



Celebrating
25 Years

Ronald E. McNair Scholars

Undergraduate Research
Symposium

May 2nd 2024

Presented by:
Cal Poly Pomona
McNair Scholars Program



DIRECTOR'S NOTE

Dr. Alejandro Morales

Welcome to the 2024 Annual Ronald E. McNair Postbaccalaureate Achievement Program Symposium! This year marks the 25th anniversary of the McNair Scholars program at Cal Poly Pomona. I am Alejandro Morales, the program's faculty director and professor of Psychology at Cal Poly Pomona. The McNair scholars work closely with their faculty mentors on projects related to their majors. Scholars and mentors spend long hours discussing research, developing a research project, collecting data, analyzing and interpreting the data, and presenting the results of their study at the McNair Symposium.

The symposium culminates the scholars' hard work and dedication. The McNair Scholars staff witness each scholar's growth as they become more confident in presenting their work and see their passion for research. The scholars also applied to different graduate programs (i.e., master's and doctorate) across the United States. I am happy to report that a group of scholars will begin graduate school at the University of Wisconsin-Madison, UCI, Loma Linda University, University of Arizona, San Francisco State University, UCR, San Diego State University, Cal State Long Beach, and Cal Poly Pomona. Congratulations to those starting their graduate program; please keep in touch!

Celebrating McNair Scholars' silver anniversary is a monumental event. We are excited to welcome back alums and celebrate with mentors, scholars, faculty, staff, and administrators. Our success is due to different groups of individuals. The African proverb, it takes a village to raise a child applies to our work with scholars. I want to express my deepest gratitude to the McNair staff: Tiana, Leah, Wei, Winny, Philippe, Brian, and Frank. To our faculty mentors, we can't thank you enough for your time and energy in working with scholars. We thank each administrator who continuously supported us and reserved time to speak with the scholars. Lastly, we thank our campus partners from other TRIO programs, such as the Cal Poly Pomona Foundation, Scholarships, and Financial Aid office.

As we bid farewell to Cohort 25, we warmly welcome Cohort 26 to the McNair Scholars program. We are excited to embark on this new journey with you and continue our mission of supporting and mentoring first-generation, low-income, and underrepresented students in their pursuit of doctoral degrees and academic excellence.

Congratulations, cohort 25; we are so proud of you!

Director Emeritus

Dr. Frank Torres

Welcome to the twenty-fifth symposium of the McNair Scholars Program. I am Frank Torres, Director Emeritus of the program. This program is the result of a dream I had more than twenty-five years ago, and I could not be prouder of the McNair Scholars who have graduated and gone on to achieve their dream of earning a PhD. Dreams are critically important whenever one wants to achieve something valuable, something that will make a difference. In that spirit, I will speak to you about two significant individuals and their dreams. The first individual is Dr. McNair who once stated, "To make a dream come true, you must first dream."

Dr. Ronald Erwin McNair, after whom this program is named, had the courage to dream about becoming an astronaut. His favorite TV show was Star Trek, and he was fascinated with the scientific concepts the show addressed and the way in which everyone in the show was treated respectfully. He was born in South Carolina on October 21, 1950, and, although he graduated as valedictorian from his high school in 1967, he quickly realized that his high school instructors had not prepared him for college math and science. He failed his first tests in college math and science, and instead of complaining or being discouraged, he found tutors and studied three times as hard to catch up with other students. He was not afraid to keep his dream alive. He overcame obstacles and took responsibility for learning the skills he needed to reach his dream. When he graduated with a BS from North Carolina A&T State University, he graduated with honors and was accepted into MIT where he earned his MS and PhD. A few years later, in 1978, NASA selected him to enter the astronaut program.

Another person who dreamt big was astronaut Jose Hernandez, a former Upward Bound student. Hernandez once said, "It's worth dreaming big when you are willing to put in the work that is needed to accomplish the goal you have." His attempt to become an astronaut is an amazing story in perseverance. NASA rejected him the first time he applied to be an astronaut, and NASA rejected him the next time he applied. Each time NASA rejected him he asked what he could do to succeed. They told him he needed to get a pilot's license, he needed to learn Russian, he needed to get a black belt in self-defense, he needed to become scuba qualified, etc. NASA rejected him eleven times before he was accepted into the Astronaut Candidate training program. Like Ronald McNair before him, Jose Hernandez dreamt big, never gave up on his dream, and devoted himself to the hard work and skills he needed to achieve his dream. The stories of Dr. Ronald McNair and Jose Hernandez are inspiring and motivational. You, our McNair Scholars at Cal Poly Pomona, may use their stories to keep you focused on your own dream to achieve a PhD. As you begin your graduate journey, and the demands of your graduate program seem overwhelming, reflect on the challenges that McNair and Hernandez had to overcome. Remember how they never gave up. Remember, also, the words of Ralph Waldo Emerson, "The greatest glory in living lies not in never falling, but in rising every time we fall."

Congratulations to you, our wonderful McNair Scholars. Continue your dreaming and keep reaching for the stars!



Symposium Schedule



Breakout Room: Garden Vista

Sociology & Psychology

Breakout Room: Valley Vista

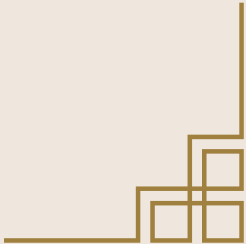
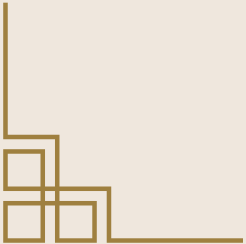
Psychology

Breakout Room: Mountain Vista 1

Psychology & CLASS

Breakout Room: Mountain Vista 2

Engineering & Science



Garden Vista (Upper Level)

Time	Scholar	Major	Research Title
10:00 am	Oona Iglesias	Sociology	<u>The Effectiveness of the McNair Scholars Program at Cal Poly Pomona</u>
5-minute break			
10:20 am	Kristin Collins-Jimenez	Sociology	<u>"How Does Divorce Impact Children?"</u>
5-minute break			
10:40 am	Ana M. Tercerro	Psychology	<u>Exploring the influence of the Mental Timeline on Recognition Memory through the use of Electroencephalography</u>
5-minute break			
11:10 am	Celeste Vasquez	Sociology	<u>Understanding Wealth inequality: Mexican Americas' Experiences in Accessing Wealth</u>
5-minute break			
11:30 am	Graciela Padilla	Sociology	<u>Parenting Students at Cal Poly Pomona</u>
5-minute break			
11:50 am	Veronica Naranjo	Psychology	<u>"Intergenerational Effects of Mental Health Stigma in Latinx College Students: An Exploration of Familial Influence"</u>
5-minute break			
12:10 pm	Jessica Corona	Sociology	<u>How High School Special Education students with learning disabilities are prepared for college from the perspective of parents</u>

Valley Vista (Upper Level)

Time	Scholar	Major	Research Title
10:00 am	Jessica Gonzalez	Psychology	<u>Mental Health Utilization Amongst Asian Americans and Latinx College Students: Using A Cross Comparative Approach to Understand Help-Seeking Behaviors and Increase Culturally Relevant Interventions.</u>
5-minute break			
10:20 am	Alexis Lopez	Psychology	<u>How Disparities and Stigma Contribute to Mental Health Underutilization Among Asian and Latinx American College Students</u>
5-minute break			
10:40 am	Melody Villegas	Psychology	<u>The Psychological and Academic Impact of Mass Shootings on Students in Higher Education</u>
5-minute break			
11:10 am	Steven Wong	Psychology	<u>Locus of Control and the Big Five Personality Traits Predicting Job Satisfaction</u>
5-minute break			
11:30 am	Samantha Hughes	Psychology	<u>Understanding the Relationship Between Food Insecurity and Disordered Eating Behaviors in First-Generation College Students</u>
5-minute break			
11:50 am	Fabian Larios	Psychology	<u>College Students' Openness to Treatment for Mental Health: An Exploration of Family or Origin Influence on Mode of Treatment</u>
5-minute break			
12:10 pm	Eduardo Bribiesca	Psychology	<u>First and Second Generation Hispanic with Religious Experiences: A culturally Sensitive Approach to Mental Health</u>

Mountain Vista I (Lower Level)

Time	Scholar	Major	Research Title
10:00 am	Andrew Lopez	Psychology	<u>Latinx Attitudes</u>
5-minute break			
10:20 am	Everett Elias	Pre-Credential History	<u>The Radicalism of Hope: The Obama Presidency and What Comes Next</u>
5-minute break			
10:40 am	Angelina Mason	Communication PR and GEMS	<u>In the Affective Borderlands: Staff Experiences with Microaggressions in the After-School System</u>
5-minute break			
11:10 am	Jay Gomez	GEMS	<u>Bioaesthetics of DIY Concerts</u>
5-minute break			
11:30 am	Jacquelyn Moran	Liberal Studies	<u>Latino Children in Special Education Programs</u>
5-minute break			
11:50 am	Gaby Widjaja	Anthropology and Psychology	<u>Beyond Individuals: Understanding COVID-19 risks through the lens of Multigenerational Households.</u>

Mountain Vista 2 (Lower Level)

Time	Scholar	Major	Research Title
10:00 am	Ruben Torres Romero	Computer Engineering	<u>Exploring Collaborative Robotic Environment: Unmanned Hybrid Vehicle, at CPP Reconfigurable Space Computing Lab</u>
5-minute break			
10:20 am	Gloria Tovar	Computer Engineering	<u>AI-Enhanced Flying Telescope for Artemis: Pioneering Space Exploration via Computer Vision</u>
5-minute break			
10:40 am	Marianellie Bravo	Biology	<u>A study to identify Homeobox genes in Pre- and Post-Pollinated Carpels in Aquilegia</u>
5-minute break			
11:10 am	Gina Lalli	Biology	<u>"Can Wine Pomace be beneficial in Cattle Farming?"</u>
5-minute break			
11:30 am	Anna Marie Contreras	Geography and Environmental Science	<u>Understanding Recreational Park Users of Water Quality in the Santa Ana River</u>
5-minute break			
11:50 am	Valerie Estala	Animal Science	<u>The Effects of Habitation Design and Sound level on Canines in Los Angeles Shelters</u>

SCHOLAR ABSTRACTS AND BIOGRAPHIES

Marianellie Bravo

Mentor: Dr. Bharti Sharma

Title: A Study to Identify Homeobox genes in Pre- and Post-Pollinated Carpels in *Aquilegia*

Abstract:

The evolution of the seed marked a massive shift in the mechanisms of land plant sexual reproduction. This intricate process of plant development has long captivated the imaginations of biologists and evolutionary scientists. Fruit development is a key process in the reproductive success and proper establishment of seeds. Hence, it has a great economic impact on agricultural and horticultural plants. While the mechanisms underlying carpel development have been explored across various plant species, the genus *Aquilegia* has emerged as an exceptional model system, offering unique opportunities to understand the evolution and molecular regulation of critical floral development processes. In this study, we have deployed developmental, molecular, and transcriptomic approaches to understand the genetic networks underlying carpel and ovule maturation. This study has identified crucial homeobox genes potentially influencing carpel and ovule development. We conducted RNA sequencing and differential gene expression analysis on carpels from three developmental stages. We were able to identify multiple homeobox genes to be differentially expressed. Of the identified genes, only a few have been annotated. Besides identifying the candidate genes for functional studies, we aim to annotate the homeobox genes to understand their conservation and divergence in *Aquilegia*.

Biography:

Marianellie Bravo is a fifth-year undergraduate student of the College of Science at California State Polytechnic University, Pomona. Marianellie entered Cal Poly Pomona as a Biology major and specializes in botanical and ecological areas of study. She is a passionate advocate of holistic healthcare and a persistent mentor to the youth around her. Marianellie's research interests lie within genomics and bioinformatics. She has experience prepping, aligning, and analyzing whole genome sequences utilizing national databases, computer clustering, the Command Line, Anaconda, and RStudio. Her current work is in collaboration with Dr. Sharma and the graduate and undergraduate students in Dr. Sharma's lab. This work involves researching the underlying genetic mechanisms behind the intricate flower morphologies of *Delphinium* and the pre- and post-fertilization of *Aquilegia coerulea*. Marianellie's hopes to continue her research on the graduate level and eventually obtain her PhD and MD in hopes of extending the credibility of natural remedies.



SCHOLAR ABSTRACTS AND BIOGRAPHIES

Eduardo Bribiesca

Mentor: Dr. Tierra T. Ellis

Title: First and Second Generation Hispanics with Religious Experiences: A Culturally Sensitive Approach to Mental Health

Abstract:

As Hispanics are the largest minority group in the United States and are projected to grow so do the mental health disparities that are seen in this group since Hispanics are some of the lowest-seeking mental health individuals (Caplan, 2019). Many Hispanics, particularly those that are first-generation and second-generation have the lowest use of mental health opportunities because of a variety of barriers such as stigma, financial components, and inadequate access to resources. This research intends to investigate the openness of culturally sensitive approaches to mental health and if those approaches would foster a willingness towards mental health seeking. Examining Hispanic cultures, one of the predominant aspects attached to the culture is religion to varying degrees. Approaches to Hispanic mental health in a culturally appropriate fashion integrating faith would be a method by which professionals can be agents to de-stigmatize mental health. I gathered 8 participants to ask about their perceptions of a culturally sensitive approach to mental health with a foundation in religion. Participants expressed being open-minded towards approaches for mental health from a cultural perspective using methods that the participants are familiar with and recognize as part of their cultural development. Questions about religious affiliation were asked during a semi-structured interview. This research contributes towards bridging the area between religious Hispanics who are apprehensive to seek mental health opportunities and professionals who attempt to reach those populations that have some of the highest mental health disparities by implementing a culturally sensitive approach.

Biography:

Eduardo Bribiesca is an undergraduate student at Cal Poly Pomona where he studies Psychology and is currently in his final semester before attaining a bachelor's degree in his respective field. Eduardo transferred to Cal Poly from Cerro Coso where he received two associate degrees, one associate in arts in liberal arts math and science and an associate in science for math. He currently forms part of the Penpal POC research lab with his mentor Dr. Tierra T. Ellis who also oversees his McNair project. Eduardo's current research is investigating methods to de-stigmatize mental health and promote well-being through familiar facets.



SCHOLAR ABSTRACTS AND BIOGRAPHIES

Kristin Collins-Jimenez

Mentor: Dr. Peter Hanink

Title: How Does Divorce Impact Children?

Abstract:

The focus of this study is to investigate the effects that divorce has on children. This study aims to identify, what if any, areas of life are affected by the life transition of a child due to divorce. The study employs a quantitative research design, utilizing a survey administered by Qualtrics. The survey consists of eighteen questions. All participants are 18 years or older whose parents divorced. The participants reflect on their own experiences. The survey is posted, emailed, and digitally sent using multiple platforms. The method used is random and convenient sampling. Three flyers were posted (with a QR code) on Cal Poly Pomona campus requesting between 70- 100 adult participants. The flyer was also shared via email, text message and discord. A link was shared through the social media platforms Instagram and Facebook. E-mails were sent to Cal Poly Pomona professors requesting to forward the survey link to their students. The QR code will go directly to the Qualtrics survey. Attached will be a consent form and information explaining that this is a anonymous survey. Quantitative data will then be analyzed and reported. The main objective is to determine in which ways divorce impacts children. This research is to obtain data and feedback from participants who experienced their parents' divorce when they were younger. Analyzing data to see if any social services can be provided to children and families going through divorce to lessen the negative impact. This research is important because the divorce rate is high and understanding the effects divorce has on children is important for social services and families. Children's social development is critical to their well-being and to becoming a healthy, productive member of society. The information retained can assist in the production of sustainable family resources.

Biography:

Kristin Collins-Jimenez is a fourth-year undergraduate student at California State Polytechnic University, Pomona who is studying Sociology. In her previous years, she studied at Pasadena City College and Chaffey Community College. After stepping away from college due to unfavorable life circumstances and events, she returned to college after ten years. As a mother to four children, Kristin is determined and on schedule to graduate with her bachelor's degree in Sociology Spring 2024. Her current research delves into the relationship divorce has on children. She plans to receive her master's in social work where she can gain the tools and knowledge to pursue a career as a Medical Social Worker. She is passionate about social services and non-profit organizations. She will be applying to in state graduate programs this year. Once her MSW is achieved, she plans on studying for her LCSW.



SCHOLAR ABSTRACTS AND BIOGRAPHIES

Anna Marie Contreras

Mentor: Dr. Kristen Conway-Gomez

Title: Understanding Recreational Park Users Perception of Water Quality in the Santa Ana River

Abstract:

The Santa Ana River is the largest river in Southern California. Its surrounding land is highly urbanized which has led to the degrading of its water quality through influences such as local run-off and treated wastewater. There are many studies that focus on the state of the Santa Ana River but not many that focus on the environmental awareness of the river in its surrounding community. This research study was created to explore park users' perception of water quality in the Santa Ana River. For this case study, voluntary, confidential interviews were conducted on random human subjects over the age of eighteen found at Fairmount Park, adjacent to the Santa Ana River, located in Riverside, California. The interviews covered demographics for each participant and focused mainly on each individual's knowledge and thoughts to familiarity with the park location, the Santa Ana River, water quality, and policy. What I expect to get from the finalized interpretation of this data is an understanding of what may influence park users to hold more accurate knowledge of the Santa Ana River. With the findings received from this study we can encourage Santa Ana River authorities in charge of the community's public understanding to invest more time into creating and spreading educational programs needed to cover awareness this study might show to be lacking amongst not only park users' but all communities in the Santa Ana River Watershed.

Biography:

Anna Marie Contreras is a fourth-year undergraduate at California State Polytechnic University who is studying Geography with an emphasis on Environmental Studies. In her previous years, she studied at Chaffey Community College and continues to work as a groundwater recharge intern for a municipal water district. Her current research focuses on park users' perception of water quality in the Santa Ana River to better understand how efficient the spreading of information is in regard to environmental awareness of the Santa Ana River. Her career goals are to assist the state of California in protecting its water resources through government water conservation and management projects.



SCHOLAR ABSTRACTS AND BIOGRAPHIES

Jessica Corona

Mentor: Dr. Melissa Barragan

Title: How high school special education students with learning disabilities are prepared for college from the perspectives of parents

Abstract:

The proposed study will examine how high school special education students with learning disabilities are prepared for college from the perspectives of parents, who play a key role in the educational journey of their child. By identifying gaps in information and services provided to parents with special needs children, schools can develop better strategies for preparing young people for college and career.

Specifically, this study seeks to address the following questions: 1. To what extent do parents believe their child is obtaining the necessary knowledge and skills to graduate from high school and seek higher education after high school? 2. How does the high school inform parents of college and career readiness in the following areas: literacy level, math level (local and state testing), CTE courses, A-G completion courses, study skill mastery (executive functions), and credit completion? 3. What are the support personnel and systems in place to monitor, support and inform students and parents on the on-going progress of the student towards their goals? 4. What information around college is offered to parents who have children with an IEP? 5. How do parents make sense of their child's placement in special education due to their learning disability? The goal of this exploratory case study is not to have a representative sample, rather it is to understand how a specific population (parents of children with special needs children) makes sense of their child's readiness for college and career. Findings from this study will be used to inform questions for future inquiry, where a larger more purposeful sample can be gathered.

Biography:

Jessica Corona is a 2nd year transfer student undergraduate at California State Polytechnic University, Pomona who is studying Sociology. She studied at East Los Angeles college and found a profound interest in Education, in both Special Education and in Ethnic Studies. She currently works as a Human resource representative and looks forward to growing with her career in the future. Her current research focuses on High school students with disabilities and their readiness for college in the perspective of parents. She plans to receive her Ph. D in Education. She has applied to 4 Ph. D programs and looks forward to hearing back from them. Her future goals are to come back to Cal poly as a professor and to continue to work with nonprofit organizations to bring innovation and learning strategies for both regular ed. Students and students with disabilities. In the future, she would also like to pursue research in criminology and how disabilities (mental health) play a role in the criminal justice system.



SCHOLAR ABSTRACTS AND BIOGRAPHIES

Everett Elias

Mentor: Dr. Aishwary Kumar

Title: *The Radicalism of Hope: The Obama Presidency and What Comes Next*

Abstract:

On March 18th, 2008, Barack Obama delivered a speech where he stated, “I will never forget that in no other country on Earth is my story even possible. It is in this moment, a moment preceded and succeeded by an American story historically written in panic and fear. A moment when we were finally allowed to believe in a future with the possibility of transcending our divisions. A vision of true democracy, a collective that was never perfect but built a foundation-- together-- for our moral universe. These imperfect coalitions represent hope for an unsegregated future, a commitment to the power derived from ordinary people who refuse the ticket, and those whose moral passion had an effect of lasting change. To combat a moral illiteracy that seems to be running rampant, and to finally commit to a philosophical reckoning with an unending civil war; we the people, must build a vocabulary and forge a commitment around nonviolence. It is in this understanding we realize our future rests not in the faith that “the moral arc of the universe bends toward justice,” but through the radicalism of hope. Hope is a difficult political virtue to cultivate because it requires sacrifice, honesty, and a true telling of our past.⁹ This is the political virtue which holds the potential to bring humanity closer to a promised land. Hope is the radical nonviolence needed for moral passion to transcend political divides; the common purpose we must pursue to make the American democratic experiment successful. It is the nonviolence needed to change the world.

Biography:

Everett Elias is a candidate for B.A. in History and Minor in Nonviolence Studies. As an intellectual historian, Everett studies the history of global political thought, moral philosophy, and the legacies of the American civil rights tradition, especially the impact of its commitment to radical nonviolence in an unevenly democratic world. As an educator, Everett’s work revolves around hope: the hope of creating equitable, diverse, and just learning environments that take into account the heavy burden of our social reality and disparities. He seeks to train younger students on the importance of civic engagement, anti-racist thought, and the desegregation of our intellectual and moral worlds. His commitment to the study of democratic politics and political nonviolence has been influenced by the work of Hannah Arendt, James Baldwin, Ta-Nehisi Coates, W.E.B. Du Bois, Michel Foucault, and Judith Butler—and of course, his mentor, Aishwary Kumar. Apart from heading the Student Initiative of Justice at Cal Poly, Everett serves as the Coordinator of Programs at Ahimsa Center and The Democracy Institute.



SCHOLAR ABSTRACTS AND BIOGRAPHIES

Valerie Estala

Mentor: Dr. Eeman At-Taras

Title: The Effects of Habitation Design and Sound Level on Canines in Los Angeles Animal Shelters

Abstract:

The habitation design needed for canine housing needs is imperative when designing an animal shelter. This includes living quarters, socialization, urination/defecation spaces, nutritional needs, mental stimulation, etc. Previous research has shown that the kennel spaces canines reside in can significantly affect their sleep, appetite, stress, and even their ability to thrive. This research will focus on the importance of quality living spaces and stress-related protocols on animal shelters in Los Angeles County, thus identifying a correlation between these factors and the presence/absence of stress-related behavior. My methodology will reflect the importance of habitation design and noise levels in animal shelter facilities, collecting data from a minimum of four animal shelters in Los Angeles County, with 15 participants per shelter (both staff and volunteer). The Qualtrics survey contains questions pertaining to animal behavior such as excessive barking, lack of appetite, pacing, etc., which are indicators of canine stress. The survey also poses questions about the measures taken to mediate stress behaviors in dogs, such as time spent outdoors, noise level reduction, veterinary exams, and so forth. For my observations of habitation design, the key factors in my research are sound levels, which will be measured using a decibel meter, observing whether kennel spaces are double-compartment or single-compartment, identifying the presence/absence of toys in each space, and presence/absence of elevation in the kennel. I have hypothesized that the presence or absence of these habitation factors will correlate with the presence or absence of behavioral stress response in the dogs at these shelters, which will be indicated through the information received from survey responses.

Biography:

Valerie Estala is a third-year animal science major at California State Polytechnic University, Pomona. She has an unfaltering passion for animal welfare, and volunteered at a horse rescue in Alicante, Spain over the previous summer, where she learned about equine science, husbandry, and ethics. Furthermore, she is currently working at a Humane Society where she hopes to further her career as an animal behaviorist. She plans to pursue a Master's Degree in Animal Science, where she can gain the research experience and academic knowledge to help shelter animals overcome their emotional traumas. Currently, she is conducting research on shelter welfare, particularly that of canines in Los Angeles County animal shelters. She plans to graduate in Spring 2025, and attend an accredited Master's program that suits her research interests.



SCHOLAR ABSTRACTS AND BIOGRAPHIES

Jay Gomez

Mentor: Dr. Anita Jain

Title: Bioaesthetics of DIY Concerts

Abstract:

The intention of my research is to better define the young field of Bioaesthetics through the methodology of ethnographic field work and participatory action research. Bioaesthetics is a field of study that concerns itself with understanding art in the context of biological evolution, primarily considering artistic inclination as an adaptation. This field was coined by Art Theorist David Mandel throughout his career to the mid 1950's to the early 1980's and furthered by Carsten Strauthausen in 2017. As far as my research can lead me, these two are the only critical theorists to attempt to define and map the systems of bioaesthetics, leaving much work and experimentation to be done. As a gigging music worker myself in Northern and Southern California, I have maintained a wonderful network of music spaces and people - not to mention gained a dynamic community. As I go to different concerts and engage more thoroughly in my local underground music scenes, events, norms, and practices, I use the previous frameworks of Bioaesthetics to create a radically new one - specifically concerning a small artist community's method of resistance.

Biography:

A spokesperson for the DIY approach, Nojay is a recording artist, producer, audio engineer and music video director from the Sacramento, CA area. They are known locally for their self-organized animated live shows and experimental production. They were nominated for a Sacramento Area Music award (SAMMIE) in 2020 for their shows in late 2019. They are pursuing a degree in Gender, Ethnic and Multicultural Studies with a music minor in order to better unify music workers. They are currently in pursuit of admission to grad school.



SCHOLAR ABSTRACTS AND BIOGRAPHIES

Jessica Gonzalez

Mentor: Dr. Soeun Park

Title: Mental Health Utilization Amongst Asian Americans and Latinx College Students: Using A Cross Comparative Approach To Understand Help-Seeking Behaviors and Increase Culturally Relevant Interventions.

Abstract:

While universities and colleges offer mental health resources to a wide range of students, these resources may not adequately address the specific needs of Asian American and Latinx college students who are facing psychological distress due to factors unrelated to their academic life. There has been limited research conducted to investigate and evaluate their lack of utilization of mental health resources at colleges and universities, which would subsequently highlight the factors that contribute to their help-seeking behaviors. There is a need to challenge the dominant Eurocentric therapeutic model while considering alternative strategies that addresses and recognizes diverse experiences of individuals. The current research examines the challenges experienced by Asian American and Latinx college students that may result in low utilization patterns. This study aims to bridge the gap in research using a cross-cultural approach with the goal of understanding how to improve resources for underrepresented groups by a modifying the existing resources to cater to their unique experiences. Through a comprehensive examination of Asian Americans and Latinx college student's perspectives on mental health, the study seeks to recognize the discrimination and microaggressions they experience. At the same time, it analyzes the relationship between stigma, helping seeking behaviors, and utilization patterns. The current qualitative study utilizes surveys and semi-structured interviews to explore their utilization of mental health resources, stigma toward mental health, and any barriers towards the help-seeking behaviors among Asian American and Latinx college students. The participants (n = 10) self-identify as Asian American or Latinx college students from California Polytechnic State University, Pomona. The preliminary findings of the thematic analysis showed that both communities highlighted the significance of counselors possessing cultural competence. This would enable them to better grasp their distinctive experiences and understand their cultural background, language, and specific challenges they may face, thus enhancing the likelihood of students seeking mental health support. Although students encounter stigma outside of school through different avenues, campus resources need to consider these underrepresented student's factors that are affecting them. By expanding on multicultural approaches that increase accessibility and by considering family dynamics, this study will help improve mental health resources that acknowledge the unique personal experiences of these intersecting identities.

Biography:

Jessica Gonzalez is a fourth-year transfer student at California State Polytechnic University who is majoring in Psychology. In addition to her participation in the McNair Scholars program, Jessica is actively engaged in other campus activities. She presently holds the position of treasurer for Psi Chi International Society, is involved in the SEIF Lab led by Dr. Soeun Park, and is a member of the Parent Advisory Board for the campus children's center. Her research focuses on utilizing a socio-ecological and intersectionality theoretical framework to examine how various settings and identities within racial/minority communities impact their views on mental health, which in turn influences their help-seeking behaviors. She aims to obtain a PhD in Clinical Psychology as a short-term goal, leading to her long-term aspiration of engaging in academia and research to create culturally relevant, evidence-based treatments to enhance the well-being of underrepresented and marginalized communities.



SCHOLAR ABSTRACTS AND BIOGRAPHIES

Samantha Hughes

Mentor: Dr. Soeun Park

Title: Understanding the Relationship Between Food Insecurity and Disordered Eating Behaviors in First-Generation College Students

Abstract:

This study will investigate the association between food insecurity and the presence of disordered eating behaviors among first-generation college students. For college students, having no time to eat, lack of access to groceries, or having to resort to unhealthier eating options such as fast food, are presently inveterate. Food insecurity is the uncertainty and lack of access to enough nutritious and safe food. Does this uncertainty predict disordered behaviors? Disordered eating behaviors are abnormal eating behaviors that are not a clinical diagnosis and have lower severity levels. This study aims to investigate if first-generation students experiencing food insecurity are more likely to exhibit disordered eating behaviors compared to those who are food secure. Questions for this survey have been used from the USDA Food Security questionnaire to measure food insecurity and questions have also been used from the questionnaires from the Eating Disorder examination questionnaire (EDE-Q) to measure disordered eating behaviors. Responses to questions will be collected and not made visible to participants. Data will be collected through use of an anonymous survey that will be distributed throughout campus, as well as through snowballing and promoting with the help of Cal Poly Pomona's first-generation program, Educational Opportunity Program. My samples (N=) will be comprised of first-generation, undergraduate Cal Poly Pomona students, from any socio-demographic background. The data will be analyzed using correlational analysis and regression to examine the relationship between food insecurity and disordered eating behaviors. With hopes that this research will show that with the presence of food insecurity, disordered eating behaviors will be seen in relation. With the minimal research that has been done surrounding this topic, there have been correlations shown between the food insecurity and eating behaviors. With this research there are hopes that the two will be brought to the light, with accessible resources being provided, and a sense of comfortability being established.

Biography:

Samantha Hughes is a fourth-year undergraduate at California State Polytechnic University, Pomona who is studying Psychology and Gender and Sexuality Studies. She began to get her psychology career when she started at Cal Poly Pomona. With being involved in activities hosted by her department to conducting her own research, she has begun to carve her path. Her current research involves exploring food insecurity and seeing if there is a correlation to disordered eating behaviors in first-generation students. She plans to receive her Ph.D. in Counseling Psychology as well as her license to have her own private practice in therapy for teenagers and young adults. Her short-term plans include increasing her knowledge through volunteering, expanding her research, and participating in a summer research opportunity. Her long-term plans include obtaining an internship that works with her schedule while completing higher education. During the spring quarter of 2025, she will be applying to in and out-of-state graduate school programs.



SCHOLAR ABSTRACTS AND BIOGRAPHIES

Oona Iglesias

Mentor: Dr. Peter Hanink

Title: The Effectiveness of the McNair Scholars Program at Cal Poly Pomona

Abstract:

Student support programs play a vital role in addressing social mobility in education. While considerable programs exist, TRIO programs are designed to aid students through the academic pipeline, from high school to post-secondary schooling. The McNair Scholars Program, or the Ronald E. McNair Post baccalaureate Achievement Program, is a higher education program designed to prepare eligible participants for doctoral programs through research, academic assistance, and mentorship. McNair Scholars have the opportunity to conduct and present research and attend graduate school preparation activities. Most existing literature about the program focuses on the achievements made by “successful,” graduated scholars. These studies fail to fully address the efficacy of the retention of the McNair Scholars program. This research project aims to measure the effectiveness of the McNair Scholars program at Cal Poly Pomona by analyzing scholars’ experiences through their participation in the program. The effectiveness will be analyzed through a mixed-methods approach involving preexisting data from the program and semi-structured interviews of McNair scholars at Cal Poly Pomona. Ultimately, this research seeks to contribute further knowledge on how the program can better assist future cohorts in their research and plans after their degree.

Biography:

Oona Iglesias is a first-generation college student in her last year at Cal Poly Pomona, majoring in Sociology with a pre-law route. She continues to participate in numerous organizations related to social contracts and civic institutions and works on campus as a student assistant. Focusing on social justice and peace has led her to support marginalized communities through research and advocacy, and becoming a vessel for victims of unfair advantages. Her story encourages her to persevere through times of need as she pursues the goals of better representation in the legal field and research related to law and incarceration. Upon completing her undergraduate degree, she plans to take some time off to complete the LSAT and GRE to apply for dual degrees in a JD/Ph.D. program. Her long-term goals include becoming a juvenile defense attorney and a professor while continuing to be actively involved in her passion for humanitarian work.



SCHOLAR ABSTRACTS AND BIOGRAPHIES

Gina Lalli

Mentor: Dr. Hyungchul Han

Title: “Can Wine Pomace be Beneficial in Cattle Farming?”

Abstract:

Cattle farming is one of the leading causes of Methane accumulation in the atmosphere, which is also one of the leading causes of climate change. Methane emission in cattle is primarily dependent on cattle diet. Feed efficiency is also low in cattle which is costly to farmers and drives the cost of food higher. The benefits of wine, mostly attributed to the flavonoids within have been previously scientifically recorded, but it is not a substance that is appropriate for animals. The goal of this study is to find a way to make the wine flavonoids beneficial to cattle. As one of the leading wine manufacturing locations in the country, California has a vast amount of pomace leftover after wine production. This pomace, which consists of grapes and stems and twigs will be collected, dried, ground into fine powder, and used to supplement cattle diet. 8 control cows, and 8 experimental cows will be tested for pH, and blood chemistry with iSTAT analyzer to ascertain if any important digestive processes are affected by the wine pomace. The study will also look at arthritic markers in cattle to investigate further applications of dried wine pomace

Biography:

Gina Lalli is a fifth-year undergraduate pursuing a degree in Biology at Cal Poly Pomona. Previously Gina studied at Pasadena City College and Citrus College where she earned her Associate’s degree in Biology. Gina is extremely involved in her community, volunteering at her daughter’s school, chairing the HOA at her complex, caring for horses, and teaching horseback riding to beginners at Bellavantage Farms. Gina is an avid rider, and is Horse Show Manager for the Cal Poly Equestrian Team. Her research includes how Metformin, the diabetes medication affects rates of proliferation and differentiation of human mesenchymal stem cells, specifically osteocytes and adipocytes, under the supervision of Dr. Ansel Zhao, as well as what effects leftover wine pomace may have on digestion in dairy cattle under the supervision of Dr. Hyungchul Han. Her plans are to receive a doctoral degree in medical and genomic research so she can contribute to advancements in science and medicine for the betterment of life, with preference toward research in horse health. She plans to attend graduate school in the following academic year in the greater Los Angeles area. Her long-term goals are to remain in research after obtaining her PhD, and affiliating with a local University where she can conduct research and motivate the next generation to continue bettering the lives of humans and animals alike. Her short-term goals are to complete her current research project, and begin her Doctoral studies in Fall. She is a firm believer, and a testament to the benefits that interacting with animals can have on the human spirit and body. She would also like to be involved in furthering inclusivity and diversity in the science community by supporting future students through instruction and outreach.



SCHOLAR ABSTRACTS AND BIOGRAPHIES

Fabian Larios

Mentor: Dr. Marie B. Lamothe Francois

Title: College Students' Openness to Treatment for Mental Health: An Exploration of Family of Origin Influence on Mode of Treatment

Abstract:

Maintaining proper mental health has always been of the utmost importance for the general population. It is estimated that about one in every four individuals will experience a mental health disorder at some point in their lives, and if an individual is unable to maintain their mental health, it can result to their quality of life being impacted significantly, leading to impaired functioning and reduction of productivity (Sweileh, 2023). One group of individuals that has been significantly affected by mental health difficulties is college students. Without proper support, untreated mental health problems can lead to significant social, educational, and academic impairments (Borsari, 2018). According to Eisenberg (2009), students that feel depressed will have an overall lower academic performance, lower grade point averages, and can even be linked to students dropping out. Despite the options college students have when it comes to deciding on treatment, there is limited research regarding students' choice in mode of treatment and what factors may influence those decisions. This study aims to explore the influence of Family of Origin (FoO) on Student's perceptions regarding mental health and their decisions regarding the mode of treatment. In particular, the current study will explore the influence of family of origin on college students' decision to attend talk therapy or utilize medication as the mode of treatment for their mental health difficulties. The hypotheses for this study are as follows: a) College students will perceive family of origin to have significant influence on their perceptions of Mental Health Difficulties; b) Family of Origin will have an influence on college students' decision regarding Mode of Treatment for Mental Health; c) College Students will be more open to using medication rather than talk therapy as mode treatment for mental health difficulties.

Biography:

Fabian Larios is a fourth-year undergraduate student studying Psychology at California State Polytechnic University, Pomona. He is currently studying to earn his bachelor's degree in psychology. He is also currently working with Tri-City in the Peer-Mentor program not only to improve his knowledge in the field but to also help individuals who are struggling with mental difficulties. He plans on earning a Ph.D. in Clinical Psychology to provide psychological care to underrepresented communities. Fabian is also highly interested in researching mental health disorders, such as anxiety and depression, to contribute to the development of knowledge and understanding of effective psychological services.



SCHOLAR ABSTRACTS AND BIOGRAPHIES

Alexis Lopez

Mentor: Dr. Soeun Park

Title: How Disparities and Stigma Contribute to Mental Health Underutilization Among Asian and Latinx American College Students

Abstract:

While universities and colleges offer mental health resources to a wide range of students, these resources may not adequately address the specific needs of Asian American and Latinx college students who are facing psychological distress due to factors unrelated to their academic life. There has been limited research conducted to investigate and evaluate their lack of utilization of mental health resources at colleges and universities, which would subsequently highlight the factors that contribute to their help-seeking behaviors. There is a need to challenge the dominant Eurocentric therapeutic model while considering alternative strategies that addresses and recognizes diverse experiences of individuals. The current research examines the challenges experienced by Asian American and Latinx college students that may result in low utilization patterns. This study aims to bridge the gap in research using a cross-cultural approach with the goal of understanding how to improve resources for underrepresented groups by a modifying the existing resources to cater to their unique experiences. Through a comprehensive examination of Asian Americans and Latinx college student's perspectives on mental health, the study seeks to recognize the discrimination and microaggressions they experience. At the same time, it analyzes the relationship between stigma, helping seeking behaviors, and utilization patterns. The current qualitative study utilizes surveys and semi-structured interviews to explore their utilization of mental health resources, stigma toward mental health, and any barriers towards the help-seeking behaviors among Asian American and Latinx college students. The participants ($n = 10$) self-identify as Asian American or Latinx college students from California State Polytechnic University, Pomona. The preliminary findings of the thematic analysis revealed that when a therapist possesses an in-depth comprehension of the student's cultural context, linguistics, and unique obstacles they might be encountering, it increases the likelihood of the student seeking mental health resources. Although students encounter stigma outside of school through different avenues, campus resources need to consider these underrepresented student's factors that are affecting them. By expanding on multicultural approaches that increase accessibility and by considering family dynamics, this study will help improve mental health resources that acknowledge the unique personal experiences of these intersecting identities.

Biography:

Erving Alexis Lopez is a fourth-year undergraduate at California State Polytechnic University, Pomona who is studying psychology. In his previous years, he studied at East Los Angeles Community College as a computer science major, then switched to psychology because he finds people's behaviors and social interactions interesting. He is in the Socio-Ecological Intersectionality Framework lab, researching on stigma and mental health underutilization under mentorship of Dr. Soeun Park. He plans to receive his Ph.D. in clinical/counseling psychology where he can gain the tools to benefit his community academically and socially through research and community outreach. His long-term goals are to continue expanding his research on ethnic minorities' mental health through cross-sectional studies on intersectionality and developing new methods for cultural-relative therapies that cater to their unique experiences and intersecting identities of individuals.



SCHOLAR ABSTRACTS AND BIOGRAPHIES

Andrew Lopez

Mentor: Dr. Lori Baker

Title: Latinx Attitudes

Abstract:

Research consistently shows an under-utilization of services by People of Color. To remedy this, it is imperative that we increase our understanding of attitudes toward mental health, mental illness, and mental health treatment in these populations. This study aims to address Latinx attitudes toward mental health and mental illness by exploring how cultural identity, level of acculturation, and cultural values and beliefs shape these perspectives. This is a qualitative study where semi-structured individual interviews will be conducted with Latinx participants ages 18 and older. At least 20 participants will be recruited through purposive, convenience, and snowball sampling. Interviews will take place via Zoom and conducted by the primary investigator and trained research assistants who all identify as Latinx and are fluent in both English and Spanish. Participants will complete a demographic survey which covers the basic areas (e.g., age, gender, year in school, religious affiliation) as well as questions about cultural/ethnic identity, place of birth, time lived in the U.S., and languages spoken. Sample interview questions include what their understanding is of mental health versus mental illness; personal, family, and cultural beliefs about mental health and mental illness; personal and family experiences with mental health and mental illness; and personal and family help-seeking for mental health issues. Through a three-step thematic analysis of the interview data, we anticipate finding themes related to gender roles, religious affiliation, family hierarchies, generational status, level of acculturation, and individualism/collectivism. We hope that the results of this research will provide mental health professionals with valuable information on how to better address the specific needs of the Latinx community and make mental health services more accessible to this group.

Biography:

Andrew Lopez is a second-year transfer student at California State Polytechnic University, Pomona, where he is studying Psychology. Andrew transferred from Mt. San Antonio College in 2022. During his time at Cal Poly Pomona, he has volunteered as a crisis counselor and has also served as a teacher's assistant in multicultural psychology. Additionally, he has been accepted to conduct research at the University of Southern California's REU Jumpstart Program over the summer. His current research focuses on understanding attitudes towards mental health, mental illness, and mental health treatment within the Latinx community. Andrew plans to pursue his goal of obtaining a Ph.D. in either counseling or clinical psychology. He intends to continue conducting research, particularly in the area of social media's portrayal of minorities and its effects on mental health. In the upcoming fall, he plans to apply to graduate school programs both in and out-of-state.



SCHOLAR ABSTRACTS AND BIOGRAPHIES

Ana Marroquin Tercero

Mentor: Dr. Kevin Autry

Title: Exploring the Influence of the Mental Timeline on Recognition Memory through the use of Electroencephalography

Abstract:

Time is a unique concept given that it cannot be physically experienced through our senses. Instead, we utilize metaphorical representations (Lakoff & Johnson, 1980) with time being represented as space. This is known as the mental timeline (Borodistky, 2000). The present study focuses on exploring whether the mental timeline influences memory. Our experiment will manipulate the spatial location of study items to activate the mental timeline during encoding. We will then test whether the location of the information presented to participants influences their recognition memory for the items and recall of their temporal associations. Participants will study past and future items on the left and right side of the screen. These items are line drawings borrowed from Saj et al.(2013). They represent objects preferred by a character named David, such as things he liked to eat (e.g., apple), things he liked to wear (e.g., sweater), things he liked to do (e.g., skiing), and things in his home (e.g., refrigerator), at different points in time (i.e., 10 years ago or in 10 years). Past preferences are represented beneath a cartoon image of a young boy and future preferences are represented beneath a cartoon image of an older man. After studying each block of items, participants will complete a recognition task while their brain activity is recorded via electroencephalography (EEG). We expect subjects will have greater recognition and recall of information presented to them in congruent trials (e.g, past items presented on the left) compared to incongruent trials (e.g, past items presented on the right). We will also examine two event-related potentials (ERP) known as P300 and N400. For both components, we expect greater amplitudes for incongruent trials compared to congruent trials. These anticipated results would demonstrate how the mental timeline influences recognition memory, suggesting that memory could be improved when temporal information is encoded with appropriate spatial layouts

Biography:

Ana Gloria Marroquin Tercero is a first-generation college student and American. She comes from a Latinx background, which she credits for providing her with the inspiration to work towards obtaining a Ph.D. She is in her second year of college at Cal Poly Pomona and has demonstrated throughout her time here, her dedication and passion for learning and setting herself up for success. She has been recognized by the Dean and President as an exemplary student who reflects Cal Poly Pomona's mission. She was also invited back to conduct undergraduate research at UMass Chan Medical school this summer, which would make it her second time conducting research there. She is currently getting ready to apply to Graduate school, as she will be submitting applications this upcoming Fall semester. Her research experience extends from working on Exploring the influence of the Mental timeline on recognition memory, to Validating a transgenic mouse line designed for cell type-specific knockdown of the circadian transcription factor *Npas2*, writing a review on the Relationship between Alzheimer's, hexosamine, & O-GlcNac, and being a part of the National Alzhiemers Buddies where she worked on building interpersonal relationships with dementia residents, and aiding residents in developing a stronger understanding of personal identity and spearhead impactful change. She is working towards becoming a Neuropsychologist who will provide more accessible services to low-income, underrepresented immigrant communities like the ones she grew up and lives in, and work towards being able to see the change that is necessary within the medical field when it comes to BIPOC communities. She is looking forward to being able to further her academic and professional career alongside the support of the McNair Scholars program.



SCHOLAR ABSTRACTS AND BIOGRAPHIES

Angelina Mason

Mentor: Dr. Shayda Kafai

Title: *In the Affective Borderlands: Staff Experiences with Microaggressions in the After-School System*

Abstract:

Microaggressions are brief and commonplace daily verbal, behavioral, or environmental actions (whether intentional or unintentional) that communicate hostile, derogatory, or negative slights and insults toward members of oppressed or targeted groups (Nadal 2014). While microaggressive acts have the capacity to be present in any area of society, and while researchers have extensively explored the microaggressions within higher education (Franklin 2016) and the K-12 system (Daftary 2023), this study will examine the role and impact of microaggressions in the after-school K-12 system, a highly under-researched application (Steketee 2021). This study is an investigation into how microaggressions regulate the cultural norms of the after-school environment as well as affect the bodyminds of the adult line staff that work there. Bodyminds is a term from Disability Studies that this study will employ; bodymind suggests that our minds and our bodies, rather than being separate entities, inform one another and are critical if we are to have a holistic and complete understanding of a person's experience (Price 2015; Schalk 2018). Besides the inadequate amount of paid preparation time for activities and becoming an educator without enough training, microaggressions manifested during interactions with other program affiliates chip away at the mental-emotional well-being and belonging of the staff they are directed toward. My research seeks to add to the fields of Gender and Ethnic Studies by examining the impacts of microaggressions on line staff in an under-researched educational space. My primary and secondary research questions ask: 1) Centering the experiences of line staff at afterschool programs how do microaggressions regulate the cultural norms of the space as well as affect the bodyminds of the staff? 2) What are the consequences of unaddressed, and even encouraged, microaggressions that take place within the after-school space amongst adult staff members?

Biography:

Angelina Mason is a fourth year undergraduate at California State Polytechnic University, Pomona who is a double major in Communication and Gender, Ethnicity, and Multicultural Studies. Her current research through McNair delves into staff experiences with microaggressions in the after-school system. She plans to receive her Master's in Communication Studies at Cal State LA, and then eventually go on to obtain her PhD. Her short term plans include continuing research from a critical cultural focus and working with non-profit organizations that contribute to educating the youth. Her long term plans still include these, but with the goal of being a professor in higher education as well.



SCHOLAR ABSTRACTS AND BIOGRAPHIES

Jacquelyn Moran

Mentor: Dr. Sekani Robinson

Title: Latino Children in Special Education Programs

Abstract:

In all parts of school districts, students should be provided with the resources needed to be successful students, i.e. such as books, technology, and many more. Different schools have different resources to help students learn. Some schools have more resources than others, depending on what grade level they are and where they are located. The resources provided to students in school can vary widely depending on the educational institution, its level (elementary, middle, high school, or higher education), and its location. 15% of children in the US are disabled, with 3% of that number occurring in California (Schaeffer, 2023). For this research, I am conducting 10 in-depth interviews with elementary teachers and administrators, in person at the schools in which they teach and 20 in-depth interviews with Latino parents with children in special education classes. The interviews consist of 20 questions that address. I approach these questions utilizing the platica method. The platica method is a Chicana/Latina Feminist method in which refers to techniques that provide the theory & analysis of research. It is culturally appropriate for me to use platica method since many of these individuals are women and Latinas. This qualitative study will examine an elementary school and teachers to see if students with disabilities and their parents are getting the support they need for their education. The Disabilities Education Act is guaranteed that students with disabilities get the assistance they need and want, but research has shown that the communities they are around are not getting the aid the students need due to being a low-income district (Legislative Analyst's Office, 2019). More importantly, this study exposed me to a literature review and the research process while preparing me to become a researcher, scholar, and author in education.

Biography:

Jacquelyn Moran is a fourth-year undergraduate student at California State Polytechnic University, Pomona majoring in Liberal Studies within the College of Education & Integrative Studies. Her unique program offers a bachelor's degree and credential. Her current research focuses on students' resources in special education programs. She plans to pursue a Ph.D. in Education Policy with the goal of becoming an advocate for historically underserved communities and students with learning disabilities. Jacquelyn's passion for education stems from her experiences growing up in Santa Ana, CA, and her love for her baby cousin who was born with disabilities. In Fall 2024, she will be attending a master's program locally.



SCHOLAR ABSTRACTS AND BIOGRAPHIES

Veronica Naranjo

Mentor: Dr. Marie Brigitt Lamothe-François

Title: Intergenerational Effects of Mental Health Stigma in Latinx College Students: An Exploration of Familial Influence

Abstract:

It has been reported that undergraduate students are exceedingly more susceptible to the onset and exacerbation of mental health disorders, which likely plays a significant role in the continued impact of stigma related to mental health difficulties. While mental health struggles indiscriminately impact various groups, the current study focuses on the plight of Latino individuals. Studies have demonstrated that Latinos overall exhibit lower regard for mental health services (Bucay-Harari et al., 2020; Hirari et al., 2015; Jasso et al., 2004; Pérez et al., 2008; Sarró et al., 2015). For those that do use mental health services, families are usually viewed as the “gatekeepers” to seeking professional help, since their opinions and suggestions influence the possibility that students seek assistance (Arria et al., 2011). The main purpose for this research project is to ascertain whether family’s perceptions of mental health and treatment influences Latino students’ regard for mental health and the stigma that exists in the community. This study will also determine if gender plays a role in college students’ approach to mental health and subsequent help seeking behaviors. The number of participants for this study will be about 80-90 undergraduate college students that come from a Latinx background. This study will utilize a mixed methods approach, using the Familial Perspective Questionnaire and Demographics Questionnaire to obtain qualitative information from participants about their family of origin’s perceptions and behaviors regarding mental health, while the Stigma Consciousness Scale (Link & Phelan, 2014) and the Mental Help Seeking Attitudes Scale (Hammer, 2018) will be used to obtain quantitative data regarding mental health related attitudes. The current study is in progress, however, findings will likely demonstrate that Latinx college students’ perception of mental health, mental health related stigmas, and help seeking behaviors will be heavily influenced by their family of origin’s perceptions.

Biography:

Veronica Naranjo is a fourth year undergraduate at California State Polytechnic University, Pomona who is studying Psychology. She is currently a part of Dr. Lamothe-François’ lab known as the Psychology of Connection Lab (PSoCOLab), where she is a research assistant and provides research consultation to newly onboarded lab students. She spends her time being an active member in the community by being a part of different organizations, such as being a Psi Chi Chapter Member and volunteering at the non-profit organization Psyches of Color. Her current research focuses on how family of origin effects their view of mental health stigmas and help-seeking behaviors in Latinx college students. She plans to pursue her Ph.D. in clinical psychology and hopes to work with those from underrepresented and marginalized communities. She hopes to provide mental health awareness to the BIPOC community and help reduce the stigma surrounding mental health in the community.



SCHOLAR ABSTRACTS AND BIOGRAPHIES

Graciela Padilla

Mentor: Dr. Caryn Bell Gerstenberger

Title: Parenting Students at Cal Poly Pomona

Abstract:

This study aims to investigate what is offered for parenting students who need housing aid or other resources for their children over the age of five as well as the parents themselves. I will also be studying what feelings the student parents' have towards the resources they have received. Learning what their experience with the resources provided, in particular with children over the age of five. This participatory action research is focusing on their experiences and opinion concerning services they have received through Cal Poly Pomona. Although the majority of the analysis will be qualitative, the study will rely on some quantitative basic descriptive analysis as well. Awareness to this study can bring parenting students more opportunities of support from Cal Poly Pomona and set a goal of promoting a change. This change will better serve our community of parenting students, particularly those with older children, a group of students who have been overlooked in previous research and in the design of services for parenting students.

Biography:

Graciela Padilla is a fourth-year undergraduate at California State Polytechnic University, Pomona who is studying Sociology. She transferred from Mt. San Antonio College where she has worked for the past three years as a Student Services Support under the Title V HSI Grant, and most recently with the Rising Scholars Program. Her current research delves into the resources provided to parenting students. She plans to receive her MS in Counseling, Student Development in Higher Education at California State University Long Beach, where she can gain knowledge and develop her skills to serve as a counselor in higher education. Her short-term plans include completing her last semester at California State Polytechnic University and graduating in May 2024. Her long-term plan is graduating from California State University Long Beach with her MS in Counseling and helping future generations in their higher education journey.



SCHOLAR ABSTRACTS AND BIOGRAPHIES

Ruben Torres Romero

Mentor: Dr. Mohamed Aly

Title: Exploring Collaborative Robotic Environment: Unmanned Hybrid Vehicle, at CPP Reconfigurable Space Computing Lab

Abstract:

In the context of addressing hazardous and challenging scenarios, collaborative robotic environments play a vital role in accomplishing unsafe tasks for humans. While considerable interest exists in creating such environments for Unmanned Aerial Vehicles (UAVs), there is a notable lack of implementation for Unmanned Ground Vehicles (UGVs). This research project aims to bridge this gap by proposing a new hybrid UGV, referred to as an unmanned hybrid vehicle (UHV). The UHV is to effectively collaborate within a robotic environment, facilitating task efficiency in disaster situations, extreme climates, and extraterrestrial locations like the Moon. The study begins by modifying an existing UGV to incorporate heavy-duty propellor motors and sensors, resulting in a versatile and capable UHV. Data produced by various sensors across the system hooked up to the Raspberry Pi, which utilizes ROS (Robot Operating System), will facilitate real-time data processing, control, and communication between the UHV and other devices within the collaborative robotic environment. Subsequently, gathered comprehensive data will reveal its performance in assigned tasks, considering crucial aspects such as safety, task completion time, range of control, and overall efficiency. The envisioned outcome is a UGV that can interact seamlessly within a collaborative environment, facilitating enhanced cooperation between UGVs and UAVs when deployed in challenging conditions. Ultimately, this research seeks to contribute to advancing robotics technology, enabling the deployment of collaborative UGV and UAV systems to address critical challenges in environments where human intervention is impractical or hazardous. By combining the strengths of both ground-based and aerial platforms, this hybrid UGV promises to pave the way for safer and more efficient task execution in extreme circumstances

Biography:

Ruben Torres Romero is a rising and ambitious Computer Engineering undergraduate senior at California State Polytechnic University, Pomona. He began his journey during hectic times in 2020, persevered, and eventually joined and contributed to the following programs: Research through Inclusive Opportunities (2021-2022), Cal-Bridge (2022-Present), and McNair Scholars (2022-Present). As a returning scholar, Ruben's current research involves an unmanned hybrid vehicle and how it can aid task accomplishment on the Moon through a collaborative robotic environment. Ruben will graduate in the spring of 2024 and plans to receive his Master's and Ph.D. in Electrical and Computer Engineering. Ruben intends to become a professor or work in a lab to collaborate across many computer-related fields, most notably cyber-physical systems, AI, and robotics. Ruben is grateful for the monumental support from his family and the incredible guidance from Dr. Mohamed Aly, both of which were instrumental in his undergraduate career.



SCHOLAR ABSTRACTS AND BIOGRAPHIES

Gloria Tovar

Mentor: Dr. Mohamed E. Aly

Title: AI-Enhanced Flying Telescope for Artemis: Pioneering Space Exploration via Computer Vision

Abstract:

This research presents an innovative flying telescope equipped with computer vision for the Artemis mission. This telescope drone identifies and tracks distant galaxies, offering dynamic observational abilities beyond conventional space telescopes. Integrated with our technology devices, it communicates real-time visual feeds, augmented reality overlays with celestial information, and seamlessly integrates with the Artemis communication systems. Addressing current technological unknowns, this project not only enhances space observation but also democratizes access to astronomical data, bridging the divide between experts and the general public. The design redefines space exploration, making the universe more accessible and comprehensible for all.

Biography:

Gloria Tovar is a fifth-year undergraduate at California State Polytechnic University, Pomona, majoring in Computer Engineering. Over the past two years, she has been part of the RIO program, researching Lightweight Cryptography under the guidance of her mentor, Professor Aly. Additionally, she has contributed to the software development of an Unmanned Ground Vehicle for NASA Artemis mission. Her current research focuses on enabling a drone to lift a telescope and developing software to transmit data from the telescope to a computer for star constellation detection. She plans to pursue a master's degree in either Electrical Engineering or Computer Engineering, with the goal of working in the industry specializing in networking, artificial intelligence, or cybersecurity. During the spring semester, she will be applying to graduate school.



SCHOLAR ABSTRACTS AND BIOGRAPHIES

Celeste Vasquez

Mentor: Dr. Erica Morales

Title: Understanding Wealth Inequality: Mexican Americans' Experiences in Accessing Wealth

Abstract:

Wealth is significant as it leads to social mobility, power, and capital. Scholars have noted wealth is not just income but assets such as property, investment products, and common goods. Mexican Americans have encountered obstacles to acquiring wealth due to racism and discrimination and have less wealth than their white counterparts. Drawing on in-depth interviews with Mexican American adults, this study asks: What are the challenges Mexican Americans encounter in acquiring wealth? Despite these challenges, how do Mexican Americans build their financial literacy and obtain wealth? How does class status contribute to Mexican American's experience in building Wealth? This research will demonstrate the navigational strategies Mexican Americans utilize to generate wealth. Moreover, it will deepen our understanding of Mexican Americans' social mobility and striving toward further economic power and freedom.

Biography:

Celeste Vasquez is a fourth-year undergraduate student at Cal Poly Pomona, majoring in Sociology. She balances her studies with a part-time administrative role as an Assistant Coordinator at the City of Moreno Valley. Her current research focuses on the social and economic disparities within the Mexican American community and how these disparities impact their ability to accumulate wealth. After completing her research and obtaining her Bachelor of Arts degree from Cal Poly Pomona, Celeste plans to enroll in a PhD program in Law or Public Policy to further her passion for advocacy. Her long-term goal is to advocate for human rights and work towards minimizing the social and economic gaps in marginalized groups. Celeste is set to graduate with her bachelor's degree in Sociology in May 2024



SCHOLAR ABSTRACTS AND BIOGRAPHIES

Melody Villegas

Mentor: Dr. Tatiana Pumacchua

Title: The Psychological and Academic Impact of Mass Shootings on Students in Higher Education

Abstract:

There has been a high rise in the number of mass shootings occurring throughout America. These tragic events are being publicized in the media and have shown that they can happen anywhere at any time, especially in education. Literature reveals there are a few studies on how exposure to mass shootings have affected students in higher education. Of the available research, a large portion of studies have focused on the psychological impact on those who were directly impacted by mass shootings, rather than those who were not directly involved. The present study aims to further explore the impact of mass shootings, specifically how peripheral exposure to the events impacts college students' wellbeing and academic performance. The importance of this study is to discover new literature on the concept of mass shootings, particularly from a point of view where individuals are not directly impacted. The main purpose of the study is to identify where the inability for students to reach academic achievement in higher education comes from and if violence that occurs in our society is one of the present issues. It is essential to increase the literature on mass shootings in higher education as it proposes a chance for students to continue succeeding, both academically and with their overall well-being, at their colleges with no fear or worry of violence and crime occurring on campus. Therefore, the present qualitative study explored how university students were informed about mass shootings and campus safety within their universities. Moreover, this study utilizes a semi-structured interview to examine students' relationship to mass shootings, precisely their ability to perform academically and the impact on their own mental health. Specifically, the findings will illustrate important information on how university students have been indirectly affected by the occurrence of mass shootings.

Biography:

Melody Villegas is a first-generation, Hispanic student attending California State Polytechnic, Pomona as a fourth year majoring in psychology. She aspires to obtain her Ph.D. in school psychology after attending graduate school. She is currently serving as a research assistant in CPP's Socioemotional Research Lab. As a member of this lab, she collaborates on research with her team and works with Pomona Unified School District in mentoring younger students. Melody is a McNair Scholar and is also currently working on her own research project. She has previous experience working with children and young adolescents as a substitute instructional assistant for another school district. Melody has started working with children and young adolescents, in hopes of one day reaching her goal of becoming a school psychologist for an elementary school. She believes that assisting children consistently brings her joy and happiness to watch them succeed.



SCHOLAR ABSTRACTS AND BIOGRAPHIES

Gaby Widjaja

Mentor: Dr. Amy Dao

Title: Beyond Individuals: Understanding COVID-19 risks through the lens of Multigenerational Households

Abstract:

With 103,436,829 confirmed cases and 1,181,607 COVID-19 deaths in the U.S., of June 2023, SARS-CoV-2 (COVID-19) has been proven to be highly contagious and fatal. However, despite these statistics, considerable differences exist among the general public regarding the perception of risks associated with COVID-19, which consequently influences individuals' health behaviors and protective actions. This study examines what crowded multigenerational households, defined in this project as a living arrangement where three or more generations cohabitate, view as risks and how they navigate these feelings of vulnerability during the COVID-19 pandemic. Using a constant comparative approach, I analyze data from interviews with 68 Californian multigenerational households, focusing on households' perceptions of risk, how risks can be compounded, and some of the harm reduction strategies employed by individuals living in crowded households. Findings show that individuals are mindful of household members' vulnerabilities, with age, preexisting health conditions, family roles and obligations, and public-facing occupations driving high COVID-19 vulnerability perception. These insights underscore the social nature of risk perception within households, and understanding this may contribute to informing future outbreak communication strategies

Biography:

Gaby Widjaja is a first-generation Anthropology and Psychology undergraduate student at Cal Poly Pomona, who loves to learn beyond the traditional classroom setting. From participating in community-based research, academic internships, creative projects, and advocacy, she is privileged to be trained in ethnographic research, program evaluation, data analysis, and research dissemination. Gaby's McNair research project is focused on understanding what individuals living in potentially crowded living arrangements view as risks and how they navigate these feelings of vulnerability. Her other undergraduate research projects are interested in investigating how one's embodied identity and experiences shape their access to good health, disease, and risks. As she continues to evolve in her scholarly pursuits, her aspiration is to become part of projects that seek to improve understanding of health risks as they differ from one community to another.



SCHOLAR ABSTRACTS AND BIOGRAPHIES

Steven Wong

Mentor: Dr. Michael T. Giang

Title: Locus of Control and the Big Five Personality Traits Predicting Job Satisfaction

Abstract:

Research has often focused on connecting personality factors to job satisfaction, with neuroticism, conscientiousness, and extraversion among the most stable predictors. However, analyses largely focused on linear (vs. curvilinear) relationships among these factors, and locus of control as another factor is often overlooked. For instance, while conscientiousness has been commonly associated with increased job satisfaction, this is only at low to moderate levels; extremely high levels of conscientiousness lead to poor job satisfaction, suggesting a potential curvilinear relationship with job satisfaction. Additionally, researchers have recently been studying locus of control as a personality factor commonly linked to job satisfaction. That is, internal locus of control was positively associated with job satisfaction, while external locus of control was negatively associated with all reported sub-factors. Currently available literature either focuses on locus of control or other personality traits predicting job satisfaction rather than both. The present study examined the predictive (linear and curvilinear) relationship of the big five personality factors (openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism) and internal locus of control on job satisfaction. Using data from Wave IV (age 24-32) of the National Longitudinal Study of Adolescent to Adult Health (AddHealth; $N=5018$), multiple regression results showed that increased internal locus of control ($B=.157$, $p < .001$) and extraversion ($B=.094$, $p < .001$) predicted greater job satisfaction. In contrast, increased openness to experience ($B = -.124$, $p < .001$) and neuroticism ($B= -.152$, $p < .001$) predicted significant decreases in job satisfaction. Curvilinear regressions were conducted to determine if the predictive model could be improved. Among the six personality factors, results show that only extraversion demonstrated a significant curvilinear relationship with job satisfaction; that is, extraversion at low to moderate levels predicts increased job satisfaction ($B=.417$, $p < .001$), but at higher or extreme levels, it predicts decreased job satisfaction ($B= -.046$, $p < .008$). Implications will be discussed regarding personality traits and locus of control through linear and curvilinear lenses for job retention. By assessing personality, human resource management can derive utility from the study, improving the person-environment fit for employees.

Biography:

Steven Wong is a psychology major and is expected to graduate in Spring 2024. He transferred to Cal Poly Pomona from Fullerton Community College, where he received his associate degree in psychology. His current research examines the influence of personality and locus of control on job satisfaction. Implications of this research involve improving employee selection, retention, and job performance in organizations. He plans to pursue a graduate degree in industrial-organizational psychology, where he can obtain the foundational knowledge to become a research psychologist for the U.S. Government State Department. This position will give the opportunity for him to manage highly specialized staff in researching and implementing hiring and promotion assessments. He has applied to six graduate programs within the last six months, one of which is a Ph.D. program in industrial-organizational psychology.





Medal Recipients

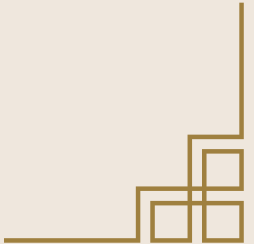
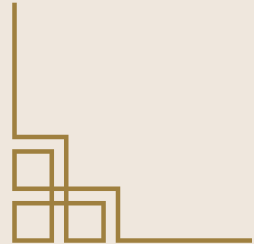


Gold

Veneese Brown Evans - Ph.D. / Integrative Pathobiology / UC Davis / 2023
Krista Marrero - Ph.D. / Neuroscience / UC Riverside / 2023
Glen Morrison - Ph.D. / Plant Biology / UC Riverside 2023
Amanda Riggle - Ph.D. / English / UC Riverside / 2023

Silver

Patricia Amoroto - Masters / Public Health / CSU Los Angeles / 2024
Brittany Banner - Masters / Education / CSU Los Angeles / 2022
Charles Bickham - Masters / Computer Science / USC / 2024
Issac Guzman - Masters / Mechanical Engineering / UCLA / 2020
Jocelyn Harrison - Masters / Social Work / Loma Linda University / 2020
Anthony Klaib - Masters / Aerospace Engineering / USC / 2023
Gerardo Montano - Masters / Business Administration / University of La Verne / 2015
Jennette Ramirez - Masters / American Studies and Ethnicity / USC / 2023
Diana Solis - Masters / Chicana/o & Latina/o Studies / CSU Los Angeles / 2021





Thank You



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Thank you, Dean Johnson!

