Study Protocol for the Easing Anxiety Sensitivity for Everyone (EASE) Randomized Controlled Trial: A Smartphone-Based Anxiety and Depression Intervention for Racially/Ethnically Diverse Adults

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Health disparities have emerged in rates of COVID-19 exposure, hospitalization, and death among Black, Latinx, and American Indian (BLAI) individuals compared to Non-Latinx White (NLW) individuals. BLAI populations have been disproportionately affected by lower behavioral health access and heightened negative mental health outcomes during the pandemic. The current project addresses health disparities in access to behavioral health care since the onset of the COVID-19 pandemic among BLAI populations via an adaptation of the established, initially validated, low-cost, mobile application (i.e., Easing Anxiety Sensitivity for Everyone; EASE) among individuals with elevated anxiety and/or depression symptoms. EASE seeks to mitigate pandemic-related mental health disparities by systematically targeting anxiety sensitivity, a vulnerability factor implicated in the onset, maintenance, and severity of mental health outcomes, via culturally-tailored psychoeducation, cognitive restructuring, and interoceptive exposure exercises. For this ongoing clinical trial, participants (Total N = 824; >200 Black, >200 Hispanic, >200 American Indian, and >200 NLW individuals) are randomized to receive either a) the EASE app or b) the INSIGHT app, an active, smartphone delivered comparison condition for managing anxiety and depression symptoms. The present study includes data from a baseline assessment, 6-month intervention period, and 3- and 6-month post-baseline assessments that include qualitative interviews conducted through Zoom. Participants complete two scheduled daily ecological momentary assessments (EMAs) during the 6-month intervention period. These twice daily EMAs guide a just-in-time approach to immediate, personalized behavioral health care. Findings from the present study have the potential to impact public health by decreasing anxiety and depression symptoms among minoritized populations determined to be at risk for exacerbated, long-lasting negative health sequelae resulting from the COVID-19 pandemic. This study has received university IRB approval. This study has been registered with ClinicalTrials.gov.
Abstract Type: Protocol

The Family in Focus Online Health Behavior Coaching Program for Parents of Children with Body Weight Concerns: Protocol for a Pilot Randomized Controlled Intervention

Pudney, Ellen, V; Schofer, Wendy, E; Kekeh, Michele, A; Bartholmae, Marilyn, M; Bittner, Michael, C; Kelley, Mackenzie, K; Burross Jackson, Laura, A

Introduction: Parents of children with weight concerns are in need of support and resources on how to best help their children develop healthy habits, yet traditional programs fail to target the underlying beliefs that shape parenting practices. For instance, many parents have issues with their own weight and body image, and these beliefs can influence their parenting behaviors. Therefore, Family in Focus (FiF), an online, group-based, health coaching program, was developed to guide parents in reexamining their beliefs about weight and support them in creating sustainable, family-focused, health behavior changes. The aim of this pilot study is to identify the psychological changes that occur in parents as a result of participating in FiF.

Methods: We are currently collecting data for this randomized, waitlist-controlled intervention. Our sample consists of 57 parents of children ages 3-17 with body weight concerns. Participants were recruited via social media and community organizations. Those randomized to the intervention are receiving FiF, which consists of 8 group coaching sessions offered once a week via Zoom. Participants are filling out quantitative surveys and answering open-ended questions via REDCap at three time points: baseline, post-intervention, and 4-months. We will conduct a Mixed Models Repeated Measures test to determine between and within group differences on 5 parent-focused outcomes: self-efficacy in managing child’s diet and activity, eating competence, body image, self-compassion, and affiliate stigma for child’s weight. Responses to the open-ended survey questions, which assess parental reflections on their family’s eating, activity, stress, etc., will be thematically coded and triangulated with quantitative findings. This study has received university IRB approval.

Discussion: If successful, this study will provide initial evidence regarding the psychological changes that can occur when parents participate in a family-focused weight coaching program. Targeting parents’ weight-based self-beliefs may be an innovative strategy to addressing weight-related health behaviors among children.
Abstract Type: Protocol

Protocol for a Mobile Application to Address Cannabis Use Disorder Among Black Adults

Jones, Ava, A; Nizio, Pamella; Clausen, Bryce; Businelle, Michael, S; Ponton, Natalia; Redmond, Brooke, Y; Buckner, Julia, D; Obasi, Ezemenari, M; Zvolensky, Michael, J; Garey, Lorra

Introduction: African American/Black adults use cannabis more frequently and are more likely to meet criteria for Cannabis Use Disorder (CUD) than both White and Hispanic/Latinx individuals. Black adults may be more apt to use cannabis to cope with emotional or somatic distress, which constitutes a false safety behavior (FSB; a behavior designed to reduce psychological distress in the short-term). Although FSB engagement can perpetuate the cycle of high rates of CUD among Black individuals, limited work has applied a FSB elimination treatment approach to Black adults with CUD. Specifically, no previous work has evaluated FSB reduction/elimination in the context of a culturally tailored and highly accessible treatment developed for Black individuals. The current study aims to develop and pilot test a culturally tailored adaptive intervention that integrates FSB reduction/elimination skills for cannabis reduction/cessation among Black adults with probable CUD (CT-MICART).

Method: Black adults with probable CUD (N = 50) are currently being recruited through national advertisements across different social media and online platforms to participate in the current study. Data collection is currently in progress. Participants are asked to complete an online screener, and if eligible, an enrollment call, baseline assessment, 3 daily ecological momentary assessments (EMAs) for 6 weeks, and a follow-up self-report assessment and qualitative interview at 6-weeks post-randomization. Participants are randomized into one of two conditions post-baseline: 1) CT-MICART+EMAs for 6 weeks or 2) EMAs only for 6 weeks. Data analysis will examine treatment effects on cannabis use and FSB engagement.

Discussion: The current study will seek to document the efficacy of a low-cost and easily accessible, culturally-tailored CUD treatment for Black adults, a historically underserved population in terms of substance use problems.

Ethics: This study has received IRB approval and has been registered with ClinicalTrials.gov.
Addressing Tobacco-Related and Lung Cancer Inequities Among Black Adults: A Mixed Methods Pilot Project

Martinez Leal, Isabel; Britton, Maggie; Dey, Annesha; Jafry, Midhat Z; Rogova, Anastasia; Chen, Tzuan A; Obasi, Ezemenari M; Woodard, LeChauncy; Reitzel, Lorraine R

Introduction: Despite comparable smoking rates to White adults, Black adults are less likely to receive tobacco-use disorder (TUD) intervention, thus suffering disproportionately from more advanced-stage lung cancer (LC) and higher LC mortality rates. While lung cancer screening (LCS) reduces mortality by 20%, only 2% of eligible Texan adults receive LCS. Recent eligibility guideline revisions can potentially address LC inequities by expanding eligibility for Black adults, who are diagnosed at an earlier age and have lower pack-year history than White adults. This project prioritizes this timely opportunity to develop evidence-based, culturally-informed TUD and LCS interventions to increase their delivery and uptake among underresourced Black adult patients receiving care within Federally Qualified Health Centers (FQHCs) in Texas.

Methods: We will enroll 3 critical stakeholder groups: quality-improvement professionals and healthcare providers at 4 FQHCs (serving ≥13% Black patients); and Black FQHC patients who are current/former smokers. This pilot study will adopt a convergent parallel mixed methods design to develop interventions including: 1) healthcare provider educational/training initiatives to increase the delivery of culturally-informed TUD intervention and LCS to Black adults; and 2) community-based efforts to increase patient uptake of TUD intervention and LCS. We will also access feasibility and acceptability of the developed interventions. The Health Equity Implementation Framework will guide the development of culturally-informed and anti-racist interventions exploring enablers and inhibitors to delivery/uptake of TUD intervention and LCS for Black adults across levels: healthcare systems, providers, and patients.

Ethics: Following the institution’s Internal Review Board approval, work commenced on 3/15/23.

Discussion: Study innovation and contributions to implementation science include developing multilevel, equity-focused interventions that pair culturally-informed tobacco cessation/relapse prevention and LCS procedures within FQHCs into an integrated model of care that extends to former smokers. Ultimately, this project aims to increase Black adults’ access and receipt of evidence-based care to promote health equity.
An Integrated mHealth Application for Smoking Cessation in Black Smokers with HIV: Protocol for a Randomized Controlled Trial

Bizier, Andre; Thai, Jessica, M.; Businelle, Michael, S.; Kezbers, Krista, M.; Hoeppner, Bettina, B.; Giordano, Thomas, P.; Gallagher, Matthew, W.; Zvolensky, Michael, J.; Garey, Lorra

Introduction: Black adults who smoke and have HIV face significant stressors (e.g., racial discrimination, HIV stigma) that impede successful smoking cessation attempts, perpetuate smoking-related health disparities, and increase the risk of elevated interoceptive stress (e.g., anxiety, bodily sensations). The aim of this study (NOSI under NIHMD U54MD015946) is to test a culturally adapted, novel, mobile intervention that targets smoking outcomes, HIV treatment engagement/adherence, and anxiety sensitivity among Black smokers with HIV (i.e., Mobile Anxiety Sensitivity Program for Smoking and HIV; MASP+). Data collection is currently ongoing.

Methods: The current study is a pilot randomized controlled trial in which Black smokers with HIV (N = 72) will be recruited from an HIV clinic in the Houston area and randomly assigned to use either: (1) the National Cancer Institute’s (NCI) QuitGuide app, or (2) MASP+. Study procedures include an online pre-screener, daily app-based ecological momentary assessments (EMAs), a phone-based qualitative interview at week 6 for participants in all study conditions, and smartphone-based follow-up assessments at 0, 1, 2 (quit date), 3, 4, 5, 6, and 28 weeks post-baseline. Primary outcomes include biochemically-verified 7-day point prevalence abstinence, increased use of antiretroviral therapy, and improved attendance at HIV-related health appointments at 26 weeks post-quit. Qualitative data will also be collected and assessed to obtain feedback that will guide further tailoring of app content and evaluation of efficacy.

Discussion: Results of the present study will examine the MASP+ app’s potential as an aid to quitting smoking, improving HIV treatment engagement, and reducing physiological stress among Black people with HIV. If successful, this study will provide evidence for the efficacy of a new treatment for addressing comorbid mental and physical health difficulties for this high-risk population.

Ethics: This study has received university IRB approval.

Registration: This study has been registered with ClinicalTrials.gov (NCT: NCT05709002).
Board 306

Abstract Type: Protocol

Alliances to Combat Tobacco in Organizations Now (Project ACTION): A Funded Study Protocol to Increase Evidence-Based Tobacco Intervention Capacity in LGBTQI+ Community and Healthcare Centers

Britton, Maggie; Kakarla, Sriya, N; Arora, Sankalp; Martinez Leal, Isabel; Chen, Tzuan, A; Cofer, Jennifer; Sanchez, Hector; Reitzel, Lorraine, R

Introduction: Tobacco use is causally linked to ~17 distinct cancer types and numerous other deleterious health outcomes. Tobacco company marketing strategies, among other things, have contributed to elevated use rates within LGBTQI+ communities in the U.S., making them priority groups for tobacco cessation intervention. LGBTQI+ community and healthcare centers are a trusted and therefore ideal setting for the delivery of tobacco use disorder care. This project aims to adapt, implement, and disseminate a tobacco-free workplace program in/to LGBTQI+ serving centers to address known tobacco use disparities.

Methods: Core program components are informed by social cognitive theory and entail enacting tobacco-free workplace policies, educating employees, providing specialized training for clinicians, and furnishing essential resources to build capacity for the delivery of evidence-based tobacco use care in >/=3 LGBTQI+ centers in Texas. Employing a mixed-method, hybrid effectiveness-implementation design, we will scale-out the program for each center guided by the Exploration, Preparation, Implementation, and Sustainment (EPIS) Implementation Framework. Modifications are anticipated and will be recorded using the Framework for Reporting Adaptations and Modifications to Evidence-based Implementation Strategies (FRAME-IS). Primary implementation outcomes are penetration, fidelity, and sustainability; clinical effectiveness outcomes will be derived from client/patient records. Dissemination, rooted in the utilization-focused surveillance framework, will be statewide, employing a blend of active and passive strategies.

Ethics: Approved by the institution’s Quality Improvement Assessment Board; work began 8/31/23.

Discussion: Project ACTION’s innovation lies in the synthesis of various implementation science theories, models, and frameworks into a cohesive and integrated approach for narrowing the translational gap to bring evidence-based tobacco control and care into trusted community and healthcare settings, ultimately reducing tobacco use disparities for LGBTQI+ communities. Program implementation in community centers is likewise novel. Our work will provide guidance to organizations and professionals working with LGBTQI+ communities to expand their capacity in treating tobacco use disorder.
Board 307

Abstract Type: Protocol

An Innovative Approach To Teen Pregnancy Prevention

Donnelly, Joseph; Young, Michael; Hecht, Michael; Carr, Dametreea

Introduction. The birth rate among teens in the United States has been declining since 1991, but remains substantially higher than in other western industrialized nations. Additionally, racial/ethnic disparities continue to exist. The purpose of the proposed study is to test the effects of a classroom-based prevention curriculum that includes a narrative app, and a text messaging program, provided separately and in combination, on sexual behavior and teen pregnancy outcomes.

Methods. Participants in the study will be 9th graders attending school in the Washington D.C. School District. The research will use a matched-pair, cluster-randomization design, to randomly assign schools to curriculum or control conditions. Students will be individually randomized to receive or not receive the text-messaging intervention. This will result in four statistically equivalent groups: (1) curriculum only, (2) curriculum + text-messaging, (3) text-messaging only, (4) control. This design will allow researchers to examine the effects of the curriculum and text messaging interventions separately, and in combination. The goal of the 12-session curriculum is to empower adolescents to create healthy relationships and delay sexual activity. The text messages reinforce curriculum content. Following curriculum completion, text-messages will be sent three times/week for 10 weeks. The testing instrument is a self-report questionnaire. The questionnaire will be administered at baseline, and again at six and twelve months after completion of the classroom curriculum. Only students who have written parental consent, and who themselves provide written assent will participate in the research.

Ethics. Prior to any data collection IRB approval will be obtain from the WCG IRB.

Discussion. The study, which examines the effects of a curriculum and text messaging intervention separately and in combination, is an innovative approach to teen pregnancy prevention that can also make an important contribution to the study of adolescent health behavior.

Registration. The study will be registered on clinicaltrials.gov
Abstract Type: Protocol

Addressing High Tobacco Use Rates at Opioid Treatment Centers Through Comprehensive Tobacco-Free Workplace Programming: A Funded Clinical Quality Improvement Study Protocol

Britton, Maggie; Le, Cameron; Martinez Leal, Isabel; Rogova, Anastasia; Chen, Tzuan, A; Karam-Hage, Maher; Cinciripini, Paul, M; Sanchez, Hector; Reitzel, Lorraine, R

Introduction: Tobacco use is exceedingly high among individuals with opioid addiction, but not commonly addressed by clinicians in opioid treatment centers (OTCs). Reasons for this include pro-smoking social norms in OTCs, clinicians’ lack of training, and the complex relationship between chronic pain and tobacco use. Comprehensive tobacco-free workplace programs in OTCs can address tobacco use on multiple levels with evidence-based policies and practices. However, implementation of workplace interventions is grossly understudied in OTCs; work is needed to create a model for engaging OTC clinicians in providing tobacco use screening/care/referral. Project aims are to successfully implement, evaluate, and disseminate an adapted workplace intervention in OTCs.

Methods: Based on social cognitive theory, the intervention includes policy implementation, clinical workflow changes, employee education, specialized provider training, and resource provision at >/=2 OTCs. A mixed method, hybrid effectiveness-implementation design will guide the Type II scale out process, with dynamic adaptations catalogued based on FRAME-IS. The EPIS model will guide multiple implementation strategies aimed at integrating tobacco dependence care into the clinical workflow. Success will be measured by Proctor’s pragmatic implementation outcomes of acceptability, penetration, and sustainment; clinical outcomes (e.g., patient quit attempts) will be secondarily assessed with patient/quitline records. Brownson’s work on dissemination informs the utilization-focused surveillance framework for knowledge diffusion; strategies comprise active and passive approaches, including an implementation guide and technical assistance provision.

Ethics: Approved by the institution’s Quality Improvement Assessment Board; work began 8/31/23.

Discussion: Innovation is based on novelty in OTCs; the combination of theory, models, and frameworks; and the use of a cancer center’s quitline for delivering tobacco treatment.

Results will inform implementation science application to tobacco control while providing practical guidance about integrating best practice recommendations in treating tobacco use disorder in OTC settings; ultimately, similar implementations could mitigate the tobacco use disparities experienced by OTC patients.
Maternal Depression Trajectory Patterns from First Year through Fifteen Years Postpartum: Impacts on Adolescent Offspring

Chow, Angela

Purpose: In developed countries, prevalence rates for postpartum depression range as high as 10-15%. Maternal depression has been identified as a risk factor associated with the high maternal mortality rate and adverse offspring outcomes. However, most published studies on maternal depression have utilized only cross-sectional or short-term longitudinal data. This study aimed to examine the trajectory patterns of maternal depression spanning 15 years and their association with the mental health and delinquency behaviors of adolescent offspring.

Methods: Data were from the Future of Families and Child Wellbeing Study (FFCWS), involving 4898 mothers and their children. The study utilized six waves of data: at birth, and at the 1-year, 3-year, 5-year, 9-year, and 15-year follow-ups (with baseline data collected in 1998-2000). Maternal depression was measured across five waves using the CIDI-SF at 1 year, 3 years, 5 years, 9 years, and 15 years postpartum. Depressive symptoms, assessed by CES-D, and delinquent behaviors of their adolescent offspring were collected at the 15-year follow-up. General growth mixture modeling was employed to identify trajectories in maternal depression.

Results: Three trajectory groups in maternal depression were identified and labeled according to the probabilities of experiencing major depression: Consistently Low (83.3%), Decreasing (which showed a decrease from high probabilities at year 1 to moderately low probabilities by year 15, accounting for 10.1%), and Increasing (exhibiting an increase from low to high probabilities, amounting to 6.6%). At age 15, adolescents with mothers from both the Increasing and Decreasing groups exhibited higher levels of depressive symptoms (b=.121 & b=.139, ps<0.01 and delinquent behaviors (b=.429 & b=.451, ps<0.01).

Conclusion: The results provide preliminary evidence suggesting intergenerational detrimental effects of long-term maternal depression on offspring. Future endeavors should continue to examine the extent to which these maternal depression trajectories impact other offspring outcomes and explore measures to support these families, particularly those in the increasing trajectory groups.
Abstract Type: Research Based

**Cancer Information Seekers’ Comprehension Level and the Association with Preventable Cancer Risk Factors: A Cross-sectional Analysis from a Nationally Representative U.S. Adult Survey**

**Cho, Beomyoung; Pan, Yining; German, Mariel; Stallings-Smith, Sericea**

Purpose: Despite various benefits of cancer information-seeking behavior in the prevention of cancer risk factors, little is known about whether the risk factors of cancer information seekers vary by their ability to understand the information they found. This study aims to examine the association of cancer information comprehension level and major preventable cancer risk factors among adult cancer information seekers.

Methods: Data of the Health Information National Trends Survey (HINTS)-6 in 2022 were used. Individuals who have looked for cancer information from any source were considered cancer information seekers (n = 2,453). Four preventable cancer risk factors were dichotomized: 1) cigarette smoking (have smoked ≥100 cigarettes and reported currently smoke every day/some days), 2) experiencing sunburn (≥1 times in the past 12 months), 3) being overweight/obese (≥25 body mass index [kg/m²]), and 4) binge drinking (≥5 alcoholic drinks for male or ≥4 alcoholic drinks for female on one occasion in the past 30 days). Individuals who reported that cancer information was hard to understand were considered having difficulties in comprehension. Weighted multiple logistic regression analysis was conducted to examine the association between cancer information comprehension level and the four cancer risk factors, adjusting for sex, race/ethnicity, age, annual household income, education attainment level, depressive symptoms, cancer diagnosis history, and metropolitan status.

Results: About 37% of cancer information seekers reported comprehension difficulties. Cancer information seekers with comprehension difficulties had higher odds of experiencing sunburn (Adjusted odds ratio [AOR]: 1.61, 95% confidence interval [CI]: 1.23-2.11), being overweight/obese (AOR: 1.46, 95% CI: 1.09-1.96), and partaking in binge drinking (AOR: 1.66, 95% CI: 1.12-2.46) than their counterparts.

Conclusions: Cancer information-seeking behavior itself may not be effective in preventing cancer risk factors if the seekers cannot fully comprehend the information they found. Comprehensible cancer information to all information seekers should be developed and disseminated appropriately.
Board 311

Abstract Type: Research Based

**Traditional and Race-Based Bullying in Racial-Minority Majority and Racially Diverse Schools**

Low, Sabina; Lu, Yu; Temple, Jeff, R.

Few studies in the U.S. have simultaneously examined traditional and race-based bullying with consideration of school-level racial composition. The current study examined patterns of bullying victimization as a function of school racial composition, in minority-majority (i.e., a racial/ethnic minority group consists of 50% or above of the student population) and racially/ethnically diverse schools (i.e., no racial/ethnic group consists of 50% or above of the student population). Participants were students (N=1,911, Mage = 13.7 years) enrolled in 7th grade in 24 public schools (42.3% Hispanics, 9.0% non-Hispanic White, 28.9% non-Hispanic Black, and 19.7% non-Hispanic Asian). Of the 24 schools, 8 were racially/ethnically diverse, 16 were minority-majority schools, including 9 Hispanic majority schools, 5 Non-Hispanic Black majority schools, and 2 Non-Hispanic Asian majority schools. Of the participants, 1,297 (68.7%) reported being a victim of traditional bullying and 483 (25.6%) a victim of race-based bullying in the past year. Multilevel regression analyses suggested student-level protective factors, including student-student relationships was related to both forms of victimization (traditional bully: beta* = -.10, p < .01; race-based bullying: AOR = .73, 95% CI: .60, .88, p < .01) and student-teacher relationships (beta = -.07, p < .05) was associated with traditional bullying victimization. However, school racial composition was only significant in explaining race-based bullying. Specifically, minority-majority schools had lower levels of race-based bullying victimization compared to racially/ethnically diverse schools (AOR = .68, 95% CI: .55, .85, p < .01). Findings suggest that consideration of school contextual factors offers a more nuanced understanding of the relation between race and victimization.

*Standardized coefficient. The Greek letter beta is not shown properly on the submission page, thus we used “beta.”
Examining the Impact of Health-Related and Health System Factors on the Relationship Between Patient-Centered Communication, HPV Knowledge and Perceived Effectiveness of the HPB Vaccine

Tomar, Aditi; Harvey, Idethia, Shevon; Myint, Wah, Wah; Feng, Shuo

Purpose: Despite the long-standing availability of the HPV vaccine, its rates continue to remain suboptimal. Collaborative, patient-centered communication, and knowledge about HPV-related cancers contribute significantly to HPV vaccine acceptability. Moreover, the interplay between health-related and health-system factors are also associated with HPV vaccine acceptability. Our study investigates the association between patient-centered communication, HPV knowledge, health-related and health-system factors on perceived HPV vaccine effectiveness, which is a key predictor of vaccine acceptability.

Methods: Our sample comprised nationally representative US adults from the National Trends Survey (HINTS) 5, Cycle. Structural equation modeling (SEM) was used to explore pathways between health-related and health system factors on perceived vaccine effectiveness; both directly and via knowledge and patient-centered communication. The predictors in our model included health-related factors (general health status, ability to manage one’s health, presence of a chronic physical condition, and mental health), and health-system factors (having a regular healthcare provider, frequency of doctor visits, quality of care, and access to health records). The mediators, knowledge and patient-centered communication were assessed as latent variables with seven and four underlying indictors, respectively.

Results. Findings suggest a direct relationship between HPV knowledge and perceived vaccine effectiveness ($\beta= 0.63; p < 0.05$), and patient-centered communication and perceived vaccine effectiveness ($\beta= 0.06; p < 0.05$). Interestingly, frequency of doctor visits directly and negatively predicted patient-centered communication ($\beta = -0.037, p< 0.05$). Self-reported health status was directly and positively related to HPV vaccine acceptability ($\beta = 0.147, p <0.05$). Having a chronic medical condition ($\beta = -0.094, p=0.004$), depression/ anxiety ($\beta = 0.141, p <0.05$) were related to HPV vaccine acceptability, via knowledge.

Conclusion. Findings emphasize the significance of considering health-related and health-system factors while addressing vaccine acceptability. Given the complex dynamics surrounding HPV vaccine, public health researchers should prioritize addressing factors at both the individual and system levels.
Abstract Type: Research Based

The Roles of Social Media, Health Communication, and Social Influences on College Students’ Perceptions About HPV Vaccine Confidence

Tomar, Aditi; Thompson, Erika, L.; Smith, Matthew, Lee

Purpose: While an HPV vaccine is available to prevent six types of cancer, rates of uptake are still suboptimal among young adults. Social media and vaccine confidence continue to be a main research priority for increasing HPV vaccination among this population. In this study, we explored the roles of social media, health communication, and social influences on HPV vaccine confidence.

Methods: Data were analyzed from a national sample of 2,400 U.S. college students using an internet-delivered questionnaire. Structural equation modeling (SEM) was used to assess the pathways among social influence, three health communication constructs, social media use to share HPV-related posts, and HPV vaccine confidence. Social influence was evaluated as latent variable comprising five underlying measures (i.e., influence from parents, friends, partner, healthcare provider, religious leader). Health communication constructs included sharing health information, using online support groups, and watching health-related videos. HPV vaccine confidence was measured in terms of the vaccine’s effectiveness in preventing HPV. The model accounted for sex, race/ethnicity, and current year in college.

Results: The structural model fitted well with the data (RMSEA: 0.06, CFI: 0.94; TLI: 0.89; SRMR: 0.06). Vaccine confidence was significantly and negatively associated with social influences (β=-0.094, p<0.05). Social media use was associated positively and significantly with sharing health information (β=0.75, p<0.05). However, vaccine confidence was not significantly associated with social media use or any of the health communication constructs.

Conclusion: Our study did not reveal a statistically significant influence of social media, social influence, and health communication on HPV vaccine confidence. The negative impact of social influence on vaccine confidence underscores the need for deeper investigation into the prevailing hesitancy related to the HPV vaccine.
Attitudes, Knowledge, and Perception of AI in Health Care, in a Racially Diverse, Lower-Income Population in Houston, New York and Los Angeles

Adepoju, Omolola, E; Bristow, Alane; Dang, Patrick; Baiden, Philip; Jacobs, Wura

Background: AI has the potential to improve access to health resources and care in underserved, low-income groups but its acceptability and trust among this population is unknown. To fill this gap, this study examined knowledge, attitudes, and perceptions of AI use in health care among a racially and socioeconomically diverse U.S. adult population.

Methods: Cross-sectional survey data were gathered from 212 low-income adults in Houston, New York, and Los Angeles, between April and August 2023. Descriptive analyses employing frequencies and proportions were used to detail self-reported data on awareness, perceptions of benefits, trust, and concerns regarding ChatGPT and AI in health care.

Results: A total of 305 surveys were returned, of which 212 were complete (69.5% completion rate). Only 15% of survey respondents reported being confident regarding their knowledge of AI technologies, such as ChatGPT. 34% agreed AI was beneficial for patient care while only 33% of respondents wanted their personal medical treatment to be supported by AI. 71% of respondents indicated they were “scared of the influence of AI on medical treatment”, and 74% believed ethical concerns affected their attitudes towards AI. Fear of the influence of AI was greatest among White respondents, respondents making under $35,000 per year, and those with a high school education or less. Ethical concerns were greatest among respondents making under $35,000 per year, and those with a high school education or less.

Conclusion: The limited awareness and negative attitude towards AI and ChatGPT highlight the technological disparities that underserved populations face. This warrants the need to develop community-level interventions to educate and increase trust in AI to promote usability in low-income populations that stand to benefit the most from it. Future intervention studies may consider high-engagement strategies similar to PEN America’s Medica Literacy Program, which have been successful in improving digital health literacy at the community-level.
Board 315

Abstract Type: Research Based

Perceived HIV-Related Health Information Needs, Behaviors, and Outcomes for Youth Experiencing Homelessness at Risk for HIV: A Qualitative Study

Galvin, Annalynn M.; Unegbu, Crystal; Barr, Emily; Santa Maria, Diane M.

Purpose: Youth experiencing homelessness are at higher risk for Human Immunodeficiency Virus (HIV) than youth stably housed. While youth experiencing homelessness may obtain HIV-related health information and treatment during sporadic health care appointments, they may prefer more accessible informal health communication channels of varying credibility (i.e., peer groups, social media). The purpose of this qualitative pilot study was to examine health literacy facets of HIV-related information seeking and sharing among youth experiencing homelessness at risk for HIV.

Methods: Semi-structured interviews (n=11) were conducted in the Houston, TX from July-October 2023 with both youth (aged 18-25; n=6) experiencing homelessness eligible for Pre-Exposure Prophylaxis and providers in health care and social service who serve this population (n=5). Using Sørensen’s multidimensional health literacy framework, interviews elicited how youth experiencing homelessness accessed, understood, appraised, and applied general and HIV-related health information. Interviews were audio-recorded, transcribed, iteratively coded, and thematically analyzed.

Results: Salient themes included HIV-related health information seeking and sharing primarily through clinics, shelters, community organizations, and internet searching, with limited information sharing between youth based on levels of trust and perceived accuracy. Youth participants reported little difficulty with understanding and appraising HIV-related health information. Youth noted more difficulty accessing information through health care systems compared to online resources and the benefits of privacy and non-judgment with online searching. Health and social service providers also highlight the importance of establishing trust with clients beyond the health information and social services provided and delivering information in engaging and client-tailored ways.

Conclusions: These qualitative findings from youth experiencing homelessness, health care, and social service providers lay the groundwork for targeted multi-level interventions that support accurate, accessible health information seeking and sharing about HIV prevention. These future studies may then support HIV prevention uptake and potentially reduce HIV disparities among at-risk youth experiencing homelessness.
The Persistence of MPOX Myths: A Deep Dive into Post-Outbreak Discourse on X

Kearney, Matthew, D; Bracy, Danny; Cronholm, Peter

Purpose: We sought to study social media content from X (formerly Twitter) about MPOX specifically focusing on misinformation and false information one year after the 2022 global outbreak of the virus.

Methods: To examine content related to MPOX, we collected unique public tweets (i.e., X posts) created between May 1st and May 31st 2023 using the now defunct Twitter API (n=14,203 tweets). Search terms included MPX, MPOX, and monkeypox. Audience engagement (# likes + # retweets + # comments) was calculated for all tweets, and the top 1% was sampled for further analysis to identify prevalent themes and sentiments. Tweets were categorized into specific themes developed through manual review and coding of tweets. Descriptive statistics were generated to quantify themes' prevalence.

Results: A total of 143 tweets were analyzed averaging 366 audience engagements each (max: 33,732). The predominant themes identified were skepticism and criticism of the MPOX response (30.1%), discussions related to the LGBTQ+ community (18.2%), and tweets emphasizing the importance of vaccination (17.5%). Other prevalent themes included references to global health organizations (14.0%), expressions of fear and panic (12.6%), discussions about animal transmission (7.0%), political references (6.3%), event promotions (1.4%), personal experiences (1.4%), and misinformation or conspiracy theories (1.4%). Nearly a fifth of tweets (16.1%) contained false or misleading information about MPOX.

Discussion: Our study highlights the presence of misinformation and skepticism in social media discussions about MPOX. The prevalence of false information underscores the need for accurate and timely dissemination of information by health authorities. Additionally, the diverse range of themes reflects the multifaceted nature of public discourse during health crises, emphasizing the importance of targeted communication strategies to address varying concerns within different communities. This research provides valuable insights for public health authorities and policymakers to effectively engage with the public and combat misinformation during disease outbreaks.
Rival Mediated Pathways of Frequent Social Media Use, Electronic Nicotine Delivery Systems Use and Internalizing Mental Health Problems

Lee, Shieun; Elam, Kit, K; Luo, Juhua; Lohrmann, David, L; Chow, Angela

Background: The present study aimed to examine four a priori rival mediated pathways of frequent social media use, electronic nicotine delivery systems (ENDS) use and internalizing mental health (MH) problems across five waves of nationally representative data.

Methods: Data were drawn from Wave 2 to Wave 5 of the Population Assessment of Tobacco and Health Study, a nationally representative cohort study spanning about 4 years. The analytic sample included those who were ages 12-14 years at Wave 2 and who provided data in subsequent waves until Wave 4.5 (N=4,627, 69.7% were White and 51.4% were male). Frequent social media use (several times a day), ENDS use (past 30-day use), and internalizing MH problems (endorsed symptoms on four items in the past year) were dichotomized for analysis.

Results: The weighted proportions of the three key variables kept increasing over time. From Wave 2 to Wave 5, frequent social media use grew from 56.9% to 77.2%; internalizing MH problems from 18.9% to 29.0%; and ENDS use from 1.4% to 11.4%. There was a significant within-person association of one-wave time-lead frequent social media use with ENDS use [adjusted odds ratio (aOR) = 1.87; 95% CI = 1.47, 2.37] and with worsened internalizing MH problems (aOR = 1.19; 95% CI = 1.04, 1.37) in the weighted logistic regressions with the generalized linear mixed model with random effects. A model-based causal mediation analysis was conducted to estimate the average causal mediation effect. Across all the four examined mediation pathways among the three variables, partial mediation was observed, and all the pathways were significant for both boys and girls. Sex differences did not emerge in the examined prospective mediated pathways.

Conclusions: Frequent social media use appears to play an important role in the prospective association between experiencing internalizing MH problems and ENDS use.
Gender Differences in the Association Between Bullying Behaviors and Academic Achievement Among a Sample of Diverse Rural and Urban Adolescents

Lydia Lising; Mikaela M. Rojas; Lizbeth Becerra; Eric Shanazari; Kimberly Rogers; Myriam Forster

Background: Academic achievement, conceptualized as grade point average (GPA), is associated with college readiness and positive life course outcomes. While the literature suggests there are gender differences in school bullying outcomes, any involvement in bullying can compromise adolescent health and development. Although studies have found that bullying can compromise academic achievement, to date, few studies have explored gender and ethnic differences in the association between bullying involvement and academic achievement.

Methods: Data (N=877) are baseline responses from students enrolled in a longitudinal study investigating social and environmental risk and protective factors for school and health outcomes among urban and rural students from three states. GLMs—controlling for sex, age, ethnicity, and state—tested the association between bullying behavior (victims, and bullies or bully-victims) and GPA, and whether there were any gender or ethnic differences in the bullying involvement - GPA relationship.

Results: The sample was 52% female, 25% African American, 23% Hispanic, 25% Asian/Pacific Islander, and 27% NH- White and had an average GPA of 2.58 (SD=0.79). Over one in three students (37%) reported being bullied and 19% reported being either a bully or a bully-victim. Youth bully-victims (being both a victim and bullying others) had significantly lower GPA’s (b=-.17, p<.05) than their peers with no bullying involvement. There were no ethnic differences in this relationship however, female bully-victims had lower GPAs than their male bully-victim counterparts (p<.05).

Conclusion: Consistent with research identifying bully-victims as an especially high-risk group, our findings indicate that bully-victims, and particularly female bully-victims, had poorer academic outcomes than either victims only or students not involved in bullying. Future research should identify gender-specific protective factors so that school-based bullying prevention programs can develop tailored, effective programming.
Abstract Type: Research Based

Does Acceptance of Wife Beating Attitude Influence Intimate Partner Violence Experience among the Filipino Women?

Aggad, Roaa; Myint, Wah; Osuji, Chimuanya; Tomer, Aditi

Background: Attitude toward wife-beating is vital to overcoming different forms of violence against women, which is one of the public health issues paid little attention to. This study examines the relationship between the acceptance of wife beating and social determinants.

Method: Data from the 2022 Philippines Demographic and Health Survey were used. The outcome variable was respondents' attitudes towards wife-beating, which was assessed by asking whether they agreed that wife-beating is justified under certain scenarios included in the survey. The predictor variables include sociodemographic characteristics (age, place of residence, employment, education, wealth quintile), witnessing the father's abusive behavior, and partner's controlling behavior. Descriptive analysis and logistic regression were conducted using Stata 18.0.

Results: Of 14,586 women, 1,920 (10%) reported that wife-beating is justified in at least one of the given scenarios; wife neglects the child, burns the food, argues with her partner, refuses sex, and goes out without telling her partner. Strong predictors included the experience of any type of intimate partner violence (IPV), decision-making score, and experienced of controlling behavior. The women who reported that wife beating is justified were more likely to experience IPV than those who did not (adjusted OR= 1.49; 95% CI=1.21-1.85). Similarly, women who answered that they experienced controlling behavior by their husbands were more likely to justify wife-beating than those who did not (aOR=1.77, 95%CI=1.45-2.15). Furthermore, those who had decision-making alone or jointly with their partners in all four questions asked were less likely to accept that wife-beating is justified than those who did not (aOR= 0.74, 95% CI= 0.56-0.98).

Conclusion: Results suggest that women's attitude towards wife-beating is an important factor in their experience of IPV. Future health policies and programs should include messages that can impact women's perception that wife beating or other types of violence should be justified.
Abstract Type: Research Based

Using Technology to Monitor Health Effects from Environmental Exposures in Children Aged 6-14 Years Old

Zierold, Kristina, M; Sears, Lonnie, L

PURPOSE: Environmental exposures have been associated with childhood attention deficit hyperactivity disorder (ADHD). Many researchers utilize paper-based behavioral scales such as the Child Behavior Checklist (CBCL) to investigate the impact of environmental exposures on neurobehavioral health. The purpose of this study was to investigate the comparability between use of a computerized technology called the Behavior Assessment and Research System (BARS) and the commonly used CBCL when measuring neurotoxin exposures and ADHD in children.

METHODS: We enrolled 281 children and their parents/guardians for a five-year research study where we investigated neurobehavioral health and exposure to neurotoxins. Children were tested by the BARS, which is a computerized system that performs neurobehavioral tests, such as the Continuous Performance Test (CPT) and the Selective Attention Test (SAT). BARS consists of a specialized 9-button keyboard that is placed on a laptop. As BARS speaks to children, the children hit the button that corresponds to their answer. Parents/Guardians were required to complete the CBCL and we utilized the ADHD DSM oriented scale for comparison to the BARS.

RESULTS: Using Tobit modeling and adjusting for multiple comparisons, several computerized BARS tests were determined to be associated with attention and impulse control problems on the parent/guardian form of the CBCL. For example, the BARS CPT false alarm (standardized estimate 1.57, 95% confidence interval (CI) (0.67, 2.48), adjusted p=0.006), SAT wrong count (standardized estimate 2.8, 95% CI (1.17, 4.44), adjusted p=0.006), and SAT proportion correct (standardized estimate -2.45, 95% CI (-4.01, -0.88), adjusted p=0.01) were related to attention and impulse control.

CONCLUSIONS: This research shows that the computerized BARS can contribute to environmental exposure and neurobehavioral health. In this example, we utilized BARS to assess CBCL diagnosed ADHD. BARS determined subclinical behaviors related to ADHD, such as sustained attention, impulse control, response, associative learning, and short-term memory.
Daily Patterns of Poly-Substance Use Among Reproductive Age Females, Impulsivity and Risky Sexual Behavior: A Day-Level Latent Class Analysis

Doherty, Emily, A.; Moyers, Susette, A.; Crockett-Barbera, Erica, K.; Chiaf, Ashleigh, L.; Appleseth, Hannah, S.; Leffingwell, Quinn; Croff, Julie, M.

Purpose: Poly-substance use is prevalent among adolescents and emerging adults and is associated with adverse outcomes. Poly-substance use is also correlated with other risk behaviors, including unprotected sex. Both of which increase risk of unplanned and substance exposed pregnancies in females. Yet, few studies have examined the cooccurrence of these behaviors at the day level alongside person level characteristics. The present study applied latent class analysis (LCA) to daily data to 1) identify day-level patterns of substance use and 2) examine the extent to which same day unprotected sex and 3) examine the extent to which impulsivity were associated with class membership.

Methods: Alcohol-consuming females 14-25 years of age (n=150) reported daily substance use at weekly intervals using a Timeline Follow back approach over a one-month period. The Barratt Impulsiveness Scale was administered at baseline and daily report of unprotected sex was collected.

Results: Multilevel LCA identified four distinct day-level classes, including two of primarily single use and one of poly-substance use. Day-level classes were: 1. little to no use (54.6%), 2. vaping (25.6%), 3. cannabis with some cigarette use (10.7%), and 4. heavy alcohol use with intoxication and some vaping and cannabis use (9.1%). Latent classes differed across person level characteristics and risk of same day unprotected sex. Class 1 was associated with lower impulsivity than other latent classes (M=-0.17 vs. 0.09-0.28, p<0.0001). Classes 3 & 4 were associated with higher probability of same day unprotected sex relative to other classes (21% and 14% vs. 6-8%, p<0.0001).

Conclusion: Findings extend previous research by characterizing day level patterns of substance use and risky sexual behavior by impulsivity among emerging adult females. Findings support impulsivity as a person-level characteristic that may increase vulnerability to polysubstance use and unprotected sex, compared to light use or use of vapes alone.
Board 322

Abstract Type: Research Based

When Users Engage Matters: Examining Associations Between Time of Day, Semantic Sentiment, User Engagement, and Mood State in an Online Support Program for Caregivers of People Living with Alzheimer’s Disease and Related Dementias (AD/ADRD)

Pickett, Andrew, C; Longanathar, Priya; Linden, Anna; Boutillier, Justin; Sinclair, Kelsey, L; Elliott, Christian; Zuraw, Matthew; Werner, Nicole, E.

Purpose: Alzheimer’s Disease (AD) and Related Dementia (AD/ADRD) is a leading cause of death among older adults and incidence rates are expected to rise in coming decades. Persons living with AD/ADRD often require unpaid care from others to assist with daily routine activities (e.g., medication administration). CareVirtue is an online tool designed to support AD/ADRD caregivers; it includes a journal feature for recording and sharing information. We sought to explore differences in journal tool use and caregiver mood, based on the time of day.

Methods: We analyzed posts (n= 1,555 posts; 170,212 words) generated by 53 unique users of CareVirtue between March and May 2021. For each post, users reported a mood score (from 1 [very poor] to 5 [very good]) and tagged relevant keywords; we further calculated a sentiment score for each post. Posts were grouped by time of day and differences were explored using analysis of variance.

Results: We observed significant group differences by time of day with respect to mood state (F= 10.73, p<.001), post sentiment (F= 5.14, p=.002), and word count (F= 5.84, p<.001). Across each variable a similar pattern emerged, wherein users posting in the morning had poorer mood state, more negative sentiment, and fewer words written than users in other groups (afternoon, evening, overnight). There were no time differences observed with respect to the number of keyword tags.

Conclusions: Our results suggest there are temporal effects associated with caring for people living with AD/ADRD. Specifically, users who engaged in morning journaling reported poorer mood state and levels of engagement. Reflecting on care-associated tasks early in the day, when users may be busiest, may increase stress for users of such platforms and may reduce intervention engagement. Consistent with others, our findings suggest the need for more carefully tailored support systems for AD/ADRD caregivers.
Is E-cigarette Use Context Linked to E-cigarette Dependence? A Longitudinal Examination Among College Students

Ou, Tzung-Shiang; Buu, Anne; Yang, James; Lin, Hsien-Chang

Purpose: Previous studies have established an understanding of e-cigarette use contexts and associated e-cigarette use patterns such as use frequency, yet the critical extension to associated e-cigarette dependence outcome remains under-researched. Understanding such associations can provide deeper insights into potential intervention points to prevent the development of dependence. Thus, this study conducted a prospective longitudinal investigation examining the associations between e-cigarette use contexts and e-cigarette dependence among college students.

Methods: This study recruited college students who were current e-cigarette users from Fall 2019 to Fall 2020 (four semesters) at three public universities in the Midwest and South of the U.S. Those who participated for at least two semesters were included in the final analysis (N=366). Data were collected using a structured questionnaire. E-cigarette use dependence was assessed using the Penn State Electronic Cigarette Dependence Index. A linear mixed model with a random intercept and a random slope was conducted to examine the longitudinal association between e-cigarette use contexts (using e-cigarettes for relaxation purposes, using e-cigarettes due to their good taste, being hooked on e-cigarettes, and using e-cigarettes for experiment purposes) and e-cigarette dependence, controlling for demographics and other covariates.

Results: Participants who used e-cigarettes for relaxation (β=0.73, p<0.001), due to their good taste (β=0.48, p<0.05), and being hooked (β=2.91, p<0.001) tended to have a higher level of e-cigarette dependence. Using e-cigarettes for experimental purposes was associated with a decreased level of dependence (β=−1.03, p<0.01).

Conclusions: These findings highlight the importance of addressing e-cigarette use contexts to prevent the development of e-cigarette dependence. Prevention and intervention efforts aimed at developing more effective strategies should consider the various e-cigarette use contexts associated with dependence risks, such as enhancing awareness of the use dependence risk related to good taste of e-cigarettes, assessing use motivations, and incorporating early screenings for use.
Board 324

Abstract Type: Research Based

**Understanding the Support and Resource Needs of Grandparents Raising Grandchildren**

Kekeh Michele; Dial Kathy; Tonn Cara; Yancura Loriena A

Purpose: US population estimates suggest that 2.3 million children live separately from both parents. Often called kinship caregivers, family relatives care for 70% to 90% of these children, with grandparents making up the largest category. The aim of this study was to examine the experiences and needs of grandparents raising their grandchildren in terms of community support, resources, and services.

Methods: Phone or Zoom interviews were conducted among a purposive sample of 24 grandparent caregivers from February to March 2022 to examine their initial experiences of becoming a caregiver, the current support services and resources they received, and other resources and services that would be helpful to them. Each interview lasted 50 to 60 minutes and was digitally recorded and transcribed verbatim with the participant's permission. The interview data were analyzed using descriptive thematic analysis. The study protocol was reviewed and approved by the institutional review board.

Results: Most participants acknowledged not knowing any resources at the onset of their caregiving and were intimidated to ask for assistance. Over time, some received support from government-funded programs and the school system. However, many were unqualified for government-funded programs and relied on community support and assistance from family members and friends, support groups, and faith-based communities. The primary helpful resources included Medicaid, respite care, educational assistance and therapy for grandchildren, and financial and legal assistance to navigate the court system.

Conclusion: As most grandparents had fixed incomes, caring for their grandchildren was an additional financial burden. Many needed support for the well-being of their entire family. The study findings suggest the establishment of policies to support grandparents at the onset of their caregiving role and provide them with information and referrals to resources to address their family needs.
Abstract Type: Research Based

**Psychometric Properties of the Adolescent and Young Adult Men – Health Indicators Scale (AYAM-HIS)**

Rovito, Michael, J; Dworkin, Shari; Allen, Keri; Rovito, Kathy, E; Martinez, Sydney

**Purpose:** The goal of this current exploratory study was to evaluate the psychometric properties of the AYAM-HIS among a select sample of adolescent and young adult men, a priority population experiencing disparate health outcomes compared to women.

**Methods:** A total of 160 adolescent and young adult men were recruited via snowball sampling techniques in a large metropolitan region to take part in this study. Out of the original sample, 135 provided appropriate informed consent documentation and completed the AYAM-HIS in its entirety. A subsample (n=40) of the 135-participant pool was randomly selected to complete the survey a second time one-week after completing the first survey. A total of 34 participants completed the assessment in its entirety a second time.

**Results:** Cronbach's alpha values ranged from 0.554 to 0.617 among the five exploratory factors indicating acceptable consistency scores. These scores indicate that there are acceptable levels of internal consistency within each factor. Spearman rho analyses calculated stability coefficients of ≥ 0.5 for 125 out of the 131 scale data items, indicating acceptable reliability properties (see Table 2 below). Approximately 60% of those items (75 out of 125 items) had a stability coefficient of ≥ 0.7, indicating good reliability properties of the AYAM-HIS tool.

**Conclusion:** These preliminary results indicate that the AYAM-HIS yielded reliable and valid data, thus providing a means to measure indicators of health behaviors and possible outcomes within this population. The AYAM-HIS can provide the necessary information to assess current health behaviors so as to provide a foundation from which interventions can be designed. Future research into reducing survey fatigue related to the AYAM-HIS and testing with diverse populations are warranted. More research is needed among a larger population to confirm these findings.
Factors Associated with Hazardous Drinking Among Daily E-Cigarette Users

Dobbs, Page, D; Arthur, Erin; Peterson, Olivia; Seymore, Jessica; Buttram, Mance; Davis, Robert

Purpose. Research suggests that e-cigarette users often use other substances such as alcohol and cannabis. The objective of this study was to explore the relationship between hazardous drinking among e-cigarette users and other social and behavioral factors.

Methods. A sample of daily e-cigarette users were recruited from a large southern university to complete a cross-sectional survey (n=412) and a subsample of participants were recruited to participate in a follow-up virtual interview (n=25). Survey participants were asked about their demographic information, use of substances (i.e., alcohol, cannabis, e-cigarettes), dependence on e-cigarettes (using the Penn State E-Cigarette Dependence Index) and were screened for depression using the PHQ9. Chi-squared analyses and t-tests examined differences between characteristics of hazardous and non-hazardous drinking. Next, a multivariate logistic regression examined relationships between covariates and hazardous drinking. Qualitative data were transcribed verbatim, checked for accuracy, and coded using NVIVO. A thematic analysis was conducted for coded data. Emerging themes were used to explain quantitative findings.

Results. Among our sample of daily e-cigarette users, 65.3% reported hazardous drinking. Daily e-cigarette users who reported ever use of cannabis (aOR=1.98) were associated with increased odds of hazardous drinking. Other covariates related with greater odds of hazardous drinking included increased age (aOR=1.08), greater risk of depression (aOR=1.05), and greater dependence on e-cigarettes (aOR=1.07). During interviews, participants described experiencing increased cravings while drinking.

Discussion. E-cigarette users who drink excessively may use several substances and may need behavioral and psychological therapy. Interventions seeking to address e-cigarette use among young audiences should consider that risky health behaviors may be bidirectionally associated with mental health outcomes, such as depression. Substance use prevention messages and interventions should be paired with mental health support to assist those at risk for poly-substance use and depression.
Assessing Transnational Spillover Effects of Mexico’s Front-of-Package Nutritional Labelling System Among Mexican Americans in the US: Findings from the 2021 and 2022 International Food Policy Surveys

Thrasher, James, F; Davis, Rachel, E; Fang, Dai; Nieto, Claudia; White, Christine, M; Jáuregui, Alejandra; Hammond, David

Objective: In 2020, Mexico implemented an innovative front-of-package nutrition warning label (FoPWL) policy for packaged foods high in sodium, trans fats, saturated fats, sugar, or calories, which aim to increase the salience and understanding of nutrition information. Although the US does not mandate FoPWLs, Mexican products with FoPWLs are available in Mexican-oriented food stores in the US. This study evaluated Mexican Americans’ self-reported exposure to and effects of Mexican FoPWLs for packaged foods.

Methods: The 2021 and 2022 International Food Policy Study surveyed online panels of adult Mexican Americans in the US (n=6690) about buying food at Mexican-oriented stores, noticing Mexican FoPWLs, and being influenced by FoPWLs to purchase fewer colas, sodas, diet sodas, sweetened fruit drinks, candy, snacks, desserts, and sugary cereals (each assessed separately). After recoding the frequency of buying foods in Mexican stores and noticing FoPWLs (i.e., “often” and “very often” vs. rest), logistic models regressed these outcomes on sociodemographics, adjusting for post-stratification weights.

Results: Most participants (87.0%) purchased foods in Mexican stores. Of these, 67.1% reported noticing FoPWLs, among whom many reported that FoPWLs influenced them to buy fewer unhealthy foods (range=32% [snacks like chips] - 44% [colas]). No significant changes were found for these outcomes over time, except that more people reported buying fewer sweetened fruit drinks and desserts due to FoPWLs in 2021. Being younger, having ≥two children at home, and Spanish use frequency were positively associated with both buying foods in Mexican stores and noticing FoPWLs. Also, higher education and income adequacy were positively associated with noticing FoPWLs. Being female and more frequent Spanish use were consistently associated with purchasing fewer unhealthy foods because of FoPWLs.

Conclusions: Mexican foods with FoPWLs have entered the US market and may have reduced unhealthy food purchases among Mexican Americans, including among some disadvantaged subgroups.
Abstract Type: Research Based

Clinician’s Overall Satisfaction, Perceived Effectiveness of Teaching Methods, and Future Learning Needs

Clark, Heather, R; Myint, Wah, W; Zemanek, Kim, A; Ward, Kayce; Mitchell, Stacy, A; Downing, Nancy, R

Background: To increase access to sexual assault forensic exams (SAFEs) in rural communities, the Texas A&M School of Nursing’s Center of Excellence in Forensic Nursing implemented the Texas Teleforensic Remote Assistance Center (Tex-TRAC) project. The project connects rural hospital clinicians to expert Sexual Assault Nurse Examiners (SANEs) using telehealth technology. Critical to the project is ensuring proper training and mentoring of rural clinicians to provide high quality, trauma-informed, patient-centered care. This is accomplished using the ECHO® platform to provide regular opportunities to increase skills and techniques to rural clinicians. This study describes evaluation results of ECHO-SAFE sessions.

Method: Post session evaluations were distributed to participants using Qualtrics® online survey software. Descriptive and text analyses were conducted on evaluation questions, including overall satisfaction, perceived effectiveness of teaching methods, and future learning needs.

Results: There were 52 clinicians who participated in the seven (N=7) ECHO-SAFE sessions. In all seven surveys, participants strongly agreed that the TeleSANE experts’ teaching strategies and learners’ engagement were effective. Also, more than 90% (N=42) of participants agreed or strongly agreed that the sessions’ objectives were met. They reported the information was very valuable, and the presentations were great. When asked about future ECHO-SAFE topics, five major themes included: (a) managing patients, (b) clinical skills development, (c) new guidelines and laws, (d) self-management, and (e) other. Clinicians wanted to have more case studies. One reported, “I really enjoy case studies and personal experience stories which help us understand how these stories can happen.” Other requests included skills development such as sexually transmitted infection testing, strangulation assessment, injury identification, and evidence collection.

Conclusions: Findings indicate ECHO-SAFE workshops are a strong platform for participant engagement. Further, clinicians’ requests for continuous education using a telehealth platform can have potential for their retention in providing SAFE.
Evaluation Of A READY4Life Program For Refugee And Immigrant Youth

Young, Michael; Montesa, Emmanuel; Alvarado, Rachel

Purpose: Research has demonstrated the development of healthy relationships can also have a positive impact on mental and physical health. The Office of Family Assistance funds organizations to provide relationship education for youth, to help them prepare for Life (READY4Life). The U.S. Committee for Refugees and Immigrants (USCRI) is one such organization. The purpose of this study was to examine the preliminary effects of the USCRI Ready4Life program on four outcome measures: 1) Communication skills; 2) Conflict resolution, conflict management, and problem-solving skills; 3) Healthy relationship and marriage skills; 4) Progress towards greater economic stability.

Methods: Refugee and immigrant youth were randomly assigned, in a 3:1 ratio, to either an intervention group or a comparison group. Intervention participants received a 16-hour relationship education (RE) program developed for refugee populations. The program was designed to help young people develop important life skills and become successful in their new country. In addition to the RE program, intervention participants also received case management. Participants in the comparison group only received case management. All participants (intervention and control), completed self-report questionnaires prior to the beginning of the program. Then intervention youth participated in the RE program. All participants completed a follow-up questionnaire six months after the end of the program.

Results: Intervention participants (n=253) made significant (p<05) improvements from pretest to follow-up, when compared to control participants (n=88) on all four outcome variables; Effect sizes were small.

Conclusions: These analyses represent interim findings from an ongoing grant program and do not demonstrate program effectiveness or impact. Nevertheless, these positive findings relative to the implementation of an RE program with refugee and immigrant youth are encouraging. Future researchers should consider including specific health programming as part of the intervention and also examine the effects of the intervention on health behavior and other direct health outcomes.
Board 330

Abstract Type: Research Based

**Telehealth Divide in Depression and Substance Use Treatment among US Adults, 2021**

Wenhua Lu; Renee D. Goodwin

**Purpose:** To examine sociodemographic disparities in telehealth service utilization among US adults with past-year major depressive episode (MDE) and substance use disorder (SUD).

**Methods:** Data from adults aged 18 and above (N = 47,291) who participated in the 2021 National Survey on Drug Use and Health, a nationally representative survey of the US population, were analyzed using multivariable logistic regression. All analyses adjusted for complex survey design, and adjusted odds ratios (AOR) were reported.

**Results:** In 2021, 5107 and 9465 of US adults met criteria for 12-month MDE and SUD, respectively, among whom 42.3% and 3.3% received telehealth services for respective conditions. Among adults with MDE, adults aged 26-49 (AOR=1.32 [1.06-1.65]), females (AOR=1.39 [1.12-1.73]), lesbians/gays (AOR=1.60 [1.05-2.45]), bisexual individuals (AOR=1.64 [1.25-2.16]), adults with some college (AOR:1.58 [1.07-2.34]) or college degree or higher (AOR=1.94 [1.27-2.96]), and those with private insurance (AOR=1.89 [1.30-2.74]) had higher odds of telehealth service utilization. Compared to adults living in large metropolitan areas, rural residents (AOR=0.68 [0.49-0.95]) had lower odds of telehealth utilization. Having MDE-related severe impairment significantly increased odds of telehealth service use in adults with past-year MDE. Among adults with SUD, adults aged 26-49 (AOR=2.53 [1.42-4.50]) and those with co-occurring MDE had higher odds of telehealth service use.

**Conclusion:** To sustain the telehealth service model and ensure equitable access, targeted efforts are needed to promote linkage to care for young adults, improve digital literacy for adults with low education, increase insurance enrollment and affordability, and expand telehealth provision in rural areas. More gender-affirmative engagement and care are needed to improve SUD telehealth service use in sexual minority adult populations.
Board 331

Abstract Type: Research Based

Identifying Pertinent Risk Factors for Nicotine and Cannabis Use Among Hispanic Young Adults: A Classification and Regression Tree Application

Jacobs, Wura; Qin, Weisiyu; Leventhal, Adam

Purpose: Drawing on the social ecological theory, we examined intrapersonal, psychological stressors, and social and home environmental factors to identify characteristics most significant for nicotine and cannabis product use risk among Hispanic young adults.

Methods: Data were from the latest wave (2023) of the Happiness and Health Study. Participants self-reported their past 6-month nicotine and cannabis product use. They also reported on various intrapersonal, psychological, social environment, and home exposure to cigarette, vaping, cannabis use. Classification and Regression Trees (CART) analyses were used to identify determinants using Gini impurity. Model intricacy was restrained and pruned to circumvent overfitting.

Results: From a total cohort of 1,073 Hispanic young adults, the observed prevalence for past 6-month nicotine and cannabis product use were 26.56% and 43.62%, respectively. For the CART model examining nicotine product use, exposure to vaping in the home emerged as the primary determinant/risk classifier (model accuracy 0.82 [95% CI: 0.80-0.84]). Hispanic young adults exposed to nicotine vaping in the home and who used cannabis in the past 6-month were 78% more likely to use any nicotine products. Those without home exposure to vaping and who do not use cannabis product, had a 12% probability for nicotine product use. For the CART model examining past 6-month cannabis use, home cannabis exposure was also the primary risk classifier (model accuracy 0.76 [95% CI: 0.73-0.78]). Home exposure to cannabis was correlated with an 82% likelihood of cannabis product use. Conversely, an absence of home exposure to cannabis, no use of e-cigarettes, and strong concern for social issues was associated with a 19% probability of cannabis product use.

Conclusions: The pronounced influence of domestic substance use exposure and accompanying risks underscores the need for targeted public health interventions. Implementing culturally resonant, evidence-based intervention strategies environmental risk factors is imperative.
Board 332

Abstract Type: Research Based

A Boost of Confidence: Participation in a Sober Active Community and Abstinence Self-Efficacy

Handley, Sage; Patterson, Megan, S.; Heinrich, Katie, M.; Francis, Allison, N.; Khanhkham, Ashley; Garcia, Vanessa, R.; Howell, Emily; Fields, Allison; Prochnow, Tyler; Barry, Adam

PURPOSE: One in seven Americans aged 12 or older meet criteria for a substance use disorder (SUD), with relapse rates at 40-60%. Multiple factors influence a person's success in recovery, including their confidence to abstain from their addiction, having a supportive social network, and engaging in exercise. This study explored whether participation in The Phoenix, a nonprofit organization offering free group-based exercise to people in recovery from SUDs, was related to higher abstinence self-efficacy (ASE). We also explored whether participants' social networks were associated with ASE.

METHODS: Current Phoenix members (n=52; 51.9% women; 82.9% White, Mage=37.3 years) participated in a two-part study. Part 1 was an online survey measuring ASE, program adherence, recovery capital, psychological distress, and demographic information. Part 2 comprised in-depth interviews assessing participants' recovery support networks. A hierarchical linear regression model assessed whether individual and network-level variables were associated with ASE. Individual-level variables included age, gender, race, program participation, recovery capital, and psychological distress. Network-level variables included network composition (e.g., percentage of networks also in recovery) and network constraint (extent to which network members are connected to one another; higher constraint = higher connectivity within networks).

RESULTS: Abstinence self-efficacy (R2=.504, p=.002) was associated with more frequent participation in Phoenix classes (β=.378, p=.026) and lower psychological distress scores (β=.378, p=.026). At the network-level, higher network constraint scores (β=.378, p=.026) were associated with higher abstinence self-efficacy scores.

CONCLUSION: Findings suggest that participation in The Phoenix was associated with increased ASE, while psychological distress was associated with decreased ASE in our sample. We observed a link between network constraint and ASE, aligning with existing research that emphasizes the importance of robust, interconnected support networks in enhancing recovery confidence. Programs like The Phoenix may be instrumental in supporting individuals with SUDs, thereby facilitating sustained recovery.
Abstract Type: Research Based

Preliminary Results From the Horizon Eagle Fatherhood Program

Young, Michael; Johnson, Katrina

Purpose: Responsible fatherhood programs encourage fathers to provide support in their raising children and to serve as models for their child’s development. One point of emphasis for fatherhood programs is helping unemployed fathers secure employment. Father employment has been shown to have benefits for the fathers’ own mental and physical health, and for the health status/behavior of their children. The purpose of this study was to examine the preliminary effects of the Horizon Eagle Fatherhood Program on improvement in selected relationship and parenting skills and in employment status.

Methods: A community agency, Horizon Outreach, recruited fathers (n=104) to participate in a 40-hour program, designed to help fathers improve relationships, and parenting skills and make progress toward economic stability, including employment. Fathers were randomly assigned, in a 3:1 ratio, to either an intervention group or a comparison group. Intervention fathers received the program and case management. Fathers in the comparison group received case management. All fathers completed self-report questionnaires, prior to the beginning of the program. Following the pretest, Intervention fathers participated in the intervention program. After intervention fathers completed the program, all fathers participated in workforce training. Six months after the program, all fathers completed a follow-up questionnaire.

Results: Intervention fathers made significant improvements from pretest to six-month follow-up in efforts to encourage problem solving by children (p<.05) and in reduction in family conflict (p<.001). Additionally, when compared to control fathers, intervention fathers were more likely to have secured employment (p<.01).

Conclusions: These analyses represent interim findings from an ongoing grant program and do not demonstrate program effectiveness or impact. Nevertheless, these positive preliminary findings, with a relatively small sample, are encouraging. Future researchers should consider including specific health programming within the fatherhood intervention and also examine the effects of the program on health behaviors and other health outcomes.
Board 334

Abstract Type: Research Based

Use of ECHO/SAFE Telehealth Intervention in Clinicians’ Capacity Building on Trauma-Informed Patient-Centered Care

Myint, Wah, W; Clark, Heather, R; Zemanek, Kim, A; Ward, Kayce; Mitchell, Stacy, A; Downing, Nancy, R.

Background: The Center for Excellence in Forensic Nursing, Texas A&M School of Nursing, implemented a trauma-informed patient-centered care project, the Texas Teleforensic Remote Assistance Center (Tex-TRAC), to support rural Texas hospitals in serving sexual assault survivors using telehealth technology to provide real-time assistance to hospital clinicians. A key component of the program is provision of sexual assault forensic examination (SAFE) related mentoring, support, and/or didactic training through the Project ECHO® platform (Extension for Community Healthcare Outcomes). ECHO-SAFE sessions target building clinicians’ capacity and confidence to conduct Tex-TRAC-assisted medical forensic exams. This study presents participating clinicians’ perceived effectiveness of the ECHO-SAFE training mode of delivery and success of the sessions.

Method: A cross-sectional quantitative survey was conducted at the end of sixty-minutes didactic training on different ECHO-SAFE topics using Qualtrics, a web-based survey platform. There were seven sessions that accessed ECHO-SAFE technology, with a didactic presented by expert SANEs. Analyses were conducted using Stata 18.0.

Results: With a total of 52 surveys completed across the seven (7) sessions, nearly all participants rated the technology performance as working well, with 90% rating 100 on a scale of 10-100, and an additional 8% rating the technology as a 90. Similarly, nearly all participants (92%) reported hearing well (rating of 100) during the sessions. Finally, the technology was rated as enabling discussion and collaboration with 90% rating this feature at a 100. The participants’ feedback on the open-ended questions revealed that the training was “valuable to their practice,” “gave great information,” “the cases were realistic scenarios,” and they were “more attentive to the needs of diverse population they served such immigrants or adolescents.”

Conclusion: Use of ECHO-SAFE technology for capacity building of rural clinicians shows promising results. Continuous support for the rural hospital clinicians could sustain the project and give tremendous benefits to the sexual assault survivors.
Abstract Type: Research Based

**Adverse and Positive Childhood Experiences and Associated Adulthood Criminal Conviction**

Suh, Ganghui; Chow, Angela; Ou, Tzung-Shiang; Lin, Hsien-Chang

Background: The social and economic burden of criminal activities is substantial. Recent studies have highlighted the relationship between different childhood experiences and juvenile convictions, yet no study has examined different dynamics of adverse-positive childhood experiences (ACE-PCE) to assess the mechanisms by which childhood experiences lead to adulthood criminality. Resiliency Theory provides frameworks to examine the complex interactions between childhood adversity and positivity and their associated health outcomes.

Methods: This longitudinal study investigated the contribution of ACE and PCE exposures in experiencing adulthood criminal convictions using the National Longitudinal Study of Adolescent to Adult Health data (N=1,980) in four models based on Resiliency Theory’s frameworks. The associations of both adverse and positive childhood experiences on the likelihood of developing adulthood conviction experiences were analyzed using logistic regressions.

Results: Moderate exposure to ACEs (AOR=1.53, p<0.05) and high exposure to ACEs (AOR=2.10, p<0.05) resulted in a gradually increased likelihood of experiencing adulthood conviction. High exposure to PCEs (AOR=0.46, p<0.01) resulted in a decreased likelihood of adulthood conviction, but not for moderate PCEs exposure. High PCEs exposure (AOR=0.51, p<0.05) resulted in a reduced likelihood of adulthood conviction, with both ACEs and PCEs as independent variables. However, with the addition of ACEs-PCEs interaction in the model, increasing PCEs resulted in a higher likelihood of conviction.

Conclusion: The results suggest that ACEs and PCEs present dose-response effects independently of one another where increasing ACEs exposure leads to a heightened risk of adult conviction, whereas increasing PCEs exposure leads to a reduced likelihood of being convicted in adulthood. Contradictory results emerged when both ACEs and PCEs were assessed. It is crucial to address the need for the implementation and re-evaluation of school-based programs to detect ACEs. Future studies should further explore the complexity of childhood experiences and their association with adulthood criminality for a clearer understanding.
Anti-E-cigarette Use Content Exposure on Social Media Attenuates the Association Between Mental Health Problems and E-cigarette Use among Youth

Zheng, Xia; Li, Wenbo; Yang, Meng; Lin, Hsien-Chang

Introduction: Previous studies have implied that social media is connected to e-cigarette use behaviors among youth. However, there is a paucity of empirical evidence on how social media is connected to curbing e-cigarette use. This study investigates the role of exposure to anti-e-cigarette content on social media (e.g., news articles, and public health campaigns) in mitigating mental health risk factors in e-cigarette use among youth. Specifically, we examined whether anti-e-cigarette content was associated with less e-cigarette use by attenuating the effects of internalizing problems on e-cigarette use.

Methods: Nationally representative data were from the 2022 National Youth Tobacco Survey. Youth aged 9 to 19 years were included (unweighted N=28,291). A weighted logistic regression was conducted to examine how internalizing mental health problems were associated with past-30 day e-cigarette use, and how anti-use e-cigarette content on social media moderated this association. Control variables include demographics, risk perception, perceived norms of e-cigarette use, and e-cigarette promotion and advertising exposure.

Results: Exposure to anti-use content on social media was associated with a lower likelihood of using e-cigarettes in the past 30 days among youth (AOR=0.82, p<.001), where anti-use content exposure on social media moderated the association (AOR=0.87, p=.01), indicating that anti-use content exposure on social media could attenuate the effects of internalizing problems on e-cigarette use.

Conclusions: This study revealed a nuanced picture of the roles of social media in shaping e-cigarette-related behaviors among youth. It underscores the possibility that anti-e-cigarette use content on social media could mitigate mental health risk factors on e-cigarette use. Promoting educational content that addresses the risk of e-cigarette use, particularly with a focus on related mental health outcomes, should be promoted more proactively on social media to help curb youth e-cigarette consumption.
Board 337

Abstract Type: Research Based

Identifying Mental Health Literacy as a Key Predictor of COVID-19 Vaccination Acceptance among American Indian/Alaska Native/Native American People

Chen, Xuewei; Winterowd, Carrie; Li, Ming; Kreps, Gary, L.

Introduction: American Indian or Alaska Native (AI/AN) people have experienced substantial health disparities during the COVID-19 pandemic. In the current study, we examined how health literacy, mental health literacy, and socio-demographic characteristics may be associated with willingness to receive a COVID-19 vaccination among AI/AN people.

Methods: A total of 563 AI/AN participants completed an online Qualtrics survey in February 2021. Our participation selection criteria included being (a) 18 years or older, (b) self-identified as AI/AN, and (c) physically located in the United States at the time when filling out the survey. A purposive snowball sampling strategy was used by sending recruitment flyers to colleagues and organizations who serve AI/AN communities to share with potential respondents. This study has received university IRB approval. Bivariate and linear regression analyses were conducted to examine the relationships between AI/AN people’s willingness to receive a COVID-19 vaccination and their health literacy, mental health literacy, self-rated physical and mental health status, worry about getting COVID-19, perceived COVID-19 susceptibility, perceived COVID-19 severity, and some their socio-demographics (i.e., age, gender, and education).

Results: AI/AN people’s mental health literacy and health literacy predicted 30.90% and 4.65% of the variance, in their willingness to receive a COVID-19 vaccination, respectively. After statistically accounting (holding constant) for AI/AN people’s self-rated physical/mental health status, their potential worry about getting COVID-19, their perceived susceptibility, the perceived severity of COVID-19 consequences, and socio-demographics (i.e., gender, age, and education), AI/AN people’s mental health literacy was still a strong predictor (b = 0.03, p < 0.001) of their willingness to receive a COVID-19 vaccination (model R2adjusted = 40.14%).

Discussion: Mental health literacy was a substantial factor associated with willingness to receive COVID-19 vaccination among AI/AN people in this sample. It is essential to provide evidence-based and culturally informed interventions to improve mental health literacy among AI/AN people.
Mpox Media Consumptions, Attitudes, and Preferences

Owens, Christopher; Hubach, Randolph D

Purpose: The purpose of this mixed-method study was to examine the consumption of, attitudes towards, and preferences for mpox media (formerly known as monkeypox) among US sexual and gender minority (SGM) males.

Methods: A total of 496 SGM males completed an online cross-sectional survey between August 6-15, 2022, during the beginning of the mpox epidemic in the US. Close-ended items assessed participants' demographic characteristics, sexual behavioral characteristics, mpox media consumption, and attitudes towards mpox representation in the media. An open-ended item assessed participants' preferences for mpox media content. Close-ended data was analyzed with descriptive statistics and multiple logistic regressions were used to examine demographic and behavioral factors' association with mpox media consumptions and attitudes. Open-ended data was analyzed with inductive content analysis.

Results: Although most participants consumed national/global (86.1%) and state/local (77.0%), most also agreed or strongly agreed that the media reports about mpox only targeted (66.3%) and stigmatized gay and bisexual men (69.2%). Rural respondents had lower odds of consuming global/national (aOR = 0.54, 95% CI = 0.31–0.95) and state/local media reports about mpox (aOR = 0.40, 95% CI = 0.25–0.64) than urban respondents. The odds of agreeing or strongly agreeing that mpox-related media targets gay and bisexual men was 80 higher among rural respondents than among urban respondents (aOR = 1.80, 95% CI = 1.13–2.88). Respondents with an annual household income of $59,999 or less had lower odds of consuming state/local media about mpox than respondents with a higher income (aOR = 0.60, 95% CI = 0.37–0.97). The three most preferred mpox content were the destigmatization of SGM people (44.2%), mpox vaccine accessibility (25.2%), and mpox transmission and prevention (19.2%).

Conclusion: SGM males prefer mpox messaging campaigns to be grounded in stigma-reduction to ensure that messages do not perpetrate stigma against them. Stigmatizing messaging might prevent SGM males eligible to receive the mpox vaccine from actually getting it. Special attention should be considered when designing mpox and other sexual health disease health campaigns for rural SGM males, given the elevated stigma rural SGM males experience.
Board 339

Abstract Type: Research Based

What Do They Talk About? How Individuals Connected to Addiction Recovery Engage via The Phoenix Mobile App

Heinrich, Katie M; Collinson, Beth; Valdez, Danny

Purpose: Individuals wanting to change substance use behaviors may choose to engage with virtual recovery-supportive resources including social media and apps. These resources help people both initiate and sustain change without formal treatment. Yet, limited research has explored how individuals engage within these virtual spaces. This study tests a variety of natural language processing (NLP) and deep-learning tools to process and contextualize data from The Phoenix: A Sober Community mobile app.

Methods: Using a pilot sample of N=19,695 posts, we approximated and visualized themes using an iterative Bi-directional Encoder Representations from Transformers (BERT) topic modeling tool, we measured emotions using the Text2Emotion lexicon, and measured sentiment using the Valence Aware Dictionary and sEntiment [sic] Reasoner (VADER) lexicon.

Results: Our iterative BERT topic model analysis identified 10 semi-correlated latent topics (Coherence = .49). These topics likewise implicated two mutually exclusive uses of the Phoenix mobile app: (a) as a promoter of social events and outings (7 topics), and (b) as a place to openly discuss addiction, sobriety, recovery, and relapse (3 topics). Our emotion analysis findings were inconclusive, as the lexicon incorrectly categorized posts qualitatively deemed ‘supportive’ as having ‘sad’ or ‘fear’ indicators. However, our sentiment analysis correctly identified highly affirming posts and posts indicative of personal struggles or sobriety roadblocks.

Conclusions: Our findings support the use of NLP and deep learning to analyze mobile app data pertaining to addiction, sobriety, and recovery. These tools both elucidated general uses of this app and offered insights and possible potential intervention points for users disclosing their recovery and sobriety struggles. Future research should consider the use of these exploratory tools with bot technology to rapidly intervene based on certain scores or indicators.
Board 340

Abstract Type: Research Based

**Strategies for Paternal and Child Physical Activity: Application of the Social-Ecological Model to Dyadic Interviews Among Mexican Heritage Fathers**

Wende, Marilyn, E; Umstattd Meyer, M. Renée; Enriquez, Serena; Bridges Hamilton, Christina, N; Prochnow, Tyler; Sharkey, Joseph, R.

Purpose: Families living near the Texas-Mexico border face disproportionate barriers to physical activity (PA), yet little research has explored how Mexican-heritage fathers perceive and overcome barriers to child PA. The purpose of this study was to examine and describe fathers’ perceptions of strategies to improve child PA through a social-ecological lens.

Methods: Fathers (n=30) living near the Texas-Mexico border colonias completed Spanish-language dyadic interviews (n=15) conducted by trained facilitators. Spanish-language audio recordings were transcribed verbatim and translated into English. A coding framework was created based on the social-ecological model. Inductive and deductive approaches directed thematic analysis. Coding consisted of two researchers who coded one interview for reliability purposes with intercoder agreement set at 80 percent agreement on 95 percent of codes.

Results: Fathers mentioned intrapersonal (e.g., physical health, beliefs), interpersonal (e.g., social support, norms), environmental (e.g., neighborhood/home environments), and policy (e.g., access to jobs, law enforcement) factors that influenced their own and their child’s PA. Participants discussed intrapersonal factors (e.g., father experiencing injury) as barriers to their child’s PA, while interpersonal factors (e.g., parental duty) facilitated PA. Outdoor environments were cited as crucial for PA, but due to safety concerns (e.g., traffic), children required parental supervision or community support to be active. Many fathers reported working long hours and having low access to well-paying jobs as a major barrier to PA. However, participants reported finding meaning in PA for themselves and their children, including connection with family and friends, personal identity, and maintaining good health.

Conclusions: Results from this study suggest that the meaning participants attribute to being physically active, especially on the interpersonal level, contributes to reinforcing PA and promoting resilience for themselves and their children. These findings can inform research and intervention by identifying the perspectives of fathers regarding facilitators and barriers to PA in limited resource areas.
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Abstract Type: Research Based

**Fitness Technology and Physical Activity: Mediating Roles of Communication Behaviors on Social Media**

Zheng, Xia

Introduction: Fitness technologies, such as smartphone applications (apps) and wearable tracking devices, have gained widespread popularity. While primarily designed to support health and fitness goals, fitness technologies also afford users various health-related communication behaviors on social media. This study had two main objectives: 1) to examine whether using health information technology was associated with increased physical activity levels, and 2) to investigate whether communication behaviors on social media mediated the aforementioned link in a nationally representative sample.

Methods: Data from the Health Information National Trends Survey (HINTS) 2022 collection were included (N=6,252, weighted N=258,418,467). Multivariate linear regressions with weights were used to test hypotheses without mediation relationships. Hayes’s PROCESS program, a path-analysis based tool was used for testing mediation relationships. The bootstrapping technique was used to generate an empirical representation of the sampling distribution of the indirect effect when doing mediation analysis.

Results: Controlling for demographic and other known influences on physical activities, the findings revealed that users of fitness technology reported higher levels of both moderate physical activity ($\beta= .41$, $p<0.001$) and strength training ($\beta= .29$, $p<0.001$). Additionally, communication behaviors (i.e., share of personal health information on social media and access health-related videos on social media) mediated the link between fitness technology use and frequency of strength training (95% CIs=[.005, .022] and [.008, .037] respectively).

Conclusions: These results underscored the potential of fitness technologies to enhance physical activity levels. This study suggests an opportunity to leverage fitness technologies to develop effective interventions for positive behavioral changes by harnessing communication behaviors afforded by social media.

Keywords: fitness technology, health information technology; physical activities; apps; wearable tracking devices; communication mediation; social media
Lactation Telehealth Simulation Session for Lactation Students: Promoting Communication Between LCs and Breastfeeding Parents

Mendelson, Sherri, G; Efrat, Merav; Forster, Myriam

Purpose: Lactation assistance during and after hospital stay promotes Healthy People 2030 aims of exclusive breastfeeding for the first six months of life. Interventions to help start and maintain breastfeeding need to incorporate factors that have shown positive results on breastfeeding outcomes. Breastfeeding interventions with lactation counselors (LC) who provide accurate breastfeeding knowledge and support are linked to higher initiation, duration, and longer exclusive breastfeeding rates. This study explores utilization and acceptability of virtual telehealth simulation counseling sessions with student-instructor debriefing to develop student’s lactation counseling and communication skills.

Methods: This was a quasi-experimental experiential learning intervention with the objective of training diverse LCs. A community lactation consultant presented 10 one-hour simulated virtual prenatal breastfeeding classes and first week at home breastfeeding support groups to small groups of lactation students. The lactation consultant assumed the role of LC and of the expectant or breastfeeding parent. Qualitative analysis was used to summarize comments from recorded sessions.

Results: Students (N=35) attended a prenatal and postnatal session. Comments concerned the concept of patient autonomy, “laying out options for the mother to determine what would work for her gives her a say in the process.” All student participants agreed or strongly agreed that simulations were extremely helpful in enhancing their lactation learning.

Conclusions: Results suggest simulations are a successful format for training future LCs. Guiding students to communicate with new parents in non-judgmental ways, demonstrating how to support parent’s autonomy, providing clear definitions of terms and intent, and understanding physiologic outcomes are critical elements of training students from diverse cultures for future practice. Simulation training is a promising educational modality to improve breastfeeding initiation and duration.
Correlates of E-cigarette Use Among Young Adults in Lebanon

Mukhopadhyay Ayesha; Lugemwa Tony; Asfar Taghrild; Nakkash Rima; Maziak Wasim; Ward Kenneth

Introduction: E-cigarette use (vaping) has been increasing globally, especially among adolescents who smoke cigarettes. Little is known, however, about factors that drive vaping in Eastern Mediterranean region (EMR) countries such as Lebanon, which has high rates of waterpipe use.

Methods: We examined associations of sociodemographic, tobacco-related, and personality characteristics with having ever vaped among 461 members of a school-based cohort study in Beirut, Lebanon. Cohort members were selected from 8th – 9th grades based on use, or susceptibility to use, waterpipe or cigarettes. This study analyzed associations at the 9th follow-up (when vaping status was assessed, mean age 21.3 years; 39% female). Logistic regression was used to identify correlates.

Results: 37.5% of respondents reported vaping, which was associated with being in school (OR [95% CI] = 2.88 [1.47-5.62], greater income (OR = 1.70 [1.07-2.69]), currently smoking waterpipe (OR = 1.67 [1.00-2.81]), not being a novelty seeker (OR = 0.25 [0.13-0.48]) and reporting more depression symptoms (OR = 2.21 [1.27-3.84]). Vaping was more strongly associated with waterpipe use among those who had tried to quit waterpipe recently (OR = 3.20 [1.46-7.01]) than among those who had not made a quit attempt (OR = 2.03 [1.08-3.83]) (p = 0.0002). In contrast, cigarette smokers who had not tried to quit were more likely to vape (OR = 2.52 [1.55-4.09]).

Discussion: In Lebanon, vaping is especially prevalent among young adult waterpipe users who want to quit. Results have implications for targeting harm reduction efforts in the EMR.
Are Screen Time and Social Media Consumption Related to Poorer Health and Academic Outcomes in Graduate Students?

Pucillo, Evan M.; Andrea, Catherine, M.

Introduction: There is a growing body of research showing adverse consequences from increased mobile phone screen time and social media usage. Similarly, there is mounting evidence that certain brain structures involved in neuro-cognitive-behavioral processes may become atrophied with excessive social media consumption. This may lead to impairments in the limbic system structures associated with memory and learning. The purpose of this study was to explore relationships between social media screen time and self-reported health and academic performance.

Methods: IRB approved all study procedures. A longitudinal and observational cohort design was used to test the hypotheses. Subjects completed baseline self-reported surveys for the General Health Questionnaire (GHQ), and Psychological Well Being Scale (PWBS). Data was collected using weekly screen-time reports, self-reported social media usage, and self-reported sleep time, and was analyzed using IBM SPSS v.29.

Results: N=26 students were included (N[%]= 10[38%] male; 16[62%] female) with a mean(SD) age of 25.2(1.6). Mean(SD) GHQ was 30.1(3.1), PWBS was 105(9.9), daily screen time 256(58)min, social media usage 168(36)min, academic GPA 3.4(0.3). GHQ, PWBS, and GPA were significantly related to social media usage (r = -0.53(p<0.05), r = -0.41(p<0.05), r = -0.28(p<0.05), respectively).

Discussion: This study showed a relationship between prolonged social media screen time and lower self-reported health and psychological well-being. Further, GPA was lower for students with higher social media screen time. Academic support networks should consider the impacts of social media health behaviors on student populations. Further longitudinal study is needed to determine if social media consumption has deleterious long-term effects on graduate students.
Abstract Type: Research Based

**Multi-level Determinants of Food Pantry Use among Food Insecure Racial and Ethnic Diverse College Students**

Perez, Jacqueline; Jarvis, Jocelyn, E; Jones, Rashida; Stern, Marilyn; Himmelgreen, David; Conner, Kyaien; Dumford, Amber; DeBate, Rita, D

Objective: College students are disproportionally more food insecure when compared to the public with Black and Hispanic college students 1.5 times more likely to experience food insecurity (FI). Although a rapid growth in college campus food pantries has transpired, research suggests moderate utilization rates. The purpose of this study was to employ a multidimensional framework depicting multiples levels and domains of influence relevant to understanding and addressing campus food pantry utilization among food insecure non-Hispanic Black and Hispanic college students.

Methods: The current study is part of a larger cross-sectional study exploring FI among racial and ethnic undergraduate college students (n=460; 174 Black non-Hispanic, 286 Hispanic) attending a large, urban, southeastern, research institution in Fall 2022. Based on the National Institute of Minority Health and Health Disparities Research Framework measures, representing levels/domains of influence, included: a) Individual/Health: food insecurity, psychological distress, loneliness; b) Individual/Behavioral: food pantry use, FI coping mechanisms, cooking behaviors and skills; c) Individual/Socio-cultural: socio-demographics; d) Interpersonal/Socio-cultural: experiences with discrimination; social support; e) Community/Socio-cultural: cultural familiarity/ validation, humanized educational experience, holistic support. A multivariate logistic regression model was constructed to analyze the relationship between food pantry use and multi-level domains of influence.

Results: Approximately 63% of participants were observed with very low food security and 37% with low food security; only 17% of participants reported food pantry use. Logistic regression analyses revealed FI coping mechanisms (OR=1.15, 95% CI [1.082-1.231] and discrimination day-to-day unfair treatment (OR=1.04, 95% CI [.1.000-1.077]) were observed to be predictive of food pantry utilization.

Conclusions: Results reveal food pantry utilization among racial and ethnic college students is associated with both individual and interpersonal level factors. Decreasing disparities in FI among college students requires further examination of determinants that span various domains within and among socio-ecological levels of influence to inform the development of multi-level interventions.
**Board 346**

Abstract Type: Research Based

**Adverse Childhood Experiences and Current Electronic Cigarette Use among Young Adults in the United States**

Merianos, Ashley, L; Olaniyan, Afolakemi, C; Nabors, Laura, A; King, Keith, A

Purpose: Adverse childhood experiences (ACEs) have been associated with increased tobacco product use, but less is known about the association between ACEs and current e-cigarette use during young adulthood. We examined the associations between ACEs and current e-cigarette use among U.S. young adults.

Methods: A secondary analysis of 2021 Behavioral Risk Factor Surveillance System data was conducted and included 2,537 U.S. young adults ages 18-24 years. We assessed cumulative number of ACEs categorically as one, two, three, and ≥4 ACEs, and assessed each ACE type individually. Current e-cigarette use was defined as using e-cigarettes on some days or every day. Covariates included young adult sex, race/ethnicity, education level, income level, and current other tobacco use (i.e., combustible cigarettes, smokeless tobacco). We conducted adjusted logistic regression analyses.

Results: About 19% of participants currently used e-cigarettes, and 22% reported one ACE, 13% reported two ACEs, 11% reported three ACEs, and 31% reported ≥4 ACEs. Participants who experienced three ACEs (adjusted odds ratio [AOR]=2.20, 95% confidence interval [CI]=1.15-4.23) and ≥4 ACEs (AOR=2.73, 95%CI=1.58-4.71) were at higher odds of reporting current e-cigarette use than those who experienced no ACEs. Participants who experienced emotional abuse (AOR=1.83, 95%CI=1.33-2.51) and physical abuse (AOR=1.73, 95%CI=1.21-2.46) from parents were at higher odds of reporting current e-cigarette use than those who did not experience these ACEs. Participants who lived with household members who had a mental illness (AOR=1.91, 95%CI=1.38-2.66), alcohol problem (AOR=1.80, 95%CI=1.27-2.55), used illicit drugs (AOR=1.69, 95%CI=1.19-2.39), or engaged in physical violence with each other (AOR=1.67, 95%CI=1.18-2.34) were at higher odds of reporting current e-cigarette use than those who did not experience these ACEs.

Conclusions: Results demonstrated associations between ACEs and current e-cigarette use among U.S. young adults. Programs that assist young adults in coping with childhood trauma and maltreatment may contribute to a reduction in their e-cigarette use.
Home Thirdhand Tobacco Smoke Exposure Associated with Inadequate Sleep Duration among U.S. Adolescents

Merianos, Ashley, L; Hill, Madelyn, J; Mahabee-Gittens, E, Melinda

Purpose: Tobacco smoke exposure and inadequate sleep duration have been independently associated with health consequences among adolescents. Less is known about the association between tobacco smoke exposure and inadequate sleep duration among this at-risk population. The objective of this study was to explore the association between home tobacco smoke exposure status and inadequate sleep duration among U.S. adolescents.

Methods: We conducted a secondary analysis of 2020-2021 National Survey of Children’s Health data including 27,272 adolescents ages 13-17 years. Home tobacco smoke exposure status included: no home tobacco smoke exposure or did not live with smokers; home thirdhand smoke exposure only or lived with smokers who did not smoke indoors; and home secondhand and thirdhand smoke exposure or lived with smokers who smoked indoors. Inadequate sleep duration was assessed categorically based on age-specific guidelines, which was defined as <8 hours per 24 hours. Covariates included adolescent age, sex, race/ethnicity, mental, emotional, developmental, or behavioral problem, body mass index-for-age, physical activity, and screen time; caregiver education; and family structure and federal poverty level. Two weighted unadjusted and adjusted logistic regression models were fitted with the adjusted model including the covariates.

Results: Approximately 27% of adolescents had reports of inadequate sleep duration. Regarding home tobacco smoke exposure status, 12% had home thirdhand smoke exposure only and 3% had home secondhand and thirdhand smoke exposure. Unadjusted (odds ratio [OR]=1.37, 95% confidence interval [CI]=1.15-1.64) and adjusted (adjusted OR=1.24, 95%CI=1.03-1.50) model results indicated that adolescents with home thirdhand smoke exposure only were at increased odds of having inadequate sleep compared to adolescents with no home tobacco smoke exposure.

Conclusions: Home thirdhand smoke exposure is associated with inadequate sleep duration among U.S. adolescents. Restricting smoking inside the home does not completely protect adolescents from exposure-related risks. Household tobacco cessation and sleep hygiene for adolescents should be encouraged.
Perceived Friend and Family Support for COVID-19 Vaccination is Associated with Parents’ Decision to Vaccinate Their Children in a Diverse, Lower Income Community in the Northeastern US

Ben Rudolph; Sumit Sharma; Leily Ayala; Jonna Thomas; Ebony Jackson-Shaheed; Anna E. Price

Despite evidence of COVID-19 vaccine safety and efficacy, vaccine uptake among children remains limited. Evidence suggests that social influences may impact vaccination status; although, few studies have examined the relationship between social influences and uptake of the COVID-19 vaccine for the children of lower-income, parents of color. This study, conducted in a diverse, lower-income community in the Northeastern US, examined the relationship between social influences and parents’ decision to have their child(ren) vaccinated against COVID-19. In 2022, we surveyed 186 parents using an interview-administered survey in English and Spanish at after-school programs, parks, and city events. Parents were asked about their vaccine status, their children’s vaccine status, the extent to which their friends and family supported them getting the COVID-19 vaccine, and whether they knew others who did not want the COVID-19 vaccine. Descriptive statistics and logistic regression models were used to analyze the data. Statistical significance was set at p<.05, a priori. Parents surveyed were mostly Hispanic (60.2%) and black (38.2%) females (73.7%) who had been vaccinated themselves (81.1%). However, only 53.8% of parents reported vaccinating their child(ren). The only variable significantly associated with parents choosing not to vaccinate their child(ren) was whether or not their friends and family supported them getting the COVID-19 vaccine. Specifically, parents of children who were unvaccinated were 7.26 (95%CI = 2.22, 26.18) times more likely to report that their family and friends were against them getting the COVID-19 vaccine (p<.001). Parents’ vaccine status and knowing “anyone” who did not want the COVID-19 vaccine were not significantly associated with parents decision to vaccinate their child(ren) (p>.05). Perceptions of friends and family’s attitudes towards vaccination should be considered when developing strategies to support parental decisions to vaccinate their child(ren) for COVID-19, particularly among parents of color living in lower-income communities.
Abstract Type:

**Multi-Level Determinants of Food Insecurity among Racial and Ethnic Diverse College Students**

Brown, Nashira, I; Buro, Acadia; Jones, Rashida; Himmelgreen, David; Dumford, Amber; Conner, Kyaien; Stern, Marilyn; DeBate, Rita, D

Objective: College students are observed with increased prevalence of food insecurity (FI) as compared to the general population. Although race and ethnicity are two of the strongest predictors of FI, little research is available on determinants of FI among racial/ethnic diverse college students. The purpose of this study was to identify population specific multi-level determinants of FI among racial/ethnic college students.

Methods: Based on the National Institute of Minority Health and Health Disparities Research Framework, a cross-sectional study (n=588) was employed to identify population-specific determinants of FI through the assessment of multiple domains and levels of influence. Measures representing levels/domains included: a) Individual/Health: food insecurity, psychological distress, loneliness; b) Individual/Behavioral: food insecurity coping mechanisms, cooking behaviors and skills; c) Individual/Socio-cultural: socio-demographics, cultural identity; d) Interpersonal/Socio-cultural: experiences with discrimination; social support; e) Community/Socio-cultural: cultural familiarity/validation, humanized educational experience, holistic support. Regression analyses were employed to explore predictors of FI among non-Hispanic white, Hispanic, and non-Hispanic Black college students.

Results: Model 1 comprising non-Hispanic Black students revealed a statistically significant positive association between FI and experiences with discrimination ($\beta = .203; p<.001$). Model 2 comprising Hispanic students revealed statistically significant positive associations between FI and FI coping mechanisms ($\beta = .074; p<.001$) and BMI ($\beta = .030; p=.017$) and an inverse relationship between FI and Holistic Support ($\beta =-.051; p=.007$). Model 3 comprising non-Hispanic White students revealed a significant positive association between FI and FI coping mechanisms ($\beta =.136; p=.012$) and BMI ($\beta =.053; p=.019$).

Conclusions: Examining predictors of FI among racial and ethnic diverse college students revealed differences in multi-level determinants of FI by racial and ethnic student populations. Addressing disparities in FI among college students requires an examination of determinants that span various domains within and among socio-ecological levels of influence to inform the development of multi-level interventions.
Abstract Type: Research Based

**Longitudinal Study of Parent-Child Communication and Youth Sexual Risk Behaviors**

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**Purpose:** Recommendations regarding parent-child communication and youth sexual risk behaviors have primarily relied on results from cross-sectional research. This study’s purpose was to prospectively investigate the influence of several parent-child communication topics on youth sexual risk behaviors.

**Methods:** Parent and their children (N= 1111 parent-child pairs) were recruited through door-to-door canvassing of randomly-selected census tracts and blocks to participate in a 4-year longitudinal study. Cox proportional hazards regression analyses or generalized linear mixed model analyses were conducted to assess the prospective influence of parent-child communication on youth sexual risk behaviors.

**Results:** Youth demographic characteristics were mean age =14.3 years (SD =1.6); 52.8% female; 41% White, 29% Hispanic, 24% Black, and 6% other. Youth with stronger parent-child communication regarding delaying sexual activity (AHR= 0.82, 95% CI: 0.68-0.99), as well as general family communication (AHR= 0.73; 95% CI: 0.61-0.88), were significantly and prospectively less likely ever to have had sex. In contrast, youth with stronger parent-child communication regarding birth control (AHR= 1.30; 95% CI: 1.08-1.57) and STI prevention (AHR= 1.24; 95% CI: 1.03-1.49) were significantly and prospectively more likely to have had sex. For youth who reported having had sex, those who reported stronger parent-child communication regarding birth control (AOR= 1.54; 95% CI: 1.22-1.94), STD prevention (AOR= 1.40; 95% CI: 1.11-1.78), and general family communication (AOR= 1.30; 95% CI: 1.03-1.64) were significantly more likely to have used birth control at last sex. Finally, female youth with stronger parent-child communication regarding delaying sexual activity were significantly less likely to have ever been pregnant (AOR= 0.67; 95% CI: 0.45-0.99).

**Conclusions:** These longitudinal study results support the efficacy of parent-child communication in delaying youth sexual activity, using birth control, and preventing teenage pregnancy.