



The conference, *Promoting Inclusive Excellence Through Innovative and Creative Strategies*, is open to campus-wide and public attendance. Hosted by the College of Health and Human Development (HHD), the conference will showcase the diversity of disciplines in HHD. HHD students, staff, and faculty will offer workshops, panel discussions, papers, live research spotlights, posters, performances, installations, and exhibits. There will be awards for presenters, and cash prizes for students.

#### **Conference Dates and Hours**

November 17, 2022, 9 am - 5 pm

November 18, 2022, 9 am - 12 pm

#### **Organization Committee**

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## **EFFECTIVENESS AND FEASIBILITY OF A MULTIMODAL EXERCISE PROGRAM WITH WEIGHTED WALKING POLES FOR OLDER ADULTS WITH PARKINSON'S DISEASE**

Andrew Bartlett

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**ID:** OR01

**Purpose/Hypothesis:** To determine the feasibility/effectiveness of a 6-week multimodal exercise program with weighted walking poles for older individuals with Parkinson's Disease (PD). **Hypothesis:** Statistically significant improvement on all dependent variables. **Materials/Methods:** Six participants with Parkinson's Disease who were members of a Rock Steady Boxing program completed a multimodal exercise program (1-hour 2x/wk. for six weeks). Pre and post testing included: QoL (SF-20), balance, grip strength, gait speed, cardiorespiratory fitness, and physical performance. **Results:** Feasibility of the program was 91.8 %; Compared to baseline participants demonstrated improvements in left grip strength (68.53  $\pm$  26.77 lbs. vs. 66.21  $\pm$  24.78); overall decrease in time for Dual Task Timed Up and Go -4.14 (95% CI, -11.74 to 3.46) seconds; increased gait speed of 0.11 (95% CI, -.040 to 0.267) m/s; overall mean increase in steps on the recumbent bike of 72.66 (95% CI, -64.50 to 209.83) seconds. Furthermore, compared to baseline there was an increase in mean score for the following domains within the SF-20: Social Function (5.33  $\pm$  .816 vs. 4.5  $\pm$  1.51); Physical Function (12.33  $\pm$  4.27 vs. 11.83  $\pm$  3.76); Role Function (3.16  $\pm$  1.32 vs. 2.83  $\pm$  1.6); Mental Health (27.33  $\pm$  1.21 vs. 25.16  $\pm$  3.18). **Conclusions:** A six-week multimodal exercise program using weighted walking poles is feasible and although didn't show any statistically significant results, did demonstrate improvement in physical performance and QoL. **Clinical Relevance:** First study using a multimodal exercise program with weighted walking poles for individuals with Parkinson's Disease. Results provide support for using a multimodal approach for physical therapists who are treating older adults with Parkinson's Disease.

**Keywords:** parkinson's disease, older adults, rock steady boxing

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**Type of presentation:** Oral  
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## DETERMINING THE IMPACT OF A PILOT TO SUPPORT BLACK MATERNAL HEALTH PROFESSIONALS

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**ID:** OR02

**Background.** There is an alarming maternal mortality crisis among Black birthing persons in the United States. Professionals in Black Maternal Health support birthing families. Further, it is well known that health care environments can be toxic (systemic racism) to Black professionals and patients. Yet, there is minimal information on how Black professionals are being encouraged and mentored to continue supporting others. The objective was to determine the impact of a virtual peer support group among Black community maternal health professionals on preserving and prioritizing their mental health. **Methods.** This virtual mentoring project (7 sessions) was rooted in community partnered participatory research principles and led by a Black-women community based organization and a Black woman academic partner. A 17 item pre- and post-survey was used to query about building confidence, creating space for intergenerational bridge building, engendering a growth mindset, and leveraging Black cultural principles (e.g., community, storytelling, mothering). **Results.** There were 14 participants (100% female, spanning across 4 generations; 93% Black) which included 10 mentees and 4 mentors (2 mentors with 3 mentees). Approximately, 86% attended all sessions. Responses evolved from pre- to post- which reflected a deeper understanding to the concepts such as, intentionally and constantly growing forward. There were immediate life changes among participants such as job promotions (n=4), increased visibility as a public speaker (n=3), recognitions as champions (n=2) in Black perinatal health, and overall increased intentionality and frequency of self-care. **Conclusion.** These findings help inform future programs to support Black perinatal professionals through culturally congruent mentoring.

**Keywords:** perinatal care; mentoring; community partnered participatory research

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## VALORIZATION OF VEGETABLE BYPRODUCTS FOR NEW PRODUCT DEVELOPMENT

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### **ID:** OR03

Food processing waste is a global problem that needs to be addressed. The Food and Agriculture Organization of the United Nations (FAO) estimated that one-third of the global edible food produced for human consumption, or 1.3 metric tons, is wasted each year. In developing and industrialized countries, food losses and waste, including edible industrial food byproducts, cost approximately \$310 billion and \$680 billion per year, respectively. The main goal of this project is to create new and innovative sustainable food products with added health benefits using the food processing waste generated by some of the major fruit and vegetable processing and production industries in California. This project is a collaboration between faculty from Cal Poly Pomona, Cal Poly San Luis Obispo and CSUN. Our approach is to use traditional fermentation of food processing byproducts to create a sustainable kombucha drink. First an enzymatic treatment to hydrolyze carrot pomace will be developed and then the hydrolyzed carrot pomace will be used as a substrate to make a carotene rich kombucha. This project got funding from the CSU Agricultural Research Institute (ARI).

**Keywords:** food waste, kombucha, byproducts, traditional fermentation

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## **FORCE-VELOCITY PROFILES DURING LOWER EXTREMITY EXTENSIONS**

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**ID:** OR04

**INTRODUCTION:** Lower extremity extensions (LEE) involve the simultaneous extension of the hip, knee, and ankle. During LEE, an inverse relationship exists between the amount of force one can produce with the limb and speed at which one can move it. Strength and conditioning professionals use this relationship to prescribe training parameters to improve athletic performance. Yet it is unknown if this relationship is task-specific or an inherent property of the individual. We hypothesized that different modes of testing would yield different force-speed relationships during LEE. **METHODS:** We measured the force and velocity of LEEs on an isokinetic dynamometer using isokinetic (same speed) and isotonic (same resistance) modes. For the isokinetic mode, we used speeds of 4, 6, 8, and 10 cm/s. For the isotonic mode, we used resistances of 35, 50, 55, and 60 kg. We plotted the force-velocity relationships for each mode. We calculated the linear slope of each mode and compared them to one another. **RESULTS:** The slope of the force-velocity relationship for the isotonic and isokinetic modes were  $-0.9277$  and  $-0.0371$ , respectively. **DISCUSSION:** The results suggest that the LEE force-velocity relationship is task-specific and not an inherent property of the limb. The practice of using a LEE force-velocity relationship to set strength and conditioning training parameters is questioned.

**Keywords:** lower extremity; force-velocity relationship; isokinetic

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## **HOW IT STARTED...HOW IT'S GOING: TRANSFORMING HIGHER ED STUDENT SUPPORT FROM GATEKEEPING INTO APPLIED CRITICAL EQUITY**

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**ID:** OR05

Higher education traditionally considered one of its primary roles to be that of "gatekeeper," - enthusiastically weeding out students who seemingly could not prove their academic worth measured by conventional standards (i.e., GPA, time to graduation, etc.). For over a half-century Social Justice movements and imperatives, from outside and within academia increasingly have focused on institutional accountability for successfully educating university students. Though now viewed as commonplace, virtually all student support services were born out of necessity. For students who were otherwise marginalized and excluded, those navigating hostile campus climates, such support services functioned as both refuge and spaces of affirmation. These foundational support services included advisement, tutorial, recruitment, mentoring, counseling, cultural and other support centers, writing programs, and more. During the past decade, data-informed assessment of student success has become the prevailing standard. In particular, Applied Critical Equity's use of racially disaggregated data is now helping guide and develop student engagement opportunities –all with the goal of ensuring the greatest impact, and the most effective means for improving student success. Learn more about the process for developing and implementing such holistic student-centered asset-based approaches.

**Keywords:** applied critical equity student success

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## ON CONCEDED DEFEAT

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**ID:** OR06

Losing happens. Competitive sport centrally involves an effort to determine the relative abilities of contestants. Despite some exceptions, such as in the case of ties or draws, the results of competition establish winners and losers. Without losing, there is no competitive sports. Despite not wanting to lose, almost every athlete, even the most successful and iconic, loses. And so, what does an athlete do about losing? Part of being a good competitor is learning to deal with loss; learning to concede defeat. Conceding can happen during, at the conclusion, or even after the contest. But what does it mean to concede defeat and how should it be done? While much focus is on the outward expression of concession, the more integral part is an athlete's internal recognition and acceptance of losing. Learning to compete well entails learning to concede defeat. It is a skill in itself that can be developed that has important implications for moving forward after loss. The ability to concede defeat at the end of a competition influences and informs how an athlete engages competition throughout the contest. Finally, if sport contributes to human culture and well-being, then learning to concede defeat is a significance part of that contribution. I will conclude by identifying how the skill of conceding defeat applies beyond the realm of competitive sport.

**Keywords:** sport, competition, losing, resilience, community

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## A NOVEL RESIDENT OUTREACH PROGRAM IMPROVES STREET TREE PLANTING OUTCOMES IN LOS ANGELES

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**ID:** OR07

Urban tree planting is a key climate change resilience strategy for many municipalities, but remains challenged by establishment mortality in semi-arid regions. Street trees offer shade benefits to adjacent structures and pavement, and enable public works departments to implement heat island reduction interventions to exposed communities. But in Los Angeles, resident approval and written agreement to water for 3-5 years is required to plant street trees in residential public rights of way. Historically, 10% of residents contacted agreed to adopt street trees, and 50% of trees planted survived. Community engagement strategies, shown to improve tree acceptance rates and survival elsewhere, had not been tested here. This mixed-methods evaluation of a street tree planting and public education project in 2018 evaluated a novel youth outreach strategy to engage residents. Regular watering was provided post-transplant for varying periods. Residents were surveyed and project partners were interviewed; tree health was assessed visually. Resident feedback on the engagement strategy was strongly positive. Residents surveyed demonstrated measured learning outcomes, and satisfaction with education was associated with improved tree survival. Project partners identified numerous co-benefits, primarily among youth educators, and revealed an increased capacity for future urban greening work. Univariate logistic regression identified tree species, weeks of watering, and drought exposure as predictors of tree health ( $p < .05$ ), but in a multivariate model, only certain tree species were significant ( $p < .05$ ). This evaluation identifies multiple strategies to inform future tree planting projects, increase street tree acceptance and establishment survival, and support community co-benefits.

**Keywords:** climate change resilience, community engagement

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## STROKE EDUCATION TO NURSES IN ARMENIA: A PILOT STUDY

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**ID:** OR08

**Purpose:** The purpose of this study is to evaluate the impact of evidence-based disease focused educational workshop in enhancing nursing care of stroke management clinical knowledge and competencies amongst nurses in Armenia. **Background:** The Stroke Initiative Advisory Taskforce for Armenia (SIATA), the Stroke Council, the National Institute of Health (NIH) of Armenia have established ongoing, collaborative, structured clinical training modalities for the neurologists practicing in the country, thus; enhancing the knowledge base and understanding of the physicians with evidenced based clinical practice standards and treatment strategies. These practice advancements have reflected positively on patient care outcomes. However, there has been no attempts to provide the nursing staff with relevant continuing education opportunities. Thus, there was a gap in knowledge base advancement amongst the nursing community. **Methods:** This was a pilot study delivered from USA to Armenia via Zoom platform. The event was promoted on the NIH and MoH websites. Pre and post program design was used. Data was collected on Qualtrics. An 8 hours curriculum was delivered over four weeks by three expert nurse clinicians. **Results:** 43 nurses took pre and post-test. Pre-test 5.8/12 and post-test 6.1/12. The results did not demonstrate significant improvement. **Conclusion:** Remote virtual education was well received by the nurses. Other culturally specific factors such as nurses' proficiency in multiple choice test taking strategies, the role of the nurse, the scope of nursing practice and the health care delivery system should have been taken into consideration when selecting the evaluation tool.

**Keywords:** stroke education, nursing, armenia

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## EXPLORING THE ROLE OF ENVIRONMENTAL HEALTH IN THE HEALTH ADMINISTRATION COLLEGE CURRICULUM

Jennifer Newman; Frankie Augustin; Jonathan Watts; Eric Shanazari

*Cal State Northridge | Health Sciences Department*

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**ID:** OR09

The COVID-19 pandemic is teaching health administration students (HA) in real time that healthcare administrators must prepare a coordinated and multi-disciplinary response to protect population health, all of which includes an understanding of environmental health and safety (EHS). This grant-funded research project explored the value of merging the disciplines of EHS and HA. The specific aims of the study were to: (1) Bring awareness of the glaring gap in the HA curriculum; (2) change the postsecondary undergraduate curriculum to include required and relevant topics in EHS; (3) change the way we prepare HA students to bring a better-prepared graduate for the healthcare workplace; and (4) provide awareness of EHS, which includes clarifying the purpose, the different job positions found in the discipline, and the interactive role of EHS in HA. Methods- Exploratory interviews were conducted with 10 HA practitioners and 10 EHS practitioners who work in a hospital or clinical setting. Audio recordings of the interviews were transcribed and coded using MAXQDA software. Thematic Content Analysis (TCA) was used to identify common, emergent themes. Results- Four major themes emerged from the interviews: Gaps in (a) the interdisciplinary understanding between HA and EHS practitioners, as well as (b) undergraduate and graduate education curriculum, (c) A need for more collaboration between HA and EHS professionals, (d) Recommendations to increase the breadth and depth of interdisciplinary activities and trainings for HA for curriculum and workplace activities and training. Discussion- Recommendations to fill these gaps in the HA workforce's interdisciplinary understanding of EHS include supplementing and reinforcing the existing curriculum to incorporate more opportunities for HA students' exposure to the EHS topics and their relevance to HA roles.

**Keywords:** environmental health and safety, health administration, curriculum, inter-professional education

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**Type of presentation:** Oral  
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## INVESTIGATION OF RESEARCH SUPPORTS GUT MICROBIOME WELLNESS IN PHYSICAL THERAPY (PT)

Beth Phillips; Earl Lopez; Ashley-Mae Puckett; Morgan Francis

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**ID:** OR10

**PURPOSE.** Investigation of scientific literature regarding effects of the gut microbiome (GM) on disease states and overall health, including lifestyle factors modulating GM. **SUBJECTS.** Conditions for subjects investigated included effects of aerobic and resistance exercise on GM, effects of diet on GM, and the relationship between the GM and the following diseases: Obesity, Rheumatoid Arthritis, Parkinson's, Alzheimer's, Diabetes Mellitus, and Covid-19. **METHODS/MATERIALS.** The integrative review utilized the following search engines: Google scholar, PubMed, CSUN OVIATT library and PEDro. **Keywords:** gut microbiome, microbiota, gut microbiome and: inflammation, resistance exercise, endurance training, inflammatory disease, autoimmune disease, and diet. **RESULTS.** Inflammation is present in chronic diseases. GM is demonstrated to modulate inflammation. Dysbiosis (microbiome imbalance) underlies and progresses a variety of conditions/diseases treated within the scope of PT including: Obesity, Alzheimer's, Parkinson's, Rheumatoid Arthritis and Diabetes. Gut-related symptoms and the GM affects severity of Covid-19. **Exercise.** Acute exercise temporarily alters GM, exercise creates GM similar to healthy controls and there's a positive general trend of increased anti-inflammatory and decreased pro-inflammatory bacteria. **Diet.** Whole plant food fiber, and Mediterranean, vegan, and vegetarian diets are beneficial to GM and decreasing inflammation. Western and Ketogenic Diet reduces beneficial bacteria and disrupts the intestinal barrier impairing immune function. **CONCLUSIONS.** There's a strong relationship between gut microbiome (GM) and disease states. Plant based/high fiber diets with consistent exercise promotes healthy GM. Lifestyle choices modulate GM, directly affecting creation/mitigation of inflammation and disease. PTs can positively influence patients' wellness outcomes through promotion of exercise and gut health education.

**Keywords:** gut microbiome, inflammation, autoimmune disease, exercise, diet

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**Type of presentation:** Oral  
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## IMPACT OF COVID VARIATIONS IN SKILLED NURSING FACILITIES IN CALIFORNIA AND LOS ANGELES COUNTY

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**ID:** OR11

The SARS-CoV-2 COVID-19 pandemic has profoundly impacted skilled nursing facilities (SNFs) in the United States. The vulnerabilities of a medically fragile population increased profoundly with the lack of guidelines to protect the health and welfare of SNF (Skilled Nursing Facilities) residents and workers during a global pandemic. Official reports of infectious diseases by SNFs must be consistent and accurate. It is paramount that governmental and non-governmental health agencies, hospitals, and nursing facilities collaborate with healthcare providers, public health professionals, and officials to ensure reported data are accurate, organized, and coherent for any surveillance system to be trusted. Early in the pandemic, SNF reporting was dysfunctional, discrediting the skilled nursing system; dismantling relationships among health care providers and public officials, and discrediting the skilled nursing system; dismantled relationships among health care providers and public officials; and created mistrust among residents, families, and staff. As the pandemic progressed, the ability or willingness of SNF administrators to report accurate outcomes became conspicuous. Data fidelity is essential to guide decisions that are made by SNFs administrators in response to COVID-19 incidence and outcomes. We conducted a longitudinal study to review and evaluate 25 months (about 2 years) of pandemic reporting data for SNFs in Los Angeles County against SNFs in California. Our results indicate that SNFs reported illogical and inaccurate COVID-19 outcomes among staff and residents. As a result, SNF operators were unprepared to assess and manage the spread of COVID-19 among residents and staff, resulting in preventable cases and deaths.

**Keywords:** covid-19, skilled nursing facilities, data fidelity

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**Type of presentation:** Oral  
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## REVIEW OF MINDFULNESS-BASED STRESS REDUCTION INTERVENTIONS TO REDUCE STRESS AND BODY MASS INDEX, IN PARTICULAR AMONG COLLEGE STUDENTS

Mirna Sawyer; Ashlyn Southerland; Liana Gutierrez

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**ID:** OR12

Mindfulness-based stress reduction (MBSR) is an 8 week therapeutic treatment that includes meditation, yoga, and other mindfulness activities to reduce stress-related outcomes and promote healthy emotional regulatory behaviors. MBSR interventions have been widely tested over the past decade using a variety of formats, outcome measures, and settings. However, most MBSR interventions have targeted non-Hispanic, White, female, and middle to upper class participants. Purpose: A systematic review of the literature was conducted using PRISMA guidelines to examine the efficacy of (1) MBSR to reduce body mass index (BMI) and/or perceived stress, and (2) MBSR interventions that lasted less than 8 weeks, and (3) MBSR interventions targeting college students. Inclusion criteria included MBSR articles: with perceived stress or BMI as outcomes, that targeted college students, and/or tested an MBSR of <8 week duration. A total of 24 articles were reviewed. Results of the review revealed that (2) MBSR interventions show mixed efficacy in terms of BMI and perceived stress as outcomes (2) a lack of efficacy of MBSR interventions has been attributed to low sample sizes, short follow-up periods, and absence of rigor in intervention design and/or protocol, (3) generalizability of MBSR effectiveness also in question due to lack of diverse participant pool across studies, and (4) some evidence that shorter length mindfulness based interventions may be as effective as the longer 8 week MBSR. Conclusion: This review identified promising aspects as well as potential challenges for conducting MBSR interventions to reduce perceived stress and BMI among college students.

**Keywords:** mindfulness, stress, body mass index, college students, interventions

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## RELATION BETWEEN RESTRICTED AND REPETITIVE BEHAVIORS AND ANXIETY IN AUTISM SPECTRUM DISORDER: A META-ANALYSIS

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**ID:** OR13

**Background:** Restricted and repetitive behaviors (RRBs) are increasingly being reported to limit the social adaptability of children with autism. **Method:** Three databases (PubMed, PsycINFO, & Web of Science) were selected to conduct a systematic review to examine the consistency in which theoretical frameworks and instruments have been used to evaluate the presence and impact of RRBs in young children who may have ASD. **Results:** Among the 36 articles examined in this review, young males represented 78.5% of the totality of participants (n = 62,339). Approximately one-third of the studies (n = 11) provided an explanation of RRBs through utilizing a theoretical framework). With respect to instrument utility, of the 35 instruments recorded, the Autism Diagnostic Observation Schedule (ADOS) was most frequently used. **Conclusions:** The ADOS and the Autism Diagnostic Interview – Revised (ADI-R) are highly revered as they both are consistently referenced as “a gold standard.” However, due to the expensiveness of those assessments, they are underutilized, likely among vulnerable populations (e.g., economically disadvantaged, ethnic minorities; LGBTQ+), as many practitioners and parents cannot afford access to them.

**Keywords:** autism, children, systematic review

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**Type of presentation:** Oral  
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**ETHNIC DIFFERENCES IN THE ASSOCIATION BETWEEN INDIVIDUAL AND CUMULATIVE  
ROLE TRANSITIONS AND PAST 30-DAY SUBSTANCE USE; FINDINGS FROM A DIVERSE  
CALIFORNIA COLLEGE SAMPLE**

Abnous Shahverdi; Linn Dahlman; Sarah Alhassan; Jorge Vigil; Myriam Forster; Bethany Rainisch

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**ID:** OR14

**Background:** The college years are characterized by multiple role transitions (i.e., dating, employment, parenting) and elevated risk for substance use. Research examining whether transitions elevate risk for substance use often do not account for a family history of substance use or explore ethnic differences in these associations. We assessed whether role transitions increase frequency of days students use substances and any ethnic differences in this association, adjusting for covariates. **Method:** Data are from students (N=819, age 18-26) participating in a substance use prevention program at CSUN. Generalized linear models assessed associations between individual and cumulative transitions and past 30-day alcohol, nicotine (vaping), and marijuana use controlling for age, gender identity, ethnicity, and a family history of substance use. **Results:** Starting a relationship, breakups, moving in with a partner, and losing a job, were independently associated with increased days using alcohol, nicotine, and marijuana. When examining cumulative transitions, every additional transition was associated with an increase in days using alcohol (IRR 1.24, 95% CI: .88-2.82), nicotine (1.17, 95% CI: 1.11-1.47) and marijuana (IRR: 1.29, 95% CI: 1.21-1.48). Multiracial and Asian Pacific Islander students reported more days vaping and drinking alcohol than other ethnic groups with the same number of transitions. Non-Hispanic White students with multiple transitions reported significantly more days using marijuana than other ethnic groups with a similar number of transitions. **Conclusion:** We recommend campus substance use prevention programming address the stress associated with young adult role transitions and consider cultural influences in stress management and substance use behaviors.

**Keywords:** substance use, role transitions, college students, ethnic differences

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**Type of presentation:** Oral  
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## **APPLYING SYSTEMS SCIENCE TO ADDICTION HEALTH SERVICES RESEARCH: A STUDY OF SERVICE PROVIDER NETWORKS AND ACCESS TO CARE**

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**ID:** OR15

**Background/Aims:** Research in the HIV and mental health fields suggests that the structures of health and human service provider networks affect access to care. We applied social network theory to study whether certain types of provider networks leads to greater access to and engagement in treatment for opioid use disorders (OUD). **Methods:** We created an agent-based model to simulate people getting diagnosed for an OUD, initiating a comprehensive package of services, and continuing in treatment over the course of one year. We tracked access to treatment and retention in four networks made up of general healthcare and specialty care providers based in the central Los Angeles area. The networks varied in their structure, ranging from a network where links between providers are at random, a hub and spoke, network where opioid treatment programs occupy a central position, and a network with a clique structure in which all providers are connected. **Results:** Preliminary results suggest that network structures impact both linkage and retention in OUD care. The ,hub and spoke, network results in a higher rate of linkage to care, while the clique network appears better equipped to provide comprehensive care for patients with multiple needs. In addition, patients in the clique network have longer retention in care. **Conclusion:** The impact of provider networks is an understudied area in addiction health services. The application of agent-based modeling to addiction health services research is innovative and can help researchers test hypotheses about the role of provider networks on patient outcomes.

**Keywords:** agent-based modeling, access to care, opioid use disorders

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**Type of presentation:** Oral

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## **ANXIETY IN DANCERS: A MULTIFACETED PSYCHOLOGICAL, PHYSIOLOGIC AND BIOMECHANICAL INVESTIGATION**

Paula Thomson; Danielle Jarvis; S. Victoria Jaque

*Cal State Northridge | Kinesiology Department*

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**ID:** OR16

This multi-disciplinary study examined dancers with/without a clinical anxiety disorder. 255 dancers provided informed consent (IRB approved) and completed self-report measures (Beck Anxiety Inventory, Coping Strategies under Stress, Rumination-Reflection Questionnaire, Passion Scale, and Difficulty with Emotion Regulation). A subsample participated in a biomechanical fatigue study (n=35) and a heart rate variability (HRV) study (n=60). Three-dimensional motion capture system was used to examine joint kinematics and ground reaction forces before and after dancers performed a dance sequence to reach a fatigued state. The Vivometric LifeShirt<sup>®</sup> was used to examine resting HRV. MANCOVA and repeated measures ANOVA were conducted to determine differences between dancers with and without an anxiety disorder. Regression was utilized to determine predictive factors for anxiety. Dancers with an anxiety disorder had significantly more rumination, difficulty regulating emotions, and emotion-oriented coping under stress. Resting HRV results suggested that dancers with an anxiety disorder were more sympathetically activated with less parasympathetic (vagal) control. They also reached a fatigued state sooner and demonstrated a stiffer landing after fatigue compared to dancers without anxiety who demonstrated a softer landing when fatigued. Rumination and less task-oriented coping explained 20.9% of the variance in anxiety. Emotion-oriented coping, difficulty with emotion regulation, and avoidant coping (negative direction) explained 25.9% of the variance in anxiety. This multifaceted study identified different psychological, physiologic, and biomechanical characteristics in dancers with and without an anxiety disorder. Addressing these diverse, yet interconnected factors, will hopefully diminish the negative effects of clinical anxiety and promote greater complexity in dance science research.

**Keywords:** anxiety, biomechanics, dance, heart rate variability, psychology

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**Type of presentation:** Oral  
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## **ETHNICITY, ADVERSITY, CREATIVE PROCESS, AND CREATIVE IDENTITY IN A COLLEGE AND COMMUNITY SAMPLE**

Paula Thomson & Sarah Victoria Jaque

*Cal State Northridge | Kinesiology Department*

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### **ID: OR17**

This study (N = 524) examined the relationship between ethnicity, adversity, and creativity. In this cross-sectional IRB approved college and community study, five self-report measures were completed: biographical screener, Adverse Childhood Experience Questionnaire, Experience of Creativity Questionnaire (ECQ), Short Scale of Creative Self (SSCS), and Traumatic Event Questionnaire. Four major ethnicity groups were compared: Black (14%), Asian (22%), White (38%), Latinx (25%). Cumulative traumatic events, creative personal identity, creative self-efficacy, and most creative processing variables were similar across the four ethnicity groups. The experiential creative process, distinct experience, was significantly higher in the Black and Asian groups compared to the White group. Findings related to specific childhood adversity and adult traumatic experiences did indicate the likelihood of different group membership, with the Black group experiencing higher rates of childhood physical abuse, physical neglect, parental separation, family member incarcerated, witnessing a traumatic event, and in danger of losing their lives. The White group had a higher prevalence rate of a family member struggling with a substance abuse and suffering a mental illness. The Asian group had more likelihood of experiencing childhood emotional abuse. A unique finding in this study is that creative self-efficacy was predicted by the experiential creative process, power and pleasure, and creative personal identity was predicted by creative centrality. Neither ethnicity nor cumulative trauma were significant predictors for creative self-efficacy and creative personal identity. Engaging in creative activities may promote well-being and provide a platform to reduce inequalities. The creative self is not limited by adversity or ethnicity.

**Keywords:** adversity, creative personal identity, creative self-efficacy, creative processing, ethnicity

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**Type of presentation:** Oral  
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## **POSTURAL ADJUSTMENTS DUE TO INCREASED LOAD DURING THE BARBELL BACK SQUAT EXERCISE**

Jose Diaz & Riley Stanford

*Cal State Northridge | Kinesiology Department*

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**ID:** P01

**INTRODUCTION:** The barbell squat exercise puts demand on the lower extremity musculature by creating torque about the ankle, knee, and hip joints. The purpose of this computer simulation study was to test the tacit assumption that one performs a squat the same way regardless of load. We hypothesize that postural adjustments will be necessary with increased load to keep the system (lifter plus barbell) center of mass (sCOM) within the base of support (BOS). **METHODS:** MotionGenesis™ software and published anthropometric data was used to construct a mathematical model of a lifter (height = 1.8 m; weight = 85 kg). Ankle, knee, and hip joint angles, along with the location of the sCOM were determined at the bottom position of a squat. The barbell mass was systematically increased from 0% to 200% of the lifter's body weight and the resulting changes in joint angles necessary to maintain the sCOM location were calculated. **RESULTS:** Changes in load resulted in nonlinear (4th order polynomial;  $R^2 = 0.995$ ) changes in all joint angles. With an increase in load, a decrease in ankle angle corresponded to a linear ( $R^2 = 1.00$ ) decrease in knee angle and a linear ( $R^2 = .952$ ) increase in hip angle. **DISCUSSION:** Postural adjustments necessary to centralize the sCOM within the BOS with increased load may affect the torque demand about the lower-extremity joints. These results suggest that squat performance changes with different loads and subsequently the demand at each joint does not change proportionately with changes in load.

**Keywords:** squat, load, center of mass, posture

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**Type of presentation:** Poster  
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**Presenter(s):** Diaz, Jose

## IMPACT CONTINUOUS GLUCOSE MONITORING AND FACE TO FACE DIABETES EDUCATION PROGRAM AMONG UNDERSERVED TYPE 2 DM ADULT HISPANIC PATIENTS

Karen Carig; Yun Hong; Shristi Shrestha

*Cal State Northridge | Nursing Department*

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### ID: P02

The purpose of this study is to implement a diabetes education program and continuous glucose monitoring for underserved Hispanic adults living in the Santa Clarita Valley with Type 2 diabetes mellitus and measure the effect of the education program on lowering glycosylated hemoglobin (Hb-A1C). Type 2 diabetes mellitus (Type 2 DM) is a prevalent disease that affects a broad range of ethnicities and socioeconomic groups. In the United States, 37 million people have diabetes and consist of 11.3% of the United States population (National Diabetes Fact Sheet, 2022). Underserved and ethnically diverse populations have disproportionate health disparities, particularly with chronic diseases such as type 2 diabetes mellitus. Hispanic or Latino adults have more than a 50% chance of developing type 2 diabetes, develop it at a younger age, and have higher rates of kidney failure, diabetes-related vision loss, and blindness (Centers for Disease Control and Prevention, 2022). Thus, consideration for an effective and culturally sensitive platform for education delivery to this group warrants investigation. This change project was conducted as a part of a clinical assignment in the ABSN nursing program at CSUN. Educators will review patient records of glycosylated hemoglobin (Hb-A1C) glycemic control blood levels recorded in medical records within 8 weeks to determine baseline measurements, ranges and trends. Participants eligibility is determined by referrals from primary care provider for patients with elevated glycosylated hemoglobin (Hb-A1C) due to minimal change or failure in medication protocol control. Ten patients will be recruited from a primary care clinic to participate in face to face meetings with a diabetic educator and CSUN ABSN nursing students. According to empirical research findings, it is predicted that the diabetes education program and continuous glucose monitoring will result in a .5 to 1 point reduction in glycosylated hemoglobin (Hb-A1C). Implementing the diabetes face to face education program will result in favorable outcomes for glycemic hemoglobin control. It is indicated that referring to continuous glucose monitoring will be a strong predictor for compliance among the Hispanic population. Through the use of evidence-based practice and research, health care providers can examine the overall outcomes through adulthood. What did I learn? Future research is needed with more than one diabetic educator and a larger more diverse sample. Culturally appropriate continuous glucose monitoring and diabetes face to face education programs could be implemented in a variety of settings and diabetes education content in nursing curriculum should be strengthened.

**Keywords:** hispanic patients, diabetes mellitus, education program, bmi, a1c

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**Type of presentation:** Poster  
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## THE EFFECT OF PUBLIC UNIVERSITIES PROVIDING A REFRIGERATOR TO STORE EXPRESSED BREAST MILK ON THE COMPREHENSIVENESS SCORE OF LACTATION ACCOMMODATION POLICIES

Kalila Houston; Wyconda Cotton-Curtis; Zakariah Robinson; Christopher Rogers; Kacie C.A. Blackman

*Cal State Northridge | Public Health Sciences Department*

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**ID:** P03

Lactating students in academia confront a number of difficulties as they attempt to breastfeed during their studies. Out of 20 million college students in the US, who enrolled in 2019-2020, 4.3 million of them are raising a child, and lack accommodations to return to school after giving birth. California Assembly Bill 2785 requires an educational institution to provide lactation accommodations to express, store milk, and address other needs related to breastfeeding. This study aims to determine if breast milk storage resources affect the comprehensiveness of lactation accommodation policies in 4-year public universities in California. The inclusion was each institution was required to have a public accessible policy and/or Title IX for viewing. All policies within the California State University and the University of California Systems were reviewed via a policy audit tool. The lactation policies were assessed (yes=1/no=0). Descriptive statistics and an independent t-test were used to analyze the data. We audited the 23 California State University policies and the 9 University of California campuses through public access or student handbook. Only 19 of the 23 CSU and all 9 of the UC university policies were available. When comparing the score of schools that do not provide a refrigerator (mean=20.29), to the schools that did provide a refrigerator (mean=26.69) they are significantly higher ( $t=4.060$ ,  $p<0.05$ ). In conclusion, providing accommodations for the storage of breast milk will improve the lactating student's academic success and the child's health.

**Keywords:** student, lactation, accommodation, resources

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**Type of presentation:** Poster  
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## **IMPACT HYBRID PRE-DIABETES EDUCATION PROGRAM AMONG UNDERSERVED ADULT HISPANIC PATIENTS**

Sharon Kang; Cynthia Hartounian; Monique Plummer; Eve Bettman

*Cal State Northridge | Nursing Department*

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**ID:** P04

Currently 96 million individuals aged 18 years or older have pre-diabetes, comprising 38% of the adult United States population (National Diabetes Fact Sheet, 2022). It is well known that patients in underserved and ethnically diverse populations have disproportionate health disparities, particularly with risk factors such as pre-diabetes mellitus. Uninsured and underserved Hispanic patients with diabetes mellitus appear to be at the highest risk for preventable chronic diseases (Zhang J et al, 2021). Over their lifetime, Hispanic or Latino adults have more than a 50% change chance of developing type 2 diabetes, develop it at a younger age, and have higher rates of kidney failure, diabetes-related vision loss, and blindness (Centers for Disease Control and Prevention, 2022). Thus, consideration for an effective and culturally sensitive platform for education delivery to this group warrants investigation. A convenience sample of male and female adult patients between the ages of 18 and 74, with pre-diabetes were recruited. A total of 30 patients were invited and 15 enrolled. The Diabetes Prevention lifestyle intervention program is 3 months long whereby participants meet weekly via zoom for a group class. Materials and strategies are tailored to address ethnic diversity. Participants will be asked to engage in a minimum of 150 minutes of physical activity a week, retain an exercise log, and self-report their exercise and weight. The researchers will follow up with fingerstick glucose checks, weight checks, and vital signs at the beginning of the program, at week 3 and at week 6 to analyze program effectiveness.

**Keywords:** diabetes, prediabetic, blood glucose, weight loss

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**Type of presentation:** Poster  
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## SUNBRELLAPOWER SOLAR UMBRELLA

Rodica Kohn

*Cal State Northridge | Family and Consumer Sciences Department*

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### **ID:** P05

California State University Northridge is on its way to becoming a carbon-neutral campus by increasing its energy efficiency and using less nonrenewable energy. "Carbon neutral" means that the total amount of energy used by campus on an annual basis equals the amount of energy created on site. By converting solar energy into electrical energy, for each kWh generated by solar energy, the carbon dioxide (CO<sub>2</sub>) emissions that pollute the planet can be reduced by 600 grams. Los Angeles is the fourth city in the US (after Phoenix, Las Vegas, and Sacramento) with 73% sunny days. With this in mind, we designed solar umbrellas, unlike the ones on the market, that can be used in outdoor spaces here at CSUN, as well as at other universities, parks, cities, or remote areas where access to power is limited or nonexistent. Our design will provide seating for four people, electrical power to recharge mobile devices, and light during overcast conditions. We have incorporated custom-made batteries that are stored inside the base of the solar umbrella, capable of storing for a long period of time, long enough to offset overcast weather. Components: 1. The canopy will be covered with flexible solar panels, which can cover 80% of the canopy, instead of the standard panels of 2 % to 15 %. 2. Table to provide a work surface. 3. Two benches to accommodate 4 people, and space between the benches can accommodate two wheelchairs). 4. Battery to store power generated by the solar cells. 5. Material: aluminum (6061T), which can be anodized in a variety of colors.

**Keywords:** flexible solar panels, accommodate wheelchairs, used here at csun, other universities and cities, as well as in remote areas where access to power is limited or nonexistent.

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**Type of presentation:** Poster  
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## **TRAIL BLAZING AUGMENTED REALITY RESEARCH AND DEVELOPMENT INFRASTRUCTURE AT CSUN: SIZZLING PROCESSES, PROMISES, AND CHALLENGES**

Ana Patino; Jeremy Argueta; Gerard Samson; Elizabeth Matz; Jazlyn Armendariz; Jared Carillo; Kacie Blackman; Thomas Chan

*Cal State Northridge | Psychology Department*

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### **ID: P06**

Augmented Reality (AR) headsets allow the hands-free use of holograms to interact with the physical world. The Department of Defense (DoD) recently spent \$11 Billion on developing this valuable technology. Despite the promise, the equipment has high startup costs and steep learning curves, especially challenging at California State University, Northridge (CSUN), one of the nation's largest minority-serving institutions. The AWARE Project: Arming Wearable Augmented Reality Equipment was funded by the DoD to expand CSUN's AR capabilities. This presentation highlights the processes, promises, and challenges experienced with building an AR infrastructure at CSUN. Outcome I - Prior to receiving DoD funding, only 16 students and 4 faculty were involved in AR headset projects; AWARE expanded this number to ~70 students (count in progress) and 14 faculty. CSUN also gained 4 additional industry partnerships, 8 new research projects, and 11 new grant submissions. The processes underlying the increase in AR activities were primarily due to the removal of the high costs of the equipment along with "Hollywood and Home" recruitment strategies. Outcome II - Equipment purchased also led to recruiting and training of students, staff, and faculty from various interdisciplinary fields, including Art & Design, Mechanical Engineering, Psychology, and Kinesiology. New research skills were directly related to using AR technologies; however, online tutorial modules were underutilized compared to in-person training. Despite the COVID19 pandemic and challenges, funding AWARE has put CSUN at the forefront of immersive headset research and development. Overall, funding has led to new CSUN student and faculty engagement and promising industry partnerships.

**Keywords:** augmented reality, funding, promises, challenges, infrastructure, students

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**Type of presentation:** Poster  
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## COMPARING ACTUAL AND SIMULATED SHOULDER AND ELBOW KINEMATICS DURING REACHING TASKS

Hieu Pham; Nathan Kayanirad; Sean Flanagan

*Cal State Northridge | Kinesiology Department*

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**ID:** P07

**INTRODUCTION:** Reaching is a common activity of daily living that involves the use of the shoulder and elbow to place the hand at a specific location in space. Understanding normal elbow and shoulder kinematics (angular position, velocity, acceleration, and coordination) is essential for developing interventions to improve reaching in individuals with neuromuscular impairment (e.g., stroke). Mathematical modeling and computer simulation can further assist our understanding of human reaching and these interventions. The purpose of this study was to describe normal kinematics of reaching and compare the results to simulated reaching. **METHODS:** We used a 12-camera motion analysis system to track trunk, upper arm, and forearm motion during a reaching movement. We calculated joint motion as the relative motion between the trunk and upper arm (shoulder) and upper arm and forearm (elbow). MotionGenesis™ software and published anthropometric data was used to construct a mathematical model of a person reaching. Elbow and shoulder kinematics were compared between the experimental and simulated conditions for reaching directly forward, forward and downward, and forward and upward. **RESULTS:** There was reasonable agreement between simulated and experimental conditions for elbow kinematics, but not for shoulder kinematics. Coordination between the shoulder and elbow were not as smooth as predicted. **DISCUSSION:** Agreement between the elbow, but not the shoulder, kinematics suggest that the elbow moves in a predictable manner while the shoulder adjusts for real-world conditions. Interventions should be cognizant of this results when trying to improve reaching performance.

**Keywords:** biomechanics, simulation, modeling, kinematics, reaching

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**Type of presentation:** Poster  
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**Presenter(s):** Pham, Hieu

## THE EFFECTIVENESS OF A NUTRITION AND GARDENING CURRICULUM IN CREATING HEALTHIER HABITS IN ELEMENTARY SCHOOL STUDENTS

Alondra Valdez; Estefania Ramos; Ana Garcia

*Cal State Northridge | Marilyn Magaram Center*

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**ID:** P08

Creating habits at a young age is essential for one's lifelong development. Increasing childhood obesity rates are a primary concern; therefore, teaching children the importance of eating fruits and vegetables is crucial to establish a solid foundation in making balanced dietary choices. The virtual garden-enhanced nutrition education (GENE) curriculum, Sprouting at Home (SpAH), was created for fourth through sixth graders to increase students' nutrition and gardening knowledge, and fruit and vegetable consumption. The study adheres to a non-control pre-experimental study model; six lessons were administered over six weeks during Fall 2021. Surveys were administered before and after the intervention to determine student behaviors and knowledge changes. This data will be instrumental in determining the efficacy of this GENE virtual curriculum and also to compare with data from an in-person version of the curriculum (Sprouting at Schools), which will be implemented in Spring 2022. Data analysis for the SpAH is in progress.

**Keywords:** nutrition education, children, gardening

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**Type of presentation:** Poster  
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## SERVICE PROVIDER PERSPECTIVES ON COVID-19 IMPACTS ON SOUTHEAST ASIAN AMERICAN COMMUNITIES

Cynthia Robles; Danielle Co; Shane Esmundo; Melina Rodriguez; Brenda Romero; Katrina Silos; Talya Tessley; Mayra Zamora; Melanie Sabado-Liwag; Patchareeya Kwan.

*Cal State Northridge | Health Sciences Department*

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### **ID:** P09

Background: COVID-19 disproportionately impacts racial and ethnic minorities in the United States. Data on Asian Americans are often aggregated into one group, concealing any differences among subgroups. Our study centers on listening to the distinctiveness of these subgroups by focusing on 4 Southeast Asian Communities, (Cambodian, Filipino, Thai and Vietnamese) in Greater Los Angeles and the impact COVID-19 had and continues to have through the lens of community-based service providers. Methods: Semi-structured one-on-one interviews were conducted with key informants (n=6) representing the Cambodian (n=2), Filipino (n=1), Thai (n=2) and Vietnamese (n=1) communities in Greater Los Angeles. A thematic analysis of the interviews was conducted by the CSUN research team to better understand the impact of COVID-19 on the communities they serve. Results: Eight interconnected adversities, due to COVID-19, were identified in the four Southeast Asian communities. Those adversities included language barriers (n=6), health (n=6), COVID-19 information (n=6), socioeconomic status (n=4), family (n=3), immigration (n=2), access to technology (n=2) and geography (n=2). According to service providers, COVID-19 impacted all communities' mental health (MH), the means of impact were unique in that Cambodian Americans, and Vietnamese Americans, past war trauma was triggered while in Thai Americans and Vietnamese Americans financial stressors affected MH. Conclusion: The impact of COVID-19 in these Southeast Asian groups is multidimensional. This thematic analysis shows that although at surface, these communities have largely similar COVID-19 adversities, greater exploration shows distinctions in how these adversities manifest themselves in each community. Emphasizing the continual need to decluster Asian American groups.

**Keywords:** covid-19, southeast asian communities, distinctiveness

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**Type of presentation:** Poster  
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**PRELIMINARY FINDINGS FROM AN EVALUATION OF A NOVEL SUBSTANCE USE PREVENTION WEB-APP DELIVERED TO DIVERSE COLLEGE STUDENTS IN SOUTHERN CALIFORNIA**

Abnous Shahverdi; Sarah Alhassan; Myriam Forster; Jean Spielman; Jorge Vigil; Linn Dahlman; Bethany Rainisch

*Cal State Northridge | Health Sciences Department - iSTART*

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**ID: P10**

Introduction: Despite young adults' elevated risk for substance use and their preference web-based technology, few college prevention programs have leveraged innovative rapidly evolving mHealth technology. This study describes preliminary evaluation data of a novel web-app to prevent substance use delivered to diverse students attending a Hispanic Serving Institution in southern California. Methods: Data are pre and post-test results from students (N=752) randomized to either a 5-week web-app prevention (n=244) group, single component comparison (n=251) group, or standard of care control(n=257) group. Wilcoxon-ranked tests assessed changes in past 30-day alcohol use, binge drinking and marijuana use. Results: At baseline there were no differences past 30-day substance use behaviors across the three conditions. At posttest, the prevention group had a greater reduction in days drinking (3.10 vs. 2.17,  $p < .0003$ ) than the comparison (3.23 vs. 2.89,  $< .01$ ) and control (3.13 vs. 3.00  $< .05$ ) groups. The prevention group also reported a greater reduction in days using marijuana (3.41 vs. 2.81  $< .007$ ) than the comparison (3.49 vs. 3.19,  $< .04$ ) and control (3.43 vs. 3.21,  $< .05$ ). Similarly, prevention groups students reported fewer days binge drinking (1.73 vs. 1.03,  $< .05$ ) than the comparison (1.68 vs. 1.59) or control (1.71 vs. 1.62) groups at post-test. Conclusion: Our results suggest that new modalities such as web-apps can reduce past 30-day substance use behaviors among diverse college populations and represent a promising public health prevention approach. Program content and implications for future prevention efforts are discussed.

**Keywords:** prevention, substance use, web-app, mhealth

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**Type of presentation:** Poster  
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## THE RELATIONSHIPS BETWEEN SCIENCE SELF-EFFICACY, GROWTH MINDSET AND ETHNIC IDENTITY AMONG COLLEGE STUDENTS FROM 2- AND 4-YEAR INSTITUTIONS

Fatima Shirazi & Shu-Sha Angie Guan

*Cal State Northridge | Child and Adolescence Development Department*

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**ID:** P11

Students of color continue to be underrepresented in STEM fields and given the link between STEM careers and socioeconomic status, this underrepresentation of minority students is problematic in that it may reproduce socioeconomic disparities (Hackett et al., 1992). The lack of representation and role models in STEM (Williams & George-Jackson, 2014) often means negative stereotypes go unchallenged and can affect students, understanding and valuing their own ethnicity (i.e., ethnic identity). Ethnic identity is, in turn, predictive of science self-efficacy (O'Brien et al., 1999). Additionally, strategies that engage students (e.g., active learning pedagogy) can increase science self-efficacy (Ballen et al., 2017). By examining the “complexity of contexts” in minority students’ perceptions of themselves in relation to educational contexts (Kim et al., 2021), we may be able to identify strategies to address STEM disparities. The current study examines the relationship between student’s educational engagement strategies (i.e., growth mindset: your intelligence is something about you that you can’t change very much; Dweck, 2015) and science self-efficacy (e.g., how much confidence do you have in your ability to pursue a science career?; Byars-Winston et al., 2016) and how this relationship can be moderated by ethnic identity (e.g., have a clear sense of my ethnic background and what it means for me, Phinney, 1992) among college students (N = 219; 74.4% female) from diverse backgrounds (e.g., 9.1% Asian American, 1.8% African American, 73.5% Latino, 5% White, 7.5% Mixed, .9% Other) and science majors (e.g., 71.2% social behavioral sciences, 28.8% natural sciences) at a 2-year (n = 164) and 4-year (n = 55) institution. Results indicate that growth mindset was significantly, positively correlated with science self-efficacy ( $r = .18, p = .014$ ); however, ethnic identity was not associated with either growth mindset ( $r = .11, p = .125$ ) or science self-efficacy ( $r = .07, p = .388$ ). After controlling for age, gender and ethnicity, growth mindset was still marginally predictive of science self-efficacy ( $b = .13, SE = .07$ ); however, there was no moderation by ethnic identity ( $b = .01, SE = .07$ ). Contrary to our hypothesis, ethnic identity did not moderate the relationship between growth mindset and science self-efficacy, suggesting this effect is reduced among college students relative to the high school students in prior research (O'Brien et al., 1999). Altogether, this work contributes to the growing literature on educational strategies (e.g., promoting growth mindset) to support URM STEM students and reduce STEM workforce gaps.

**Keywords:** self efficacy, growth mindset, representation, ethnic identity, college students

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**Type of presentation:** Poster  
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## COMMUNITY-BASED FOCUS GROUP DISCUSSION FOR COVID-19 EFFECTS ON SOUTHEAST ASIAN AMERICAN COMMUNITIES

Katrina Silos; Brenda Romero; Danielle Co; Shane Esmundo; Cynthia Robles; Melina Rodriguez; Talya Tessler; Mayra Zamora; Melanie Sabado-Liwag; Patchareeya Kwan

*Cal State Northridge | Health Sciences Department*

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### **ID:** P12

**Background:** COVID-19 has disproportionately impacted Southeast Asian Americans (SEAs). The broad categorization of SEAs as well as inadequate representation within research infrastructures fails to portray multidimensional experiences of subgroups, including the Cambodian, Filipino, Thai, and Vietnamese American communities. **Purpose:** To understand and highlight the impacts of COVID-19 on English-speaking Cambodian, Filipino, Thai, and Vietnamese Americans living in Los Angeles County. The focus group emphasizes community members' voices and involvement to ensure that the study captures SEAA needs in an accurate and meaningful manner. **Methods:** An English focus group discussion was facilitated virtually on Zoom by three trained research members. A convenience sample of 5 participants was recruited and the participants were compensated with gift cards. The virtual discussion lasted for about 2 hours and was divided into three main sections: 1.) consent review, 2.) discussion of survey components, and 3.) closing questions and thoughts. **Results:** A total of 5 participants (M=2, F=3) representing the Thai, Filipino, and Cambodian communities were present. A list was created for 29 ideas obtained from the feedback received. Participants suggested adjusting phrases to be more inclusive, expanding options for survey answers, and gaining insight on community members' current living situations. **Conclusion:** The focus group discussion enabled the research study to gain community support in addressing health disparities. The collected responses highlight a need to modify questions to accommodate community needs, such as additional translations and explanation of various terms. Moreover, the study emphasizes community involvement to accurately capture distinct adversities among marginalized groups.

**Keywords:** southeast asian american communities, covid-19 effects, health equity

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**Type of presentation:** Poster  
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**Presenter(s):** Silos, Katrina



## **BREAKING BREAD AND PROMOTING HEALTH AND WELLBEING VIA DISTRESS TOLERANCE SKILLS**

Jenzie Tamayo & Ashlyn Southerland

*Cal State Northridge | Public Health, Health Sciences Department*

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### **ID: P13**

Disruption of campus and extracurricular activities propagated by the COVID-19 pandemic presented an increase in food insecurity, stress, anxiety, depression, and reduced coping ability among college student population (Copeland et al., 2021; Owens et al., 2020; Wang et al., 2020). These findings reveal that the most impacted are underrepresented minority (URM), low-income, and first-generation students, who are negatively impacted by pre-existing barriers to mental health resources, care, and services (Lui et al., 2020). To rebuild the campus community and reduce mental health hurdles, a three-hour wellness program was implemented using distress tolerance approaches, public health strategies, and wellbeing awareness. Recruitment efforts targeted 14 organizations on campus. Target enrollment was 12 students; eight actually attended. The program included an icebreaker, cooking four family-style meals, and breaking bread or sharing the cooked meal. After the students and faculty shared the meal, the program followed with four additional components: a 45 minute presentation defining self-care and four examples of distress tolerance methods (pros/cons, STOP skill, radical acceptance, and the five senses), a 30 minute presentation on the distress tolerance kit components and campus resources, and a hands-on opportunity for students to create distress tolerance kits. All participants indicated satisfaction with the teaching materials and duration of the program, providing further indication of program quality. Future program adaptations (improvements) are recommended to increase participant recruitment, cater outreach approaches to promote diversification of participant pool, and increase time of program preparations for meaningful program implementation.

**Keywords:** mental health, underrepresented minority, college students

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**Type of presentation:** Poster  
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## **SOUTHEAST ASIAN HEALTH STUDY (SEA)**

Talya Tessler

*Cal State Northridge | Health Sciences Department*

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### **ID: P14**

**Purpose:** The Southeast Asian Health Study (SEA) is designed to assess health and mental health related factors among young adults of Southeast Asian descent, living in Southern California. This study focuses on young adults ages 18-35 years old, who identify as Cambodian, Thai, and Indonesian. **Methods:** An anonymous online survey utilizing the Multidimensional Health Locus of Control Scale was conducted to assess mental health locus of control among young adults ages 18-35 and identified as Cambodian, Thai, and Indonesian. **Results:** A total of 39 participants completed the 5 item scale. 74% of participants identified as Cambodian, 15% of participants identified as Thai, and 10% identified as Indonesian. The average age of participants was 21.13. Out of the total sample, 15% of participants identified as male and 84% of participants identified as female. The average participant scores on the Locus of Control scale (20=full control and 5=no control) based on ethnicity and age are as follows. The average score for Cambodians=12.21, Thais=12.83, and Indonesians=12. The average score for females was 12.28 and the average score for males was 12.66. **Conclusion:** The results showed that participants mildly believed that they had a sense of control over their mental health and males had a slight increase in this sense than females.

**Keywords:** southeast asians, young adults, health, mental health

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**Type of presentation:** Poster  
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## **DEVELOPING A KNOWLEDGE, ATTITUDES, AND BEHAVIORS OF BASIC STUDENT NEEDS SCALE**

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**ID:** P15

This study aimed to develop a reliable and valid instrument for measuring faculty and staff knowledge, attitudes, and behaviors about students' basic needs, on-campus programs for students facing financial burden, and access to other on-campus resources. Currently, no validated scale exists to assess faculty and staff knowledge, attitudes, and behaviors (KAB) regarding college students' basic needs. Reliability and validity of this newly developed instrument were assessed with the data generated from a pilot survey (N=383). To assess reliability and validity, visual inspection of scree plots, inter-item correlations, and Primary Component Analysis (PCA) were performed. Results from scale assessment for reliability and validity show high inter-item correlation across all subscales, and acceptable Cronbach alpha of greater than .800 for all three scales (K=.854, A=.939, B=.875). PCA was used to determine dimensionality for each scale, results from the Bartlett's Test of Sphericity indicate that all subscales are closely correlated (K:  $\chi^2(21)=1.069.83$ ,  $p<.001$ , A:  $\chi^2(28)=2,615.91$ ,  $p<.001$ , B:  $\chi^2(21)=1,312$ ,  $p<.001$ ). Furthermore, a visual inspection of Scree Plots confirmed single dimensionality across all three subscales; thus, no item rotation analysis was necessary. These analyses provide preliminary evidence that items included in this instrument may be a promising approach to measuring and assessing faculty and staff knowledge, attitudes, and behaviors in relation to student basic needs.

**Keywords:** student basic needs, scale creation

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**Type of presentation:** Poster  
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**USING AN INNOVATIVE MULTI-MODULE WEB-APP TO DELIVER A SUBSTANCE-USE PREVENTION INTERVENTION AMONG STUDENTS AT A HISPANIC SERVING INSTITUTION: DEVELOPMENT AND EVALUATION DESIGN**

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**ID:** P16

**Background:** Despite effective strategies to prevent substance use and misuse among college students, challenges remain. As young adults, preference for and comfortability with web-based technology continues to increase, leveraging innovative approaches to rapidly evolving mHealth technology is critical for the success of lowering the risk for substance use and related consequences in college populations, and especially those at Hispanic Serving Institutions. **Description:** A novel, 30-day multi-module web-app intervention aimed at preventing substance use among college students was developed based on key theoretical constructs, behavior change strategies, and practical module components: attitudes (knowledge), perceived susceptibility (risk perceptions), subjective norms (normative re-education), and self-efficacy (refusal skills). Content design was culturally and age-relevant, emphasizing simplicity, accessibility, and interactivity. This innovative practice will be evaluated via a time series design using a sample of 600 students randomly assigned to either the intervention, comparison, or control condition at a public institution in southern California. **Lessons Learned:** Developing a web-app substance use intervention is an accessible, feasible, cost-efficient, and potentially scalable way to reach diverse student populations. Preliminary feedback suggests students find the web-app easy and comfortable to use, with engaging, interactive content, and a majority prefer this technology to face-to-face interventions. **Implications:** The iSTART web-app is an innovative and sustainable program ideal for college campuses with diverse student populations. If this prevention web-app is successful, it will significantly contribute to the evidence base of effective substance use interventions in college settings, and highlights the benefits of web-app programs as a significant substance-use prevention strategy.

**Keywords:** substance use prevention, college health, health technology

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**Type of presentation:** Poster  
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## HIGHLIGHTING OUR ORIGINAL STEWARDS: DESIGNING MOMENTS AND PLACES OF REFLECTION, HEALING, ADVOCACY, AND LEARNING

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### **ID:** PRE01

Students and faculty from interior design and public health have been collaborating with the Fernandeño Tataviam Band of Mission Indians (FTBMI) to highlight their strength and resilience throughout history. In the spirit of healing traumas and countering the effects of racism, interactive sites will be installed around campus to promote healing and connection of the past, present, and future. CSUN sits on FTBMI land, and the Diversity & Equity Innovation Grant (DEIG) allows CSUN to impart knowledge about, and recognize this land. The installations are inspired by the four seasons: spring, summer, fall, and winter; each having a corresponding exhibit. At all sites, signage with descriptions, facts, and QR codes will allow for students and visitors to reflect and learn about the Tataviam people. The spring site will lead to a mosaic tile portrait of a prominent historical Tribal Captain, Rogerio Rocha. The summer site includes a sundial marking seasonal solstices and equinoxes, and is about community and connecting to the sun. The fall site is a place for reflection where the growing oak trees stand as memoriam to their grandparents and for winter, a moon phase light installation will honor the journey between our world and the afterlife. The fifth and final site is a native plant garden in front of Bayramian Hall and is being designed by a campus partner. The sites were designed through collaborative effort and are in the process of being developed. Mock ups and graphics will be displayed and presented by our CSUN team.

**Keywords:** land acknowledgment, healing, awareness, connection, native

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**Type of presentation:** Pre-conference event

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**Presenter(s):** Aghashahi, Goldis; Carlson, Cedona; Carmona-juarez, Oscar; Jackson, Emily; Soleymani, Kayla; & Velasco, Jaime

## **SENSORY PANEL OF NEW FOOD PRODUCTS DEVELOPED BY FOOD SCIENCE STUDENTS**

FCS 302 students

*Cal State Northridge | Family and Consumer Sciences Department*

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### **ID: PRE02**

Students in the food science program take FCS 302, food product development, in their last year of the program. In this course, students go through the process of creating a new food product. In order to get feedback about their product from potential consumers, students perform a sensory test on which volunteers taste their products. This semester, students in FCS 302 will be having the sensory test on Tuesday Nov 15, from 10 - 12 pm and I would like to have this activity included in the pre-conference programming.

**Keywords:** food science, sensory evaluation, new food products

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**Type of presentation:** Pre-conference event  
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