with a home, a job, and a supportive social network. In exchange, Nordic nations imprison an average of 70 out of every 100,000 inhabitants (DOJ, 2019), with a 20% recidivism rate (Benecchi, 2021), whereas America imprisons an average of 700 out of every 100,000 citizens, with a 76.6% recidivism rate.

