

UNDERGRADUATE STUDENT ABSTRACTS

Butte County Hmong Youth Wellbeing Mixed Methods Study

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Recently, there has been an alarming rise in youth suicide¹. For example, for U.S. youth aged 15 to 19, after a period of stability from 2001 to 2009, rates increased 57% from 2009 through 2017. Additionally, key indicators of suicide have increased, with almost 1 in 4 reporting seriously considering suicide, almost 1 in 5 reporting a plan, and almost 1 in 10 reporting an attempt². This mixed methods study examines suicidal thoughts and behaviors in Hmong youth. We will explore well-being experiences at school, connection with friends and family, engagement in physical activity, exposure to drugs and alcohol, attitudes about mental health, help-seeking behaviors, ethnic identity, and suicidal thoughts and actions. The study has three objectives: a) to explore suicidal thoughts and behaviors for youth who have versus who have not reported a suicidal plan in the last twelve months; b) to explore various psychological, social, and academic factors for those who have versus who have not reported a suicidal plan in the last 12 months; and c) to inform school-based prevention efforts in our community. A convenience sample of twenty-four Hmong youth were recruited through researcher connections with community-based organizations (mean age = 15.83; 50% female). All participants attended an after-school youth group and the community leader inquired about participation. Interested youth were provided the survey link to complete online during group time. Participants were offered a \$5 Dutch Bros gift card. Those who expressed interest will engage in an interview in fall of 2023. Thematic analysis will be used to examine patterns of meaning within the qualitative data. Quantitative analyses will be primarily descriptive; however, relationships

between variables will be examined for youth who reported a suicide plan in the last 12 months compared to those who did not. Unfortunately, 50% (n=8) of our participants reported having made a suicide plan throughout the last twelve months (missing data for 8 participants). We anticipate there will be noticeable differences between those who have and who have not reported a suicide plan in terms of psychological (e.g., identity), social (e.g., sense of belonging), and academic (e.g., academic stress) characteristics.

1. Curtin S. C., Garnett M.F. (2023). Suicide and homicide death rates among youth and young adults aged 10–24: United States, 2001–2021. *NCHS Data Brief*, no 471. Hyattsville, MD: National Center for Health Statistics. <https://dx.doi.org/10.15620/cdc:12842>
2. Centers for Disease Control and Prevention (2023). Youth risk behavior survey: Data summary & trends report. https://www.cdc.gov/healthyyouth/data/yrbs/pdf/yrbs_data-summary-trends_report2023_508.pdf

Contemporary migration of the Americas: A Viewpoint from Tijuana, Mexico

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Contemporary migration in the Americas has predominately been perceived as emigrants marching towards the US and Canada. However, relatively little is known as to what migration looks like in transit countries or in the modified migrant destination - the country in which migrants are starting to settle and considering staying in. Mexico, traditionally understood as an emigrant country, is a country full of internal migration, international immigration, and transit. Based on field and bibliographical research in Tijuana, Baja California, -one of the more important cities in international migration- we sought to develop a qualitative study on the aspirations, backgrounds, and conditions of international migrants currently in Tijuana. In essence, a survey was developed, yet unable to be employed due to institutional barriers, oversaturation, and overall difficulties in reaching

the migrant population. However, various revelations arose. Migrants in Mexico are coming in unseen numbers, with a much wider range in nationalities than ever before; now, not just central Americans are transiting (towards the US) and seeking to stay in Mexico. Venezuelans, Cubans, Haitians, Ecuadorians, Colombians, Nicaraguans, and even Angolans and other African nations have migratory presence in Mexico (although in relatively fewer numbers than Latin American countries). Mexico, in short, has transformed from an expelling country towards a country of destination, asylum, and huge transit.

Our research focus has shifted towards internal migration - a migration even more invisible and unaccounted for than international migration: that of Mexicans moving within national territory. Reasons for this shift include limitations in applying traditional methodology to international migrants, many of which are in refugee centers and non-governmental camps. But the predominant reason, is the revelation that this sector (Mexicans migrating to different parts of the country) has been much more prevalent, and is an uncontrolled phenomenon, which implies a political, economic, social and cultural toll on such a diverse country. In an era with growing violence, climate issues, high rates of urbanization, yet seemingly prosperous economic development with a generation of higher educational achievement, we see Mexicans as an extremely mobile population. Perhaps understanding the movements occurring within the country can even tell us much as to how institutions and society, are to react to international migration arriving in the country.

Using Internet of Things Design Project to Inspire Entrepreneur Mindset in Underrepresented Minorities in Engineering Programs

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Recent studies indicate that a significant portion of industry executives, approximately 51%, lack critical soft skills, such as problem-solving, critical thinking, communication, innovation, and creativity. Traditionally, many engineering programs often limit students' exposure to real-world problem-solving and experiential learning to Capstone courses, leading to a lack of well-rounded skills among recent graduates. Despite incorporating various methods to improve these skills, engineering programs may still fall short of allowing students to participate in genuine, open-ended inquiry activities that promote creativity and problem-solving [1].

To tackle this prevailing issue of soft skill deficit among recent engineering graduates, participants undertook an Internet of Things (IoT) project design approach to cultivate an entrepreneur mindset (EM) and promote self-reliance. EM in this work was defined as "The inclination to discover, evaluate, and exploit opportunities." The Internet of Things is a term used to describe a paradigm of systems consisting of devices, sensors, and processing units that connect and work together to communicate data over the Internet. Participants were required to propose, plan, design, and implement solutions to real-world challenges using an IoT-based design. To evaluate the outcome of this study, participants responded to metacognitive reflection prompts using Photovoice. Photovoice is a qualitative learning assessment tool used to collect and analyze data using a combination of photos with captions and reflections.

The proposed project in this study aimed to create a cost-effective security system tailored to college students, engaging an entrepreneurial and engineering perspective while collab-

orating closely with a professional. Through ideation, refinement, and creation, participants gained valuable insights into product development and the proactive approach required to bring ideas to life. This journey proved challenging yet exhilarating, culminating in the transformation of concepts into tangible realities. Besides fostering the development of new technical skills, the project also facilitated the growth of professional competencies. The study highlights the significance of cultivating an EM to equip engineering graduates for a dynamic and competitive professional landscape. The findings emphasize the importance of hands-on, open-ended inquiry activities in developing research skills and improving self-reliance among engineering graduates to enhance their overall preparedness for the workforce.

[1] Hadil Mustafa, "Promoting Entrepreneurial Mindset in Engineering Students Using IoT-Focused Project-Based Learning, ASEE 2023, Baltimore, MD

The Safety Coffin - Life Preserver or Capitalizing on Phobia in the 19th Century

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In 1868, inventor Franz Vesper organized an exhibition in Newark, New Jersey, to showcase his new invention: the Vesper Burial Case. 600 attendees paid fifty cents each to see the design, which featured a rope attached to a bell for the victim to ring for help if they were buried alive. Vesper's invention capitalized on the paranoia of possible victims being buried alive. Stories of wills written with directives to cut off limbs to confirm death and reprints of ads of victims being buried alive caused terror throughout the nineteenth century. This research project reveals that significant changes in industrialization, a lack of medical knowledge, and the growing commodification of the death industry explain this focus on fear. The project explores the relationship between designs like Vesper's Burial Case in advertising and taphophobia, the fear of being buried alive. It analyzes if the

phobia was exploited for profit or designed to meet genuine needs. For its methodology, an array of primary source materials are consulted, including newspaper clippings from the mid-19th century, including various prints of media, from patent designs to one text titled *Premature Burial and How It May Be Prevented* in 1905 and multiple accounts of unfortunate victims being buried alive. The evidence drawn from advertising and exhibits suggests that taphophobia was exploited. Vesper charged 50 cents: nineteen dollars in current funds, an immense amount at the time. The average person could not afford to view such luxury, suggesting the decision by Vesper and others to target wealthy patrons alone. A contradiction at the core of this phenomenon — that the general public believed in the necessity of safety coffins yet was not considered the target audience to purchase them — is compounded by the fact that there is no clear evidence of a safety coffin saving a single life. This is not an outdated fear; the legacy of this fear continues into the present, as safety coffins are commissioned currently, as evidenced by a 2014 patent. Further research is recommended to examine the safety coffin through the lens of ad campaigns for exploitation.

Activism and Spray Paint: Environmental Graffiti in Bogotá Colombia

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This article is a case study of ethnographic analysis on the interconnection between public art in the public urban spaces of Bogotá, Colombia, and its effect on legislation. This is an exploration study on how mural painting can impact public perception, specifically on the topic of environmental activism and the social commentary it produces in its wake. Mural painting and graffiti have long been used to disseminate messages to the viewing audience in pictorial images. Within the past decade, there has been an exponential increase in graffiti and mural painting in Bogotá centered on making

socio-political statements aimed to increase public awareness. This is due to the decriminalization of graffiti across Colombia, resulting in a hub of both local and foreign artists. Additionally, the utilization of graffiti within the context of environmental activism has been bolstered by the newly elected, more environmentally friendly focused president and vice president. After delving into the historical background and significance of environmental public art, the specific aspect that requires more research is the difference between mural artists and taggers. Both types of artists play an important role in disseminating environmental messages. However, they use very different methods, with varying levels of legality. Throughout our preliminary research, it is clear that these groups of artists are somewhat divided. An additional goal of this case study is now to discover, through further in-person ethnographic research, if this differentiation impacts the effectiveness of public art as a means of environmental activism. This will be determined by conducting in person interviews with both the general public, and the artists themselves. We hope that this study will provide a foundation for understanding how art changes public perception, and seek to determine what the long term implications of public art based education can have on resolving community stumbling blocks. This study is still in progress, and further research is required. Both in person fieldwork and additional literature studies will occur throughout the next six months. This study will ultimately result in a short documentary, produced with the assistance and technology of the Advanced Laboratory for Visual Anthropology at Chico State.

Qualitative Evaluation of a Food Product Analysis Project Among College Students in the United States and Ecuador

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Faculty Mentor: Keiko Goto

Collaborative Online International Learning (COIL) aims to foster cross-cultural student

competence through the development of multi-cultural learning environments that bring professors and students together from two countries. This study examined the impact of a food product examination project through COIL on global and inter-cultural communication and collaboration skills among students who are enrolled in food and nutrition courses in the United States and Ecuador. Students taking a semester-long nutrition course at a university in California and students in a culinary art course in Ecuador worked in groups to complete a food product examination project. The project focused on examining five Ecuadorian food products (hominy, potato, quinoa, plantain, and cassava). Students collectively developed “global” dishes utilizing these Ecuadorian products as part of a nutrition education initiative that helps target a specific population in Ecuador. Eleven qualitative in-depth interviews were conducted with both US and Ecuadorian students who participated in the project. The transcribed data were coded using thematic analysis. The themes that emerged from the analysis were examined, compared, and synthesized across the interviews. A qualitative evaluation and the authors’ experience revealed that food played an important role in enhancing inter-cultural communication and collaboration in three main ways. First, it was found that food was an effective icebreaker and a tool for team building exercises or activities. Second, food also played a role in learning about the culture and identifying the similarities between the two cultures in a unique way. Finally, experiential learning through food, such as cooking and tasting food, appeared to help students stay motivated about the project and make the group project more enjoyable. Our findings suggest that food may be used as a tool for cross-cultural communication and collaborative learning in higher education. Further research is needed to effectively evaluate learning outcomes of food-related COIL projects.

The Crucial Connection: Exploring the Impact of University Housing on Student Success and Retention

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University housing plays a critical role in shaping students' college experiences, particularly for first-time freshmen transitioning away from home. While recent research has focused on aspects related to student success and the first-year experience, there has been minimal exploration of the influence and impact of housing. University housing's role in contributing to student success has often been overlooked or downplayed, with its potentially significant impact on students often underestimated. This research explores the impact of university housing on student success and retention, emphasizing its interconnected nature with various aspects of students' lives. This research does not oppose or contradict most of the current studies on student success; instead, it serves to address a literature gap, specifically focusing on the significant influence of university housing. The study employs a qualitative research approach, using one-on-one interviews with former residents to gain insights into their experiences. The sample size for the interviews was limited, comprising only 12 former residents. Despite the small sample size, it encompassed individuals from various academic years, current residents, as well as those who had served as resident advisors and desk attendants. Two case studies were selected for a more comprehensive and in-depth analysis with the aim of gaining a broader perspective. These two interviews revealed themes related to positive and negative peer influence, the significance of housing location, and the role of Resident Advisors (RAs). These themes are supported by existing literature, highlighting the importance of university housing in fostering a supportive campus environment and promoting student retention. The paper concludes with suggestions for enhancing university housing: 1) creating inclusive communities, 2)

implementing Living-Learning Communities, 3) improving RA training, and 4) promoting healthy behaviors. By recognizing the pivotal role of university housing, institutions can enhance students' overall college experiences and support their academic and personal growth.

The Social Pressure First-Generation Students Have with Families to Not Fail

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This study focuses on the social pressure experienced by first-generation students within their families when it comes to pursuing higher education. The research aims to gain a deeper understanding of their perspectives, motivations, struggles, and challenges in order to enhance support from educational institutions. The unique aspect of this study lies in its focus on how family dynamics and social factors in California State Universities influence the academic progress of first-generation students. To gather firsthand insights, qualitative methods such as surveys and questionnaires will be conducted. The primary objective is to identify recurring themes and patterns in the daily pressures faced by students, enabling the provision of appropriate services and information for their success. Anticipated outcomes include shedding light on significant issues and devising quick solutions to prevent future disturbances. The study also underscores the aspirations of first-generation families who view education as a pathway to a better life. Moreover, the financial burdens and personal sacrifices made by family members further compound the pressure on students to advance academically. Parental involvement is also recognized as a crucial factor contributing to positive student achievement. Existing research supports the notion that social pressure not only impacts the mental health of first-generation students but also their academic performance. These students often navigate a difficult environment, feeling inadequate, lacking support systems, and fearing disappointment. They

also struggle with the fear of being perceived as inadequate. Recognizing and addressing this pressure is essential to facilitate academic success and promote the overall mental well-being of first-generation students, enabling them to reach their full potential. To address the implications of this study, specific strategies in various categories must be offered to provide academic and psychological assistance. The involvement and support of those around these students can foster a sense of belonging, strengthen them, and help them excel academically. Creating a supportive atmosphere that acknowledges their unique challenges can make a significant difference. Ultimately, this research was motivated by personal experience and is driven by the desire to create and promote diversity in higher education and to equip first-generation students with the necessary tools to combat societal pressures and overcome the world.