

Lighting Talks

COVID mitigation strategies are associated with better physical activity and diet in a cohort of pregnant people with overweight and obesity: Findings from a racially/ethnically diverse sample

Smith, Paige; Phipps, Jennifer; Liu, Siwei; D'Souza, Indira; Satish, Nikita; Ha, Stephanie; Gilliland, Paige; Simmons, Leigh Ann

Purpose: Using a novel viral respiratory illness mitigation scale (VRIMS), we assessed the relationship between COVID-mitigation behaviors, physical activity, diet, and race/ethnicity in a cohort of pregnant people with overweight and obesity from the Goals for Reaching Optimal Wellness (GROWell) trial. We hypothesized that people who tried to avoid respiratory illness would also have better health behaviors and that our marginalized participants would have overall higher VRIMS scores.

Methods: All actively enrolled GROWell participants (N=369) completed a baseline survey that included COVID-mitigation behavior questions, a Rapid Eating Assessment for Participants (REAP) survey, Pregnancy Physical Activity Questionnaire (PPAQ), and a demographics survey. We performed a correlation analysis between the VRIMS score, physical activity, and diet to assess our hypothesis at this baseline timepoint. General linear models were used to assess the effect of race/ethnicity.

Results: More than 60% of the participants engaged in at least 5 out of the 8 illness-mitigating strategies (e.g., mask wearing, hand-washing; $M = 4.78$, $SD = 1.7$). VRIMS scores were positively correlated with diet ($r = .14$, $p < .01$) and total physical activity ($r = .10$, $p < .05$). Both African American/Black (beta = .89, $p < .05$) and Asian (beta = 1.00, $p < .001$) participants reported higher VRIMS scores than White participants; additionally, Hispanic participants reported higher VRIMS scores than Non-Hispanic participants (beta = .43, $p < .05$).

Conclusion: GROWell participants who engaged in more illness-mitigating strategies

also engaged in more physical activity and had higher quality diets. Maternal outcomes in the United States are declining, particularly in marginalized communities; our data suggest that this is not due to lack of physical activity, poor diet or poor illness-mitigation strategies. These findings support existing work that shows racism and other structural determinants of health are more important for maternal health than health behaviors.

Exploring the causes and consequences of homelessness among sexual and gender diverse adults in Texas

Grigsby, Timothy, J; Ramos de Oliveria, Clarianna, V; Serafica, Reimund; Salcido, Robert; Stone, Amy; Schnarrs, Phillip, W

Purpose: Sexual and gender minority (SGM) individuals are overrepresented among youth and adult homeless populations. This study characterized correlates of first time homelessness (never, childhood, adulthood), and assessed the relationship between homelessness and mental and behavioral health indicators in a sample of SGM adults in South Texas.

Methods: Data are anonymous, self-reported survey responses from a larger study of SGM health in South Texas (N=1,022; majority homosexual [57.2%], cisgender [87.1%]). Multinomial logistic regression models were used to assess correlates of first-time homelessness. Logistic regression models—controlling for sexual and gender orientation, age, ethnicity, and current annual income—assessed relationships between homelessness and past year alcohol or other drug (AOD) problems and Patient Health Questionnaire (PHQ-4) positive screens for depression and anxiety.

Results: 2.8% of participants experienced homelessness in childhood and 11.7% reported homelessness in adulthood. The relative risk of experiencing homelessness as a child increased for those reporting they received free lunch (RRR=8.79, 95%CI=3.03-16.59) and with every additional ACE reported

(RRR=1.70,95%CI=1.40-2.07), while adult experiences of homelessness were associated with identifying as transgender (RRR=1.83,95%CI=1.08-3.11), receiving free lunch as a minor (RRR=1.85,95%CI=1.96-2.93), and with increasing ACE scores (RRR=1.36,95%CI=1.26-1.47). Depression was associated with homelessness in childhood (AOR=3.53,95%CI=1.44-8.67) and adulthood (AOR=2.08,95%CI=1.30-3.32), but only adult homelessness was associated with anxiety (AOR=2.46,95%CI=1.58-3.84). The odds of experiencing an AOD problem was greater for those homelessness in childhood (AOR=4.31,95%CI=2.02-9.17) or adulthood (AOR=2.27,95%CI=1.36-3.80).

Conclusions: Structural and individual factors are associated with homelessness in SGM populations. Longitudinal research is needed to develop well-informed, culturally sensitive prevention and intervention programs.

The Effects of E-cigarettes Pictorial Warning Labels Compared with The FDA Text-only Labels on Attention, Reaction, and Attitude among young adults: An Online Randomized Cross-over Experimental Study

Asfar, Taghrif; Oluwole, Olusanya, J.; Casas, Alejandra; Friedman, Lily; Schmidt, Michael; Noar, Seth; Vallone, Donna; Maziak, Wasim

Purpose: The use of e-cigarettes has reached epidemic levels among young people in the US. Health communication of e-cigarette risks through warning labels has been considered a priority by leading health and regulatory bodies in the US to reduce e-cigarette use among young people. This study aims to examine the effect of 24 e-cigarette Pictorial Warning Labels (PWLs) compared to the FDA text warning label (TWL) on attention, reaction, harm perception, and intention to stop (users)/or to not initiate (nonusers) e-cigarette use among US young adults.

Methods: We conducted a cross-over 2 (PWL vs. FDA-TWL) × 2 (e-cigarette users vs. nonusers) × 3 (labels Themes: T1-Toxicity, T2-health effect, T3-specific harm) online experiment among a nationally representative sample of 400 (50% current e-cigarette users; 50% nonusers) US young adults (females 50%; mean age of 25.39.1±2.62 years) in July 2022. Participants were randomized to view and rate the FDA-TWL and 3 PWLs (one from each theme) presented in random order. All the items were assessed on a 5-point Likert scale (1=not at all progressing to 5=very much). Planned comparisons were conducted using the Friedman test followed by a pairwise Wilcoxon signed-rank test for multiple comparisons.

Results: Compared with the FDA-TWL, PWLs elicited greater attention (p=0.0004), negative affect reactions (p<0.0001), cognitive elaboration (p<0.0001), anticipated avoidance (p=0.041), intention to quit e-cigarettes (uses; p=0.004), intention to quit cigarettes (p=0.0007), intention to not initiate e-cigarette (nonusers; p=0.0006), and overall perceptions of the effectiveness (p=0.005). compared to PWLs, the FDA-TWL was considered easier to understand (p=0.011) and more relevant.

Conclusions: The e-cigarette PWLs were superior to the FDA-TWL on almost all communication outcomes, including attention to quitting cigarettes. These findings support the potential of implementing PWLs on e-cigarette packages to strengthen the FDA regulation for e-cigarettes and to prevent future e-cigarette-related morbidity and mortality.

The impact of household incarceration on youth and young adult mental health

Watts, Jonathan; Friedman, Amy; Golets, Lyudmyla; Forster, Myriam

Purpose: Over 2.5 million children, predominantly youth living in underserved communities and youth of color, have an incarcerated parent or family member in jail or prison. Although there has been research

conducted on the impact of incarceration on adults, there is limited research focused on youth whose family members interact with the justice system and little is known about their lived experience. To fill this gap the current study interviewed young adults who had at least one incarcerated family member during their childhood and/or adolescence.

Methods: Semi-structured interviews of young adults whose parent/s, caregiver/s, or relatives were incarcerated (N=15) during childhood were conducted to develop a qualitative narrative synthesis. On average, respondents were 23 years old; 77% were female, and slightly over half of interviewees were from California (62%) followed by New York (15%), Washington D.C. (15%), and North Carolina (8%). Participants were asked about their family members' incarceration, relationship with them before, during, and after incarceration, coping strategies, relationship with the school environment and available support systems. **Results:** Themes that emerged from interviews indicate that familial incarceration had a significant short and long-term impact on relationship formation, future orientation, mental health and functioning in the school and home environment. Interviewees who participated in school and community programs designed to help navigate familial incarceration reported that social support from peers and adults with similar experiences helped mitigate stigma and facilitated adaptive coping.

Conclusion: It is essential to understand the impact of familial incarceration on child's mental health and interpersonal functioning. There are almost no support programs tailored to this segment of the youth population and our study suggests that school and community-based programs can provide a safe space to help youth cope with their experience and that positive relationships with teachers and peers can promote resilience.

Association between Socioeconomic Disadvantage and Neighborhood Walkability Across the United States

Kaczynski, Andrew; Hallum, Shirelle; Wende, Marilyn; Stowe, Ellen; Davis, Kara; Chupak, Anna

Purpose: Poor access to walking supports can exacerbate disparities in physical activity and chronic disease. Little research has explored the association between socioeconomic disadvantage (SED) and neighborhood walkability at a national scale. This study examined the relationship between neighborhood SED and walkability across the United States, including variations by region and state.

Methods: SED was calculated for all block groups in the US (n=215,791) using 2018 five-year estimates from the American Community Survey. Four key variables – percent unemployed, percent of population under 125% of the federal poverty threshold, percent less than high school education, and percent renter occupied housing – were normalized and summed to create a composite score. Walkability was measured using the EPA's National Walkability Index (NWI), which scores block groups from 1-20 (lowest-highest) and includes key indicators for intersection density, proximity to transit, and land-use diversity. Mixed-model linear regression analyzed the relationship between block group SED and NWI, controlling for state-level nesting and block group population density. Similar analyses were performed stratifying by nine census divisions and all 51 states (including DC).

Results: Across all US block groups, there was a positive relationship between SED and NWI (B=0.10, p<.001), such that areas with higher SED possessed greater walkability. A similar relationship was observed in 7 of 9 census divisions (excluding South Atlantic and Mountain; range for all divisions B=-0.13-0.16; M=0.064, s.d.=0.055) and 21 of 51 states (range for all states B=-0.13-0.24; M=0.039, s.d.=0.081). Choropleth maps will illustrate regional and state-level variations in

the association between SED and walkability.

Conclusions: These findings aid in identifying specific regions, states, and block groups where infrastructure improvements should be targeted to address environmental justice, pedestrian safety, and chronic disease. Future research should also examine micro-scale attributes of walkability (e.g., sidewalk quality, neighborhood aesthetics) to ensure equitable, safe, and attractive environments for all.

‘A monumental blow to the reproductive rights movement’: Modeling online reactions to the Dobbs v. Jackson Women’s Health Organization SCOTUS Ruling with Natural Language Processing and Neural Networks

Valdez, Danny; Jozkowski, Kristen, N; Mena-Melendez, Lucrecia; Crawford, Brandon L.; Arvind, Akshat

Background: On June 24, 2022, the Supreme Court of the United States (SCOTUS) ruling in Dobbs v. Jackson Women’s Health Organization overturned Roe v. Wade, ending a 49-year precedent establishing abortion before viability as a constitutionally protected right in the US. Predictably, the aftermath of the SCOTUS ruling saw increases in social media activity related to abortion and Roe v. Wade, affording the opportunity to model these data for insights into nationwide abortion climate. Purpose: This study characterizes social media reactions for themes related to the overturn of Roe v. Wade (beginning May 17--the date an unofficial Dobbs ruling was leaked to the public--and ending June 29, 2022--one week post Dobbs decision). Methods: We leveraged Twitter’s API to collect (N=4,353,103) tweets. We applied Latent Dirichlet Allocation topic models with qualitative inductive coding to generate themes. We then applied a Sentence Bi-directional Encoder from Transformers (S-BERT) analysis to evaluate daily themes and longitudinal changes in themes over time. Finally, we applied a sentiment analysis to

measure affect and changes in daily posting volume.

Results: Public reactions to the Dobbs decision were largely negative. Indeed, most topics generated from our corpus likewise reflected multiple domains of reproductive rights and access and how the Dobbs aftermath would negatively affect such care. Only a few topics indicated support for SCOTUS’ actions, which framed the Dobbs outcome as a victory for the unborn and support for former President Trump’s SCOTUS appointees.

Discussion and Conclusion: Although reactions to the Dobbs ruling were in support of abortion, people’s inability to remain engaged overtime may reflect only passive interest or complex beliefs about abortion. However, public apathy holds serious implications for other social issues that will likely be heard before SCOTUS in coming terms, including the right to contraception, same sex marriage, and other issues.

Trusted News Sources and Confidence in the Safety of COVID-19 Vaccination

Alkhatib, Sarah, A.; Luningham, Justin; Akpan, Idara, N.; Taskin, Tanjila; Wishwanatha, Jamboor, K.; Thompson, Erika, L.

Objective: COVID-19 vaccination prevents severe disease manifestations; yet uptake has been suboptimal. Confidence in the safety and efficacy of the vaccine influences COVID-19 vaccination decisions. Exposure to information from a trusted news source can impact perceptions and may contribute to vaccine decisions. This study assessed the association between trusted news sources and confidence in the safety of COVID-19 vaccination among Texas adults. Methods: Participants were recruited through an online panel using quota sampling based on the racial and ethnic distribution of Texas in July 2022 (n=1089). The primary predictor variable was self-reported trusted news sources for COVID-19 related news (16 options), in which respondents were asked to endorse any news source they trusted, with

options ranging from print media to cable news to local news. The outcome was confidence in the safety of the COVID-19 vaccine (not at all confident to very confident). Multinomial regression analyses were conducted to model confidence in COVID-19 vaccination and trusted news sources while controlling for education, age, gender, and self-reported race.

Results: Through an initial descriptive analysis, Fox News, local cable TV programs, and news broadcasting from one's home abroad were associated with lower confidence levels. After grouping those three sources as "top news sources" and assessing their effect on confidence through a multinomial model, it was found that individuals who trusted those top sources were significantly less likely to endorse "somewhat confident" (OR=0.59, 95%CI 0.4-0.89) or "very confident" (OR=0.41, 95%CI 0.27- 0.62) compared to being "not at all confident" in the safety of the COVID-19 vaccine.

Conclusions: Study findings show that some trusted news sources contributed to participants having less confidence or no confidence in the safety of the COVID-19 vaccine. Public health initiatives should consider how to address vaccine confidence among the public given the diversity of information sources people rely on.

Portrayal of Delta-8 THC on YouTube

Olsson, Sofia; Sekhon Vishaldeep K; LoParco, Cassidy, R; Yockey, Andrew, R; Greene, Kaylin; Rossheim, Matthew, E

Introduction: Delta-8 THC is a psychoactive substance found in the Cannabis plant that was implicitly made federally legal via a 'legal loophole' in the 2018 U.S. Farm Bill. Little is known about how Delta-8 products are being described and marketed, including user-generated content on social media. This study assessed the types of Delta-8 videos on YouTube, one of the most used social websites, and the messages these videos portray to viewers that might influence their perceptions of Delta-8 products.

Methods: We searched keywords "Delta-8" and "Delta 8" on YouTube and recorded the available videos. Forty-seven videos were qualitatively analyzed. Two researchers created a qualitative codebook through an iterative process, independently coded all videos, and reached consensus on discrepancies. An inductive theory approach and keyword analysis were used to identify trends.

Results: Videos were primarily news, informational, or product reviews. One-half of the videos promoted Delta-8 THC usage (n=23), while others advised against it (n=20) or were neutral (n=4). Most (n=37) mentioned Delta-8 legality and 10 referenced the Farm Bill. The psychoactive and intoxicating properties of Delta-8 were mentioned in 77% of videos. Two-thirds of the videos mentioned potential mental effects (e.g., anxiety reduction, relaxation) and one-half mentioned potential physical effects (e.g., pain relief, increased appetite). Commonly cited reasons for using Delta-8 were pain relief, anxiety relief, increased appetite, improve sleep quality, getting high, convenient access, and legal status. Recommended doses to use varied between 10-500mg, and many expressed concerns regarding product quality given the lack of regulation and standardization.

Conclusion: Information easily accessible on YouTube may promote the use of Delta-8. Considering the intoxicating effects of Delta-8 and lack of manufacturing regulations, additional research is critical for informing behavioral and policy interventions.

Longitudinal associations between physical activity and activities of daily living: Investigating mediating roles of chronic physical conditions and intellectual aging function

Yuan, Shuhan; Elam, Kit, K.; Johnston, Jeanne, D.; Chow, Angela

Purpose: Gradual loss of activities of daily living (ADL; functional skills of taking self-care) begins in middle adulthood, which may lead to unsatisfactory quality of life. Aging-

related functional declines can be slowed down by engaging in more physical activity (PA). According to PA-related studies on social cognitive theory, self-regulation (e.g., intellectual functioning) and physical ability (e.g., chronic physical conditions) are both crucial to performing ADL, which may be promoted by PA. However, current research hasn't investigated whether PA confers intellectual benefit, helping to slow down the loss of ADL. This study examined chronic physical conditions and intellectual functioning as mediators of PA and ADL in the middle-aged population.

Methods: Participants were aged 40-60 old at baseline (N=3749) from three waves of Midlife in the United States dataset. Participants reported moderate and vigorous PA frequency, difficulty in conducting basic ADL (e.g., bathing) and a instrumental ADL (e.g., housekeeping), number of chronic health conditions, and intellectual functioning (e.g., "The older I get the harder it is to think clearly."). Four path analysis models were employed to estimate the association of Wave 1 physical activity (moderate/vigorous) with Wave 3 ADL (basic/instrumental) and the mediating roles of chronic physical conditions and intellectual functioning at Wave 2.

Results: Fit statistics indicated acceptable fit. Moderate and vigorous PA were negatively associated with difficulty in conducting basic ADL (bs=-0.03; ps<.01) and indirectly through intellectual aging function (bs= -0.01, -0.003; ps<.05). Moderate and vigorous PA were only indirectly associated with the difficulty in conducting instrumental ADL through intellectual aging function (bs=-0.01; ps<.05) and chronic physical conditions (bs=-0.01; ps<.05).

Conclusions: Findings highlighted the beneficial influence of moderate and vigorous PA on different types of ADL and physical and intellectual health as essential underlying roles. Public health professionals should design targeted PA interventions to improve basic and instrumental ADL.

Breastfeeding Initiation and Information Sources by Race

Johnson, Kaeli, C.; Baal Balasundaram, Rohit; Akpan, Idara, N.; Griner, Stacey, B.

Purpose: Breastfeeding can mitigate infant complications such as respiratory diseases and infant mortality. Black women have lower breastfeeding initiation compared to other races. Social factors, like breastfeeding information sources, are associated with improved breastfeeding initiation, but little research examines racial differences. The purpose of this study was to determine the role of race in breastfeeding initiation and sources of breastfeeding information.

Methods: This secondary analysis project used the Pregnancy Risk Assessment Monitoring System (PRAMS) Phase 8 Core Questionnaire Research File (2016-2020) (n=180,432). The outcome variables of interest were breastfeeding initiation (yes/no) and information sources (doctor, lactation specialist, family, or friends, etc.), and the independent variable was race (Black, White, other). Confounding variables were sociodemographic factors like age, income, and education. Univariate and multivariable analyses were conducted using SAS 9.4.

Results: Black women had significant lower (p < .0001) breastfeeding initiation rates (79.4%) compared to White (89.8%), Asian and Native Hawaiian (93.7%), American Indian and Alaska Native (82.9%), Other (90.8%), and Mixed Race (90.4%) groups. Black women had higher odds of receiving information from breastfeeding hotlines (OR=1.878; 95% CI: 1.813-1.945) or their doctor (OR= 1.6; 95% CI: 1.556-1.661), compared to White women (p < .0001). Black women also had lower odds of receiving breastfeeding information from a lactation specialist (OR= 0.884; 95% CI: 0.860-0.909) or family or friends (OR= 0.851; 95% CI: 0.830-0.872) compared to White women (p < .0001).

Conclusions: Findings indicate that Black women use breastfeeding hotlines and their doctors as information sources more than White women but have lower odds of using

lactation specialists or family and friends as resources. Interventions should focus on Black women's preferred sources to relay accurate, evidence-based breastfeeding information. Future studies should explore the role of lactation specialists and familial resources to increase breastfeeding initiation among Black women while considering the historical context.

Psychological Pathways from Childhood Stressful Life Events to Cigarette, Marijuana, and Excessive Alcohol Use in Early Middle Adulthood: A Longitudinal Examination

Ou, Tzung-Shiang; Huber, Lesa; Macy, Jonathan; Chow, Angela; Lin, Hsien-Chang

Purpose: Previous studies demonstrated a robust association between childhood stressful life events and substance use behaviors in later life. However, less is known about the pathways through which they are connected. This study investigated how childhood stressful life events and substance use behaviors in early middle adulthood are connected through a sequential psychological pathway from internalizing problems to externalizing problems.

Methods: This study used data from the National Longitudinal Study of Adolescent to Adult Health (Add Health) Waves I-V (1994-2018). Adolescents aged 18 or younger at Wave I were included (N=2,326). Substance use behaviors were captured by past 30-day cigarette use, marijuana use, cigarette and marijuana co-use, and past-year excessive alcohol use at Wave V. Generalized structural equation modeling (GSEM) was conducted to investigate the sequential mediation relationship between childhood stressful life events and substance use behaviors through internalizing problems and subsequent externalizing problems, controlling for baseline gender, age, and race/ethnicity.

Results: The structural models demonstrated that childhood stressful life events at Wave I was positively associated with cigarette use

and marijuana use (ORs=1.77, 1.03, respectively; both $p < 0.001$) and past 30-day cigarette and marijuana co-use at Wave V (OR=1.02, $p < 0.001$). Internalizing problems at Wave III and externalizing problems at Wave IV sequentially mediated the aforementioned associations (all $p < 0.01$).

Conclusions: The results demonstrated that childhood stressful life events are associated with increased cigarette use, marijuana use, and cigarette and marijuana co-use in early middle age through internalizing problems in early adulthood and subsequent externalizing problems in later adulthood. Therefore, to prevent adults who experienced childhood stressful life events from using substances in their early middle adulthood, interventions that address mental health problems including internalizing problems and subsequent externalizing problems in adulthood are warranted.

Community-engaged approach to identify HIV prevention strategies among members of American Indian tribal communities in Southern California

Montoya, Jessica, L; Armenta, Richard; Armao, Shandiin; Kellog, Daniel; Romero, Richard; Calac, Daniel; Gaines, Tommi

Purpose: American Indians (AI) face significant disparities in HIV morbidity and mortality. Geographical remoteness of AI tribal communities, privacy concerns, and low cultural competency among clinicians hinder access to HIV prevention services. The objective of our qualitative study was to examine acceptability of HIV prevention strategies among members of AI tribal communities in Southern California.

Methods: We conducted individual interviews with 23 AI tribal community members. A semi-structured interview guide was used to explore acceptability of various proposed strategies for delivering HIV prevention (i.e., local health clinic, telehealth services, a mobile health unit, health booths at tribal community events, flyers posted around tribal communities, and social media

health campaigns). Rapid qualitative analysis was used to synthesize interview data. Three team members applied a summary template with key domains drawn from the interview guide. Key points from the summary templates were placed into a matrix to assess the breadth of information for each domain.

Results: Participants reported favorable acceptability of all HIV prevention delivery strategies explored. Participants verbalized strongest enthusiasm for the use of a mobile health unit and social media campaigns. Participants reported privacy concerns for receiving HIV prevention in a clinical setting (e.g., individuals might be seen accessing HIV testing services) and by telehealth (e.g., limited privacy at home). If an HIV test was recommended by a clinician, most participants reported a preference for clinic-based testing due to fear of self-administering an HIV test incorrectly. Many participants hypothesized that privacy concerns would be minimized if HIV prevention services were routinely offered to everyone rather than to a select set of individuals.

Conclusion: AI tribal community members perceive HIV prevention services as acceptable, particularly if services are easy to access and minimize privacy concerns. Future research is needed to evaluate the implementation of HIV prevention strategies in AI tribal communities.

Systematic review of Interventions for substance uses among women who had intimate partner violence

Myint, Wah, W; Alquiza, Abigail; Espinosa, Andrea; Harber, Taylor; Markentell, Emily; Marshall, Grace; Nguyen, Angela; Solis, Isabella; Hossain, M.Mahub; Ma, Ping

Purpose: Substance use interventions targeting women survivors of intimate partner violence (IPV) are limited, despite the alarmingly rising trend of substance use among these women. The purpose of this systematic review was to understand the

effectiveness of current substance use interventions for women IPV survivors.

Methods: A systematic search of CINAHL Complete, Academic Search Ultimate, APA PsycInfo, Gender Studies Database, Health Policy Reference Center, MEDLINE Complete, and Violence and Abuse Abstracts was conducted from January 1, 2009 to May 30, 2022. Search terms related to substance use interventions and IPV were included. Studies published in English that involved $\geq 50\%$ of women IPV survivors and had an outcome of either abstinence or reduction of any type of substance were eligible to be reviewed. Two independent reviewers extracted data based on PRISMA guidelines and assessed the quality of eligible studies. Narrative data syntheses were conducted.

Results: A total of eight studies met the inclusion criteria, with 2,242 women IPV survivors enrolled in substance use interventions. The majority of studies were conducted in the U.S. and had excellent or good quality. We found that 75% of studies used Randomized Controlled Trial design and 50% of studies were delivered in the clinical setting. More than half of included studies focused on any type of substance, whereas some studies exclusively targeted alcohol use during pregnancy or binge drinking. The abstinence and reduction rates of targeted substances varied based on intervention type, methodology, and follow-up length. Comprehensive services including cognitive behavior therapy and psychosocial support have demonstrated significant effectiveness in improving substance abuse. **Conclusion:** Comprehensive services appear to be a promising intervention strategy. More intervention studies targeting substance use among women with adverse life experiences should be developed. Further research examining long-term effectiveness of substance use reduction or abstinence among women IPV survivors is warranted.

Smoking associated with the misconception that drinking wine reduces cancer risk, United States 2020

Rossheim, Matthew E; Yockey, R Andrew; LoParco, Cassidy R; Trangenstein, Pamela J; Walters, Scott T; Henry, Doug; Cannell, M Brad; Jernigan, David H; Klein, William MP

Background: Alcohol is the third leading preventable cause of cancer in the United States, yet most Americans do not know that alcohol consumption increases cancer risk. Moreover, 10% of Americans believe that drinking wine is protective against developing cancer. This misconception may be particularly harmful for people who smoke because they are more susceptible to developing cancer, and drinking alcohol further increases their cancer risk more than it does for non-smokers. We examined whether smoking was associated with the misconception that drinking wine reduces cancer risk.

Methods: We used data from the Health Information National Trends Survey (HINTS) 5 Cycle 4 that were collected from February 24-June 15, 2020. HINTS is a nationally representative survey administered by the National Cancer Institute. Weighted multivariable logistic regression models examined whether smoking was associated with the misconception that drinking wine reduces cancer risk ($n = 2,892$). Models statistically adjusted for age, gender, race/ethnicity, education, family income, employment, heavy episodic drinking, cancer history, confidence in their ability to take care of their own health, the belief that drinking wine protects against heart disease, and the belief that everything causes cancer. Results: Compared to participants who were never established smokers, participants who currently smoked had 3.4 times the odds of believing that drinking wine reduces cancer risk (95%CI = 1.6-7.1, $p < 0.01$).

Conclusion: Current smokers had higher odds of believing the misconception that drinking wine reduces cancer risk. This is concerning because alcohol consumption increases cancer risk more for people who

smoke. Behavioral and policy interventions, including updated warning labels on alcoholic beverages, are needed to raise awareness that drinking any type of alcoholic beverage increases cancer risk. It is especially important that these interventions reach sub-groups at heightened risk for both developing cancer from drinking and holding related misconceptions, including people who smoke.

Rigor, fidelity, and outcomes: Creating an evidence-based program evaluation framework across health areas and geographic locations for underserved communities

Huang, Hui; Fernandez, Sofia, B.; Wilson, Courtney; Pinzon-Iregui, Claudia, M.; Perez, Katherine; Maldonado, Maria, D.; Clarke, Rachel; Fleites, Caleigh; Martin, Nicholas; Howard, Melissa

Purpose: Florida Department of Health's Office of Minority Health and Health Equity provides funding to community-based organizations (CBOs) through the "Closing the Gap" initiative to reduce health disparities by implementing evidence-based interventions (EBIs) that address local health priorities (e.g., cardiovascular disease, diabetes). This study informed the creation of a framework for evaluating unique EBIs across CBOs, as part of an external evaluation.

Methods: We conducted semi-structured interviews with representatives from 19 CBOs. Interview assessments were divided into three sections regarding a program's: 1) rigor and sources of information, 2) fidelity, and 3) outcomes. A team of coders used a consensual analysis approach to assess the use of EBIs and to inform a translational evaluation framework.

Results: Out of 19 CBOs, 11 reported using EBIs. Eight did not use an EBI but implemented programs informed by research and best practices. We designed an evaluation framework with 3 components, each scored 1-4. The highest score (4) for rigor indicates a program was tested and

deemed effective through rigorous research in peer-reviewed journals. The highest score for fidelity indicates a CBO received training on the EBI, used manuals from the developer, and monitored fidelity through supervision and/or site visits. The highest score for outcome measures indicates a CBO used appropriate pre- and post-tests to evaluate impacts on a) knowledge gain, b) behavior change and c) health indicators (e.g., blood pressure, BMI, or A1C), and the time differences between pre- and post-tests were reasonable.

Conclusions: Creating systematized and comprehensive ways of assessing unique EBIs across CBOs will allow for more robust evaluations and will promote the delivery of the highest quality programs to achieve health equity.

Trajectories of Polysubstance Use: Are Internalizing and Externalizing Problems Associated with Trajectories of Polysubstance Use?

Ou, Tzung-Shiang; Huber, Lesa; Macy, Jonathan; Chow, Angela; Lin, Hsien-Chang

Purpose: Polysubstance use among adults has been a public health concern in the U.S. and is associated with adverse consequences. Understanding the longitudinal trajectory of polysubstance use and associated predictive factors is an essential step in the effort to mitigate the polysubstance epidemic. The current study aimed to identify the longitudinal trajectory of polysubstance use and whether internalizing and externalizing problems predict it.

Methods: Adults aged 18 and older (N=18,925) were extracted from the Waves 1-5 Population Assessment of Tobacco and Health (PATH) Study. Group-Based Trajectory Modeling (GBTM) was performed to identify the trajectory of polysubstance use. Examined substances included use of cigarettes, e-cigarettes, excessive alcohol, marijuana, painkillers, and cocaine in past 30 days from all waves. Weighted multinomial logistic regressions were conducted to investigate the associations between

internalizing problems and externalizing problems and the trajectory of polysubstance use, controlling for demographic variables.

Results: Five polysubstance use trajectory groups were identified: (1) Polysubstance use--low risk (10.5%); (2) No to minimal polysubstance use risk (46.3%); (3) Cigarette-leading polysubstance use--high risk (23.2%); (4) Cigarette-marijuana co-leading polysubstance use--high risk (12.3%); and (5) Marijuana-leading polysubstance use--high risk (7.7%). Compared with Group 2, higher internalizing problems predicted the membership of Group 3 [Relative risk ratio (RRR) range: 1.07 to 1.17] and Group 4 (RRR range: 1.04 to 1.21). Compared with Group 2, higher externalizing problems predicted the membership of Group 5 (RRR range: 1.01 to 1.10).

Conclusions: This was the first study that identified the U.S. national trajectories of polysubstance use among adults within the period of 2013 - 2019. The results suggested that internalizing externalizing problems predicted the trajectories of high-risk polysubstance use. Prevention efforts should consider internalizing and externalizing problems and associated different trajectories of polysubstance use when designing polysubstance use prevention interventions.

Board 101

Sexual Behavior Motivation and the Risk and Protective factors for STI among MSM with multiple sex partners: An application of designing an educational microfilm

Cheng, Chi-Chia; Hwang, Nae-Chyi; Chen, Jeng-Wen; Wu, Wei-En; Liu, Yen-Hung; Ciou, Jhao-Yuan

Purpose: A two-year study, aiming to evaluate the effects of a microfilm-based brief sexual health intervention for men who have sex with men (MSM) at high risk for STIs has been hosted by the first author. The current abstract presented the results from the first-year work, aiming to assess the

educational needs of MSM based on the "information-motivation-behavioral skills model" (IMB model), as the basis for making the microfilm.

Methods: Respondents were recruited at an STD clinic and from snowball sampling in Taiwan in 2022. A total of 7 MSM, aged 26-33, completed one-on-one online interviews with semi-structured interview outlines. All 7 respondents gave informed consent. All interviews were transcribed. A qualitative method of Thematic Analysis was applied to extract themes from the texts. Triangulation congruence was also used to improve the reliability of the study.

Results: There were three main themes followed by several subthemes emerging from the texts. 1) The motivation of having multiple sex partners, including releasing sexual desire, looking for intimate feelings, and searching for sexual identity and acceptance from other homosexuals. 2) The risk factors of STI, including a lack of a sense of self-protection, unstable relationships, the nature of internet dating heightening the possibility of having sex, and using drugs during sex. 3) The protective factors, including a sense of protecting self and others, looking for a committed relationship and stable life, knowing how to negotiate and reject risky sexual behavior, regular screening, and rejecting drugs during sex. Embedding aforementioned themes into the script of the microfilm, a 15-minute educational microfilm entitled "Finding Love, Finding Self" was shot in June and was in the can in July, 2002.

Conclusions: It is productive to apply the IMB model to the field of sexual health communication. The research team is writing a one-hour lesson plan based on the film and will implement and evaluate it soon.

Board 102

The potential for college campus prevention programs to disrupt the adverse childhood experiences and past 30-day substance use association among diverse students

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

Background: Research has demonstrated a robust link between adverse childhood experiences (ACE) and substance use among college students. However, whether perceived risk of harm from substance use can mitigate the negative effects of ACE on substance use has not been well researched. The current study assessed whether enhanced perceptions of perceived risk can offset the association between ACE and substance use.

Methods: Data are baseline responses from diverse students (N=752) enrolled in a novel, mHealth prevention program offered at a Hispanic Serving Institution in southern California. Negative binomial regression models assessed the direct effects of cumulative ACE and perceived health risks associated with substance use on past 30-day alcohol and marijuana use; and estimated if perceived risk moderated the ACE-substance use relationship.

Results: Every additional adversity, was significantly associated with a 1.08 and 1.14 higher incident rate ratio (IRR) of past 30-day alcohol and marijuana use (95% CI: 1.03-1.14, 95% CI: 1.02-1.28, respectively), adjusting for age, gender, ethnicity, perceived prevalence of substance use, and socioeconomic status. Higher perceptions of health risk were associated with a 0.86 and 0.45 lower IRR of past 30-day alcohol and marijuana use (95% CI: 0.78-0.96, 95% CI: 0.36-0.58, respectively), adjusting for covariates. Students with ACE exposure, but low perceptions of the health risks associated with marijuana use had higher past 30-day marijuana use than students with ACE exposure and high perceived health risk of marijuana use ($p < 0.05$).

Conclusion: ACE and perceived risk of harm predicted past 30-day alcohol and marijuana use among diverse students. High perceptions of risk from marijuana use offset the negative impacts of ACE for marijuana use. Our findings underscore the importance of programs that provide accurate health information and the benefits of extending the reach of prevention programs to vulnerable student populations.

Board 103

The effectiveness of a novel multi-module prevention web-app on enhancing perceived health risk associated with substance use among diverse college students at a Hispanic serving institution in Southern California

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

Background: Given the high prevalence of substance use during the college years and students' preference for mHealth technology, it is important to assess the effectiveness of innovative college web-based prevention programs. The current study examines whether a novel multi-module prevention web-app delivered to diverse students attending a Hispanic Serving Institution in southern California can enhance students' perceptions of the health risks, a robust protective factor, of substance use.

Methods: Data are pre and 30-day post-test responses from students (N=752) randomly assigned to either: a) a 5-week multi-module web-app prevention (n=244) group; b) comparison (n=251) group; or c) control (n=257) group. Program effects on perceptions of the health risks associated with alcohol, marijuana, and illicit substance use (i.e., prescription and non-prescription opioid use) across the three groups were assessed.

Results: At baseline, there were no differences in perceived risk of harm across groups. At posttest, the risks associated with illicit substance use for the prevention group was nearly seven times that of the

comparison group, and almost 21 times that of the control group (Cohen's $d=0.21$ vs 0.03 vs 0.01 , respectively). Similarly, the perceived risks associated with alcohol use for the prevention group was twice that of the comparison and control group (Cohen's $d=0.20$ vs 0.09 vs 0.10 , respectively). The perceived health risks associated with marijuana use among the prevention group was one and a half times that of the comparison group, and eight times that of the control group (Cohen's $d=0.49$ vs 0.35 vs 0.06 , respectively).

Conclusion: Our results suggest that mHealth technology, such as the present multi-module web-app, delivering interactive prevention materials can significantly increase perceived risks associated with substance use among diverse college students. Future studies should assess the benefits of this sustainable and innovative web-app across campuses that serve diverse, historically under-represented student populations.

Board 104

Examining the Relation between COVID-19 and Alcohol Behaviors among College Students

Ward, Rose Marie; Das, Akanksha; Chen, Charlie; Kovach, Sophie; Arrasmith, Chloe; Miljkovic, Kristina

Purpose: The COVID-19 pandemic has influenced college student alcohol consumption. It is unknown if a COVID-19 diagnosis relate to drinking behaviors. Therefore, the purpose of the current study was to examine the relationship between COVID-19 diagnosis, drinking behaviors, and attitudes towards alcohol consumption. In addition, is COVID-19 diagnosis related to future alcohol consumption?

Methods: Students (n=3499) were recruited for a multiple health behavior study (T1 fall 2021; T2 spring 2022). Participants were predominantly Caucasian; average age of participants was 19.35 (SD=1.63).

Results: Approximately, 25.1% (n=879) reported testing positive for COVID-19

whereas an additional 14.6% (n=512) indicated that they had the symptoms but did not test positive. Approximately, 86.7% of the participants had been vaccinated. When asked why they got vaccinated, 11.4% indicated that it was so that they could go to the bars whereas 33.5% reported getting vaccinated so that they could have an active social life. People who tested positive for COVID-19 drank significant more days per week, drank more drinks on a drinking occasion, and had a higher peak drinking occasion than those who did not think they had COVID-19. In addition, those who were positive for COVID-19 were more likely to drink for social, coping, enhancement, and conformity reasons than those who did not have COVID-19. Having COVID-19 at T1, predicted 6 month (T2) drinking quantity, frequency, problems, motives, and centrality. Conclusions: It seems that COVID-19 status predicted current and future risky drinking behaviors. It may be a proxy for risky health habits in general. Given that alcohol consumption can impair immune system functioning, this relationship warrants future examination. Intervention efforts might use this information to craft interventions that target more risky alcohol consumption among college students.

Board 105

Impact of a public health awareness campaign on patients' perceptions of expanded pharmacy services in South Dakota using the Theory of Planned Behavior

Pinto, Sharrel, L; Kotschevar, Chris, M; Hunt, Aaron; Middendorf, Alex; Robbins, Chris, B; Miller, Erin; Van Gilder, Deidre

Purpose: Community pharmacists can be an important but often underutilized public health ally in managing diabetes and cardiovascular disease (CVD), particularly in rural areas. The objective of this project was to impact public awareness of diabetes and CVD related pharmacy services and evaluate intent to use pharmacy services.

Methods

A non-randomized pre-post study design using a modified theory of planned behavior (mTPB) to assess knowledge, attitudes, perceived norms, perceived control, and their influence on intention was completed. A 73-item survey was administered to a convenience sample (N=172) across South Dakota. The "Your Pharmacists Knows," campaign included a 30 second advertisement which was distributed via TV, live streams, print and media announcements posted at pharmacies, and print materials distributed to participants. Regression models were conducted using age, gender, race, education level, population size of the community, and insurance status as predictors for mTPB constructs. Logistic regression was conducted to assess intent and utilization.

Results: The most common predictors across mTPB constructs were female gender and higher education level ($p < .001$), indicating the need to refine messaging to males and those with lower education. All mTPB constructs were significant predictors of intent to use services ($p < .001$). Pre-existing knowledge and participant's perceived control (the participant's perception of ease of access for services) had the largest influence on intent. Additionally, there was significant improvement in post-campaign service utilization ($p < .001$).

Conclusion: This campaign positively influenced intent to seek and utilize services in rural communities often characterized as health profession shortage areas. In these communities pharmacies may be the only healthcare option for miles. Furthermore, underutilization of expanded services can compromise healthcare outcomes and costs. Through targeted campaigns such as these, patients with diabetes or CVD may find access to services to better manage their conditions.

Board 106

Tobacco use interventions among Texas healthcare centers providing behavioral health care for sexual and gender minority patients

Le, Kathy; Taing, Matthew; Britton, Maggie; Chen, Tzu-An; Parent, Michael C; Tami-Maury, Irene; Martinez Leal, Isabel; Rogova, Anastasia; Kyburz, Bryce; Williams, Teresa; Patel, Mayuri; Reitzel, Lorraine R

Purpose: This study evaluated the use of evidence-based practices (EBPs) to address tobacco use within healthcare centers providing behavioral health (eg, mental health/substance use) care to patient populations that include individuals identifying as sexual and/or gender minorities (SGMs). Individuals with behavioral health needs disproportionately use tobacco products, as do individuals who identify as SGMs. This double-disadvantage accentuates the need for tobacco-related EBP use within these healthcare settings.

Methods: Care providers from 75 SGM-serving healthcare centers across Texas were surveyed on their use of EBPs: a tobacco-free workplace policy that disallowed use indoors and out and the regular provision of tobacco screening and cessation interventions for patients.

Results: About half (n=36) of centers had a comprehensive tobacco-free workplace policy, 80.82% had regular screening and documentation of tobacco use at intake, and 57.53% provided a template to help providers perform tobacco screenings. Overall, 70.67% of respondents regularly asked patients about smoking status, 69.33% advised patients to quit, 64.00% assessed patients' interest in quitting, 58.67% assisted patients with quit attempts, and 36.00% arranged follow-up. Among participating centers, 30.67% employed ≥ 1 tobacco treatment specialist/s and 73.91% employed ≥ 1 prescriber/s onsite. Care providers rated their perceived ability to tailor interventions for special populations, which included SGMs, at 4.63 ± 2.59 (0=very low; 10=very high).

Conclusions: While EBPs are provided to some extent at healthcare centers serving SGMs with behavioral health needs, there remains room for improvement in the implementation of tobacco-free workplace policies, standardization of tobacco screenings through template use, provision rates of the 5A's (particularly for assisting and arranging), usage of tobacco treatment specialists, and improving the ability of centers to tailor EBPs for SGMs to mitigate tobacco use and disease disparities. National guidelines recommend integration of tobacco control EBPs within healthcare centers; initiatives to increase tobacco use disorder screening/intervention are needed in many settings.

Board 107

Primary Care Physicians' Rhetorical Strategies for Addressing COVID-19 Vaccine Hesitancy

Tasmiah Nuzhath

Objective: To explore the strategies that primary care physicians use to address patient COVID-19 vaccine hesitancy.

Method: We administered an online survey to 625 primary care physicians from May 14 to May 25, 2021, to assess the messages that primary care physicians use to convince hesitant patients to get vaccinated against COVID-19. 589 physicians from the total pool of 625 provided open-ended responses. We conducted thematic analysis on the responses based on previous research and themes identified within the data. The survey was administered online using the survey research firm Dynata.

Results: Eleven primary themes emerged from our analysis, which included: (1) physicians addressing specific concerns about vaccine safety (including costs versus benefits), (2) physicians helping patients understand what it means to remain unvaccinated, or (3) whether physicians try to connect emotionally through the use of guilt, or personal experience, (4) whether physicians use derisive language to communicate with unvaccinated patients. In

addition, a small number of physicians indicated they would not attempt to persuade someone who is vaccine hesitant.

Conclusions: Our study shows that while some of the physicians used different strategies to address vaccine hesitancy, some of the physicians used harsh language or did not make any effort to reduce COVID-19 related vaccine hesitancy among their patients. Focused advocacy and training are needed to increase physician engagement in vaccine-related dialogues with their patients. Such efforts will ensure that critical opportunities for patient education and awareness-building are not missed and ensure high levels of vaccination uptake.

Board 108
**Systematic Examination of
Methodological Inconsistency in
Operationalizing Cognitive Reserve and
the Relationship Between
Operationalization and Cognitive Decline**

Howard, Kerry, A; Griffin, Sarah, F; Rennert, Lior

Background: Cognitive decline (CD) is a growing public health concern. The cognitive reserve (CR) hypothesis offers an avenue for prevention, proposing that behaviors throughout the lifecourse produce varying levels of protection against CD symptoms. However, inconsistency in the operationalization of CR limits researchers' ability to make conclusions about behaviors that build CR. The purpose of this project was to explore the behaviors used to operationalize CR and the consequences of inconsistency.

Methods: Using data from 1366 participants in the Memory and Aging Project, we assessed life experiences corresponding to behaviors that have been used as CR proxies in the published literature. Spearman correlations examined the relationship between proxies. Generalized linear mixed effects models (GLMM) examined the relationship between proxies and global cognition from participant's annual tests.

Results: Of 27 proxies in the literature, the most frequent behaviors were educational and occupational attainment and leisure activities. Few proxies were strongly correlated: effect size $>.3$ for 25 of 351 correlations. For example, different behaviors within the leisure activities category (music and art lessons, volunteering, and traveling) showed negligible association with one another. GLMM showed that the relationship between CR and CD varied based on operationalization. Twenty of the proxies showed significant associations with CD to varying degrees, ranging from 0.51 points higher cognitive score ($p=.007$) for an increase in frequency of social activities to 2.29 points higher score ($p<.001$) for an increase in years of education.

Conclusion: There is variation in the behaviors hypothesized to build CR. We demonstrated that inability to uncover and disseminate important life behaviors stems from such inconsistency. Given lack of association between proxies, it follows that results depend on operationalization, which was supported by our analysis of relationships between CR and CD. Consistent methodology is necessary to improve the study of relevant behaviors and aid CD prevention.

Board 109
**Support for a Comprehensive Indicator of
Lifecourse Experiences as Alternative
Methodology for Predicting Cognitive
Decline**

Howard, Kerry, A; Griffin, Sarah, F; Rennert, Lior

Background: The cognitive reserve (CR) hypothesis theorizes that lifecourse behaviors and experiences build to produce CR, with higher CR protecting against cognitive decline (CD) symptoms. The definition asserts multiple lifecourse experiences; however, most research operationalizes CR as single measures. The purpose of this project was to contrast the performance of lifecourse CR indicator

(LCRI) to common individual operationalizations of CR in predicting CD. Methods: We extracted 53 measures in the literature used to operationalize CR from 1366 participants of the Memory and Aging Project. Through confirmatory factor analysis, we created a LCRI incorporating the best-fitting variables for a latent CR construct. Each participant was assigned a score from retained variables and weighted by factor loadings. Generalized linear mixed effect models examined the relationship between the most common individual experiences (education, occupation, leisure activities, cognitive activities, IQ, bilingualism, physical activities, SES, physical function, and social activities) and the LCRI with CD. CD outcomes were domain scores from participants' annual tests: episodic, semantic, and working memory; and perceptual orientation and speed.

Results: The factor analysis narrowed 53 measures to 23 with sufficient fit (CFI=.905, RMSEA=.044). LCRI, leisure activities, and IQ were among the most influential CR operationalizations for all cognitive domains. Education was among the most influential for four, and occupation and cognitive activities for three. A standard deviation LCRI increase was associated with higher episodic memory (Est=2.20), semantic memory (Est=1.13), working memory (Est=2.78), orientation (Est=3.92), and speed (Est=2.32), p 's<.001. Conclusion: A lifecourse CR indicator was more consistent in its association with higher cognitive domain scores than eight of 10 CR operationalizations from published literature. A thorough LCRI offers alternative methodology for examining the utility of CR as CD prevention. A lifecourse approach, considering the multitude of experiences that occur, may be the most faithful and comprehensive representation of the CR hypothesis.

Board 110

Impact of a self-measured blood pressure monitoring program in a free clinic setting

Raman, Shivani; Burton, William; Gimpel, Nora; Umana, Laura; Hurt, Marcus

Purpose: The purpose of this study is to assess the impact of a program combining patient education and self-measured blood pressure (SMBP) monitoring on BP control and knowledge and self-efficacy with respect to disease management in patients with elevated BP or HTN.

Methods: Adults >18 years old with elevated BP or HTN at a free clinic in north Texas were enrolled in a 3-month program in which they were provided a BP monitor, instructed to log their BP daily, and received education on HTN risk factors and management strategies. Participants were administered two surveys pre- and post-intervention: assessment of knowledge about HTN (score range 1-2; 1 = incorrect answer, 2 = correct answer) and assessment of self-efficacy for managing chronic disease (SEMCD; score range 1-10). BP logs were scanned into the electronic medical record at 1 month and 3 months. Outcome measures include knowledge assessment score, SEMCD score, mean systolic BP (SBP) and mean diastolic BP (DBP) pre- and post-intervention.

Results: Participants ($n = 38$) had a mean knowledge score of 1.08 (SD = 0.12) pre-intervention and 1.68 (SD = 0.33) post-intervention ($p < 0.0001$) and a mean SEMCD score of 7.80 (SD = 1.54) pre-intervention and 8.96 (SD = 1.25) post-intervention ($p = 0.0003$). Participants who completed ≥ 1 month of SMBP ($n = 25$) had a mean SBP of 140 mmHg (SD = 10 mmHg) at baseline and 131 mmHg (SD = 11 mmHg) post-intervention ($p = 0.0016$) and a mean DBP of 88 mmHg (SD = 7 mmHg) at baseline and 82 mmHg (SD = 8 mmHg) post-intervention ($p < 0.0001$). Data collection is ongoing.

Conclusions: Preliminary results suggest that interventions combining patient

education and SMBP monitoring may be effective for improving BP control and knowledge and self-efficacy with respect to HTN management in a free clinic setting.

Board 111

Documenting online recruitment and enrollment for social media intervention research to strengthen data quality and transparency

Murray, Regan M; Chiang, Shawn; Hill, Larry; Manganello, Jennifer; Leader, Amy; Klassen, Ann; Lo, Wen-Juo; Massey, Philip

Background: Advances in technology have greatly increased the ability and ease of engaging with diverse online communities. This creates unique online recruitment and enrollment challenges, particularly related to authenticating an online user's identity and eligibility.

Purpose: To explore multiple strategies for participant recruitment and enrollment for a vaccine education program on Twitter.

Methods: Eligible participants were subject to three quality checks, including a review of contact information, eligibility and cohort data, and a Twitter vetting process. A coding structure was developed to verify participant Twitter accounts met study thresholds and passed standard bot-detection software prior to enrollment.

Results: To date, 623 Twitter accounts completed the eligibility screener. Of those, 438 accounts (70.3%) were deemed eligible. Additional quality checks resulted in the removal of an additional 304 accounts. The 304 ineligible Twitter accounts included 134 (44.1%) scammers/robots, 55 (18.1%) duplicate accounts, 55 (18.1%) nonexistent accounts, 30 (9.9%) non-U.S. accounts, 14 (4.6%) suspended accounts, 13 (4.3%) private accounts, 2 (0.7%) inactive accounts, and 1 (0.3%) blocked the study account. To date, 92 accounts have been invited to enroll in the study. Of those invited to enroll, 52 (56.5%) completed the baseline and 39 (42.4%) followed the study twitter account across 12 monthly cohorts.

Conclusions: It is imperative for health researchers to remain adaptable in pursuit of online recruitment and enrollment goals. Vetting has proved a valuable methodology for assessing the credibility of online participants. In future, participants recruited via online means should pass through numerous quality checks to ensure eligibility. For studies that rely on online recruitment and screening, failing to take additional quality checks may result in a large amount of poor-quality data. When online recruitment and screening takes place, we recommend including an enrollment and eligibility diagram to support data quality and transparency.

Board 112

Pregnancy intention and contraception method use among women aged 15-49 years in the United States: 2017-2019 National Survey of Family Growth

Akpan, Idara, N; Yockey, Andrew, R; Galvin, Annalynn, M; Thompson, Erika, L

Purpose: For women who do not want to get pregnant, highly-effective contraceptives such as long-acting reversible contraceptives (LARCs; i.e., intrauterine device [IUD]/hormonal implant) may be the preferred form of birth control. However, behavioral intentions may not always translate into action, as women not intending to get pregnant may not be actively taking preventive measures to avoid pregnancy. Factors, such as preference or cultural norms may influence the choice of contraception. Therefore, this study aimed to identify the association between pregnancy intention and contraceptive use among a national sample of women.

Methods: The 2017-2019 National Survey of Family Growth was subset to women of reproductive age 15-49 (n=3025). The outcome variable was current contraceptive use categorized by level of effectiveness (IUD/hormonal implant, pill/ring/patch/injectable, barrier methods,

and no contraception). Pregnancy intention was categorized as intending, not intending, and don't know/refused. A weighted, multinomial logistic regression analysis assessed the association between pregnancy intention and current contraceptive use (reference=IUD/hormonal implant), controlling for demographics.

Results: Among the sample, current contraception methods were IUD/hormonal implant (22.1%), pill/ring/patch/injectable (34.1%), barrier methods (28.1%), and no contraception (15.7%). Among women not intending to get pregnant, 28.0% were using IUD/hormonal implant, and 15.2% were not using any contraception method. Women not intending to get pregnant were less likely than those intending to prefer pill/ring/patch/injectable (aOR=0.57; 95%CI=0.41, 0.80), barrier methods (aOR=0.54; 95%CI=0.40, 0.73), and no contraception (aOR=0.40; 95%CI=0.25, 0.64) versus IUD/hormonal implant.

Conclusions: Findings show that women not intending to get pregnant had lower odds of using moderately and least effective contraception over LARCs than intending women did. Not intending women may desire the use of more effective contraception to prevent pregnancy, emphasizing the importance of ensuring access to LARCs. Further research is needed to explore factors that influence how women choose their contraceptive methods and hinder the use of LARCs.

Board 113

Modifications to evidenced-based intervention designs: Towards translational approaches that allow for flexibility

Fernandez, Sofia B.; Wilson, Courtney; Pinzon Iregui, Claudia, M.; Maldonado, Maria, D.; Perez, Katherine; Clarke, Rachel; Fleites, Caleigh; Martin, Nicholas; Howard, Melissa; Huang, Hui

Purpose: Florida Department of Health's Office of Minority Health and Health Equity provides funding to community-based organizations (CBOs) through the "Closing the Gap" initiative to implement evidence-based interventions (EBIs) that focus on local health disparity priorities (e.g., HIV, diabetes, and cardiovascular disease). As a part of an external evaluation, the purpose of this study was to assess EBI fidelity and challenges in delivering programs, as designed.

Methods: We conducted semi-structured interviews with representatives from 19 CBOs. Representatives were asked about their experiences with monitoring fidelity and program implementation. A team of coders used a consensual analysis approach to analyze the data.

Results: CBOs described challenges in delivering their program as designed. Responses included limited time with participants and the burden of data collection on participants and staff. CBOs described difficulties with changing health behaviors, lack of resources (e.g., qualified staff, funding, access to complete EBI manuals, incentives), recruitment and retention issues, competing needs of participants, and lack of community buy-in. Modifications to programs included: reducing duration or frequency of the program; changing the modality to virtual platforms; and making modifications to culture, language, or content of program materials to be more relevant and inclusive.

Conclusions: Consistency of EBI implementation is important for fidelity and evaluation efforts. CBOs expressed challenges to EBI fidelity that, in some cases, resulted in modifications. Training around appropriate tailoring of EBIs for unique populations, geographic locations, and population needs is warranted to preserve the utility of programs while also allowing for flexibility to serve unique needs.

Board 114

A systematic review of behavioral interventions to improve maternal health in pregnant people at high risk for cardiovascular complications

Satish, Nakita; Whipps, Mackenzie, D.M.; Price, Candice; Ketchersid, Audriana; D'Souza, Indira; Ebong, Imo; Van Nord, Megan, G; Taiwo, Tanya; Hedriana, Herman; Simmons, Leigh Ann

Purpose: Cardiovascular (CV) related complications of pregnancy are increasing in the United States and are a major cause of maternal morbidity and mortality. Despite this, few behavioral interventions have been designed specifically for people at high risk for developing CV pregnancy complications. **Methods:** We conducted a systematic review of randomized controlled trials (RCTs) of behavioral interventions designed for pregnant people in the United States at high risk for CV complications that were published after 2005. Each article was reviewed by two of six reviewers, and disagreements were refereed by an independent reviewer.

Results: Overall, 2,521 articles were screened at the title/abstract level, 197 were screened at the full text level, and 53 RCTs (9,045 participants), were selected for data extraction. Commonly targeted risk factors included: prepregnancy overweight and obesity (N=29), diabetes (preexisting or gestational) (N=18), and hypertension (preexisting or pregnancy-related, e.g., preeclampsia) (N=4). Intervention targets included diet (N=17), physical activity (N=12), mindfulness (N=1), or a combination (N=23). Less than half (N=21) reported significant improvements in maternal health outcomes. Only 22 trials (6,914 participants) reported race/ethnicity (67% White, 10% African American/Black, 18% Asian/Pacific Islander, and 5% other; less than 25% were Hispanic). Most participants were recruited in-person; most interventions were conducted in-person.

Conclusion: Since 2005, 21 RCTs of perinatal behavioral interventions have reported improved maternal outcomes for

people at high risk of CV-pregnancy complications; yet, rates of CV complications continue to rise in the United States. Additionally, research shows that heart-healthy diets, increased physical activity, and reduced stress/improved mood are all associated with better CV health. Gaps identified in this review include how to improve these health behaviors prenatally with: 1) increased representation of historically marginalized participants and providers, 2) virtual options for recruitment and participation, and 3) culturally tailored interventions that address issues of structural determinants of health.

Board 115

Theory-Based Literature Review of the Effectiveness of Internet-based Interventions in the Management of Cardiovascular Diseases

Elijah, Odunayo, A; Mumba, Mercy, N; Naher, Shabnam

Purpose: Recent advancements in technology including the increase in affordability of information and communication technologies (ICTs) and digital storage, as well as higher computer performance and new high-speed bandwidth choices, proffers tremendous opportunities to employ Internet-based solutions to improve health outcomes. The goal of this study was to conduct a comprehensive evaluation of the efficacy of internet-based interventions in the management of cardiovascular diseases.

Methods: Three databases were searched for literature. The inclusion criteria include interventions aimed at CVD management, behavioral modification toward CVD risk factors, randomized controlled trials, theory- or construct-based interventions, and internet- or web-based interventions. A total of ten studies were included in this review.

Results: Some of the interventions operationalized theoretical frameworks – the health action process approach theory (n = 2), the social cognitive theory (n = 2), the

transtheoretical model ($n = 1$), and the self-regulation theory ($n = 1$). The other four interventions utilized one or more constructs in their approach with the self-efficacy construct being measured in seven interventions. Self-efficacy for physical activity and healthy eating was improved in all these studies. Improvements were reported in physical activity ($n = 6$), healthy eating ($n = 3$), quality of life ($n = 3$), and weight loss ($n = 2$) when compared to control/baseline. Other improved outcomes include program and medication adherence and reduced admission rates.

Conclusion: Internet-based interventions are effective in managing cardiovascular diseases and can provide cost-effective options to reach marginalized CVD patients. The incorporation of theory-based behavior change education and physical activities can greatly improve the efficacy of Internet-based interventions. It is suggested that patients may need ongoing care and support to mitigate the associated long-term complications because long-term benefits from the effects of the intervention are not yet understood and may necessitate internet-based booster sessions.

Board 116

Adverse childhood experiences, everyday discrimination, social concern, and tobacco and cannabis product use among young adults

Pasillas-Pablo, Daniel; Jacobs, Wura; Leventhal, Adam

Background: Developmental and psychosocial stressors such as adverse childhood experiences (ACEs), everyday discrimination, and concern for increasing hostility in the society are increasingly common. This study examined whether these stressors are associated with use of different tobacco and cannabis products similarly among racial/ethnic minority young adults and their white counterparts.

Methods: Cross-sectional data were from young adults in the Happiness and Health Study, a cohort study of students from public

high schools in LA. Participants indicated their race/ethnicity, which was used to classify them as racial/ethnic minority (RM) or not (NRM). They self-reported their past 6-month cigarette, e-cigarette (with and without nicotine), and cannabis (smoked and vaped) use and completed the ACEs, everyday discrimination (ED), and social concern (SC) scales. Stratified multivariate regression models were used to estimate association of ACEs, ED, and SC with use of different tobacco and cannabis products among RM and NRM young adults. All analyses adjusted for age, sex, and socioeconomic context.

Results: 2207 participants were included in the analysis, mean age was 21.84 years ($SD=0.4$), 60.3% were female. Among RM young adults, experience of everyday discrimination increased the odds of cigarette use ($OR=1.42$, 95% CI 1.03, 1.95) while social concern increased odds of cannabis vaping ($OR=1.14$, 95% CI 1.01, 1.29). Among NRM young adults, ACEs increased the odds of cigarette smoking ($OR=1.22$, 95% CI 1.11, 1.33), e-cigarette use ($OR=1.01$, 95% CI 1.02, 1.18), cannabis smoking ($OR=1.13$, 95% CI 1.06, 1.20), and cannabis vaping ($OR=1.10$, 95% CI 1.03, 1.17). Everyday discrimination increased the odds of e-cigarette use ($OR=1.41$, 95% CI 1.08, 1.83) while social concern increased the odds of cannabis smoking ($OR=1.27$, 95% CI 1.13, 1.43) and vaping ($OR=1.19$, 95% CI 1.06, 1.34).

Conclusion: Tobacco and cannabis use prevention efforts that acknowledge childhood trauma and are socially and culturally responsive would be beneficial and effective.

Board 117

Young Adults' Sexual and Reproductive Health Needs Related to Alcohol Use: The Perspectives of Community Stakeholders

Johnson, Kaeli, C.; Griner, Stacey, B.; Akpan, Idara, N.; Galvin, Annalynn, M.; Webb, Nathaniel; Kline, Nolan, S.; Litt, Dana, M.; Lewis, Melissa, A.; Thompson, Erika, L.

Purpose: Young adults aged 18-25 are more likely than the broader population to engage in sexual activity while consuming alcohol, which may result in negative sexual health outcomes such as sexually transmitted infections (STIs). Eliciting community stakeholder perspectives related to alcohol and sexual health needs can provide contextual information to guide the future development of programming to address these needs. Therefore, the purpose of this study was to explore the alcohol prevention and sexual health needs from the perspectives of community stakeholders in North Texas who serve young adults.

Methods: Local community stakeholders (n=12; individuals at organizations addressing alcohol use or sexual health among young adults) were recruited via convenience sampling to participate in 30-minute interviews. Participants were asked about their local young adults' needs related to alcohol use and sexual health needs with the questions: "What are the alcohol prevention needs in your community?" and "What are the sexual and reproductive health needs in your community?". Interviews were audio-recorded, transcribed, and thematically coded by two coders in MAXQDA software.

Results: Participants were college representatives, counselors, and nonprofit organizers who discussed education about sexual health and alcohol prevention as one of the biggest needs for young adults in their communities. Participants described gaps in alcohol education around "standard" drink sizes, alcohol use moderation, and how the college context may create opportunities for increased alcohol consumption. Gaps in sexual health education included setting

boundaries, consuming alcohol before sex, and education on condom and contraception use.

Conclusions: Findings indicate that community stakeholders perceived gaps in young adults' awareness of the consequences of alcohol-related sex and about methods to prevent STIs and unintended pregnancies. Numerous evidence-based interventions exist to address these gaps, suggesting a need to better disseminate these options to community partners and assist with implementation into their settings.

Board 118

Psychosocial outcomes of a culturally tailored, family-centered father-focused health promotion program for Mexican-heritage families: ¡Haz Espacio para Papi! (Make Room for Daddy)

Umstadd Meyer, M Renée; Wende, Marilyn, E; Prochnow, Tyler; Ylitalo, Kelly, R; Delgado, Haley; Johnson, Cassandra, M; Gómez, Luis; Sharkey, Joseph, R

Purpose: Mexican-heritage families living along the Texas-Mexico border report less physical activity (PA) and are at greater risk for chronic disease than the U.S. population. According to social cognitive and family systems theories, family-centered PA programs that engage Mexican-heritage fathers can improve individual psychosocial outcomes related to PA. The purpose of this study was to report the impact of a culturally-tailored, father-focused, and family-centered lifestyle program, ¡Haz Espacio para Papi!, on child PA self-efficacy, skill competency, father social support (for child PA) and parenting strategies for Mexican-heritage families along the Texas-Mexico border.

Methods: Using a step-wedge cluster randomized design, participating families (n=43), consisting of children (M age: 10.1[SD=0.9]) and fathers (M age: 39.9[SD=8.2]), were randomized into five groups. Child's PA self-efficacy (0-2 scale) was measured using an adapted PlaySelf Physical Literacy Assessment for Youth and

skill competency (0-3 scale) was measured using an adapted Canadian Assessment of Physical Literacy questionnaire. Father social support for child PA was measured using the Activity Support Scale for Multiple Groups (0-2 scale), and parenting strategies using an adapted measure by Lario et al. 2009 (0-2 scale). Linear mixed models assessed program effects on child and father psychosocial outcomes (PROC MIXED, SAS-v.9.2).

Results: The program had no association with child self-efficacy ($p=0.66$) or skill competency ($p=0.96$). However, for fathers, the program was associated with a significant increase in social support for child PA ($p<0.01$) and no changes in parenting strategies ($p=0.08$). On average, the program resulted in a .08 unit increase in father's social support for child PA. Models adjusted for program dose were consistent with unadjusted models.

Conclusions: This culturally-tailored program resulted in significantly increased fathers' social support for child PA. Public health practitioners should apply family systems and social cognitive theory in future interventions to encourage fathers' involvement and support for child PA.

Board 119

Cannabis Use Behavior: The Effects of Social Support and Adverse Childhood Experiences

Crockett-Barbera, Erica, K.; Moyers, Susette, A.; Chiaf, Ashleigh, L.; Appleseth, Hannah; Croff, Julie, M.

Introduction: Exposure to adverse childhood experiences (ACEs) have been associated with cannabis use. This study examined the moderating effect of three subtypes of social support (appraisal, belongingness, and tangible) on the relationship between ACEs and the prospective frequency and intensity of cannabis use among young women.

Methods: Females ($n=165$) between the ages of 15-24 were engaged in a one month prospective study. They completed a 6-item ACEs scale, the shortened Interpersonal

Support Evaluation List (ISEL-12), and demographic questions. Participants attended weekly appointments and completed time-line follow back of their daily cannabis use frequency and intensity.

Results: ACEs were a significant predictor of the number of days of cannabis use over the month ($\beta = .959, p < .01$). Each type of social support significantly moderated the effect of ACEs on days of cannabis use without covariates, but only appraisal ($\beta = -.037, p < .05$) and tangible support ($\beta = -.098, p = .001$) were significant with covariates. ACEs were predictive of cannabis use intensity when covariates were included ($\beta = 1.971, p < .001$). When examining the interactions for cannabis use intensity between ACEs and the 3 types of social support, the interaction between ACEs and tangible forms of social support was significant with and without covariates ($\beta = -.065, p < .05$; $\beta = -.104, p < .001$, respectively).

Conclusions: Young women's adverse childhood experiences predict cannabis use frequency and intensity over a month, and that relationship is moderated by current perceived tangible social support. Programming that targets increasing perceived tangible social support in females with ACEs may be a preventative strategy to reduce the health behavior of cannabis use.

Board 120

Testing the Effectiveness of Pictorial Waterpipe-specific Health Warning Labels Compared with The FDA Text-only Labels: An Online Factorial Experimental Study

Asfar, Taghrid; Oluwole, Olusanya, J.; Casas, Alejandra; Friedman, Lily

Purpose: This study aims to examine the effect of the 24 Waterpipe (WP) Pictorial Health warning labels (PHWLs) compared to the FDA text-only label and 2) compare the effect of PHWLs between the 6 themes.

Methods: A 2x7 between/within-subject online factorial experimental study was conducted among a national sample of 300 (50% current WP smokers; 50%

nonsmokers) US adults (females 71.1%; mean age of 31.1±3.41 years) in March 2022. Participants were randomized to view and rate seven labels: 1 FDA label and 6 PHWLs, one from each theme presented in random order. Brands were rated on attention, reaction, perceived effectiveness, intentions to quit WP (WP smokers), and intention to not initiate WP (nonsmokers). Means and SDs of outcomes were calculated. Planned comparisons using the Friedman test followed by a pairwise Wilcoxon signed-rank test for multiple comparisons were used to examine distributional differences of outcomes between the HWL type and themes.

Results: Most participants (74.4 %) were non-Hispanic Whites, 68.4% had college degrees, and 41.5% were in poverty. Compared with the FDA text label, PWLs elicited greater attention ($p<0.0001$), fear ($p<0.0001$), harm perception ($p<0.0003$), perceived effectiveness ($p<0.0001$), and intentions to quit ($p=0.0014$) and not initiate WP smoking ($p<0.0003$). PHWLs in theme 3, “harm to others,” rated the highest in attention (4.14 ± 1), believability (4.15 ± 0.95), overall perceived effectiveness (7.60 ± 2.35), harm perception (7.53 ± 2.43), and intentions to quit (7.35 ± 2.57). PHWLs in theme 2, “WP harm compared to cigarettes,” rated the highest in discouraging WP initiation (7.32 ± 2.54).

Conclusions: PHWLs were superior to the FDA text-only for several communication outcomes. PHWLs related to WP harm to others and WP harm compared to cigarettes are promising. These findings provide strong evidence for the potential implementation of WP-specific PHWLs.

Board 121

Supporting Mental Health and Goal Achievement: A Qualitative Study of the Strengths of a Virtual Peer Mentoring Program as Perceived by the Mentees

Yuan, Shuhan; Gillespie, Delaney; Lin, Hsien-Chang; Chow, Angela

Purpose: As universities switch to online education due to the COVID-19 pandemic, feeling isolated and less motivated to schoolwork has become common among many students. A 4-week virtual peer mentoring program, Connect and Thrive (C&T), was developed and conducted in a Midwestern university to connect students with peers and to support their goal achievement and mental health. This study aimed to explore the perceived strengths of this program as perceived by the mentees who completed the program.

Methods: A total of 41 C&T mentees participated in this study. Data were collected by semi-structured in-depth interviews conducted immediately after the participants completed the C&T program in Spring 2021. Adopting an exploratory qualitative design, a hybrid inductive-deductive thematic approach was employed to analyze the interview transcriptions. Roddy’s Four-Pillars Model for online student programs was utilized to create the initiate set of codes; additional codes emerged as the two analysts conducted the thematic analysis.

Results: Aligning with Roddy’s model, four themes were emerged regarding the perceived strengths of C&T among the mentees, including (1) mental health promotion: mentees reported that C&T provided a non-judgmental environment for self-reflection to voice out their pressure during the pandemic; (2) goal achievements support: C&T served as a reminder for mentees to track their academic goal setting and enhanced the mindfulness of their progress; (3) increased sense of community: the weekly online interaction and real-time information exchange supported mentees’ connections with campus resources during the pandemic; (4) mobile technology utilization: the app-based platform utilized by C&T allowed the mentees to engage in the program activities easily at anywhere.

Conclusions: This study has provided preliminary qualitative evidence on the strengths of C&T as perceived by its mentee participants. Further studies which examine its effectiveness using quantitative methods,

its scalability, and transferability to other educational settings are warranted.

Board 122

Motivational factors influencing readiness to use youth friendly services among secondary school students in East Belesa district, Ethiopia, using the Theory of Planned Behavior, 2022

Tsegaw Menen; Kassie Ayenew; Alemnew Walleign

Background: The reproductive health of youth has become a major public health concern. The utilization of youth friendly services is low among Ethiopian youths. Intention is the best predictor of behavior. However, there is no study done on the area which assesses the intention of the school youths to use youth friendly services.

Objectives: This study was aimed to assess intention to use youth friendly services and its factors among secondary school students in East Belesa district, using the Theory of Planned Behavior, 2022.

Methods: An institution based cross-sectional study was conducted from May 23 to June 12, 2022 in East Belesa district. Stratified random sampling technique was used. Data was entered using EpiData and analyzed using STATA version 14. Standardized β and R^2 values were used to interpret effects and variability with intention to use youth friendly services respectively. Simple and Multiple linear regression analysis were performed. Statistical significance was declared at a p-value of <0.05 with 95% confidence interval.

Results: A total of 511 respondents participated in the study giving a response rate of 99.8%. Around half of the participants were males (52.8%). The mean score of intention to use youth friendly services was 3.39 ± 1.14 . Direct perceived behavioral control ($\beta = 0.25$, 95%CI: 0.05, 0.45), subjective norm ($\beta = 0.28$; 95%CI: 0.09, 0.47), attitude ($\beta = 0.20$; CI: 0.03, 0.36), educated mothers ($\beta = 1.65$, 95%CI: 0.21, 3.09) and female sex ($\beta = -1.77$; 95% CI: -

3.10, -0.44) were significant predictors of intention to use youth friendly services.

Conclusion: the magnitude of intention to use youth friendly services was low. Perceived behavioral control, attitude, subjective norm, educated mothers and sex were the predictors of intention to use youth friendly services. The theory of planned behavior could be applied to predict intention of youths to use youth friendly services.

Board 124

Cigarette Smoking Behaviors and Nicotine Dependence at the Intersection of Sexual Identity and Sex: Findings from the National Survey on Drug Use and Health, 2015-2019

Ganz, Ollie; Schulz, Jonathan A.; Ehlke, Sarah J.; Villanti, Andrea C.

Purpose: To examine cigarette smoking characteristics among adults by sexual identity and sex using data from the National Survey on Drug Use and Health (NSDUH).

Methods: Using pooled data from 2015-2019 (N=210,392), we examined former cigarette smoking (>100 lifetime cigarettes, no smoking in previous year), lifetime cigarette smoking (>100 lifetime cigarettes), past-month cigarette smoking, past-month daily cigarette smoking, and nicotine dependence (Fagerström Test of Nicotine Dependence among past-month cigarette smokers), by sex (female, male) and sexual identity (heterosexual, gay/lesbian, bisexual). We estimated the prevalence of each outcome by sexual identity, overall and stratified by sex and examined associations between sexual identity and smoking outcomes, stratified by sex. Models controlled for demographics, past-year psychological distress, year, and survey weighting.

Results: Bisexual females had the highest prevalence of past-month smoking (31.2%) and the lowest prevalence of former smoking (25.1%). Past-month daily smoking and nicotine dependence were highest for gay/lesbian females (16.2% and 13.1%) and bisexual females (18.7% and 15.2%); the prevalence of former smoking was highest

for heterosexual males (48.8%) and females (49.9%). Adjusted logistic regression models showed that among females, gay/lesbian (aOR: 1.92 [1.63, 2.27]) and bisexual (aOR: 1.87 [1.72, 2.03]) adults reported greater odds of being a current smoker compared with heterosexual adults. Among males, gay (aOR: 1.28 [1.10, 1.50]) adults, but not bisexual (aOR: 1.07 [0.92, 1.24]) adults, reported greater odds of being a current smoker compared with heterosexual adults. Gay (aOR: 0.61 [0.48, 0.79]) and bisexual (aOR: 0.73 [0.57, 0.92]) males reported lower odds of being a former smoker compared with heterosexual males.

Conclusions: Differences persist in the prevalence of smoking behaviors by sex and sexual identity, particularly among gay/lesbian and bisexual women. Findings highlight the need for smoking cessation interventions that do not treat sexual minority adults as a monolith.

Board 125

Transforming Front Line Health Workers and Law Enforcement Personnel with Mindfulness-Based Resilience Training (MBRT)

Zullig, Keith, J.; Canady, Brittany, E.; Brumage, Michael, R.; Goerling, Richard; Smith, Stephanie; Gardner, Madelin; Vangilder, Vanessa; Lilly, Christa, L.

Purpose: MBRT is an emergent intervention to address acute and chronic stressors inherent to first responder occupations and may be especially helpful in rural areas where first responders and healthcare workers report high exposure to traumatic events and face barriers to accessing mental health treatment. This study presents preliminary data from an MBRT intervention among a community of front line health workers and law enforcement personnel in West Virginia.

Methods: A total of 214 participants were recruited into 10 regionally-based cohort MBRT two-day trainings from February-June 2022 followed by four weekly online synchronous training sessions. Of the 214

registered participants, 162 (14% law enforcement) completed the optional surveys. The mean age of the sample was approximately 42 (SD=13.2) and 71% identified as female and 92% as White. Pretest, posttest, and 30 day post-intervention data are reported on mindfulness, emotional intelligence, emotion regulation, and life satisfaction. Descriptive analysis was followed by independent sample t-tests on select demographic variables for the four outcomes at baseline. Repeated measures linear mixed models (LMM) were conducted to detect differences across all time points.

Results: Males reported significantly higher emotional regulation ($p=0.009$) and mindfulness ($p=0.002$) compared to females at baseline. Married participants also reported significantly higher emotional regulation ($p<0.0001$), and mindfulness ($p<0.01$) and life satisfaction ($p<0.0001$) compared to unmarried participants at baseline. LMM results suggest mindfulness (Estimate = 3.83, $p < 0.0001$), emotional intelligence (Estimate = 3.01, $p = 0.002$), emotion regulation (Estimate = -5.82, $p < 0.0001$), and life satisfaction (Estimate = 1.26, $p = 0.0017$) all improved significantly from baseline to the 30 day post-intervention assessment.

Conclusions: Six month post-intervention data collection is still underway. However, preliminary results suggest MBRT enhanced participants' reported mindfulness, emotional intelligence, emotion regulation, and life satisfaction, which is transforming this community of front line health workers and law enforcement personnel.

Board 126

Reasons for Cannabis Use and Risk of Cannabis Use Disorder Among Young Adults

Jacobs, Wura; Merianos, Ashley, L; Leventhal, Adam L

Background: Frequency and social contexts of cannabis use are known predictors of cannabis use disorders (CUD) among young

adults. Little is known about reasons of use and their associations with CUD. This study examined the association between reasons for cannabis use and risk for CUD among young adult cannabis users.

Methods: Data were from graduates of public high schools in Los Angeles, California (n=954) who self-reported any past 6-month cannabis use via blunts and other routes of smoking, vaping, dabbing, and eating were included in the analysis. The following reasons for cannabis use were assessed: sleep, emotional stress, and physical distress. Responses to the 6-item Cannabis Abuse Screening Test (CAST) scale were summed and then categorized as follows to determine CUD risk level: low (0-3 score), moderate (4-6 score), and high (≥ 7). Multivariate multinomial models were used to estimate the associations between reasons for use and CAST scores. Analyses adjusted for participants' age, sex, race, and socioeconomic context.

Results: The majority of participants (64%) were female; mean age was 21.82 years (SD=0.38). Compared to participants who did not use cannabis due to physical distress, those who did had a higher risk for moderate (adjusted relative risk ratio (ARR)=2.24, 95%CI=1.40-3.58) and high (ARR=4.88, 95%CI=3.23-7.39) CAST scores. Compared to those who did not use cannabis for emotional stress, those who did had a higher risk for high CAST scores (ARR=2.80, 95%CI=1.79-4.38). Compared to those who did not use cannabis for sleep, those who did had a higher risk for moderate (ARR=2.71, 95%CI=1.73-4.24) and high (ARR=2.28, 95%CI=1.52-3.41) CAST scores.

Conclusion: Young adult cannabis users who used for reasons of physical distress, emotional stress, and sleep were at risk for having high CAST scores indicative of CUD. Public health and clinical interventions to provide alternative methods for addressing these physical and emotional health issues.

Board 127

Capturing Differential Effects of In-Person and Online Connections on Mental Health and Resilience using a Revised Lubben Social Network Scale Among College Students

Chow, Angela; Lin, Hsien-Chang

Purpose: Understanding how online and in-person connections are associated with mental health and resilience is important, particularly since the COVID-19 pandemic. However, there is a lack of well-established tools that separately measure online and in-person connections. The study aimed to develop and examine the psychometric properties of a scale to measure in-person and online social connections.

Method: Data were collected from 180 undergraduate students from a Midwestern university in Fall 2022. A 12-item scale to measure social connections was developed based on Lubben Social Network Scale-6, including four sub-scales: (1) number of family members connected in person or (2) online; and (3) number of friends connected in person or (4) online. Internal consistency reliability for each sub-scale was assessed by Cronbach's alpha. Criterion validity was assessed by its correlations with loneliness, depressive symptoms, social connectedness, and resilience, all measured by validated scales. Multiple regression models were conducted to estimate the net effects of each sub-scale on loneliness, depressive symptoms, social connectedness, and resilience.

Results: Cronbach's alphas of the four subscales indicated a good reliability (alphas ranged 0.74-0.86). All sub-scales were negatively correlated with loneliness and depressive symptoms and positively correlated with social connectedness and resilience, indicating a good validity. Regression models indicated that Friends Connected in Person was significantly associated with loneliness ($\beta=-.57$, $p<.01$), depressive symptoms ($\beta=-.61$, $p<.05$), social connectedness ($\beta=.44$, $p<.01$), and resilience ($\beta=-.35$, $p<.05$); Friends

Connected online was significantly associated with depressive symptoms ($\beta=.32, p<.05$).

Conclusions: This study provided preliminary evidence on the reliability and validity of a new scale to measure in-person and online social connections. The findings indicated the differential effects of four types of social connections, with connection to friends in-person being the most impactful to young people. Further research that tests the scale with larger samples or among other age populations is warranted.

Board 128

The impact of childhood trauma on the relationship between social media use and internet addiction

Shanazari, Eric; Rogers, Christopher J.; Unger, Jennifer B.; Benjamin, Stephanie; Forster, Myriam

Adverse childhood experiences (ACE) have been associated with maladaptive behaviors in young adults, including internet addiction. Along with maladaptive behaviors, social media use has been linked with internet addiction; however, research has also proposed that social media may enhance social support. The present study assessed ACE, social media use, and internet addiction to explore whether students with a history of ACE who use social media are more vulnerable to internet addiction than their peers.

Data are college student responses (N=1,166) from a large, ethnically diverse, public university in Southern California. Results of linear regression models suggest that higher ACE (Beta=1.43, 95%CI=0.91-1.96) and more weekly hours of social media use (Beta=0.21, 95%CI=0.17-0.25) were significantly associated with higher internet addiction scores, while controlling for social support, SES, sex, age, race, and other online behaviors. Models assessing differences in the social media-internet addiction relationship across ACE indicate students with no ACE, and at high levels of social media use, are at lower risk internet

addiction; however, students with a history of ACE and high social media use were at much higher risk for internet addiction than their peers with no ACE.

Results highlight that ACE can exacerbate the relationship between hours of social media use and internet addiction and may partly explain some variability seen across studies. Young adults' online presence may continue to grow as internet technologies proliferate, but for individuals with a history of ACE, heavy use of online media, despite potential social support benefits, can enhance risk for internet addiction.

Board 129

Training substance use treatment center providers on tobacco use treatments is associated with increased provision of counseling and pharmacotherapy to tobacco-using patients

Carter, Brian, J; Britton, Maggie; Chen, Tzuan, A; Siddiqi, Ammar, D; Martinez Leal, Isabel; Correa-Fernández, Virmarie; Rogova, Anastasia; Kyburz, Bryce; Williams, Teresa; Casey, Kathleen; Reitzel, Lorraine, R

Purpose: Substance use treatment centers (SUTCs) do not commonly address patients' disproportionately high tobacco use. The Theoretical Domains Framework (TDF) suggests that increasing knowledge within healthcare settings is a key pathway to improve their providers' provision of evidence-based care to patients. Consequently, a multi-component tobacco-free workplace program implemented within 15 SUTCs in Texas included provider training on treating tobacco use with counseling and pharmacotherapy. Herein, the effectiveness of the program in shifting TDF-informed constructs is assessed.

Methods: Providers completed surveys, before and after a ~11-month program implementation period (pre N=259; post N=194), assessing (1) lack of knowledge on using counseling or pharmacotherapy, respectively, as a barrier to treating patients; (2) receipt of past-year training on treating

tobacco use with counseling or pharmacotherapy (incl. referral therefor), respectively; and (3) providers' self-reported use of counseling or pharmacotherapy, respectively, with tobacco-using patients. Generalized linear mixed models explored associations between knowledge barriers, training receipt, and intervention practices over time. Whether low versus high shifts in SUTC-level knowledge barriers over time moderated changes in training and intervention practices was assessed with interaction terms.

Results: Significant pre- to post-program implementation changes were as follows: receipt of counseling training (32.00% versus 70.21% of providers); receipt of pharmacotherapy training (20.46% versus 71.88%); delivery of tobacco cessation counseling (19.31% versus 28.87%); and pharmacotherapy use/referral for cessation (31.66% versus 55.15%). Relative to their counterparts, SUTCs wherein providers experienced greater knowledge-barrier reductions in pharmacotherapy treatment/referral also exhibited greater gains in associated training receipt and intervention provision over time.

Conclusion: Consistent with the TDF, results suggest the importance of SUTCs' participation in training on treating patients' tobacco use with counseling and pharmacotherapy to improve patient care provision. Strategies to enhance the uptake of training within SUTCs are needed to maximize its benefits, such as reducing provider-perceived barriers to tobacco treatment.

Board 130

Associations between e-cigarette use and sleep health among adults in the US, NHANES 2015-2018

Wang, Shanshan; Nandy, Rajesh, R;
Rossheim, Matthew, E

Background: Growing evidence suggests that e-cigarette use is associated with adverse health outcomes. However, little is known about the associations between e-

cigarette use and sleep. The study aims to examine the associations of e-cigarette use and dual (e-cigarette + combustible cigarette) use with short sleep duration and trouble sleeping among US adults.

Methods: We used data from the National Health and Nutrition Examination Survey (NHANES) 2015-2018 (n = 11,659). E-cigarette use and dual use were categorized as current, former, and never use. Short sleep duration was defined as sleep duration ≤ 6 hours. Trouble sleeping was self-reported. Logistic regression analyses were performed using appropriate sample weights to generate nationally representative estimates.

Results: The weighted percentages of current and former e-cigarette use, current and former dual use were 6.02%, 15.80%, 3.25%, and 13.33%, respectively. Compared to never e-cigarette use, current e-cigarette use was associated with significantly greater odds of short sleep duration (OR=1.69, 95% CI: 1.11-2.58) and trouble sleeping (OR=2.54, 95% CI: 1.79-3.59) after adjusting for age, sex, race/ethnicity, alcohol consumption, BMI, diabetes, hypertension, and socioeconomic status variables. Significant associations were also observed for former e-cigarette use versus never use, with short sleep duration (OR=1.29, 95% CI: 1.01-1.64) and trouble sleeping (OR=1.79, 95% CI: 1.41-2.26) after adjustment. Additionally, the adjusted ORs for short sleep duration and trouble sleeping were 1.64 (95% CI: 1.06-2.54) and 2.14 (95% CI: 1.34-3.42) among those with current dual use, and 1.46 (95% CI: 1.17-1.81) and 2.11 (95% CI: 1.66-2.67) among those with former dual use, compared to those without dual use.

Conclusions: This study demonstrates that current or former e-cigarette use or dual use is associated with higher odds of short sleep duration and trouble sleeping among US adults. Future studies are warranted to confirm the findings.

Board 131

Understanding the Menstrual Health Needs of People Experiencing Homelessness during the COVID-19 Pandemic in Lafayette, Indiana

Martinez, Rebecca, G; Frank, Jaclyn; Schnolis, Emma; Otten, Emily; Arora, Anukriti; DeMaria, Andrea; Cromer, Risa; Ruiz, Yumary; Rodriguez, Natalia

BACKGROUND: Period poverty occurs in all countries where access to menstruation products and other resources is limited. These conditions are amplified for menstruators who face significant barriers to supplies, spaces, and services. This project gathered information from people experiencing homelessness and professionals that serve this community to inform programming efforts aimed at addressing menstrual management needs to help improve the sexual and reproductive health of this vulnerable group.

OBJECTIVE: This study's focus was to understand what people experiencing homelessness know and experience when menstruating. A secondary purpose was to identify ways the COVID-19 pandemic impacted menstruation management for people experiencing homelessness and how service providers support their needs.

METHODS: In-depth interviews were conducted with 1) menstruators experiencing homelessness (n=12) and 2) community healthcare and social service providers (e.g., case managers, shelter directors, community health workers, nurses, n=12). Thematic analysis techniques were used for data analysis.

RESULTS: Menstruators experiencing homelessness navigated restrictive community resources with limited access to products, services, and spaces. While community healthcare and service providers offered some health education and connection to care, menstruators experienced complex interactions with providers and the healthcare system, exacerbated by social stigma, limited healthcare access, and underlying chronic

health conditions. The COVID-19 pandemic further magnified healthcare access disparities for this group as public spaces closed, economic conditions deteriorated, and health outcomes were poor.

Board 132

The Association between Inflammatory Diet and Infection-Related Cancers in Adults: A Systematic Review

Laily, Alfu; Reed, Jason, B; Powers, Madeline, Q; Giuliano, Anna; Kasting, Monica

Purpose: To synthesize the existing evidence of the association between inflammatory diet and infection-related cancers in the adult population.

Methods: We reviewed the literature from January 1, 2007-March 8, 2022 using PUBMED, Web of Science: Core Collection, Cochrane Library and CINAHL. We included studies that were original research, available in English, and examined the association between infection-related cancers (e.g., liver, cervical, penile, lymphoma, etc.) and inflammatory diet. Using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocol, two authors reviewed the studies by title and abstract, and any discrepancies were resolved by a third reviewer. Relevant studies were examined as full-text articles.

Results: 3,633 studies were screened, with 47 of them processed into a full text review; 19 articles met the criteria for this study. Based on preliminary results, 17 of the 19 studies reported that pro-inflammatory diet indicated by high Dietary Inflammatory Index (DII) scores was associated with an elevated risk of infection-related cancers, including gastric cancer (ORs= 1.63-3.59), cervical cancer (ORs= 1.98-3.14), and liver cancer (ORs= 2.43-3.22). This pattern seems to be more consistent with infection-related cancers that manifest at the same anatomic site as the infection (e.g., cervix, liver, and gastric) as opposed to non-localized site infection-related cancers (e.g., lymphoma). Furthermore, there were some differences

by sex, and three studies found that there was a stronger association between diet and infection-related cancer diagnoses for males compared to females.

Conclusion: Pro-inflammatory diet is positively associated with risk of infection-related cancers. This may be due to persistent infection caused by chronic inflammation. These findings suggest DII can be used as a tool to measure dietary patterns to support healthier diets. Future interventions should focus on translating these findings to behavioral modification strategies that encourage anti-inflammatory diets to reduce the risk of infection-related cancers.

Board 133

Sexual racism on geosocial networking applications and perceived social support among sexual minority men in the U.S.

Ma, Junye; Paltin, Dafna; Black, Ashley; Baker, Jason, V; Horvath, Keith, J

Background: The use of geosocial networking (GSN) applications for relationship seeking is prevalent among young sexual minority men (YSMM). However, YSMM of color may be vulnerable on GSN apps, given the intersectionality of multiple marginalized identities. Although research has examined psychological correlates of sexual racism (i.e., discrimination of partner selection based on race/ethnicity) on GSN applications, little is known about how sexual racism relates to YSMM of color's perceived social support, which is the focus of this study.

Methods: 80 YSMM, recruited through social media (Mage=25.1 years, 53.7% racial/ethnic minority), participated in a 6-month mHealth intervention to improve PrEP adherence. Data from this study were drawn from the baseline survey and included questions of YSMM's demographics, experiences of sexual racism online, and perceived social support. Chi-squared tests examined the association between sexual racism and outness to family. Wilcoxon rank

sum tests examined differences in YSMM's perceived instrumental support and social isolation by experiences of sexual racism.

Results: Overall, 32.1% of the sample experienced sexual racism on GSN applications. Analyses showed racial/ethnic differences in experiences of sexual racism: Black (54%), Asian (50%), Hispanic (43%), White (11%), $p=0.003$. A significantly lower percentage of YSMM who experienced sexual racism were out to more than half of their family (19.3% vs 60.9%), $p < .001$. Instrumental support was significantly higher for YSMM who never experienced sexual racism (Md=16) than those who did (Md=12), $p=0.02$. Social isolation was significantly higher among YSMM who experienced sexual racism (Md=12) than those who had not (Md=10), $p=0.002$.

Implications: Our findings underscored the association between sexual racism and YSMM's social lives, warranting the development of psychosocial interventions to foster social connectedness and to cope with sexual racism for YSMM of color. Findings of this study also called for GSN apps to update community guidelines regarding sexual racism.

Board 134

The health effects of familial incarceration from adolescence through early adulthood

Guevara Galicia, Maria, G; Shanazari, Eric; Becerra, Lizbeth; Nuñez, Velia; Robles, Cynthia; Forster, Myriam; Unger, Jennifer

Background: Over 2.5 million youth in the US, especially youth living in underserved communities of color, have an incarcerated family member. According to recent data in California, across all populations, Hispanics have experienced the highest increase in felony convictions. Despite considerable research on the effect of criminal justice involvement on incarcerated adults, less is known about the impact on their children. This study examines the long-term mental health effects of familial incarceration from adolescence to early adulthood.

Methods: Data are from a longitudinal health study of Hispanic youth in Southern California (n=1,094). The first wave of data collection occurred when students were in high school (age 15) and the last wave while in early adulthood (age 25). Generalized linear models assessed the association between familial incarcerated during adolescence and participants' depression and perceived stress at age 15 and age 25, adjusting for gender, country of birth, parent education, cultural identity, and income in young adulthood.

Results: Over half of the respondents were female (61%) and 25% reported having an incarcerated family member prior to age 18. At age 15, students with at least one family member incarcerated had 1.76 times odds of depression [CI: 1.24—2.48] and significantly higher perceived stress scores ($\beta=0.65$, SE=0.44) than students who did not have an incarcerated family member. Ten years later, the young adults who experienced familial incarceration prior to age 18 continued to be at greater risk for depression [OR: 1.58, CI: 1.08—2.31] and higher perceived stress ($\beta=0.69$, SE=0.31) than their peers.

Conclusion: Nationally, there are few school-based support programs tailored to this youth populations and none have been evaluated. Future public health research needs to consider the stressors associated with familial incarceration and develop evidence based programs that facilitate resilience and thriving among vulnerable youth.

Board 135

Cross-sectional national survey of Compliance Behaviour, Knowledge and Attitudes among Cases and Close Contacts during COVID-19 Pandemic

Kearney, Patricia M; Stamenic, Danko; Gajewska Kate; O'Sullivan, Margaret; Doyle, Sarah; O'Reilly, Orlaith; Buckley, CM

Purpose: The initial global response to the COVID-19 pandemic depended on public health interventions including quarantine. In Ireland, a national contact management

programme was established to notify cases, identify contacts, arrange testing for contacts and provide public health guidance to cases and contacts. The aim of this study is to identify predictors of compliance behaviour and explore knowledge and attitudes to inform the global public health preparedness and response.

Methods: Secondary data analysis of anonymised cross-sectional survey data. The sampling frame was the national COVID-19 contact management programme. A target sample of 1,000 cases and 1,000 contacts was calculated to estimate true compliance within error margin of 3% with 95% confidence. The telephone survey, administered by trained interviewers, was developed based on guidelines and evidence, and included socio-demographics, compliance behaviours, knowledge, and attitudes to COVID-19. Chi-squared statistics were used to compare characteristics. Multivariable logistic regression assessed overall compliance.

Results: Among symptomatic cases, 82.8% (n=444) complied with self-isolation while waiting for the test. Reasons for non-compliance included work (45.7%), shopping (22.8%), exercise (13.2%), and a medical appointment (10.9%). Amongst all cases (n=1027), >95% complied with similar characteristics in compliers and non-compliers (all $p>0.05$). In the multivariable model, only age was significant. Reasons for non-compliance included exercise (55.9%), medical appointment (17.6%) and work (5.9%). Of the 1078 contacts, 86.6% complied with similarly high levels in men and women, all ages and regions. Reasons for non-compliance included exercise (42.9%), shopping (28.6%) and work (22.9%). Cases and contacts reported understanding COVID-19 and satisfaction with information provided.

Conclusion: Ireland implemented unprecedented public health measures to contain COVID-19 and mitigate its impact on society and these measures were widely adopted by the population. Maintaining compliance requires political leadership, policy changes and practical solutions

including statutory sick pay, home working support and wide availability of testing.

Board 136

Smoking Prevalence is Overestimated by Employees at Substance Use Treatment Centers, Both Before and After Education Provided During the Implementation of a Comprehensive Tobacco-Free Workplace Program

Jafry, Midhat, Z; Shabaneh, Noor; Chen, Tzuan, A; Britton, Maggie; Martinez Leal, Isabel; Correa- Fernández, Virmarie; Carter, Brian, J; Rogova, Anastasia; Kyburz, Bryce; Williams, Teresa; Reitzel, Lorraine, R

Purpose: Adults with non-nicotine substance use disorders smoke cigarettes at elevated rates relative to the general population ($\leq 35\%$ vs. 13%), but their smoking is not routinely treated where they receive care. Barriers to nicotine dependency treatment provision in substance use treatment centers include high rates of employee smoking and permissive attitudes and behaviors toward patients' tobacco use. Informed by Social Norms and Institutional Theories, tobacco-free workplace programs aim to change organizational policies and practices regarding smoking, in part, by de-normalizing it. This study examined changes in one assessment of smoking de-normalization, the accuracy of employees' knowledge about the U.S. smoking prevalence, from pre- to post-implementation of a multi-component tobacco-free workplace program.

Methods: Participants were 423 employees from 13 substance use treatment centers in Texas that implemented the program between 2018-2020. Employees completed an anonymous e-survey before and after implementation wherein the U.S. smoking rate was queried. During the 10.52 (± 3.45) month program implementation, all employees were encouraged to attend an education session wherein the U.S. smoking prevalence cited was 13.7% - 15.5% and discussed in juxtaposition to that of the patients they serve. Linear mixed models

assessed changes in employees' perceived U.S. smoking rate over time, controlling for training attendance.

Results: Employees' estimates of the U.S. smoking prevalence declined over time ($p < 0.0001$) but were overestimated as 49.29% (± 23.57) at pre-implementation and 35.41% ($\pm 24.06\%$) at post-implementation, with no differences by employee smoking status.

Conclusions: Overestimation of the U.S. smoking prevalence remained resilient at substance use treatment centers, despite participation in a tobacco-free workplace program that disseminated accurate information. According to informing theories, this overestimation suggests program adoption challenges that may ultimately hamper the intended individual and organizational changes to better address patients' smoking. Results suggest that additional implementation strategies are needed to correct employees' misperceptions and reinforce accurate smoking norms within these settings.

Board 137

Disparities in Tobacco Use among Veterans Enrolled in Medicaid or Veterans Affairs

McDaniel, Justin, T; Jayawardene, Wasantha; Albright, David, L; Redner, Ryan

Purpose: This study aimed to understand whether veterans enrolled in Medicaid or Veterans Affairs (VA) were more likely to use tobacco.

Methods: Data for this cross-sectional study of military veterans ($n = 1,640$) were acquired from the 2016-2019 waves of the United States (US) National Survey on Drug Use and Health. Veterans who responded that they were enrolled in Medicaid were also eligible for VA health care; however, we assumed that a veteran didn't use VA as their provider if they answered in the affirmative to the question about Medicaid enrollment and in the negative to the question about VA coverage (and vice versa). We created a variable to distinguish between the two

insurance types: exclusive Medicaid use or exclusive VA use. Tobacco use was measured with three items. Participants were asked if they used cigarettes, cigars, or smokeless tobacco in the past year. We regressed past year use of any tobacco (yes/no) on insurance type in a multivariable logistic regression model, and controlled for age, race, sex, educational attainment, annual income, chronic disease multi-morbidity, rural/urban status, criminal behavior, religiosity, and depression.

Results: Tobacco use was less prevalent among veterans who exclusively used the VA [29.90% (95% CI = 28.87-30.84)] compared to those who exclusively used Medicaid [50.80% (95% CI = 42.76-55.73)], and the difference was statistically significant after adjustment for covariates [aOR = 0.69 (95% CI = 0.48, 0.98)].

Conclusions: This is the first study since 2009 to examine disparities in tobacco use prevalence among veterans according to insurance type. Variables that may be responsible for the observed differences in tobacco use may be the assessment and treatment of tobacco use that are used at the VA. If these observed differences can be addressed with assessment and treatment, Medicaid could reduce expenditures on tobacco-related illnesses.

Board 138

Examining Musculoskeletal Disorders among Academicians: A Cross-Sectional Survey Design

Cowan, April C; Pryor, Loree E; Li, Chih-Ying

Purpose: The purpose of this study was to examine if work-related musculoskeletal disorder (MSD) patterns exist and what are the associated impacts on quality of life among higher education academicians.

Methods: We sent out an online survey to faculty at the School of Health Professions and School of Nursing at the University of Texas Medical Branch. We combined the Nordic Musculoskeletal Questionnaire – Extended version (NMQ-E) and the Dutch Musculoskeletal Questionnaire (DMQ)

shortened version to examine the prevalence of MSDs for various parts of the body. Both the NMQ-E and DMQ had shown to be consistent for collecting self-reported information about the onset, prevalence, consequences of musculoskeletal pain, musculoskeletal workload, and related symptoms. The designed survey also included the SF-12, a valid and reliable assessment to gather quality of life (QOL) information.

Results: Twenty-seven academicians completed the survey. The majority was 45+ years old (59.3%), female (81.5%), worked 5 days/week (63.0%) and commuted 31-60 minutes daily (59.3%). The average height among participants was 62.9 (SD=13.1) inches and the average weight was 158.4 (SD=57.1) lbs. Participants' mean employment length was 9.5 (SD=7.9) years and overall, they worked 44.5 hours (SD=6.7) per week. The most common work-related musculoskeletal problems reported by academicians were in the low back (81.5%), neck (70.4%), shoulder (70.4%) and wrist/hand (63.0%) regions. Musculoskeletal problems in knees had the highest correlation with SF-12 physical QOL ($r=-.73$) while musculoskeletal problems in low back had the highest correlation with SF-12 mental health QOL ($r=-.48$).

Conclusions: We found MSD was prevalent among higher education academicians. MSD was also associated with physical and mental health QOL. Academic faculty could benefit from wellness programs that target the prevention of MSDs and promotion of healthy work habits, particularly in body regions of low back, neck, shoulder, and wrist/hand.

Board 201

Association between race/ethnicity and weight management behaviors among US adults: findings from 2017-2020 National Health and Nutrition Examination (NHANES) Survey

Osuji, Chimuanya, P; Uyamasi, Kido; Tykeara, Mims; Joseph-Williams, Elizabeth; Jones-McKyer Lisako; Tasnim, Samia

Background: Obesity is a key risk factor for many chronic diseases, and the existent disparities in its prevalence across racial/ethnic groups in the United States have worsened overtime. Differences in weight loss intention, and the use of weight-control methods have been linked to sociocultural norms related to weight and body image.

Methods: Data from the 2017-2020 National Health and Nutrition Examination (NHANES) Survey were used. The study restricted participants to those between 20 and 65 years old (n=6393). Descriptive statistics were used to illustrate racial/ethnic differences in weight loss strategies among participants who reported intention to lose weight and participants who reported intentional weight change. Multiple logistic regression models were used to assess the association between race/ethnicity and intention to lose weight, and intentional weight change.

Results: Among those who tried to lose weight, exercising was the most reported way to lose weight (Non-Hispanic Blacks, 71.7%; Other, 71.3; Hispanic, 62.9%; Non-Hispanic Whites, 64.2%). Among those whose weight changed intentionally, drinking a lot of water was the most reported way among Hispanics (68.7%) and Other races (70.8%), while eating less was most reported by Non-Hispanic Whites (65.7%), and exercising was most reported by Non-Hispanic Blacks (74.8%). Other races/ethnicities (Non-Hispanic Asian, multi-racial and others) were more likely than Non-Hispanic Whites to report intention to lose weight (adjusted odds ratio 1.41, 95% CI 1.04-1.92).

Conclusion: This study indicates a shift in the likelihood of weight loss intention and use of recommended weight loss strategies across racial/ethnic groups. Efforts should be targeted towards improving weight-loss intention and use of recommended weight-control practices among racial/ethnic minorities.

Board 202

The development of a scale assessing monkeypox knowledge: Results from a nationally representative sample of Americans

Walsh-Buhi, Eric R; Walsh-Buhi, Margaret L; Houghton, Rebecca

Purpose: This research developed and tested a scale assessing monkeypox knowledge in a national survey of U.S. adults (aged ≥ 18 years).

Methods: Address-based sampling (ABS) methods ensured full coverage of all households in the nation. N=1018 participants self-administered the Internet-based survey between September 16-26, 2022, including a 15-item scale, with knowledge items adapted from Sallam et al (<https://doi.org/10.3390/medicina58070924>) and Harapan et al (<https://doi.org/10.1080/20477724.2020.1743037>). Possible responses included “yes,” “no,” and “I do not know,” and were scored as correct=1, incorrect=-1, and “I do not know”=0. The scale sum represented the monkeypox knowledge score (theoretical range=-15-15, with a higher score representing greater knowledge. We assessed psychometric characteristics and performed one-way ANOVAs examining mean score differences by demographic groups (e.g., gender, race/ethnicity, sexual orientation), applying sampling weights to all analyses.

Results: Score reliability was strong ($\alpha=.82$). All items but one (“Diarrhea is one of the symptoms of monkeypox”) had statistically significant point biserial correlations, indicating a correlation between a correctly answered item and a higher knowledge

score. The top three correctly answered items were “Monkeypox is present in the U.S.” (86.2%), “There is a currently an outbreak of monkeypox in humans around the world” (71.2%), and “Only gay/bisexual men can get monkeypox” (68.9%). The three lowest scoring items were “Diarrhea is one of the symptoms of monkeypox” (4.5%), “Monkeypox has an average incubation period of 21 days” (11.7%), and “You can get monkeypox from your infected pet” (13.3%). Overall monkeypox knowledge was above the theoretical mean, but still low ($M=5.71$, $SD=3.85$). Differences in knowledge between sexual orientation, urbanicity, education, and household income groups were statistically significant overall. Conclusions: Monkeypox knowledge was lowest among heterosexually-identified, rural, and low education/income respondents. These data may be used to tailor monkeypox risk/prevention (e.g., vaccination) interventions. This scale also shows promise for assessing monkeypox knowledge in other groups/settings.

Board 203

Monkeypox 2022: Fear, perceived susceptibility/severity, and vaccine intention in a nationally representative sample U.S. adults

Walsh-Buhi, Eric R; Walsh-Buhi, Margaret L; Houghton, Rebecca

Purpose: The purpose of this research was to examine vaccine intention, fear of monkeypox, and perceived susceptibility to and perceived severity of monkeypox in a national survey of U.S. adults (aged ≥ 18 years).

Methods: Address-based sampling (ABS) methods were used to ensure full coverage of all households in the nation, reflecting the 2021 March Supplement of the Current Population Survey. Internet-based surveys were self-administered between September 16-26, 2022. $N=1018$ participants completed the survey. The survey included items, based partially on the Health Belief Model, assessing vaccine intention (1 item, with

responses from 1 [Definitely not] to 5 [Definitely]), fear of monkeypox (7-item scale; $\alpha=.89$; theoretical mean=7-35), perceived susceptibility to monkeypox (3-item scale; $\alpha=.85$; theoretical mean=3-15), and perceived severity of monkeypox (4-item scale; $\alpha=.65$; theoretical mean=4-20). Higher scores indicate greater fear, susceptibility, and severity. One-way ANOVAs were run to examine mean score differences by demographic groups (e.g., gender, race/ethnicity, sexual orientation). Sampling weights were applied to all analyses.

Results: Only 1.8% ($n=18$) of respondents reported having received the monkeypox vaccine. While monkeypox vaccine intention was low ($M=2.09$, $SD =0.99$), overall differences between racial/ethnic, sexual orientation, education, and household income groups were statistically significant. Fear of monkeypox was very low ($M=13.13$, $SD=5.33$), and there were overall statistically significant differences in both fear and perceived severity among gender, race/ethnicity, sexual orientation, education, and household income groups. While respondents reported not feeling very susceptible to monkeypox ($M=5.77$, $SD=2.50$), they generally rated monkeypox as just above the theoretical mean in terms of severity ($M=11.01$, $SD=2.85$).

Conclusions: Overall, Americans' vaccination for monkeypox/vaccine intent was low. Gay/lesbian and racial/ethnic minority respondents felt more susceptible to and viewed monkeypox more severely, compared with heterosexual and White respondents, respectively. These data may be used to tailor risk and prevention (e.g., vaccination) interventions, as the current global monkeypox outbreak continues.

Board 204

Impact of Perceived Parental Alcohol Problems on Adolescent and Young Adult Females' Depressive Symptoms, Family Satisfaction, and Binge Drinking

Appleseth, Hannah, S; Croff, Julie, M.; Moyers, Susette, A.; Crockett-Barbera, Erica K.

Purpose: We assessed the relationship between perceived parental alcohol problems (PPAPs), depressive symptoms, past month binge drinking episodes, and family satisfaction among a sample of female adolescents and young adults. These analyses were conducted to better understand the impact of parental alcohol use on facets of young female health and behavior.

Methods: The cross-sectional data were collected at the baseline of a larger biometric study and included 135 females ages 15 to 24, (M_{Age} = 19.24, SD = 2.62). Over half of the sample identified as White (56.3%, n = 76), 5.2% identified as Black (n = 7), 14.8% were American Indian or Alaska Native (n = 20), and 23.7% were Latina (n = 32). The Children of Alcoholics Scale 6-item (CAST-6) was used to measure participant perceptions of parental alcohol use. Outcome variables were measured by the Family Adaptability and Cohesion Evaluation Scale-IV (FACES-IV) family satisfaction subscale, the Center for Epidemiological Studies Depression Scale-Revised (CESD-R), and self-report of past month binge-drinking episodes. Hierarchical multiple regression analyses were used to allow for the predictor variable, PPAP, to be entered into the regression equation (at step 2) following the inclusion of the covariates of maternal education, paternal education, age, and race.

Results: Higher PPAP scores (measured by CAST scale) predicted increased levels of depressive symptoms ($\beta = 0.23$, $t(128) = 2.86$, $p = .01$), past-month binge drinking episodes ($\beta = 0.18$, $t(128) = 2.15$, $p = .03$), and decreased levels of family satisfaction ($\beta = -0.23$, $t(128) = -2.74$, $p = .01$).

Conclusion: Adolescent girls and young women are uniquely affected by parental alcohol use (Maxwell et al., 2022). Our findings emphasize the importance of continuing to investigate family factors in AUD prevention and treatment efforts specifically for young women—a historically underrepresented group in substance use research (Diehl et al., 2007).

Board 205

Exploring Perceived Need for Treatment among Hazardous Drinking Adults: Implications for Prospective Treatment Uptake

Montemayor, Benjamin, N.; Barry, Adam, E.; Russell, Alex, M.; Lin, Hsien-Chang; Ou, Tzung-Shiang; Massey, Phillip, M.

Purpose: Despite over 28 million Americans meeting the diagnostic criteria for an Alcohol Use Disorder (AUD), less than 10% of those with an AUD utilize treatment services. Although many adults with an AUD may recover without the use of formal treatment, less is known about the impact of intrapersonal determinants on perceived need for treatment among hazardous drinking adults. This study explored associations of perceived need for AUD treatment with hazardous drinking behavior, perceived behavioral control, and attitude regarding treatment effectiveness.

Methods: Adults (aged 18-55 years) with hazardous drinking behaviors (defined by having ≥ 8 Alcohol Use Disorder Identification Test [AUDIT] score) who have never received treatment for their drinking behaviors completed an anonymous online questionnaire (n=499). Respondent's level of hazardous drinking behavior was evaluated by their personal AUDIT score. Respondents completed measures which assessed their AUDIT score, perceived behavioral control, attitude toward treatment, and perceived need for treatment. A multivariable logistic regression model was fitted to examine the associations of perceived need for treatment with AUDIT score, perceived behavioral control, and attitude regarding treatment

effectiveness, adjusting for sociodemographic covariates.

Results: Our findings showed that only 23% of respondents perceived a need for treatment for their alcohol use. Statistically significant differences existed for AUDIT scores between those who did and did not perceive a need for alcohol treatment ($p < .001$). Moreover, respondents with higher AUDIT scores and favorable attitudes regarding treatment effectiveness were more likely to perceive a need for alcohol treatment (ORs=1.10, $p < 0.001$; and OR=1.17, $p < 0.01$, respectively).

Conclusions: Findings suggest enhancing attitudes regarding treatment effectiveness and recognition of AUD among adults who engage in hazardous drinking behaviors could enhance prospective treatment uptake. Future research could develop and test the efficacy of positive alcohol-related treatment content interventions (e.g., successful recovery journeys) on alcohol treatment seeking behaviors among adults with hazardous drinking behaviors.

Board 206

Exploring the Utility of Cannabis in Managing Symptoms of Chronic Conditions among non-Hispanic Black and Hispanic Men

Montemayor, Benjamin, N.; Merianos, Ashley, L.; Sherman, Leduc, D.; Jacobs, Wura; Smith, Matthew, L.

Purpose: Racially and ethnically diverse men experience chronic conditions at disproportionate rates. Yet, low medication compliance can adversely affect their treatment outcomes, and overall physical and mental health. Adults are increasingly using cannabis to manage symptoms of chronic conditions; however, less is known about motives of cannabis use among racially and ethnically diverse men with chronic conditions. Objective: This study assessed factors associated with recent cannabis use among non-Hispanic Black and Hispanic men with chronic conditions.

Methods: Data were analyzed from a national sample of 2,023 non-Hispanic Black and Hispanic adult men ages ≥ 40 years diagnosed with ≥ 1 chronic condition. Respondents anonymously completed an online questionnaire, which assessed self-reported chronic conditions, past-month cannabis frequency, and physical and mental health perceptions. Respondents reported on 19 potential chronic conditions, however, focal chronic conditions of interest included conditions where cannabis is commonly used for medicinal purposes: chronic pain, depression/anxiety, arthritis/rheumatic disease, and cancer/cancer survivor. A multivariable logistic regression model was conducted while including sociodemographic covariates.

Results: The mean respondent age was 57 years old, 57% were non-Hispanic Black, and 22% reported recent cannabis use. Significantly larger proportions of men with chronic pain, depression/anxiety, and arthritis/rheumatic disease reported cannabis use ($p < .001$, respectively). While Hispanic men (adjusted odds ratio [AOR]=0.73, 95% confidence interval [CI]=0.58-0.93) and those who were older (AOR=0.96, 95%CI=0.95-0.97) were at decreased odds of using cannabis, respondents with greater physical (AOR=1.10, 95%CI=1.06-1.15) and mental (AOR=1.07, 95%CI=1.02-1.11) health problems, more chronic conditions (AOR=1.23, 95%CI=1.10-1.38), and who resided in states where cannabis is legalized for medicinal and/or recreational use (AOR=2.03, 95%CI=1.50-2.74) were at increased odds to use cannabis.

Conclusions: Cannabis use may be associated with physical and mental health symptoms among non-Hispanic Black and Hispanic men with chronic conditions. Discussions with healthcare providers concerning managing symptoms with cannabis may allow for improvements in treatment outcomes.

Board 207

An exploration of social injustice among young adults with Type-1 Diabetes from low-income, racial/ethnic minority backgrounds using social needs as a predictor

Ngozi Nnoli; Pey-Juan Lee; Elizabeth Pyatak

Introduction: The objective of this study was to examine whether social needs could predict mental well-being (SF-12v2 mental component summary), diabetes-related quality of life (ADDQoL), and diabetes self-management (DSMQ) among young adults with type 1 diabetes (T1D). We hypothesized that the accumulation of social needs would significantly negatively impact the evaluated outcomes.

Methods: The participants were young adults (18-30 yrs) from the Resilient, Empowered, Active Living and Telehealth Diabetes study (REAL-T) who had T1D (n = 151). Multiple regression models were used to assess the significant contribution from the independent variable: social needs (SN), and covariate variables (race/ethnicity and parental education level) to the dependent variables: SF-12v2, ADD-QoL, and DSMQ while adjusting for the controlling variable (age).

Results: Data from 164 participants (24.4 years old; 54.3% Non-Hispanic White, 31.1% Hispanic, 14.6% Non-Hispanic Minority) were analyzed. The regression model revealed that more social needs predicted poorer mental well-being ($r^2 = 0.314$, $p < 0.001$), diabetes-related QoL ($r^2 = 0.146$, $p = 0.001$), and diabetes self-management ($r^2 = 0.151$, $p < .001$) while accounting for the covariate and controlling variables. Hispanic/Latinx participants had better diabetes self-management relative to other racial/ethnic groups ($\beta = 0.551$, $r^2 = 0.151$, $p < 0.05$). No significant contributors were found among other variables.

Conclusion: Overall, social needs predicted decreased satisfaction with one's diabetes care, mental well-being, and diabetes-related QoL. The findings demonstrate the impact of social deprivation and

marginalization using social needs as a proxy for socioeconomic status. The results support how low socioeconomic status could significantly impact young adults with T1D. Further investigation is needed among young adults from poor SES and minority racial/ethnic backgrounds to explore the impacts of deprivation and marginalization on diabetes self-management and mental well-being.

Board 208

Coping with Discrimination and Psychosocial Health Determinants in African Americans with Type 2 Diabetes

McLaurin, Natalie, N; Tabibi, Doonya, S; Wang, Tianyu; Alhalimi, Taha, A; Harrison, Louis; Lehrer, H Matthew; Tanaka, Hiro; Steinhardt, Mary, A

Purpose: This study assessed the factor structure and construct validity of the Coping with Discrimination Scale (CDS) among African American adults with type 2 diabetes (T2D).

Methods: African Americans with T2D (N=226, 61.2±11 years, 74% female) enrolled in the Texas Strength Through Resilience in Diabetes Education (TX STRIDE) clinical trial were administered the CDS and additional surveys assessing psychosocial health determinants (perceived stress, diabetes distress, depressive symptoms, resilience, social support, self-efficacy, spiritual coping). Factor analysis was conducted on the CDS to determine its factor structure, and internal consistency coefficients were reported for each factor. Pearson correlations of each CDS factor with psychosocial health determinants were used to examine construct validity.

Results: The factor analysis identified four factors: education/advocacy ($\alpha=.88$), internalization ($\alpha=.82$), maladaptation ($\alpha=.63$), and detachment ($\alpha=.59$). Education/advocacy was positively associated with resilience ($r =.33$, $p <.001$), social support ($r =.18$, $p <.01$), self-efficacy ($r =.30$, $p <.001$), and spiritual coping ($r =.35$, $p <.001$). Internalization was positively

associated with perceived stress ($r = .23$, $p < .001$), diabetes distress ($r = .21$, $p < .001$), depressive symptoms ($r = .22$, $p < .001$), and spiritual coping ($r = .23$, $p < .001$). Maladaptation was positively associated with perceived stress ($r = .22$, $p < .001$), diabetes distress ($r = .15$, $p < .05$), and depressive symptoms ($r = .19$, $p < .01$). Detachment was positively associated with perceived stress ($r = .26$, $p < .001$), diabetes distress ($r = .15$, $p < .05$), and depressive symptoms ($r = .16$, $p < .05$), and negatively associated with resilience ($r = -.20$, $p < .01$), social support ($r = -.19$, $p < .01$), and self-efficacy ($r = -.18$, $p < .01$).

Conclusion: This study provided evidence for a four-factor structure of the CDS among African American adults with T2D, with each factor exhibiting good internal consistency reliability. Each factor demonstrated significant associations with several relevant psychosocial determinants of health, including education/advocacy with more health-promoting determinants and internalization, maladaptation, and detachment with more health-diminishing determinants.

Board 209

Mixed-methods Evaluation, Refinement, and Dissemination of a Booster Seat Intervention

England, Kelli J.; Edwards, Ann L.; Gordon, Emily R.; Putnam, Emily L.; Dobyms, Taylor; Springer, Charles E.

Purpose: Booster seats reduce serious crash injury risk by 67% compared to seat belt use for 5-8 year-olds; yet over one-third of US children are prematurely transitioned to a seat belt. The purpose of this mixed-methods study was to assess parent perceptions of the 4-minute empirically supported “Boost ‘em in the Back Seat” video in order to inform creation and dissemination of shorter versions of the video.

Methods: Fifty-one parents were recruited for one of two study arms: virtual focus groups (3 groups, $n=23$) or an online survey ($n=28$). Parents viewed the existing video and

offered insights for video revision. Qualitative data were analyzed using NVIVO software and common theme analysis, and descriptive survey data were analyzed using SPSS. Parents’ perceptions and suggestions were examined to determine elements of the long video to cut while maintaining the persuasive effect. The team then worked with media partners to create and rerelease shorter versions of the video.

Results: Nearly half of parents (42.9%) were unaware of current booster recommendations. Thematic analysis revealed that parents found the storytelling approach of the video impactful. However, parents suggested shortening the video by excluding certain subject matter experts, shortening the introduction, and simplifying medical dialogue. Using this information, the team worked with JPXXX Productions to shorten the video. A 6-week digital media campaign was launched locally in August 2022 over numerous streaming, display, PPC, and social media platforms. The campaign delivered 2.5 million impressions, 363,967 video views, and outperformed typical industry standards with some platforms delivering a 96% video completion rate and 16% click through rate to website. Website traffic increased 989% and the videos also had 109,402 organic (unpaid) views during the campaign period.

Conclusions: Parent feedback was helpful in modifying an evidence-based booster seat intervention for rerelease in a modern digital media campaign.

Board 210

Short-term impacts of physical activity on mood and well-being among adults with T1D

Pham, Loree, T; Hernandez, Ray; Spruijt-Metz, Donna; Gonzalez, Jeffrey, S; Pyatak, Elizabeth, A

Background: Few studies have investigated the short-term, momentary relationships between physical activity (PA) and well-being. This study focuses on investigating the dynamic relationships between PA and

affective well-being in adults with T1D, while also investigating the potential effects of activity type and activity importance.

Methods: Participants completed daily ecological momentary assessment surveys regarding current activities (activity type and activity importance) and affective well-being states (e.g., happy, stressed, excited, anxious) via mobile phone six times per day over 14 days. Time spent in vigorous PA, moderate PA, light PA, and sedentary was measured using wrist-worn accelerometers (Actigraph wGT3X-BT) worn continuously for 14 consecutive days. Between and within-person correlations between PA, well-being, and activity type were calculated from the three-hour time period preceding the survey prompt. Mixed effects models were run to determine if relationships between physical activity and well-being were significant after adjusting for activity type and activity importance.

Results: Overall, 8,639 data points from 122 adults (41±15 yrs, 56% female, 38% Latinx, 35% White, 11% Black, 12% multiethnic/other) across 1,812 days were analyzed. Within-person, increased sedentary time was associated with less positive affect ($r = -0.11$, $p < 0.001$), while more PA at any intensity was associated with greater positive affect ($r = 0.09$ to 0.10) and reduced fatigue ($r = -0.05$ to -0.07), three hours later ($p < 0.001$). Between-person, however, increased light PA was associated with increased stress ($r = 0.21$, $p = 0.023$) and diabetes distress ($r = 0.30$, $p < 0.001$).

Conclusions: This study provides evidence that positive affect, fatigue, stress, and diabetes distress is associated with previous PA, regardless of the type of activity that people engaged in. These findings have implications for the timing of short-term interventions, such as just-in-time adaptive intervention approaches.

Board 211

Piloting and Expanding a Food Resource Navigation Model: Using community resource navigators to address food security in a community health setting

Koob, Caitlin; Stuenkel, Mackenzie; Smolens, Nicole; Richardson, Emily; Amati, Blakely; Eicken, Meredith; Sease, Kerry

Purpose: In South Carolina, 12.6% of households present as food insecure. Food assistance programs can alleviate food insecurity, yet connection to resources can present additional challenges for families. The Food Resource Navigation Model (FRNM) was designed to address determinants underlying food insecurity and resource connection, using a trained navigator. The purpose of this study was to increase early identification of food insecurity and to support family's connection to services through the FRNM and a streamlined referral support process.

Methods: A pilot study conducted at two pediatric clinics implemented routine food insecurity screenings at child wellness visits via a pediatric health and wellness survey. Providers referred families experiencing food insecurity to a Food Resource Navigator (FRN). FRNs follow an active referral protocol, contacting families, conducting the validated, 2-item Hunger Vital Signs screener, and provided customized lists of resources. FRNs followed-up at 1- and 6-months to document food security status, resource utilization, and barriers to connection.

Results: During the pilot study, 80 patients were referred to a FRN from November 2021 to April 2022, and 64% were successfully reached. One-month follow-up survey data displayed a 48% increase in household food security. Patients identified lack of transportation, time, and understanding of how to access resources as common barriers to connection.

To develop a comprehensive evaluation of connection rates and characteristics of food insecurity, a streamlined process was implemented within the FRNM. This enhanced model collects additional demographic data and is implemented in over 40 clinics, reaching 208 patients to date. Connection rate and FRN reach are now evaluated based on patient characteristics to explore inequities within the model.

Conclusions: Navigation data provides insight into health behavior trends of food insecure households and referral completion characteristics. A patient satisfaction survey is being piloted to inform a dynamic, patient-centric service to address food insecurity.

Board 212

Examining Social-Structural Reasons for Not Attending Postpartum Care Visits Among Indigenous Patients

Shreffler, Karina M.; Jones, Emily J.; Dwyer, Kathleen A.; Finnell, Karla; Joachims, Christine N.

Purpose: Postpartum care is critical for maternal health, especially for the prevention of post-birth maternal mortality. A substantial proportion of women do not attend any postpartum care visits. The current examines postpartum care visits among a clinic-based sample of low-income and racially-diverse women recruited at their first prenatal visit in Tulsa, OK.

Methods: The sample for this study include 125 women (aged 16-38; 40% White; 29% Black; 18% Indigenous; 13% Hispanic) who remained in the study through six months postpartum. Logistic regression analysis was conducted to examine the odds of attending postpartum care visits, controlling for sociodemographic variables including race/ethnicity, union status, age, parity, and economic hardship. Descriptive and post-hoc tests were then used to examine social-structural differences between Indigenous women who attended postpartum visits vs. those who did not attend.

Results: Overall, 76.8% of the sample attended at least one postpartum care appointment within six months of giving birth. Indigenous participants were 75% less likely to attend their postpartum care appointment than non-Hispanic white participants. The most common reasons given for missing appointments included not having insurance coverage, not believing that a follow up appointment was necessary, being too busy, and not having transportation. Post-hoc ANOVA tests revealed that those living with

the father of their baby had significantly higher rates of attendance at postpartum visits.

Conclusions: The findings from this study indicate that Indigenous women in the study had the lowest odds of attending postpartum care visits. Multiple reasons were given for not attending the visit, and post-hoc group comparisons suggested that not having the father of the baby in the home was an additional barrier to attendance. More research is needed into how healthcare providers can use this information to reduce barriers to postpartum care attendance, but these findings provide some targets for prevention efforts.

Board 213

Evaluating the validity and reliability of an instrument to conduct a formative evaluation of a social marketing campaign to promote bystander intervention to stop sexual harassment

Branscum, Paul; Hackman, Christine; Alber, J

Purpose: Training to engage in bystander intervention (BI) is mandatory on college campuses to help prevent sexual assault and harassment. To promote BI, a social marketing campaign was pilot tested with a Qualtrics panel of undergraduate students. The purpose of this study was to evaluate measures of validity and reliability for the planned evaluation of the social marketing BI program.

Methods: The social marketing campaign consisted of a number of images with text that promoted BI (e.g. students at a party while a man is talking to a girl who appears inebriated, with the text 'Step in. Check in. You can and should help.'). Formative measures included credibility of the message (3-items), actor rating (7-items), message effectiveness (8-items), and affective reaction to the image (5-items). Data were collected from college sample (n=525), and psychometric data revealed indices of construct validity (confirmatory factor

analysis) and internal consistency reliability (Cronbach's alpha).

Results: Students were between the ages of 18 and 24 years; a majority were Caucasian (55.4%), and women (86.2%). Initial data modeling suggested the affective reaction to the image variable be split, into 'positive' image reaction (i.e. proud, and hopeful), and 'negative' image reaction (i.e. afraid, guilty and disgusting). After this modification, the model had adequate fit (RMSEA=0.057; TLI=0.947; CFI=0.956), and all items significantly loaded on its corresponding scale. Cronbach's alpha scores were >0.70 for all scales.

Conclusions: This survey is promising for helping researchers and practitioners with more formative issues related to social marketing campaigns. Such information can be combined with summative evaluations (i.e. BI behavior, BI self-efficacy) to aid in the planning of effective health promoting interventions.

Board 214

Simultaneous Alcohol and Marijuana Use among Adolescents: 2016-2019, USA

Lewis, Melissa, A

Purpose: Simultaneous alcohol and marijuana (SAM) use (i.e., co-ingestion so that effects overlap) poses several acute health consequences among young adults. While much of the research on SAM has been with college students, less has focused on adolescent SAM use. The purpose of this study was to examine the prevalence and risk factors associated with past-30-day SAM use among a large national sample of adolescents.

Methods: Pooled data (2016-2019) from the National Survey on Drug Use and Health were analyzed among 54,382 adolescents ages 12-17 years old. Past 30-day SAM use was measured by whether or not adolescents used marijuana with their last alcohol drink. We also controlled for demographic characteristics and past month tobacco use. Weighted logistic regression

models were built to determine conditional associations to SAM use.

Results: An estimated 1.64% (n = 960) of adolescents reported past 30-day SAM use, with adolescents ages 16-17 nearly 53 times the odds (OR: 52.5, 95% CI 23.7, 116.4) of reporting past 30-day SAM use. Significant racial/ethnic differences were found, with African American adolescents (OR: 0.52, 95% CI 0.37, 0.73) at a lower odds of reporting SAM use, compared to Non-Hispanic White adolescents. Adolescents who used tobacco in the past 30 days were over 2.10 times (95% CI 1.71, 2.59) the odds of engaging in SAM use.

Discussion: Significant health disparities regarding SAM use are present among adolescents. A health equity approach is needed towards understanding these disparities to inform preventative intervention efforts.

Board 215

The Association Between Mental Health and Resilience Resources in African Americans with Type 2 Diabetes

Saba, Victoria, C; Tabibi, Doonya, S; Cebulske, Lauren, D; Lehrer, H Matthew; Steinhardt, Mary, A

Purpose: This sub-study of Texas Strength Through Resilience in Diabetes Education (TX STRIDE) clinical trial assessed associations among mental health, resilience resources, and hemoglobin A1C in African Americans with Type 2 Diabetes (T2D).

Methods: Participants were middle-aged and older adults with T2D (n=226, 61.2±11 years, 74% female). Mental health measures included depressive symptoms ($\alpha=.84$), perceived stress ($\alpha=.91$), and diabetes distress ($\alpha=.91$). Resilience resource measures included adaptation to stress ($\alpha=.75$), psychological resilience ($\alpha=.92$), self-efficacy ($\alpha=.91$), social support ($\alpha=.90$), and emotional regulation ($\alpha=.96$). A1C was assessed using a DCA Vantage™ Analyzer (n=140) or A1CNow® Self Check (n=86) when remote testing was necessary due to the pandemic. The A1CNow Self Check

measure was adjusted for underestimation of A1C using a validated regression equation. Results: Depressive symptoms were positively associated with perceived stress ($r = .55, p < .001$) and diabetes distress ($r = .50, p < .001$). Higher scores on mental health concerns were associated with lower scores on adaptation to stress (r 's = $-.36$ to $-.54, p < .001$), psychological resilience (r 's = $-.27$ to $-.46, p < .001$), self-efficacy (r 's = $-.24$ to $-.41, p < .001$), and social support (r 's = $-.15$ to $-.50, p < .05$ to $.001$). Greater mental health concerns were positively associated with difficulty regulating emotions (r 's = $.57$ to $.69, p < .001$). Finally, A1C ($\text{mean}=8.18\pm 1.9$) was positively associated with depressive symptoms ($r = .14, p < .05$), perceived stress ($r = .15, p < .05$), and diabetes distress ($r = .30, p < .001$).

Conclusions: Among African American adults with T2D, mental health concerns were associated with higher A1C and lower resilience resources. Our findings suggest that resilience resources may be beneficial for mental health concerns and the co-management of T2D and depression in African Americans with T2D.

Board 216

Egocentric Social Network Characteristics, Mental Health, and Flourishing Among College Students

Madhiri, E; Patterson, M. S.; Gagnon, L. R.

Introduction: College students are more likely to suffer from mental health disorders than the general population, with some researchers reporting prevalence rates up to six times higher among college students. Flourishing, a concept closely related to mental health, is an individual's subjective perception of their overall well-being. Research suggests that social relationships influence mental health and flourishing among college students. This study uses social network analysis (SNA) to examine support provision within college students' personal networks relative to mental health and flourishing.

Methods: Students ($n=571$) from a private university in the southern United States completed an online survey measuring demographic information, mental health scores, flourishing scores, and egocentric network data. This study computed network properties, which included homophily, and network composition based on gender, relationship, communication frequency, and support. Multiple regression was used to determine how ego- and network-level factors explain variance in respondents' flourishing and depression scores.

Results: A higher network composition of friends in an ego's composition was associated with higher depression scores ($b=0.02, p=0.02$) compared to networks composed of family members, significant others, and/or roommates. Having a higher composition of females in an ego's network was associated with lower depression scores ($b= -0.02, p=0.05$). Higher network support was associated with better flourishing scores ($b=2.57, p<0.001$).

Conclusion: Results from this study indicate egocentric characteristics are associated with depression and flourishing among this group of college students. Future studies should collect data on alter-to-alter interactions, which allow for the exploration and creation of structural variables such as network density and transitivity relative to health. Structural variables might provide more insight into the association between support, depression scores, and flourishing scores. In addition, longitudinal studies would provide a more accurate association between egocentric network characteristics, depression, and flourishing.

Board 217

Restaurants as Environments for Healthy Eating: Factors that Contribute to Restaurant-Based Healthy Eating Program Implementation in Louisiana

Moore, Tamecia; Fuster, Melissa; Quantz, Yvette; Kimball, Molly; Knapp, Megan

Purpose: Guided by social cognitive theory (SCT), the purpose of this study was to

evaluate restaurant manager/owner perceptions and identify factors that contribute to implementation and sustainability of restaurant-based healthy eating program (Ochsner Eat Fit) in Acadiana, Louisiana. The program aims to improve food environments by increasing access to and availability of healthy foods in restaurants.

Methods: From 2019 to 2020, data were collected from restaurants who were newly enrolled as an Eat Fit (EF) partner. Cross-sectional data were gathered by surveying restaurant managers/owners prior to program implementation. The variables of interest were restaurant manager/owner beliefs, perceived staff knowledge/skills, support, self-efficacy, outcome expectancies, and barriers and facilitators to implementation of Eat Fit (EF) programming. The questions pertained to restaurant characteristics, manager/owner characteristics, healthy food related attitudes and beliefs, social support, self-efficacy, barriers, and motivators for program implementation.

Results: Forty-nine managers/owners participated in the surveys. Overall, most managers/owners held positive beliefs about offering healthy food items in restaurants (n=41, 83.7%). Twenty-nine (59.2%) managers/owners had overall positive perceptions about their staff members' knowledge and skills to offer healthy food options. Most managers/owners perceived high levels of support to implement the EF program (n=41, 83.7%). Managers/owners were confident in their ability to implement the EF program in their restaurants, indicating high levels of self-efficacy (n=47, 95.9%). Overall, most managers/owners had positive outcome expectancies for the implementation of the EF program and its impact (n=32, 65.3%). Twenty-one (42.9%) managers/owners reported the median of one anticipated barrier to offering healthy food options through EF (IQR: 1-3). Barriers included customer preference, ingredient availability, staff knowledge, and operational challenges. Managers/owners selected a

median of 5 facilitators or reasons for getting involved with EF (IQR: 3-6).

Conclusions: Social Cognitive Theory may be important in examining factors that influence program adherence which could potentially improve restaurant environments.

Board 218

Mixed Method Approach Towards the College Students' Life During the COVID-19 Pandemic: Let Us Be Prepared for the Next One

Khan, Raihan, K; Jehi, Tony; Zaman, Sojib; Peachey, Andy

Purpose: The COVID-19 pandemic was a difficult time for college students. This mixed-method study assessed the fear of COVID-19, anxiety, and stress of college students, coping mechanisms among Shenandoah Valley college students, and identified areas for improvement of college resources to prepare for the next crisis.

Methods: A total of 680 students completed an online survey. Three validated instruments: Fear of COVID-19, Patient Health Questionnaire (PHQ-9), and Generalized Anxiety Disorder Assessment (GAD-7) scores, were computed. Qualitative interviews were completed (n=20), and the data were categorized into multiple themes.

Results: The mean age was 22.14±5.48 years. The majority were White (81.9%), and female (80.4%) undergraduate (78.0%) students. Approximately 41% of them were in health-related majors (41.4%). Students who were females (B, 4.31; 95% CI, 5.54-3.08), enrolled in non-health related majors (B, 1.0; 95% CI, 2.0-0.01), and who did not receive COVID-19 vaccination (B, 1.25; 95% CI, 2.47-0.03) had higher fear of the COVID-19. Those who were females (B, 1.63; 95% CI, 2.93-0.32) and did not receive the COVID-19 vaccine (B, 1.33; 95% CI, 2.65-0.01) also reported having higher stress. Qualitative analysis identified several important themes: high stress, struggle during online classes, inability to receive psychological support from the college, fear of contracting and spreading COVID-19, fear

of reduced academic performance, and lack of physical activity. Students recommended overhauling the college counseling system since they could not get appointments when needed. They mentioned receiving support from family members as helpful. Students shared their frustration with online-only classes and the need to meet their college mates.

Conclusions: Universities should extend and improve their counseling services and academic support systems and need to improve awareness among students to prepare for the next pandemic. We recommend collaboration among colleges (e.g., geographically close colleges, public colleges in a state) for proper use of resources.

Board 219

A Content Analysis of Sexual and Reproductive Health TikTok Posts During the COVID-19 Pandemic: The Gen-Z Experience

Nair, Isha; Chase, Kendall; Hughes-Wagner, Alexandra T.; Schwab-Reese, Laura M.; DeMaria, Andrea L.

Background: The social media app TikTok allows users to create and share content through short videos. Platforms, like TikTok, may be critical in communicating sentiment and providing ways for individuals to interact with and co-create sexual and reproductive health experiences. The purpose of this project was to identify and understand the content TikTok users were sharing related to sexual and reproductive health.

Methods: The top six videos from each targeted hashtag (e.g., #BirthControl, #MyBodyMyChoice, #PeriodProblems and #MeToo) were extracted on a biweekly basis for 16 weeks (July – November 2020). During data collection, we noted video characteristics such as captioning, music, likes, and cited sources. Additionally, we tracked content from a sampling of seven content curators who generate and share educational videos on these topics.

Qualitative content analysis was utilized on the extracted videos.

Results: Most videos fell into two primary categories: personal experiences and informational content. Among the personal experiences, people shared stories (e.g., IUD removal, sexual violence), crafts (e.g., painting Pill case), or humor (e.g., celebrations of period arrival). In the informational content, dancing and demonstrations were commonly used. In addition to these approaches, content curators also answered questions through TikTok's "reply" feature.

Conclusions: TikTok is used to share messages about myriad sexual and reproductive health topics. Understanding users' exposure provides important insights into their beliefs and knowledge of sexual and reproductive health. Study findings can be used to generate valuable information for teens and young adults, their healthcare providers, and their communities. Producing health messages that are both meaningful and accessible will contribute to the co-creation of critical health information for professional and personal use.

Board 220

Sexual violence perpetration and sexual risk behaviors among adolescents: A longitudinal study

Bhochhibhoya, Shristi; Reidy, Dennis, E; Baumler, Elizabeth, R; Markham, Christine, M; Peskin, Melissa, F; Shegog, Ross; Emery, Susan, T; Temple, Jeff, R

Purpose: Sexual violence (SV) perpetration is a well-documented threat to public health with multiple physical, sexual, and psychological health consequences. Adolescents who perpetrate SV engage in sexually coercive behaviors and act as an agent for unplanned pregnancies, however, no studies have explored the longitudinal link in adolescence. This study explored the longitudinal link between SV perpetration reported by 7th and 8th-grade youth and subsequent engagement in sexual risky

behaviors and pregnancies reported two years later.

Methods: We utilized harmonized data collected from three randomized clinical trial evaluations of teen pregnancy prevention programs. A total of 1927 adolescents male from 44 schools in the southern United States were enrolled among which 50% identified themselves as Hispanic and 40% as African American. Youth were asked about their engagement in SV perpetration (yes/no), the number of times they engaged in various oral and vaginal risky sex behaviors in past 3 months, and number of pregnancies they have caused. Negative binomial regression was used with full information maximum likelihood estimation in Mplus (v 8.7).

Results: Of the 1927 participants, 36 (1.9%) male youth perpetrated SV at baseline. SV perpetration at baseline was significantly associated with a higher frequency of oral sex (IRR: 3.83, $p=0.02$), use of drugs/alcohol before vaginal sex (IRR: 85.36, $p=0.04$), vaginal sex without condoms (IRR: 6.31, $p=0.04$) and a number of sexual partners (IRR: 3.47, $p=0.05$) at 2 years follow up. However, no significant association was identified between SV perpetration at baseline and getting someone pregnant when followed up two years later.

Conclusions: Our study identified the longitudinal link between SV perpetration and frequent engagement in sexual risk behaviors during adolescence. Findings further a need for early interventions against SV perpetration for adolescents so that future risk behaviors can be reduced, thus reducing negative health outcomes, such as unintended pregnancies.

Board 221

“Sometimes I feel uglier than ever”: Influences on Internal and External Body Image

Hughes-Wegner, Alexandra T; Lynch, Maia; Otten, Emily; DeMaria, Andrea L.

Background: Menstruation is a biological phenomenon experienced by many people

around the world. Despite the commonality of this experience, little is known about the cultural, social, and familial factors affecting Italian women’s body image during menstruation.

Objective: The purpose of this study was to understand how menarche and menstruation impact body image, pubic hair grooming, and genital hygiene behaviors. A secondary purpose was to explore Italian cultural and societal impacts on women’s self-image during menstruation.

Methods: Researchers conducted 28 in-depth, semi-structured interviews (May – June 2022) with English-speaking women aged 25 – 60 years living in or near Florence, Italy who have experienced menstruation or menopause. Interviews were audio-recorded and transcribed verbatim with observer comments. HyperRESEARCH aided in data organization and analysis. Qualitative content and thematic analysis techniques were used to contextualize data and identify emerging themes.

Results: External and internal influences such as family members, friends, and psychological/physical changes left women with negative feelings surrounding themselves and their bodies during menstruation. Participants revealed cultural and social factors as additional influences on behaviors and attitudes towards menstruation and self-image. A negative view of their genitals led to a change in hygiene and pubic hair removal practices.

Conclusions: Results indicated social and cultural factors in Italy have major influence on menstruation-related body image, GSI, and genital hygiene practices. Findings highlight the impacts menstruation has on overall health and well-being, including behaviors and feelings. Information from this study can provide insight into helpful ways to discuss feelings toward menstruation and healthy menstruation management among all people in Italy to provide a better experience for women while menstruating.

Board 222

Pharmacological pain management strategies prescribed or recommended to non-Hispanic Black men with chronic pain

Oloruntoba, Oluyomi; Bergeron, Caroline, D; Zhong, Lixian; Merianos, Ashley, L; Sherman, Ledric, D; Kew, Chung Lin; Goidel, Kirby; Smith, Matthew, Lee

Background: Pharmacological strategies are often central to chronic pain management; however, pain treatment among non-Hispanic Black men may differ because of their disease profiles and healthcare interactions. This study assessed factors associated with non-Hispanic Black men being prescribed/recommended narcotics/opioids for chronic pain and their satisfaction with pain treatment/management.

Methods: Data were analyzed from 286 non-Hispanic Black men with chronic pain who completed an internet-delivered questionnaire. Logistic regression was used to identify factors associated with being prescribed/recommended narcotics/opioids for pain management treatment. Then, ordinary least squares regression was used to identify factors associated with their satisfaction level with the pain treatment/management received.

Results: On average, participants were 56.2 years old and 48.3% were prescribed/recommended narcotics/opioids for chronic pain. Men with more chronic conditions (OR=0.57, P=0.043) and depression/anxiety disorders (OR=0.53, P=0.029) were less likely to be prescribed/recommended narcotics/opioids. Men who were more educated (OR=2.09, P=0.044), reported more frequent chronic pain (OR=1.28, P=0.007), and were allowed to participate more in decisions about their pain treatment and management (OR=1.11, P=0.029) were more likely to be prescribed/recommended narcotics/opioids. On average, men with more frequent chronic pain (B=-0.25, P=0.015) and pain problems (B=-0.16, P=0.009) were less satisfied with

their pain treatment/management. Men who were allowed to participate more in decisions about their pain treatment and management reported higher satisfaction with their pain treatment/management (B=0.55, P<0.001). Conclusion: Findings suggest that playing an active role in pain management can improve non-Hispanic Black men's satisfaction with pain treatment/management. This illustrates the importance of patient-centered approaches and inclusive patient-provider interactions to improve chronic pain management.

Board 223

The Role of Physical Activity in Reducing Symptoms of Posttraumatic Stress Disorder: A Meta-Analysis

Dolphin, Kathryn E.; Wong, Mason

Purpose: Posttraumatic stress disorder (PTSD) presents a significant global health burden, as it has a lifetime prevalence of approximately 8-percent. Current accepted treatments for PTSD include cognitive behavior therapy, exposure therapy, and pharmaceuticals. While physical activity has been shown to be effective in treating other anxiety disorders, it is not presently one of the primary treatments for PTSD. Thus, the purpose of this meta-analysis was to determine the effect of physical activity on PTSD symptom severity to explore the potential of physical activity as a potential treatment.

Methods: Google Scholar, MEDLINE, and Academic OneFile databases were searched for both published and unpublished studies that assessed the impact of physical activity on PTSD symptoms.

Results: Results indicated that physical activity leads to a reduction in PTSD symptoms (d= -.172). The effect of physical activity varied across studies, and, in an attempt to explain this variance, sample (age, sex, and veteran status) and intervention (exercise type and duration) moderators were examined. Type of physical activity (p<.001) impacted the effect on PTSD symptoms, with outdoor recreation (d=

-1.061) and scuba ($d = -.974$) showing the greatest effect on symptom severity. Effect differences were also found between civilian and veteran populations; the effect of exercise on PTSD symptoms was greater for samples that were non-veterans ($d = -.695$) or included both civilians and non-veterans ($d = -.659$) than veterans alone ($d = -.243$). Further, meta-regression found that the effect of physical activity on PTSD symptoms was larger in female samples ($p = .002$).

Conclusions: The findings of this study suggest that physical activity leads to a reduction in PTSD symptoms. Although the current treatments are seemingly effective, stigma remains a barrier to receiving crucial PTSD care; the introduction of physical activity as a treatment option may alleviate this stigma and promote receiving effective treatment for PTSD.

Board 224

“I think people should be more aware:” Uterine fibroid experiences among women living in Indiana

Dykstra, Chandler; Laily, Alfu; Marsh, Erica E.; Kasting, Monica; DeMaria, Andrea L.

Background: Uterine fibroids (fibroids)—benign masses of the uterus—affect up to 80% of US reproductive-aged women by age 50, making it among the most common and costly (\$17-30 billion annually) reproductive health conditions. The purpose of this study was to understand healthcare experiences of fibroids patients across the continuum of care, from early symptoms through diagnosis, treatment, and management, while also investigating the impact of the social determinants of health on fibroids experiences.

Methods: We conducted 20 semi-structured interviews with fibroids patients. Eligible participants were women aged 18 who had been diagnosed with fibroids and were residing within 75 miles of one of the two recruitment locations (Tippecanoe or Marion County) in Indiana. Interviews were audio recorded, transcribed verbatim, and analyzed using thematic analysis

techniques. Constant comparative analysis identified emergent themes.

Results: Women experienced myriad physical symptoms, which often manifested into psychological and sexual disturbances and infiltrated all aspects of daily life. Internet searches were frequently mentioned as their main information source. Fertility became a prominent factor in deciding treatment options. However, health disparities prevented some from receiving quality fibroids healthcare. Some women reported staying home during COVID-19 pandemic facilitated the management of physical symptoms. Overall, participants advocated for greater fibroids awareness and education.

Conclusion: Results offer rich insight into patient experiences, highlighting areas of improvement within fibroids care. Practical recommendations to improve clinical care standards and patient health outcomes for affected women are noted. Translation of research to practice, using a combined framework of the social-ecological model and social determinants of health, can guide the development of strategic, theory-based interventions aimed to target individual, relational, communal, and societal dimensions. Practice Implications: Using patient experiences to incorporate the social determinants of health into the social-ecological framework can enhance the patient experience and offer recommendations for improvements to fibroids care across settings.

Board 225

A Field Test of Popular Chatbots’ Responses to Questions Concerning Negative Body Image

Ruopeng An; Christopher W. Byron Jr.; Chen Chen; Xiaoling Xiang

Introduction: Chatbots are computer programs, often built upon large artificial intelligence models, that employ dialogue systems to enable online, natural language conversations with users via text, speech, or both. Body image, broadly defined as a

combination of thoughts and feelings about one's physical appearance, has been implicated in many risk behaviors and health problems, especially among adolescents and young adults. Little is known about how chatbots respond to questions about body image.

Methods: This study assessed the responses of 14 widely-used chatbots (eight companion and six therapeutic chatbots) to ten body image-related questions developed upon validated instruments. Chatbots' responses were documented, with qualities systematically assessed by nine pre-determined criteria.

Results: The overall quality of the chatbots' responses was modest (an average score of five out of nine), with substantial variations in the content and quality of responses across chatbots (individual scores ranging from one to eight). Companion and therapeutic chatbots systematically differed in their responses (e.g., focusing on comforting users vs. trying to identify the causes of negative body image and recommending potential remedies). Some therapeutic chatbots recognized potential mental health crises (self-harm) in test users' messages.

Conclusion: Substantial heterogeneities in the responses were present across chatbots and assessment criteria. Adolescents and young adults struggling with body image could be vulnerable to misleading or biased remarks made by chatbots. Still, the technical and supervision challenges to prevent those adverse consequences remain paramount and unsolved.

Board 226

Sentiment Analysis of Tweets on Soda Taxes

Ruopeng An; Yuyi Yang; Quinlan Batcheller; Qianzi Zhou

Introduction: As a primary source of added sugars in the American diet, sugar-sweetened beverage (SSB) consumption is presumed to contribute to obesity prevalence. A soda tax is an excise tax

charged on selling SSBs to reduce consumption. This study assessed people's sentiments toward soda taxes in the US based on social media posts on Twitter.

Methods: We designed a search algorithm to systematically identify and harvest soda tax-related tweets (~370,000) posted on Twitter since 2015. We built deep neural network models to classify tweets by sentiments.

Results: Public attention paid to soda taxes, indicated by the number of tweets posted annually, peaked in 2016 but has declined considerably ever since. The decreasing prevalence of tweets quoting soda tax-related news without revealing sentiments coincided with the rapid increase in tweets expressing a neutral sentiment toward soda taxes. The prevalence of tweets expressing a negative sentiment rose steadily from 2015 to 2019 and then slightly leveled off, whereas that of tweets expressing a positive sentiment remained unchanged. Excluding news-quoting tweets, tweets with neutral, negative, and positive sentiments occupied roughly 56%, 29%, and 15% during 2015-2022, respectively. Authors' total number of tweets posted, followers, and retweets predicted tweet sentiment.

Conclusions: Despite its immense potential to shape public opinion and catalyze social changes, social media remains an underutilized source of information to inform government decision-making and catalyze policy action. Social media sentiment analysis may inform the design, implementation, and modification of soda tax policies to gain critical social support while minimizing confusion and misinterpretation.

Board 227

Academic Institutional Barriers and Facilitators to Community-Based Participatory Research about COVID-19 Vaccination

Kline, Nolan S.; Griner, Stacey B.; Neelamegam, Malinee; Webb, Nathaniel J.; Morris-Harris, Deborah; Carlo, John; Guadian, Jonathan; Dunlap, Barbara

Purpose: Research on identities and intersectional social positions that perpetuate health inequality must center on the lived experiences of the people who are the focus of the study. Community-based participatory research (CBPR) offers a way to do this by engaging community members in every step of the process and reducing power differentials between researchers and community members. This approach, however, can be challenging in academic settings with low institutional capacity for community-based work. The purpose of this study was to use a CBPR approach to examine COVID-19 disparities among Latinx groups in North Texas.

Methods: We designed a mixed method study with three community-based organizations to complete surveys (n=150) and semi-structured interviews (n=24) on COVID-19 vaccine hesitancy among Latinx individuals who: 1) have a precarious immigration status; 2) are HIV+ and/or sexual and gender minorities; or 3) can experience pregnancy. Using the concept of bureaucratic violence, we provide a case study for how institutional bureaucracies contribute to structural factors constraining research on health disparities among minoritized people.

Results: We found substantive institutional-level challenges to completing CBPR projects with Latinx individuals who experience disproportionately high rates of COVID-19 but are also less likely to be vaccinated than the overall population. These factors include: 1) Institutional Review Board process inefficiencies that are designed around clinical research rather than CBPR approaches; 2) institutional

requirements that can perpetuate otherizing community organizations with undocumented immigrant leaders; 3) lack of timely compensation for community partners. **Conclusions:** Although CBPR can advance health behavior research, such as vaccination among minoritized people, institutional barriers can challenge such work. These barriers render community organizations voiceless at institutional levels, creating an othering process that conflicts with CBPR aims. Researchers should consider institution-specific barriers and facilitators to CBPR that can advance or hinder health behavior research with attention to minoritized identities.

Board 228

Diet Quality Differences Among Racial/Ethnic Minorities by English Vs Non-English Speaking Household

Thomson, Jessica, L; Landry, Alicia, S; Walls, Tameka, I

Purpose: The purpose of this study was to compare diet quality scores within racial/ethnic minorities by English vs non-English speaking household designation.

Methods: Data from two cycles of the National Health and Nutrition Examination Survey (NHANES), 2015-2016 and 2017-2018, were analyzed. Diet quality was assessed using the 2015 Healthy Eating Index (HEI-2015) for which higher scores indicate more healthful eating and based on 24-hour dietary recalls. Households that spoke only, mostly, or equal amounts of English and non-English at home were classified as English speaking (ESH) households while those that spoke only or mostly non-English at home were classified as non-English speaking (NESH) households. Statistical methods for complex survey designs were used to analyze the data.

Results: Based on 6601 participants ≥16 years of age, 53%, 51%, 46%, and 3% of Non-Hispanic Asians, other Hispanics, Mexican Americans, and Non-Hispanic blacks lived in NESH. Non-Hispanic Asians

living in NESH had lower mean scores for sodium and refined grains but higher scores for saturated fats and added sugars than Non-Hispanic Asians living in ESH. Conversely, Mexican Americans and other Hispanics living in NESH had higher mean scores for total and whole fruit, refined grains, saturated fats, and total diet quality than their counterparts living in ESH. Non-Hispanic blacks living in NESH had higher mean scores for total and 6 of 13 diet quality components than non-Hispanic blacks living in ESH.

Conclusions: Total and components of diet quality are higher for Hispanic and non-Hispanic black minorities living in NESH while results are mixed for non-Hispanic Asians living in NESH. However, total diet quality was low for all household groups (≤ 60). Continued dietary guidance in multiple languages with culturally relevant materials is essential to communicate public health and nutrition guidance to promote healthy lifestyles for both ESH and NESH.

Board 229

Latent profiles of sociocultural stressors in a sample of immigrant origin Hispanic and Somali adolescents: Associations with mental health

Becerra, Lizbeth; Grigsby, Timothy. J.; Rogers, Christopher, J.; Areba, Eunice; Forster, Myriam

Introduction: Ethnic minority, immigrant origin youth experience multiple sociocultural stressors that are distinct from general measures of stress and can undermine healthy development. This study used latent profile analysis to identify heterogeneous subgroups of sociocultural stress experiences (bicultural stress, perceived discrimination, and perceived negative context of reception) and whether these were associated with youths' past-week anxiety and depression.

Methods: Data are from a pilot study examining risk and protective factors for behavioral and mental health among first and second-generation Somali and Hispanic

youth (N = 339) living in an urban midwestern setting (mean age = 15.9; 53% male, 40% first generation). Multinomial logistic regression models predicted class membership using theoretically and empirically supported correlates (age, race/ethnicity, gender, SES, and nativity) and examined class association with anxiety and depression.

Results: The three empirically derived profiles were described as a) low cultural stress [reference group], b) high perceived discrimination, and c) high bicultural stress. Results indicated that compared to the low cultural stress profile, membership in the high perceived discrimination profile was associated with age (RRR=1.81, 95% CI=1.14-2.86) and nativity (e.g., US born vs. first-generation) (RRR= 0.0.22, 95% CI=0.07-0.75) but not depression or anxiety. Membership in the high bicultural stress profile was associated with elevated past week anxiety (RRR=2.57, 95% CI=1.86-3.54) but not depression.

Conclusion: The experience of sociocultural stress is heterogeneous and certain demographic characteristics, such as age and nativity, may be important considerations in identifying youth that would benefit from tailored support services (first generation youth were at greater risk for membership in the high perceived discrimination profile). Membership in the high bicultural stress profile was associated with past week anxiety underscoring the need to further investigate how sociocultural stressors affect mental health among immigrant origin youth.

Board 230

Examining mental health among multiply minoritized college students: The need for Intersectional approaches

DeBate, Rita, D; Bleck, Jennifer; Thompson, Erika; Kline, Nolan

Abstract: Objective: Mental health concerns among college students are a significant public health issue. Although disparities among race, ethnicity, gender, and sexual

orientation separately have been documented, research employing an intersectionality lens to examine mental health disparities among college students is negligible. The purpose of this study is to address a gap in college health research by assessing how mental health issues among college students differ by intersectionality of race/ethnicity and sexual and gender identity.

Methods: This study encompassed a secondary analysis of American College Health Association-National College Health Assessment III data collected at a large research university ($n=1,465$) located in the southern U.S. Participants included 9.6% categorized as double minority, 39.8% double majority, 13.5% single minority-sexual/gender (SG), and 37.1% single minority-race/ethnicity (RE). Measures included a) self-reported experiences of bullying, hazing, discrimination, and harassment; b) overall self-perceived health; and c) mental health (flourishing, psychological distress, loneliness, resiliency, suicide risk, alcohol risk). Comparative analyses included tests for differences between categories including chi-square tests, One-way ANOVAs with Tukey post hoc tests, and Kruskal Wallis tests for significance.

Results: Statistically significant differences were observed for hazing ($p=.003$), microaggression ($p<.001$), sexual harassment ($p<.001$), and discrimination ($p<.001$); students identifying as double minority reported more experiences compared with participants identified as double majority, single minority-RE, and single minority-SG. Double minority and single minority-SG participants had higher rates of poor/fair health ($p=.026$), psychological distress ($p<.001$), loneliness ($p<.001$), suicide risk ($p<.001$), and self-injury ($p<.001$), in addition to lower rates of belonging ($p<.001$), flourishing ($p<.001$), and resiliency ($p<.001$) as compared to double majority and single minority-RE counterparts.

Conclusions: Examining college student mental health through an intersectionality

lens revealed greater mental health concerns among those identified as multiply minoritized. Implications include a multi-level approach centered on intersectionality as a theoretical lens for mental health research and programming with college populations.

Board 231

A review of social media platform policies that address cannabis marketing

Berg, Carla J.; LoParco, Cassidy R.; Pannell, Alexandria; Griffith, Lynniah; Cui, Yuxian; Romm, Katelyn F.; Cavazos-Rehg, Patricia

Background: Exposure to cannabis marketing on social media may increase likelihood of cannabis use in youth and young adults. In states with recreational marijuana, most state and local regulations have limited language regarding online cannabis marketing or via social media. Furthermore, because cannabis is federally illicit, there is little applicable federal regulation. Given these regulatory gaps, this study examined social media policies related to cannabis marketing on platforms popular among youth and young adults.

Methods: In September 2022, we coded restrictions on cannabis marketing content (e.g., sale, trade, or gifting; paid advertising) and accessibility of cannabis marketing to those who are underage among 11 social media sites: Discord, Facebook, Instagram, Pinterest, Reddit, Snapchat, TikTok, Tumblr, Twitch, Twitter, and YouTube.

Results: All platforms except Twitch indicated that posts relating to the sale, trade, or gifting of any substance were prohibited, with 3 of these (Instagram, Reddit, Twitter) also specifying that related advertising/promotion was prohibited. Six (i.e., Facebook, Instagram, Pinterest, Reddit, Tumblr, YouTube) specified cannabis in their policies; however, Tumblr stated that their restrictions do not apply to 'drugs which may be legal or decriminalized in some regions, like marijuana, as long as the ad is properly geotargeted'. Only 4 platforms had policy language restricting content exposure among underage audiences: Discord

prohibited 'adult content' to those <18, Instagram imposed minimum age restrictions for specific content categories (but cannabis and other drugs were not specified), Snapchat indicated that advertisements must be 'suitable for the selected audience', and YouTube stated that content may be age-restricted or removed if 'the content promotes a drug'.

Conclusions: The limited social media policies to prevent youth exposure to cannabis marketing compound concerns regarding insufficient governmental regulations. Youth-oriented protective initiatives on social media platforms are a critical consideration as recreational cannabis legislation continues to expand.

Board 232

An overview of kratom retail availability and associated factors in Fort Worth, Texas

LoParco, Cassidy, R.; Yockey, Robert, A.; Sekhon, Vishaldeep, K.; Olsson, S.; Rosshiem, Matthew, E.

Abstract: Background: Kratom is a substance that has a complex psychopharmacological profile. Although kratom use in the U.S. is estimated to be low (past year use among 0.8% of adults), related calls to U.S. poison control centers have been increasing. Kratom and cannabis use are strongly associated, so retail availability may also be related. Moreover, kratom and Delta-8 THC (a psychoactive cannabis product) are federally unregulated, marketed as 'natural', and often used for pain relief and/or relaxation. Kratom may have greater retail availability in more socioeconomically deprived areas because harmful substances are often more heavily marketed to lower-income communities. Objectives: This study examined kratom retail availability and associated factors in Fort Worth, Texas.

Methods: This study utilized data from a second wave of calls to locations with alcohol, tobacco, and/or CBD licenses. In wave 1, 1,223/1,961 locations answered the

phone; only these locations were called in wave 2. The analytic sample was comprised of the 1,025/1,223 locations that answered the phone (84%). Neither kratom nor Delta-8 THC were explicitly illegal in Texas during this time (July 2022). Cross-tabulations examined overlap in kratom and Delta-8 THC availability. Independent samples T-tests examined whether stores selling Kratom were located in areas with higher/lower area deprivation index (ADI) scores.

Results: Kratom was available in 6% of locations. Most kratom retailers had a tobacco license (92%). However, most stores with a tobacco license did not sell kratom (14%), whereas most stores with a CBD license did (55%). Most kratom retailers (67%) were 'smoke shops.' Kratom availability was not associated with area deprivation scores. Most kratom retailers (95%) sold Delta-8 THC and two-thirds (65%) of Delta-8 THC retailers sold kratom. Conclusions: This was the first study to examine retail availability of kratom. Findings indicate the presence of niche stores specializing in the retail of federally unregulated substances.

Board 233

State cannabis laws, risk perceptions, and Delta-8 THC use among young adults

LoParco, Cassidy, R.; Walters, Scott, T.; Zhou, Zhengyang; Rosshiem, Matthew, E.

Background: Delta-8 THC is a psychoactive substance from the cannabis plant. Delta-8 THC is federally unregulated and is implicitly legal due to a 'loophole'. Delta-8 THC popularity and related consequences have been rising in the U.S.; however, few studies have examined factors associated with Delta-8 THC use. Previous research indicates more strict cannabis laws decrease access to cannabis and higher perceived risk is associated with less risky behavior overall. However, it is unclear how state cannabis laws and cannabis risk perceptions may be associated with Delta-8 THC use.

Methods: Data were collected from an online survey of 18- to 25-year-olds (n=166). Multivariable logistic regression models examined whether state cannabis laws, perceived susceptibility, and perceived severity were associated with past-year Delta-8 THC use. These 3 predictors were measured separately for Delta-8 and Delta-9 THC. Models adjusted for age, birth sex, race/ethnicity, student status, and past year Delta-9 THC use.

Results: Neither Delta-8 nor Delta-9 state laws were associated with past-year Delta-8 THC use. The following factors were significantly associated with higher odds of past-year Delta-8 THC use: lower perceived severity of harms from Delta-8, higher perceived severity of harms from Delta-9, lower perceived susceptibility to harms from Delta-9, and higher perceived susceptibility to harms from Delta-8. Those who used Delta-9 THC in the past year had 14 times the odds of using Delta-8 THC.

Discussion: State cannabis laws were not associated with Delta-8 THC use, which may be due to the easy accessibility to purchase Delta-8 THC online. Although the direction of associations between cannabis risk perceptions and Delta-8 THC use were inconsistent, results may indicate potential reverse causation. Harm reduction interventions may include media campaigns that provide information on the risks of both Delta-8 and Delta-9 THC. Longitudinal research, using larger sample sizes, is needed to better inform prevention efforts.

Board 234

Community Conditions, Practices, and Beliefs Contributing to Inequitable Opioid Overdose Education and Response in Black-Dominant Indianapolis Communities

Seo, Dong-Chul; Crabtree, Charlotte; Phillips, Justin; Lee, Shin Hyung; Cochran, Nikki

Background: Fatal opioid overdoses increased more rapidly among Blacks in the past few years than Whites. Context-rich

information lacks in the factors contributing to inequitable opioid overdose education and response in Black-dominant communities.

Methods: Guided by the Citizen Health Care Model, we formed a multi-sector community-based coalition that was composed of various grassroots community partners in four target zip code areas in inner-city Indianapolis. Coalition members included Black overdose survivors, family members of fatal overdoses, law enforcement, local emergency medical services, decision-makers at local and state governments, and legislators. The study used a parallel, cluster-matched, quasi-experimental design with pre- and post-measurements. Surveys (N=500) were conducted to probability community samples of both the target and control communities. The Coalition had monthly topical discussions as well as in-depth interviews (N=50) and three focus groups (N=24) of community residents in 2022 to elicit factors that contribute to inequitable opioid overdose deaths among Blacks. General inductive qualitative analysis was conducted for the narrative data.

Results: Seven major contributing factors emerged: (1) the target communities received fewer amounts of per capita naloxone; (2) no evidence of naloxone administration for the vast majority of fatal opioid-involved overdoses in the communities; (3) people who carried and were willing to use naloxone was low due to the fears of legal consequences (i.e., to avoid harassment from police) among many Black opioid users; (4) discretionary and/or strict drug law enforcement was in part to blame for racial discrimination in heroin arrests; (5) many Black opioid users refrained from calling 911 or did so only as a last resort due to the fear of judgmental, stigmatizing attitudes and maltreatment; (6) fewer opportunities for Black residents to receive opioid prevention education and/or naloxone administration training; and (7) stigmatizing beliefs about people who use drugs along with misperceptions that drug users might adjust their risk tolerance upward (e.g., perceive less risk from using

opioids, use opioids more frequently, or use higher doses) when given access to naloxone.

Conclusions: Structural and policy interventions, de-stigmatization education, equitable naloxone distribution, and provision of adequate naloxone administration training in quantity and quality are necessary to reduce disparate burden of opioid overdose deaths among Blacks.

Board 235

Toward a Better Understanding of Adult Dual Use of Cigarettes and E-cigarettes Based on Use Intensity and Reasons for Dual Use

Lee, SH; Han, D-H; Seo, D-C

Background: Dual use of combustible cigarettes and e-cigarettes is an emerging phenomenon among U.S. adults. Literature suggests two primary reasons for this emerging use (i.e., to help quit smoking and to stealth vape). This study investigated user profiles based on use intensity and the reasons for dual use.

Methods: A total of 1,151 U.S. adult dual users were drawn from the 2018-2019 Tobacco Use Supplement to the Current Population Survey. We divided them into four groups: daily dual users (n=189), predominant smokers (n=608), predominant vapers (n=143), and non-daily dual users (n=211). We performed weighted multivariable logistic regressions to identify factors associated with the two primary reasons for dual use.

Results: 3 in 10 of U.S. adult dual users used e-cigarettes to help quit smoking while 2 in 10 of U.S. adult dual users used e-cigarettes to stealth vape. Compared to daily dual users, predominant smokers [adjusted odds ratio (AOR) = 0.61, 95% CI = 0.23, 0.62] were less likely to use e-cigarettes to help quit smoking whereas predominant vapers (AOR = 1.80, 95% CI = 1.04, 3.13) were more likely to use e-cigarettes to help quit smoking and less likely to use e-cigarettes to stealth vape (AOR = 0.30, 95% CI = 0.10, 0.89).

Conclusions: There was notable heterogeneity among the four groups of dual users. As the landscape of tobacco use is rapidly changing with an increasing popularity of e-cigarettes, reasons as well as behaviors of dual users need to be regularly monitored for effective tobacco control.

Board 236

Opioid prescribing for chronic pain in federally qualified health centers – post Centers for Disease Control and Prevention guidelines

Price, Anna, E; DeNisco, Sue; Milner, Kerry

Background: The Center for Disease Control (CDC) published opioid prescribing guidelines in 2016 in order to improve the care of patients with chronic pain. Federally qualified health centers (FQHC; i.e., community health centers that receive federal funds for services in medically underserved, low-income areas) were required to implement these 2016 CDC guidelines. This study examined primary care providers' (PCPs) perceptions of opioid prescribing in FQHCs after implementation of the 2016 CDC guidelines.

Methods: Purposive sampling was used to identify 13 PCPs who treat patients with chronic pain at one of two FQHCs located in a large, lower income, diverse community in the Northeast. Interviews were conducted in person using a semi-structured interview guide. PCPs were asked to describe their experiences prescribing opioids, challenges and barriers to prescribing opioids, and challenges and barriers to weaning patients off of opioids. The transcripts from the interviews were imported into Atlas.ti qualitative statistical software for analysis.

Results: In both FQHCs, providers were predominantly female, middle aged, in practice an average of 13-15 years, and mostly specializing in internal or family medicine. PCPs reported limited time, shortage of medication-assisted treatment-trained providers, insufficient patient management standard processes, and their own fear of patient addiction as challenges

when prescribing opioids for chronic pain. PCPs also reported wanting to recommend alternatives to opioids for chronic pain management, but systemic, patient, and personal barriers impede their efforts. Conclusions: The study findings indicate that FQHCs would benefit from examining their current pain management policies and practices and addressing policies and practices at odds with the CDC guidelines. FQHCs need to provide continuing education on pain management for PCPs and partner with external organizations to facilitate patient use of recommended alternative pain treatments. Future research should examine the efficacy of such strategies for improving opioid prescribing practices among PCPs at FQHCs.

Board 237

Testicular cancer symptom recognition and stage of diagnosis

Rovito, Michael J; Craycraft, Mike; Adams, Wesley; Maresca, Michael; Saab, Mohamad; Cary, Clint; Gooljar, Chayna; Martinez, Sydney; Abu Zanet, Rama

Purpose: Despite generally favorable testicular cancer treatment outcomes, the substantial contrast in survivorship and quality of life between early- and late-stage cases warrants the need for interventions that promote early detection of TC. A critical component to this process includes registration of disease symptoms. Therefore, there is a need to further explore the relationship between symptom reporting and stage diagnosis to help develop a spectrum of TC symptoms that could assist physicians diagnosis the disease earlier.

Methods: A cross-sectional study was employed to explore possible associations between TC symptom presentation and stage of diagnosis. An original 40-item survey was distributed among TC survivors to determine the potential impact of several risk factors and behaviors upon diagnosis. This analysis aimed to explore how certain patient-driven experiences could serve as

catalysts for seeking medical care for testicular health concerns.

Results: Correlation analyses indicated the strength/significance of relationship between reported symptoms and stage diagnosis. The only non-significant association was self-reported testicular pain. Experiencing hot flashes and having no symptoms had positive associations with later-stage diagnosis. Change in shape had a significant negative association with later-stage diagnosis. Logistic regression explained relatively low variance in the data ($r^2=0.1415$), it was statistically significant (Chi^2 probability <0.001). Pain (OR=1.6524, $p<0.05$), Hot Flashes (OR=5.7893, $p<0.01$), and No Symptoms Experienced (OR=12.4836, $p<0.01$) were all significant predictors of a more advanced stage diagnosis.

Conclusion: The concern around uncommon or atypical symptoms are that they are inexact and indistinct. In short, they are not very clear and/or obvious signs that TC is present. However, perhaps in tandem with other more overt symptoms they can serve as more confirmatory variables for a suspect case or, if observed with other uncommonly reported symptoms that it could serve as a viable option for the diagnostic process to consider TC as a possible prognosis.

Board 302

Overcoming Perceived Barriers to Physical Activity in a League Structured Program: An Interpretive Qualitative Study Design

Mohd Rafiq, Alfiya Shaikh; Selina Stasi

Purpose: This study presents a multifactor enriched Physical Literacy League program (PLL) created by combining several theoretical approaches to promoting motor, cognitive, and socio-emotional skills development through Physical Activity (PA). The purpose of the study was to examine the PLL's effectiveness utilizing physical literacy characteristics (PL). The study also aimed to use PLL as a means to foster

solidarity and celebration in order to overcome perceived barriers to PA.

Method: The study included 36 school-going children-12 girls and 24 boys, from a war-torn small town in India, where barriers to PA emanated from systemic issues and post-traumatic experiences. The participants engaged in PLLP-developed on foundation of PL characteristics such as motivation, confidence, knowledge and understanding, physical competency, and value. Participant baseline PL characteristics were recorded. An interpretive qualitative study methodology was used to assess the effectiveness of the PLLP. Data collection included online and semi-structured interviews. Creswell's thematic analysis methods were employed to arrange the data, and Leximancer software was used to build concepts and cross-validate themes. The PLLP's applicability and effect on perceptions of PA barriers, desire for outdoor PA, and social involvement were evaluated critically using PL characteristics.

Results: Results show perceptions of PA barriers decreased following the program, cited through children's active participation in gender-neutral Physical Education sessions. Furthermore, the study showed that parent education, gamified virtual sessions, and parent-child interactive games increased children's desire for physical exercise and enhanced physical competency. In addition, children were motivated by virtual engagement within their comfort level, which expanded to outdoor PA and involvement with peer groups. The study's results suggested that initiatives like the PLLP could address children's early development needs while offering high-quality learning opportunities. In the future, emphasis should be made on creating long-term cognitive-behavioral intervention programs to ensure continuity with the least degree of relapse.

Board 303

Medical Autonomy and Choice-Making among Individuals with Intellectual and Developmental Disabilities

Walsh-Buhi, Margaret L.; Howland, Allison A.

Purpose: Using data from 2021-2022 National Core Indicators (NCI) survey--- assesses quality and outcomes of Developmental Disability Services for individuals with intellectual and/or developmental disabilities (IDD) and families in 46 US states--- aim of study was to analyze perceived level of choice by type of IDD and use of mental health medications in Indiana.

Method: NCI Adult In-Person Survey (IPS) is conducted with a stratified random sample of N=700 individuals who are 18 years of age or older and receiving at least one paid service from the state. Electronic health records provide level of disability, mental health medication prescribed for mood disorder, anxiety, psychotic disorder, or behavioral challenges Two subscales assess choice opportunities.

Results: In Indiana, 72% of the individuals interviewed had mild or moderate levels of IDD, followed by Severe or Profound (15%), or unknown/unspecified (12%). Approximately 62% of individuals with mild or moderate IDD, 60% with severe or profound IDD, and 64% with unspecified IDD were taking medications for mental health issues. Average scores indicating levels of choice were higher for individuals with mild (2.37) or moderate (2.14) levels of IDD than for those with severe (1.83), profound (1.70) levels.

Conclusions: It appears individuals in Indiana with low/moderate levels of disability report higher choice scores compared with those with more severe IDD. Moreover, average levels of choice are lower for individuals who take medication for mental health medication regardless of level of disability. Notable that questions used to determine NCI choice scores assess mundane opportunities; whereas, true questions about personal autonomy, decision-making, abilities to take risks/risk failure opportunities, and medical autonomy are not included. Further refinement of NCI choice scales is recommended to reach true health equity within this population, as is accurate measurement of the intersectionality of choice among individuals

with IDD/DD who have mental health disorders/issues.

Board 304

Patterns and Correlates of Alcohol Misuse among Young Black Men Who Have Sex with Men in New York City

Wenhua Lu; Thinh Toan Vu; Leo Wilton; Mark Paige; Vijay Nandi; Emily Greene; Victoria Frye

Background: This study aimed to identify patterns of binge drinking, alcohol misuse, and describe factors associated with alcohol misuse in a sample of young Black men who have sex with men (YBMSM) living in New York City.

Methodology: Baseline data from a randomized controlled trial aimed at improving the uptake of HIV testing among YBMSM/Transwomen were used. Log-binominal regression analysis was conducted to assess the association between sociodemographic factors and alcohol misuse among YBMSM.

Results: Among 250 participants, the mean age was 22.75 with 44.8% aged 22-25. Approximately 70.0% identified their sexual orientation as gay. Most participants were born in the U.S. (88.8%) and not religious (52.4%). The 12-month prevalence rates of alcohol misuse and binge drinking in the past year were 33.2% and 51.6%, respectively, while the corresponding rates in the past three months were 28.0% and 42.8%. In multivariable models, factors positively associated with past-year alcohol misuse included marijuana use (aPR: 2.55, 95% CI: 1.33, 4.49), a history of drug use (aPR=1.05, 95% CI: 1.02, 2.21), and having 1-2 (aPR=1.87, 95%CI: 1.07, 3.26) or more than 2 male sex partners (aPR=1.94, 95%CI: 1.08, 3.50). Likewise, using marijuana (aPR=2.30, 95%CI: 1.12, 4.71) and having 1-2 (aPR=2.02, 95%CI: 1.07, 3.80) or more than 2 male partners (aPR=2.18, 95%CI: 1.13, 4.19) were more likely to report alcohol misuse in the past three months. No significant association was found between

depression symptoms, chemsex, and internalized homophobia.

Conclusion: The high prevalence of alcohol misuse and binge drinking underscores the importance of raising awareness of alcohol misuse as well as designing alcohol risk reduction programs that jointly address HIV risk among YBMSM.

Board 305

Youth Participation in Substance Use Prevention: National Trends and Demographic Differences in the U.S.

Wenhua Lu; Melissa Bessaha; Miguel Muñoz-Laboy

Purpose: To examine national trends and sociodemographic differences in youth participation in alcohol, tobacco, and other drug (ATOD) prevention in the U.S..

Methods: Publicly available data for adolescents aged 12-17 (N = 136,262) from the 2011-2019 National Survey on Drug Use and Health were analyzed. Bivariate and multivariable logistic regression analyses were conducted to examine time changes and sociodemographic differences in adolescent (1) conversations with parents about the danger of ATOD use, (2) participation in any community-based ATOD prevention programs, and (3) receipt of any ATOD prevention education in school. All analyses adjusted for complex survey design and adjusted odds ratios (AOR) were reported.

Results: From 2011 to 2019, the percentages of adolescents who had talked with their parents about dangers of ATOD remained stable at below 58% (p = 0.46). In 2019, 10.6% and 70.2% of adolescents participated in community-based and school-based ATOD prevention programs, decreasing linearly from 12.1% (OR = 0.98, p< 0.001) and 74.7% (OR = 0.97, p< 0.001) in 2011, respectively. Compared to boys, girls were more likely to talk with parents (AOR = 1.11; p< 0.001) and participate in school-based programs (AOR = 1.16; p< 0.001), but less likely to participate in community-based programs. Overall, lower

levels of community-based program participation were noted in older adolescents. Compared to Whites, racial/ethnic minority adolescents were much less likely to talk with their parents about ATOD use but more likely to participate in community-based programs. Additionally, Asian Americans were more likely to participate in school-based programs (AOR = 1.41; $p < 0.001$). Relative to adolescents in metropolitan areas, those living in rural areas were more likely to participate in community-based programs (AOR = 1.24; $p < 0.001$) but less likely to receive school-based prevention education (AOR = 0.93; $p < 0.01$). Conclusion: To address sustained substance use in adolescents, enhanced prevention efforts at the family, community, and school levels are needed that consider the unique needs of diverse subgroup populations.

Board 306

Understanding Longitudinal Relations Among Frequent Social Media Use, Electronic Nicotine Delivery Systems Use, and Internalizing Mental Health Problems Among U.S. Adolescents

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

Abstract: Background: There is concurrent surge in social media use, e-cigarette use, and mental health problems in adolescents. However, literature presents conflicting results. Besides, different theories posit different transitional patterns (e.g., functional theory of self-disclosure vs. emotional contagion theory).

Methods: Data were drawn from Wave 2-5 (including Wave 4.5) of the Population Assessment of Tobacco and Health (PATH) Study. Of the 6,266 adolescents aged 12-14 years at baseline, a total of 4,916 individuals had matched data for the follow-up assessments. Weighted logistic regressions with the generalized linear mixed model with random effects were fitted to examine the within-person time-lagged associations between three variables of interest. In addition, a series of model-based within-

subject causal mediation analyses were performed to estimate the average causal mediation effect (ACME) for each mediation model using R version 4.2.0.

Results: Whereas experimental (i.e., 1-2 days) or nonfrequent (i.e., 3-19 days) e-cigarette users within the past 30 days peaked at Wave 4.5, frequent users (20+ days) kept increasing during the study period. The one-year time-lagged frequent social media use (“t-1 media”) predicted experimental ([adjusted odds ratio (AOR) = 2.70, 95% CI = 2.68, 2.72]) and nonfrequent (AOR = 2.13, 95% CI = 2.12, 2.14) e-cigarette use but not frequent e-cigarette use in later waves. The t-1 media also predicted internalizing mental health problems (AOR = 1.37, 95% CI = 1.17, 1.59) and one-year time-lagged internalizing problems predicted subsequent frequent social media use (AOR = 1.69, 95% CI = 1.45, 1.97). Frequent social media use not only served as a predictor for e-cigarette use but also mediated the prospective association between e-cigarette use and internalizing mental health problems.

Conclusions: Our results revealed that there are multiple longitudinal pathways around social media use, e-cigarette use, and mental health problems. Those adolescents who use social media more frequently are more likely to use e-cigarettes but not necessarily frequently.

Board 307

Systematic Review of Postpartum Smoking Relapse Interventions Among Maternal Women

Ahenda Petronella; John Sneha; He Ruby; Philip Hannah; Jasso-Moreno Diana; Mills Emily; Serrano Melanie; Ma Ping

Purpose: Smoking during pregnancy and postpartum period has been associated with deleterious negative health outcomes of both maternal women and their children. Despite a decreasing trend of cigarette use during pregnancy, postpartum relapse rate among those women who quit during pregnancy remains high. Our study aims to synthesize

the key characteristics of postpartum smoking relapse interventions and identify the effective ways to help maternal women maintain postpartum abstinence.

Methods: A systematic search of MEDLINE, PsychINFO, Academic Search Ultimate, CINAHL, Health Policy Reference Center, Web of Science, and Google Scholar was conducted from January 1st, 2015, through March 31st, 2022. Studies that are randomized controlled trials, published in English, and having relapse prevention services delivered in the postpartum period with abstinence outcome reported were eligible to be reviewed. Two reviewers extracted data based on PRISMA guideline and assessed the quality of eligible studies. Narrative data syntheses were conducted.

Results: A total of 23 studies met the inclusion criteria with 7,945 maternal women enrolled. Majority of these studies were developed in the U.S. and delivered in a community-based setting. Nineteen studies initiated the intervention during both pregnancy and postpartum periods whereas 4 studies initiated intervention in postpartum only. Abstinence rates varied (<10% to >90%) depending on different intervention types, outcome measures (e.g., 7-day point or continuous abstinence), and the lengths of follow-up. Average number of cigarettes smoked per day during pregnancy, breastfeeding initiation, intentions to quit, age, income, and depressive mood disorders were identified as barriers impacting postpartum abstinence. Psychosocial counseling, financial incentives and social support are the most common and effective preventive strategies used in the programs included.

Conclusion: Psychosocial and behavioral support-based interventions, or multi-component aid services appear promising to improve postpartum smoking abstinence rate. Further research examining long-term effectiveness of postpartum smoking relapse prevention programs is warranted.

Board 308

Pregnant Latinas' perceptions on benefits and concerns of expanded carrier screening: A qualitative study

Madhiri, Embedzayi; Tedross, Melodie; Wang, Haocen; Vidal, Victoria; Young, Christine; Martinez, Denise; Chen, Wei-Ju; Robbins-Furman Patricia; Page, Robin; Chen, Lei-Shih

Introduction: The American College of Obstetrics and Gynecology and the American College of Medical Genetics recommend carrier screening for all pregnant women regardless of race and ethnicity. Compared to carrier screening which only tests few diseases, expanded carrier screening (ECS) screens for hundreds of genetic diseases simultaneously. Currently, ECS is not routinely offered to all pregnant women. Before implementing ECS into routine clinical practice, it is important to understand the perceived benefits and concerns of ECS among pregnant women. This study explored such among pregnant Latinas who are an understudied and underserved population in genomics and public health research.

Methods: We conducted qualitative interviews with pregnant Latinas in their second or third trimester of pregnancy. A content-analysis approach was used to analyze the data. Using Nvivo 8, the emergent coding approach was used to group the findings into themes and subthemes.

Results: Thirty-two pregnant Latinas completed the interview. The benefits of ECS reported by them included helping prepare for the baby's arrival (34.4%), informing the baby's risk of having a genetic condition (34.4%), better knowing about their baby's health (6.3%), and ensuring that their baby would be born healthy (3.1%). Participants' expressed concerns about ECS included being overwhelmed by positive result (18.8%), concern about the accuracy of the ECS (15.6%), misunderstanding that the testing procedure would cause harm to both mother and the baby (15.6%), and concern

about the cost of ECS (3.1%). After weighing both benefits and concerns, nearly all the participants (96.9%) believed that ECS should be offered to all pregnant women.

Conclusion: Our findings suggest that pregnant Latina's desire to be offered ECS by their obstetric providers. However, the concerns about ECS that should be considered when implementing ECS into routine clinical practice for pregnant women.

Board 309

The Impact of COVID-19 on Rural Patient's Diabetes Distress, Self-Care, and Quality of Life

Misra, Ranjita; Kirk, Brenna O

Background: Diabetes mellitus (DM) is a debilitating and complex chronic condition that influences patients' psychological issues and quality of life (QoL). West Virginia is a rural state with the highest national prevalence of diabetes (16.3%). DM patients experience diabetes distress i.e., the emotional burdens, stresses, and worries from managing the disease, which is distinct from depression and anxiety.

Objective: To examine rural DM patients' diabetes distress and its impact on depression/anxiety, compliance with diabetes self-care, and QoL during the COVID-19 pandemic.

Methods & Results: A statewide sample of 1541 participants with diabetes and comorbid chronic conditions (mean age = 59.6 ± 12.3 years; 65% females) completed an online survey. Diabetes distress (measured as total, emotional, regimen-related, interpersonal, and physician-related distress), QoL (mental and physical health), and diabetes self-care (diet, exercise, blood glucose monitoring, and medication adherence) were assessed using validated scales. Depression and anxiety were self-reported. Mean diabetes distress was low to moderate. Higher distress related to the emotional burden and regimen-related distress during the pandemic. Medication adherence and blood glucose monitoring (4-5 days/week) were higher than diet and

exercise (2-3 days/week). Almost half of the DM patients (43%) reported having depression/anxiety. Multivariable logistic regression showed higher diabetes distress was predicted by younger age, lower health literacy, lower physical and mental health t-scores (QoL), and lack of adherence to a diabetic diet during the pandemic.

Conclusions: Follow-up studies are needed on healthcare providers' understanding of their patient's diabetes distress and counseling for diabetes self-care and depression/anxiety during routine clinical care.

Board 310

Burnout Related to Diabetes Distress Among Rural West Virginians Living with Diabetes: A Mixed-Method Analysis

Kirk, Brenna O; Misra, Ranjita; Khan, Raihan; Sambamoorthi, Usha

Background: Diabetes distress (DD) refers to the emotional burden and worry patients experience in managing diabetes. Distinct from depression and anxiety, DD is linked to poor self-management and worse health outcomes. West Virginia, the 3rd most rural state in the US, has the highest prevalence of diabetes mellitus (DM; 16.3%). This study explored rural West Virginians' experiences and perceptions of DD using an integrated mixed-method approach.

Methods: Semi-structured interviews (n=34), four focus groups (n=23), and surveys were conducted with participants of a 12-week diabetes and hypertension self-management program (DHSMP) implemented in WV churches. DD was quantitatively assessed using the 17-item DD Scale (DDS-17). Qualitative data were analyzed to identify major themes related to diabetes distress and were then integrated with quantitative survey data using MAXQDA software.

Results: The sample was 59.5% female; mean age was 62.1 ± 12.4 years. Qualitative analysis revealed four major themes coinciding with the theoretical domains of DD: emotional burden, interpersonal distress, provider-related distress, and

regimen-related distress. Each theme had two sub-themes: patient experience, and coping strategies. Qualitative results confirmed participants' quantitative DD scores across all four domains. HbA1c was positively associated with total DD, emotional burden, and regimen-related distress ($p < 0.01$). Women and those with a family history of diabetes were more likely to report experiences with DD, but not coping strategies. Participants with higher emotional burden and regimen-related distress were significantly more likely to qualitatively discuss coping strategies used to address those specific domains of DD. Interestingly, however, participants with higher provider-related distress were significantly less likely to report any strategies for coping or addressing that area of DD.

Conclusions: These results confirm the importance of increasing awareness, regularly screening for DD and supporting healthy coping strategies to improve self-care and diabetes outcomes among rural adults.

Board 311

An analysis of past and present tweets about monkeypox, 2006-2022

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

Background: On May 21st 2022, the World Health Organization (WHO) reported outbreaks of monkeypox in 12 countries without endemic transmission of monkeypox virus. Perhaps unsurprisingly, misinformation about monkeypox disease proliferated online quickly following the WHO report, particularly through social media platforms. The purpose of the current study was to characterize Twitter content about monkeypox before and after the 2022 outbreak.

Methods: We conducted a retrospective content analysis of public tweets mentioning "monkeypox" from July 15th, 2006 – Twitter's launch date – to July 31st, 2022. English-language original tweets (i.e., not retweets) were eligible for analysis. Linguistic analysis

software was used to identify clusters of terms and characterize patterns. Descriptive statistics were generated comparing audience engagement metrics pre- versus post-outbreak (i.e., retweets, likes).

Results: A total of 685,968 original tweets were collected. An average of 5,334 tweets were created in the years 2006-2021 compared to 616,626 in the first seven months of 2022. The most common themes were case reports (18.3% tweets), vaccination (11.0%), infection control and prevention behaviors (7.1%), and at-risk populations (6.9%). On average, post-outbreak tweets received significantly more retweets than pre-outbreak tweets (4.2 versus 2.1; $p < .001$). Of the top 20 most retweeted post-outbreak tweets, with an average=10,826.1 retweets, six were from users subsequently banned for violation of Twitter's content policies.

Conclusions: Our findings indicate a pressing need to improve the responsiveness of online content moderation tools to combat misinformation's spread during emerging public health crises. Vastly more tweets were created following the 2022 outbreak than the 15 years prior. While we observed that Twitter's content moderation ultimately removed many misinformation posts, some were still able to reach and engage broad audiences, which may explain lasting stigma surrounding the virus towards gay, bisexual, and other men who have sex with men, as well as low uptake of prevention behaviors like vaccination.

Board 312

Fluidity in Reporting Gender Identity Labels in a Diverse Sample of Transgender and Gender Diverse Youth: Implications for Prevention Research

Ocasio, Manuel, A; Kampa, Kathryn, T; Harper, Gary, W; Lightfoot, Marguerita; Fernandez, Maria, I

Introduction: Emerging literature highlights substantial health inequities among transgender and gender diverse youth (TGDY). Despite recognition that gender

identity is fluid, most researchers view it through the static lens of cross-sectional data or baseline reports in longitudinal studies. Although data reduction is often necessary for meaningful analysis, subsuming all TGDY into one group obfuscates differences that may contribute to health inequities. This study aims to help researchers recognize the fluidity of gender identities and implications for health and prevention efforts.

Methods: Patterns of change in reporting gender identity over time was examined in a sample of 235 TGDY from Louisiana and California. Participants were recruited as part of an HIV prevention and treatment study from May, 2017 to August, 2019; assessments occurred at four-month intervals over 24 months. At each assessment, participants reported gender identity and sex assigned at birth. We classified participants into nine gender identity reporting patterns. A non-transgender identifying category was created for participants who did not identify as transgender, but selected a gender different from their sex assigned at birth.

Results: Participant age ranged from 15 to 24 years; 69% were from California. Thirty-eight percent were Latinx and 34% were non-Latinx Black/African American. A majority changed identities at least once (77%) and 17% changed more than twice. Over half were classified into the Alternating Pattern. Compared to baseline, there was a notable increase in non-transgender identifying participants and a concurrent decrease in participants who identified as transgender at 24 months.

Conclusion: The considerable variation in selected gender identity labels over time suggests misclassification may occur when data from a single time point is used to define gender identity. By empirically documenting patterns of gender identity labels among TGDY, our research lays the foundation for future studies to elucidate associations between shifting gender identities and health outcomes.

Board 313

“Hi Everyone, I Guess I’m Mainly Posting for Emotional Support”: An Analysis of Social Media Discourse Related to Caregiving for Older Adults with Alzheimer’s Disease and Related Dementias (AD/ADR)

Pickett, Andrew, C; Valdez, Danny; Sinclair, Kelsey, L; Kochell, Wesley; Fowler, Boone, C; Werner, Nicole, E

Purpose: Incidence rates of Alzheimer’s Disease and Related Dementias (ADR), the fifth leading cause of death for older adults, are expected to increase dramatically in coming decades as the population of the US ages. Caregiving for individuals living with ADR can be intensive, requiring round-the-clock care to aid with performing routine activities, administering medication(s), and managing other health concerns.

Methods: We collected a dataset of 6,256 Reddit posts (totaling 1,571,856 words) from two subreddits (r/Alzheimer’s and r/dementia)-- specialized forums for discussing users’ concerns related to ADR-- dated from May- June 2022. In our first analysis, we used Latent Dirichlet Allocation to identify salient topics across the corpus and map topic overlap in individual posts. We then manually coded a random sample of 626 (i.e., 10%) for specific caregiving concerns.

Results: From the LDA, primary themes across the dataset related to financial and legal concerns, social support and digital interaction, and assisted living facilities. A cluster of smaller, overlapping topics related to caregiving experiences and ADR behaviors (e.g., dietary changes, toileting, nighttime behaviors) were also observed. Emergent themes from the manual coding process include the need for social support systems, interrelated nature of ADR symptoms, and overall stress of caregiving.

Conclusions: Our results suggest caregivers of individuals living with ADR seek a variety of forms of support from social media (e.g., subreddits). Among the most salient topics in the data, individuals sought informational

support with the complex legal and regulatory framework associated with caregiving. Further, individuals sought and provided emotional support related to burnout and exhaustion. Finally, caregivers sought solidarity and advice in dealing with the complex and interrelated symptomology of individuals in their care. Consistent with others, our findings suggest a need for additional support systems for caregivers of individuals living with ADRD.

Board 314

Fueling the Midnight Oil: Sleep quality, caffeine, and weight loss methods in college-attending young adults

Kahwash, Jenna, M; Lilly, Christa, L; Claydon, Elizabeth, A; Alamir, Y; Zullig, Keith, J

Purpose: College students are particularly vulnerable to known indicators of poor sleep quality, such as higher caffeine intake and increased stress, but studies examining eating habits in relation to sleep quality in the college population have had generally inconclusive results. The purpose of this study was to consider total caffeine consumption per day and diet and exercise to lose weight as potential indicators of sleep quality among the undergraduate college student population.

Methods: Participants (n=400) were sampled from full-time undergraduate students at a large, mid-Atlantic university in 2016 via anonymous surveys regarding sleep quality, total caffeine consumption (past 7 days), dieting and exercise to lose weight, total alcohol drinks (past 7 days), GPA, and stress. Sleep quality was assessed using the Pittsburgh Sleep Quality Index (PSQI) and data were analyzed using SAS JMP Version 16.

Results: Stepwise multivariable linear regression controlling for alcohol use, GPA, biological sex, and stress showed significant increases in PSQI score among those with higher total alcohol drinks, tremendous stress, and more than average stress, indicating reduced sleep quality. Additionally,

identifying as male and possessing less than average stress levels significantly decreased PSQI scores. Caffeine consumption remained significant until psychosocial factors were added into the model ($B=0.003\pm 0.001$, $p=0.0035$). However, sensitivity analyses on categories of caffeinated beverages showed that reported total caffeine consumption from soda remained significant across all models, significantly increasing PSQI ($B=0.01\pm 0.004$; $p=.0054$).

Conclusions: Caffeinated sodas and energy drinks reflected more significant decreases in sleep quality than other sources of caffeine. Alcohol consumption and stress levels were also found to be inversely associated with sleep quality. Future interventions aimed at improving sleep quality among undergraduate college students may consider focusing efforts on managing caffeine and alcohol consumption, as well as stress reduction.

Board 316

Utility of Amazon's Mechanical Turk for Conducting Alcohol-related Social Network Analyses: A Comparison of Two Distinct Egocentric Network Data Collection Approaches

Patterson, Megan S.; Russell, Alex M.; Barry, Adam E.

Introduction: Commonly employed sampling procedures utilizing college students (e.g., classroom convenience samples, campus-wide emails) have significant limitations. Amazon's Mechanical Turk (MTurk) represents a social and behavioral research tool that can account for these limitations. Few studies, however, have utilized MTurk to explore impacts of social influences on alcohol-related behaviors via social network analysis. Herein, we compare and contrast alcohol-related egocentric network data obtained via (a) MTurk, and (b) a traditional convenience sample of college students collected via e-mail solicitation at a large, public southwestern university.

Methods: The sample collected via MTurk consisted of 309 college students; the sample collected via e-mail solicitation consisted of 695 college students. Respondents reported demographics, personal alcohol use (measured via the AUDIT-C), and perceived drinking behaviors of five personally identified close peers. Chi-square analyses and t-tests assessed differences across samples, and hierarchical linear regression analyses assessed the effect ego- and network-level variables had on respondent's drinking behavior while controlling for sampling technique.

Results: Egocentric network variables explained 27.6% of the variation in respondents' AUDIT-C scores over and above individual-level predictors, regardless of sampling technique ($R^2 = 0.444$, $p < .001$). Being an MTurk respondent was related to higher AUDIT-C ($\beta = .158$, $p < .001$) scores after controlling for demographic and network variables. Compared to the email solicitation sample, MTurk respondents were more demographically diverse ($X^2 = 10.81$, $p < .001$) and reported more demographically diverse peer networks ($t = 48.56$, $p < .001$).

Conclusions: MTurk offers a fast, affordable, high quality method of data collection and is well-suited for egocentric network studies examining peer influences on alcohol use. Data collected within college student samples on MTurk offers several advantages when compared to a sample of college students solicited via e-mail attending a single university, including improved diversity/representation among egos and networks.

Board 317

Mental health impacts of social connection within a group-based exercise program: A social network analysis

Patterson, Megan S.; Heinrich, Katie M.; Prochnow, Tyler

Introduction: Depression is the leading cause of disability worldwide, with an estimated 300 million people (and counting) suffering

globally. Regular physical activity and positive social connections are two strategies for combating depressive symptoms. The purpose of this study was to assess if social connections created within a group-based exercise program were inversely related to depressive symptoms among its members.

Methods: 62 members of a group-based exercise program (73% female, age=34.6±9.9 years; 88% non-Hispanic white) completed online surveys measuring demographic information, physical activity, depressive symptoms, and social networks. Each respondent indicated who in the program they attended exercise classes with regularly. Linear network autocorrelation models (LNAM) determined associations between individual's depressive symptom scores and those of their social ties (i.e., network effects) while accounting for age, sex, race, physical activity scores, how long someone had been a member of the program, how many classes they attended per week, and network measures, including egocentric network density, in- and out-degree, closeness, and betweenness. All analyses were conducted in R.

Results: Depressive symptoms ($R^2 = .26$) were significantly related ($p < .05$) to age ($PE = .10$, $SE = .04$), sex ($PE = 2.15$, $SE = .90$), length of membership in the program ($PE = -.76$, $SE = .33$), egocentric density scores ($PE = -.06$, $SE = .02$), closeness scores ($PE = -.03$, $SE = .01$), and network effects ($PE = -.10$, $SE = .05$).

Conclusion: This study supports the inverse relationship between social connectedness and depressive symptoms. In this network of group exercisers, being younger, female, having more densely connected direct ties, and being more reachable/central within the network was related to lower depressive symptom scores. Further, people were likely to connect with others who were dissimilar to them based on depressive symptoms, potentially creating an opportunity for social support to transfer between dyads. Finally, longer-term participation was related to lower depressive symptoms. Longitudinal research could determine if the connections created

within the program help diminish depressive symptoms over time.

Board 318

Associations between Positive Childhood Experiences and Adulthood Incarceration

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

Background: Adverse childhood experiences (ACEs) have been shown to be linked to juvenile and adulthood criminal behaviors. In addition to adversity, there have been attempts to consider whether positive childhood experiences (PCEs) provide resiliency against future adverse health outcomes. However, there is a lack of understanding if this resiliency is replicable against future criminal behaviors in adulthood. This study investigated the association between PCEs and adulthood incarceration among the population with ACEs.

Methods: Data from the National Longitudinal Study of Adolescent to Adult Health (Add Health) Waves 2-5 (1995-2018) were used, with 1,375 participants <18 years old at Wave 2 who had one or more ACEs before adulthood and had no juvenile incarceration records. PCEs were measured by the sum of seven types of PCEs, including positive school experience, relationship with parents, self-efficacy, hobbies, safe neighborhood experiences, higher education expectations, and good general health (all in presence or absence). Two outcomes of adulthood criminal behaviors were examined, including initiation and persistence of prison entry, based on the history of incarceration across the 3 waves. Two logistic regressions were conducted to investigate the association between the number of PCEs and the two incarceration outcomes.

Results: Among the participants with ACEs, PCEs demonstrated negative associations with the initiation of adulthood incarceration (without prior juvenile incarceration) (OR=.80, p=.002) and the likelihood of

adulthood prison reentry (without prior juvenile incarceration) (OR=.82, p=.02).

Conclusions: The increase in positive childhood experiences is associated with a reduction in the risk of initiation and persistent incarceration during adulthood. Intervention efforts should target increasing overall positive experiences in intrapersonal perceptions, family and interpersonal relationships, and living environments to maximize prevention effects against future criminal behaviors.

Board 319

The Mediating Roles of Mental Problems and Racial Differences in the Linkage Between Social Media Use and E-cigarette Use Among American Youth

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

Purpose: An emerging line of research documented that social media use is linked to e-cigarette use among youth. However, less is known about the underlying mechanisms and racial differences for the effects. To fill this gap, our study examined the mediating roles of internalizing and externalizing problems in the association between social media use and e-cigarette use among youth. It also investigated racial differences in the aforementioned mediation associations.

Methods: The sample included a total of 4,913 U.S. nationally representative youth respondents in the Population Assessment of Tobacco and Health (PATH) Study Waves 3-5 (2015-2019, weighted N=12,375,593). Two weighted generalized structural equation models (GSEM) were used to examine the longitudinal mediation processes between youth's social media use frequency (Wave 3) and past-30-day e-cigarette use status (Wave 5) through internalizing and externalizing mental problems (Wave 4), respectively. Invariance tests were used to examine the racial group difference in the mediation processes.

Results: The results from the two mediation models showed that youth with high social

media use frequency at Wave 3 were more likely to use e-cigarettes at Wave 5 (total effect: ORs=1.21 and 1.22, respectively, both $ps<0.001$). Internalizing and externalizing problems at Wave 4 mediated the aforementioned associations (mediation proportions: 5.05% and 5.66%, respectively). Results of the invariance tests indicated a significant difference between Whites and non-White groups in the mediation processes (both $ps<0.001$).

Conclusions: Mental health problems followed by social media use served as a risk factor for e-cigarette use among U.S. youth. Our study suggests that interventions aiming to improve youth's mental health could subsequently temper e-cigarette use among youth social media users. Additionally, racial groups are differentially influenced by social media use and the following mental health problems. A health disparity lens is warranted in implementing the suggested interventions in tempering e-cigarette use among youth.

Board 320

Reliability and initial validity for measures of drunkorexia: Application of the Theory of Planned Behavior to Drunkorexia

Speed, Shannon; Ward, Rose Marie; Branscum, Paul; Barrios, Veronica; Budd, Kristen; Stackpole, Lucy; Haus, Lauren

Purpose: The current study evaluates the initial validity and reliability of an instrument measuring constructs from the Theory of Planned behavior (TPB) applied to three drunkorexia behaviors (restriction, excessive exercise, and purging).

Methods: College students were recruited (some were offered extra credit) and could opt to be entered to win a \$10 Amazon gift card for participation. TPB constructs (attitudes, perceived norms, perceived behavioral control (PBC), and intentions) for each behavior were evaluated using a newly developed survey. Analyses were performed to confirm the reliability (e.g., internal consistency) and validity: face and content validity via cognitive interviewing and an

expert panel, as well as construct validity via confirmatory factor analysis. Common methods to evaluate drunkorexia were also implemented (Drunkorexia Motives and Behaviors Scale [DMBS] and Compensatory Eating and Behaviors in Response to Alcohol Consumption Scale [CEBRACS]). All procedures had IRB approval

Results: Most students identified as "Woman" (63.2%, $n = 306$), White (80.0%, $n = 387$), and freshmen (28.6%, $n = 138$), with an average age 20.41 years ($SD = 2.13$). Intentions, attitudes, and PBC were positively and significantly related to alcohol intake and drunkorexia behaviors (DMBS, CEBRACS), while perceived norms were found to have a significantly negative association. While confirmatory factor analysis confirmed good construct validity for the three scales, not all relationships between variables were significant. Therefore, exploratory factor analysis was needed to further confirm validity. New combined variables had good Cronbach's alpha scores ($>.70$), and EFAs confirmed internal consistency reliability and good construct validity for restriction, exercise, and purging.

Conclusions: Investigators aiming to understand influential factors associated with drunkorexia decision-making (intention, attitudes, perceived norms, and PBC) can use these scales to explore more nuances of which drunkorexia behavior (restriction, excessive exercise and throwing up) is problematic among their priority population.

Board 321

Social media noise drowns out official and responsible health messaging: Deep-learning insights from a collection of tweets related to the global monkeypox outbreak

Valdez, Danny; Edinger, Andy; Lorenzo-Luaces, Lorenzo; Rutter, Lauren, A.; Bollen, Johan

The monkeypox outbreak provides a case study for the difficulties faced by public health messaging in the context of widespread

social media use. Our study highlights challenges faced by public health officials in providing accurate and timely information relative to the amount of social media noise inherent to this topic.

Objective: This study applies natural language processing (NLP) and deep-learning tools to underpin longitudinal discussions about monkeypox between May-June 2022.

Methods: We allocated a randomly selected (N=10,000) tweets about monkeypox for analysis using the following neural-network pipeline: (1) the Sentence Bi-directional Encoder from Transformers (S-BERT) to generate embeddings (or semantic similarity between tweets), (2) Principal Components Analysis (PCA) to reduce the complexity of our matrices, and (3) Uniform Manifold Approximation Projection (UMAP) with K-means clustering to project our data to project the evolution of topics over time. We lastly applied inductive qualitative coding to verify the content and scope of computer-identified topics.

Results: We identified seven distinct clusters. Clusters identified earlier in our data collection seemingly contained misleading information about monkeypox, including viewing monkeypox a sexually transmitted infection, assumptions monkeypox exclusively affects men who have sex with men, or deriding the outbreak and public health response as a political maneuver. Later topics, which followed early indications of misinformation, originated from verified public health outlets disseminating information on harm, precautions, and vaccine eligibility.

Discussion & Conclusion: Within a few weeks of the first reported monkeypox cases, mostly false, misleading, irrelevant, or damaging information started to circulate on social media. Official institutions, including the World Health Organization (WHO), acted promptly providing case reports and accurate information within weeks, but were overshadowed by rapidly spreading social media noise and virality of misinformation. Our results point to the need for real-time

monitoring of social media content to optimize public health responses.

Board 322

Family and peer factors associated with youth deception in tobacco use

Yang, Meng; Lin, Hsien-Chang

Purpose: The validity of self-reported tobacco use among youth has been challenged. Studies have identified the discordance between self-reported tobacco use and nicotine-related biomarker information among youth. However, no research has been conducted to investigate factors that are associated with youth deception when self-reporting tobacco use. In this study, we adapted Bristol and Mangleburg' model of youth deception to investigate youth's perceived parental reaction, normative peer influence, and tobacco advertisement, and associated youth deception in tobacco use.

Methods: This study used restricted data from Wave 5 (2018-2019) youth questionnaire of the Population Assessment of Tobacco and Health Study. Youth participants who completed the biomarker collection were included (unweighted N=1,569; weighted N=16,465,172). Youth deception in tobacco use was assessed by contrasting self-reported current tobacco use and urinary cotinine levels (39.1 ng/ml as the threshold to dichotomize tobacco use and non-use). Weighted logistic regression was employed to investigate whether perceived parental reaction, perceived normative peer influence, and tobacco advertisement exposure were associated with deception in tobacco use.

Results: Youth participants who perceived that their parents would be upset if the youth were caught using tobacco were less likely to deceive their tobacco use status (OR=0.11, p<0.01). Youth participants who were exposed to tobacco product advertisements were more likely to deceive their tobacco use status (OR=2.33, p<0.01). Youth's perceived normative peer influence was not

significantly associated with their deception in tobacco use ($p > 0.12$).

Conclusions: Our findings concluded that youth's perceived parental reaction and tobacco product advertisement exposure were significantly associated with youth deception in tobacco use. Researchers and pediatricians surveilling and estimating youth tobacco use solely based on self-reported data should consider aforementioned factors. Future studies should consider employing a longitudinal study design to further examine and confirm the effect of family, peer, and social factors on youth deception behavior in tobacco use.

Board 323

Using Public Health Surveillance Data to Explore the Relationship between Adverse Childhood Experiences and Fruit and Vegetable Intake among Adolescents

Mendoza, Ivan, D.; Banda, Jorge, A.; Giano, Zachary; Hubach, Randolph, D.

Purpose: Adverse childhood experiences (ACEs) have been related to numerous diet-related chronic diseases, yet few studies have examined the role ACEs have on specific diet patterns. The purpose of this study was to assess the extent to which total ACEs are associated with daily fruit and vegetable intake in a nationally representative sample of US adults.

Methods: 2019 Behavioral Risk Factor Surveillance System (BRFSS; $N = 418,268$) data were used to conduct multiple regression models. Total ACEs included the summed responses from the domains of abuse, household challenges, and neglect. Fruit and vegetables were reported by number of times consumed per day. The two fruit items included fruit (fresh, frozen, and canned) and fruit juice. The four vegetable items included leafy greens, fried potatoes, non-fried potatoes, and other vegetables. All fruit and vegetable items were analyzed separately to see which specific items drove the relationship between total ACEs and total FVI. The analysis controlled for poor mental

health days, sex, age, ethnicity, income, body mass index, and physical activity.

Results: Total ACEs were positively associated with daily intake of fried potatoes ($\beta = .008$, $p = .025$), other potatoes ($\beta = .008$, $p = .049$), and other vegetables ($\beta = .024$, $p < .001$). Total ACEs were negatively associated with daily intake of fruit (fresh, frozen, and canned) ($\beta = -.016$, $p < .001$). ACEs had non-significant relationships with leafy greens and fruit juice.

Conclusions: Findings suggests that those with increased ACEs scores report increased consumption of fried potatoes, non-fried potatoes, and other vegetables, and less of fruit. This could be attributed to toxic stress experienced by those with ACEs, particularly impacting those who use food as a stress coping mechanism. Findings underscore the need for public health and practitioners to support policies and programs which alleviate levels of toxic stress and help prevent future ACEs.

Board 324

Mental Health of Families with Autism Spectrum Disorder: A Systematic Review

Smith, Alison; Merrill, Ray, M

Introduction: This study explores parental and sibling mental health challenges associated with a child having autism spectrum disorder (ASD). Potential moderator and mediator effects of the association between ASD and family mental health are also considered, along with interventions and potential positive effects associated with ASD children.

Methods: A systematic review was conducted of peer-reviewed manuscripts involving mental health effects on mothers, fathers, and siblings of children with ASD. The accessed literature came from an electronic search conducted through October 2021. Well-known databases were used to access literature.

Findings: Because of behavioral problems of children with ASD, as well as additional emotional, communication, sleep, and delayed social problems, parents of children

with ASD experience greater familial stress. Mothers tend to experience more stress, anxiety, and depression than fathers do. Fathers tend to experience stress due to the mother's mental health challenges as well as a lack of confidence in raising a child with ASD. Added stress for both parties comes from strained marital relationships and other factors. Studies of siblings of children with ASD have shown positive effects in terms of self-concept and social competence, whereas other studies have shown negative effects such as low levels of prosocial behaviors, feelings of loneliness, and delays in developing social skills. Older male siblings have greater risk for behavioral and emotional difficulties and siblings later in the birth order have greater risk of feeling lonely and socially dissatisfied.

Discussion: Mothers gain greater positive outcomes by receiving assistance from family, friends, and professionals. Fathers feel empowered when involved in educational interventions that demonstrate how to care for their child with ASD. Constructive outcomes are achieved for parents of children with ASD through interventions.

Board 325

Attention Deficit Hyperactivity Disorder and Comorbid Mental Health Problems Associated with Increased Rate of Injury

Merrill, Ray, M; Merrill, Andrew, W; Madsen, M

Purpose: To describe the influence of attention deficit hyperactivity disorder (ADHD) and co-occurring mental health conditions on the rate of selected injuries.

Methods: A retrospective cohort study design was employed using medical claims data from the Deseret Mutual Benefit Administrators (DMBA). Mental health conditions, injury, medication, and demographic data were extracted from claims files for ages 4-64, years 2016-2020.

Results: Approximately 51.8% of individuals with ADHD had one or more co-occurring mental health conditions (anxiety [37.0%],

depression [29.9%], autism spectrum disorder (ASD) [3.6%], bipolar disorder [4.7%], obsessive compulsive disorder (OCD) [2.4%], schizophrenia [0.9%], and manic disorder [0.2%]). The rate of injury was 1.33 (95% CI 1.27 – 1.39) for ADHD only versus no ADHD and 1.62 (95% CI 1.56 – 1.68) for ADHD and comorbid mental health conditions versus no ADHD, after adjusting for age, sex, salary, and year. Cases with ADHD but no co-occurring mental health conditions alone versus no ADHD were at increased rate of each of 12 types of injury. The increased rate was noticeably more pronounced for ADHD cases with one or more co-occurring mental health conditions versus no ADHD. The greatest increased rate of injury was among individuals with schizophrenia, followed by bipolar disorder and OCD. Co-occurring autism disorder does not increase the rate of injury, but lowers the rate. Finally, the number of co-occurring mental health conditions among ADHD cases was positively associated with increased injury rate (6% for one, 30% for two, 65% for three, and 129% for four).

Conclusions: ADHD is positively associated with an increased rate of injury. Co-occurring mental health conditions further increase the rate of injury among those with ADHD.

Board 326

Within- and Cross-Mental Health Disorder Correlations in Husband-and-Wife Pairs

Merrill, Ray, M

Background

Mental health disorders can adversely affect relationships and are heritable. Yet, there is a high prevalence of mental illness in spouses and partners of those with mental illness. This study will assess within- and cross-mental health disorder correlations in husband-and-wife pairs.

Methods

A cross-sectional study design was employed using medical claims data from the Deseret Mutual Benefit Administrators (DMBA), linked to demographic information from employee eligibility files, 2020.

Analyses involved 21,027 contract holders aged 18–64 (68.6% male, 31.4% female), with sub-analyses on 16,543 married individuals. Summary statistics, as well as rates, and rate ratios adjusted for age, sex, and dependent child status were calculated to describe the data.

Results

The rate of stress is 19.2%, anxiety is 26.4%, and depression is 23.6% in spouses of contract holders with the same respective disorders. Rates of stress, anxiety, and depression in a spouse are greatest if the contract holder has schizophrenia. Rates of mental disorders in wives of male contract holders experiencing mental disorders tend to be greater than the rates of mental illness in husbands of female contract holders experiencing mental disorders. Rates of stress, anxiety, and depression in spouses of contract holders tend to be 2-3 times greater when the contract holder has a mental health disorder, after adjusting for the contract holder's age, sex, dependent child status, and difference in age within husband-and-wife pairs. However, differences in the magnitude of observed associations varied. The rate of a spouse having stress is 5.5 times greater if the contract holder has schizophrenia (vs. does not have schizophrenia), whereas the rate of a spouse having stress is 1.4 times greater if the contract holder has sleep apnea (vs. does not have sleep apnea).

Conclusion

Mental health disorders in spouses of contract holders are greater if the contract holder has a mental health disorder, more so when the contract holder has more serious mental illness. Both within- and cross-mental disorder correlations exist. These results have implications on relationship quality and the mental health of offspring.

Board 327

A Formative Evaluation of an Adolescent Online E-Cigarette Prevention Program

Hanson, Carl; Merrill, Ray, M

Purpose. This study is a formative evaluation of an adolescent online e-cigarette prevention program (Clearing the Vapor) giving attention to identifying higher risk adolescent populations, confirming the theory of change, and assessing short-term outcomes.

Design/methodology/approach.

The evaluation was conducted using online pretest and posttest survey data collected from adolescent program participants age 10-18 from 2019 to 2021. Analyses included risk ratios on perceived risk, self-efficacy and behavioral intentions across demographic variables. Pretest and posttest comparisons were conducted with analysis involving the t test and the McNemar test.

Findings. Prevalence of e-cigarette use was higher among males, older adolescents, and in racial/ethnic groups other than Whites and Asians. Adolescents with lower confidence to say “no” were more likely to use e-cigarettes. Greater perception of harm by using e-cigarettes increased the likelihood of adolescents feeling competent to explain to peers the harmful effects of e-cigarettes. Mean change in commitment levels to not use e-cigarettes increased for males and females, all ages, and racial/ethnic groups other than non-Hispanic Blacks and American Indians. Improvement in non-Hispanic Whites was significantly greater than for non-Hispanic Blacks, American Indians, and Hispanics.

Originality. Improvement in programming should give careful attention to the incorporation of more prevention activities and to materials tailored specifically to racial/ethnic participants. As a theory of change, findings support the utility of the Clearing the Vape prevention programming to address perceptions of harm that e-cigarettes are safe, confidence in explaining the harmful effects of use, and the development of skills to resist use.

Board 328

Can CrossFit and Weight Training Physical Education Prime Students for Lifelong Physical Activity Behaviors?

Heinrich, Katie M; George, Jason; Crawford, Derek A; Beattie, Cassandra M; Brin, Halle

Purpose: The World Health Organization urges action to increase physical activity among the 75-85% of youth not meeting guidelines. Traditional physical education (PE) programs emphasize team sports rather than developing movement competency, work capacity, and confidence. Conversely, CrossFit (CF) workouts focus on “constantly varied, high intensity, functional movements.” Weight training (WT) classes also provide movement education to students. No research has examined impacts of CF and WT on high school students’ movement competency, work capacity, and confidence, which we examined over the 2021-22 school year.

Methods: High school students taking CF (N=20, 35% female) and WT (N=19, 16% female) PE classes participated. Measurements (movement competency for squat, lunge, push, pull, brace, hinge, and rotation; work capacity for Karen [150 wallball-throws for time] and Cindy [as-many-repetitions-as-possible in 20 minutes of 5 pull-ups, 10 push-ups, and 15 squats]; and Sense of Self survey) were taken in August, December and May. For non-normal data, chi-square analyses were conducted using Friedman’s test and Wilcoxon Sign Rank tests; otherwise 2X3 RMANOVAs were conducted.

Results: Significant (non-parametric) improvements were found for the squat (CF and WT $p < 0.001$), lunge (CF and WT $p < 0.01$), push (CF $p = 0.013$, WT $p = 0.003$), pull (WT $p = 0.004$), hinge (CF $p = 0.001$, WT $p = 0.016$), and rotation (CF $p < 0.001$, WT $p = 0.034$). Significant main effects of time were found for Karen, $f(2,16) = 18.351$, $p < 0.001$, $\eta^2 = 0.696$ (CF $\Delta -3:23$, WT $\Delta -3:30$), and Cindy, $f(2,28) = 18.70$, $p < 0.001$, $\eta^2 = 0.573$ (CF $\Delta +188.5$ repetitions, WT $\Delta +141.4$ repetitions). There was a significant

group-by-time interaction for confidence to “take part in any sport/physical activity that I choose,” $f(2, 50) = 5.327$, $p = 0.008$, $\eta^2 = 0.176$, where the CF group increased and the WT decreased.

Conclusions: Both groups experienced significant improvements in movement competency and work capacity; the CF group improved confidence. Future research should longitudinally examine more participants and track impacts on long-term physical activity behaviors.

Board 329

Physical Activity and Cortisol Regulation: A Meta-Analysis

Moyers, Susette, A.; Hagger, Martin, S.

Purpose: Physical activity participation is associated with effective stress coping, as indicated by decreases in both physiological stress reactivity and perceived stress. Quantifying the effect of physical activity on the diurnal regulation of one key physiological stress indicator, the stress hormone, cortisol, across studies may demonstrate the extent to which physical activity participation is associated with diurnal HPA-axis regulation.

Method: We meta-analytically synthesized research examining relations between physical activity participation and indices of HPA-axis regulation: the diurnal cortisol slope and the cortisol awakening response. We also examined candidate moderators of the association.

Results: The analysis revealed a small, non-zero negative averaged correlation between physical activity and the diurnal cortisol slope ($r = -0.043$, 95% CI [-0.080, -0.004]). Examination of sample sociodemographic differences, study design characteristics, cortisol measurement methods, and physical activity variables as moderators revealed few changes in the averaged physical activity-diurnal cortisol slope correlation. Findings did not support lower levels of variability in the mean cortisol awakening response at higher levels of physical activity participation, and moderator analyses showed little

evidence of reductions in the observed heterogeneity for this effect. Findings suggest higher physical activity is associated with a steeper diurnal cortisol slope. However, the cortisol awakening response did not differ by physical activity level.

Conclusion: Future studies testing the physical activity and cortisol regulation association should use standardized measures of physical activity including frequency, intensity, and duration of participation, follow guidelines for better quality cortisol sampling collection and analysis, and test relations in large-scale empirical studies to confirm the direction and causality of the effect.

Board 330

Measuring the Importance Fathers Place on Modelling Healthy Behaviors

Young, Michael; Zullig, Keith; Donnelly, Joseph; Fluegeman, Stephanie

Purpose: Father involvement has been associated with a number of positive child outcomes. Fathers can serve as important models for their children. Limited work, however, has been done relative to role fathers can play in modeling healthy behaviors. The purpose of this study was to develop and validate a scale to measure the importance fathers place on modeling healthy behaviors for their children.

Methods: Researchers developed 14 statements related to fathers and health; scored on a four-point Likert-type scale. Two rounds of review by an expert panel resulted in an eight-item scale. Men (n=369, mean age 36.6, sd 11.1) enrolled in a responsible fatherhood program, completed a questionnaire which included the eight items. The questionnaire responses were randomly assigned to group A or group B and subjected to psychometric analysis.

Results: Chi-square tests showed no difference between Group A and Group B on demographic variables. Responses from Group A were subjected to exploratory factor analysis, with varimax rotation, resulting in two factors, factor 1, a five-item factor

labeled, “modeling positive health behaviors,” and factor 2, a three-item factor labeled “avoiding negative health behaviors.” Factor 1 loadings ranged from .598 to .875 (eigenvalue = 3.50, alpha = .84), explaining 43.8% of the variance. Factor 2 loadings ranged from .699 to .792 (eigenvalue = 1.23, alpha = .76), explaining 15.5% of the variance. Confirmatory factor analysis confirmed the existence of these two factors in Group B. Factor 1 loadings ranged from .612 to .877 (alpha = .76). Factor 2 loadings ranged from .705 to .798 (alpha = .68).

Conclusions: Preliminary results suggest the scale displays adequate estimates of validity and reliability. Future research should consider using the scale in examining the effects of responsible fatherhood programs, especially when measurement brevity is important.

Board 331

“I don’t have room for another one”: Reproductive interconception care barriers and facilitators among women recently pregnant and homelessness

Galvin, Annalynn M.; Akpan, Idara N.; Lewis, Melissa A.; Walters, Scott T.; Thompson, Erika L.

Background: Women experiencing homelessness may benefit from reproductive interconception care to reduce unintended pregnancy and short interpregnancy intervals. To improve reproductive interconception care outcomes, it is critical to understand barriers and facilitators using the perspectives of women with recent lived experiences within a local continuum of care. This sequential explanatory mixed-methods study aimed to identify specific information, motivation, behavioral skills, and macro-level barriers and facilitators to reproductive interconception care for women recently pregnant and homeless.

Methods: For 2016-2019 Pregnancy Risk Assessment and Monitoring System data (n=100,706 postpartum US women; 2.4% homeless), adjusted logistic regression models estimated odds ratios between

housing status and reproductive interconception care outcomes. Based on significant findings, qualitative semi-structured interviews were developed for local women recently pregnant and homeless in 2022 (n=12). Participants were interviewed about barriers and facilitators to significant reproductive interconception care outcomes. Interview transcriptions were transcribed, coded, and thematically analyzed.

Results: Since quantitative findings demonstrated that postpartum women experiencing homelessness in the last 12 months had lower odds of attending a postpartum maternal visit (aOR=0.45, 95%CI 0.37, 0.56) and higher odds of having a provider conversation about birth intervals (aOR=1.30, 95%CI 1.07, 1.57) when compared to similar stably housed women, interview guides specifically focused on attending maternal postpartum visits and birth spacing. Key themes included information (e.g., misconceptions about pregnancy and postpartum period), motivation (e.g., attitudes about interconception care experiences, perinatal social influences on birth spacing), behavioral skills (e.g., perceived self-efficacy related to attending maternal postpartum visit), and system-level factors (e.g., housing effects on future child desire).

Conclusion: Findings may facilitate current interconception research, clinical practices, and public policy that use the opportune interconception period to reduce unintended pregnancy, short birth intervals, and adverse birth outcomes in future pregnancies, thus improving pregnancy outcomes and the health of women recently homeless and pregnant.

Board 332

Cervical cancer screening and associated factors among rural women

Shambi, Dame Banti; Nigussei, Tadesse

Background: Cervical cancer screening is the method of early detection of cervical cancer before occurrence of the disease.

Cervical cancer is a major public health problem worldwide, and low-and middle-income countries are particularly affected.

Purpose: To assess the cervical cancer screening and associated factors among rural women in West Ethiopia 2022.

Methods: A community-based cross-sectional study was conducted. Multi stage sampling technique was used to select 867 study participants. The data were collected using a structured interviewer-administered questionnaire. Data were entered using EpiData manager version 4.6 and exported to SPSS version 26 for analysis. Multivariable logistic regression analysis was performed and variables with a p-value of <0.05 were taken as significant factors associated with cervical cancer screening. Qualitative data were collected by in-depth interviews, translated, transcribed, coded, categorized, and triangulated with quantitative data.

Result: From the total of 852 study participants, only 124 (14.6%) of women have been screened cervical cancers. history of sexual transmitted infection [AOR =4.48, 95% CI: 1.80,11.19], history of gynecologic examination [AOR =2.68, 95% CI: 1.57,4.60], not prefer gender for screening [AOR=4.51, 95% CI: 2.75,7.40], Adequate knowledge [AOR=4.86, 95% CI: 2.48,9.50], favorable attitude [AOR=4.29, 95% CI: 2.47,7.45], high perceived susceptible [AOR=4.05, 95% CI: 2.37,6.95], and low perceived barriers [AOR=2.30, 95% CI: 1.30,4.05] were significant factors for cervical cancer screening

Conclusion: The study revealed the cervical cancer screening is low. History of sexually transmitted infection, history of gynecological examination, not gender preference for screening, knowledge, attitude, perceived susceptibility and perceived barriers were factors associated for cervical cancer screening. Hence, to improve cervical cancer screening, raising awareness of women is recommended.

Board 333

Menthol cigarette use and transitions to other tobacco products by sex, race/ethnicity, and age group in U.S. adults

Park, Hyejin

Introduction: Menthol cigarettes are the major flavored tobacco product among U.S. adults followed by the popularity of emerging flavored electronic nicotine delivery system (ENDS). The use prevalence of menthol cigarettes among U.S. adults tends to decrease by time from 2010 to 2016. However, lack of evidence between the transition behavior between menthol cigarettes and flavored ENDS are overrating the reduction of menthol cigarette use by concealing the possibility of menthol cigarette users switching to other flavored tobacco products like flavored ENDS. This research longitudinally examines the transition behavior between menthol cigarette use and flavored ENDS use among U.S. adults.

Methods: We applied a Markov multistate transition model to the Population Assessment of Tobacco and Health Study waves 1-4 (2013-2018). We examined transition rates between menthol cigarette, non-current, ENDS and dual use states and estimated hazard ratios for age, sex, and race/ethnicity.

Results: Menthol cigarette use was persistent among adults, with 61.8% (95% Confidence Interval (CI) 59.2% to 63.9%) of exclusive menthol cigarette users and 19.4% (95% CI 17.6% to 21.1%) of dual users remaining menthol cigarette users (either exclusive or dual) after one wave. Among ENDS users, 74.7% (95% CI 62.7% to 76.8%) of exclusive ENDS users and 12.0% (95% CI 10.4% to 14.2%) of dual users remained ENDS users (either exclusive or dual) after one wave. Dual users of menthol cigarettes and ENDS were less likely to stop using menthol cigarettes than exclusive menthol cigarette users (Hazard Ratios 12.5, 95% CI 11.1 to 14.0). Transition rates varied among sociodemographic groups.

Conclusion: A substantial proportion of adult menthol cigarette smokers transitioned across flavored tobacco use states over the course of 4 years. Race had greater odds of transitioning from menthol smoking to non-current smoking. Findings suggest health disparity in menthol cigarette smoking transitions among U.S. adults.

Board 334

Internalized Homonegativity and Somatic Anxiety Distinguish Former from Current Cigarette Smokers and may Represent Cessation Targets for Intervention in LGB Communities

Robinson, Ty, A; Smith, Nathan, G; Obasi, Ezemenari, M; Reitzel, Lorraine, R

Purpose: Lesbian, gay, and bisexual (LGB) adults smoke at higher rates than the overall U.S. population (20% vs 14%). Understanding what characterizes successful cessation may aid in intervention development and, ultimately, the reduction of smoking-related health inequities in the LGB community. Psychosocial stressors and their cognitive and physical sequelae have been associated with smoking and smoking relapse in a quit attempt; although most smokers want to quit, motives for continued smoking include the perception that it relieves stressor-attributed anxiety symptoms. These factors, however, have been understudied among LGB adults. Guided by Hatzenbuehler's integrative mediation framework, this study examined how a non-adaptive cognitive response to LGB minority stressors (namely, the internalization of societal homonegativity) might relate to the manifestation of physical anxiety symptomatology and reduce the likelihood of being a former (versus current) smoker.

Methods: Participants (N=77; Mage=42±14; 62% cisgender male; 30% cisgender female; 8% transgender; 49% White; 37% Black; 11% Latinx) were recruited from Houston, Texas, as part of a larger study on LGB health. Participants in this analysis smoked ≥100 cigarettes/lifetime, and successfully

quit (n=23 former smokers) or remained daily or occasional smokers (n=54 current smokers). The Lesbian, Gay, and Bisexual Identity Scale and the State-Trait Inventory for Cognitive and Somatic Anxiety were used to assess internalized homonegativity and somatic anxiety, respectively. Mediation was tested with the PROCESS macro for SPSS. Results: Current smokers experienced higher internalized homonegativity rates than former smokers (former=0, current=1; $b=.6495$, $p=.0168$). Internalized homonegativity was positively associated with somatic anxiety ($b=.1650$, $p=.0008$), and the association between internalized homonegativity and smoking status was mediated through somatic anxiety [.0002, .6539]. The proportion of the mediated effect was 17.1%.

Conclusion: This preliminary work may suggest that internalized homonegativity and somatic anxiety represent malleable intervention targets for LGB smokers who want to develop different minority stress coping methods.

Board 335

Dietary Behaviors and Nutritional Beliefs Among Black Men with Previously Undiagnosed Diabetes and Prediabetes

Rony, Melissa; Quintero-Arias, Carolina; Osorio, Marcela; Ararso, Yonathan; Leigh, Chike; Norman, Elizabeth; Ravenell, Joseph, E; Wall, Stephen, P; Lee, David, C

Objective: This study uses qualitative interviews with Black men with HbA1c levels consistent with previously undiagnosed diabetes or prediabetes to better understand possible contributing factors to the disproportionate diabetes burden.

Research Design and Methods: We recruited Black men without a prior diagnosis of diabetes from Black-owned barbershops in Brooklyn, NY. Participants were screened using point-of-care HbA1c tests. Among those with HbA1c levels within prediabetes or diabetes thresholds, qualitative interviews were conducted to uncover prevalent themes related to their overall health status, health

behaviors, utilization of healthcare services, and experiences with the healthcare system. Results: 52 Black men without a prior diagnosis of diabetes and a HbA1c reading at or above 5.7% were interviewed. Many participants stated that they do not eat regularly. The most common reasons participants mentioned for eating one meal a day or less are time constraints and the belief that it is healthier. Furthermore, while all participants expressed that diabetes has to do with abnormal blood sugar levels, many participants were unsure of how one develops diabetes. Lastly, some participants mentioned insulin injections, loss of a limb, and death as consequences of diabetes.

Conclusion: Our study identifies factors that may contribute to disparities in healthcare diabetes burden and diabetes outcomes amongst Black men with previously undiagnosed prediabetes and diabetes. To help alleviate the disparity in diabetes among Black men, healthcare providers should take a more active role in helping their patients understand type 2 diabetes, and the differences between type 1 and type 2 diabetes and the risk factors. Additionally, providers should promote sustainable healthy eating habits such as encouraging patients to look for more lean proteins and low glycemic foods when eating out. Lastly, this study highlights the need for accessible diabetes education and culturally competent nutritional education in high-risk populations, such as Black communities.

Board 336

Healthcare-seeking Behaviors Among Black Men with Previously Undiagnosed Diabetes and Prediabetes

Rony, Melissa; Quintero-Arias, Carolina; Osorio, Marcela; Ararso, Yonathan; Leigh, Chike; Norman, Elizabeth; Ravenell, Joseph; Wall, Stephen; Lee, David

Objective: Given the significant disparities in diabetes burden, this study uses qualitative interviews with Black men with HbA1c levels consistent with previously undiagnosed diabetes or prediabetes to understand

possible factors for underutilization of healthcare.

Research Design and Methods: We recruited Black men from Black-owned barbershops in Brooklyn, NY, who were screened using point-of-care HbA1c tests. Among those with HbA1c levels within prediabetes or diabetes thresholds, qualitative interviews were conducted to uncover prevalent themes related to their overall health status, health behaviors, utilization of healthcare services, and experiences with the healthcare system. We used a theoretical framework from the William and Mohammed Medical Mistrust Model to guide our qualitative analysis.

Results: 52 Black men without a prior diagnosis of diabetes and a HbA1c reading at or above 5.7% were interviewed. Many participants stated that they regularly seek medical advice from someone other than their primary health provider. The most common sources participants stated were family members and friends, and self-help resources. Furthermore, some participants expressed medical mistrust as the primary reason for not consulting with their healthcare provider about their health questions.

Conclusion: Our study identifies factors that may contribute to disparities in healthcare utilization and diabetes outcomes amongst Black men with previously undiagnosed prediabetes and diabetes. To help alleviate the disparity in diabetes burden among Black men, healthcare providers should take a more active role to engage in understanding the specific healthcare needs and expectations of each patient, especially those who are in high-risk populations.

Board 337
Translating Community Level Health Data into Multifunctional Urban Green Spaces

Lafrenz, Andrew, J

Purpose: This research focused on testing a multidisciplinary, community-involved health behavior framework to drive the UGS design process. The aim of this study was: 1) to use community level data and feedback to better

understand the intersectionality of physical health, psychological wellbeing, and social cohesion across the lifespan and 2) utilize collected data to translate research into meaningful systemic policy and environmental health related changes by create a multifunctional UGS plan that enhances nature therapy, natural play, and sports and recreation.

Methods: A mixed methods approach included analyzing community health assessment data (236 survey responses), community forum and survey feedback (157 survey responses), local urban green space inventory, and environmental assessment and impact data to develop a design plan that maximize the greatest potential health benefits for the greatest proportion of the population in a community.

Results: Community health data indicated a strong relationship between the availability of places to be physically active in the community and higher ratings of mental (aOR = 1.80) and physical (aOR = 1.49) health. Qualitative data indicated community members prioritized the need for more nature trails and more multifunctional parks and greenspaces.

Conclusions: The creation and utilization of the proposed community-inclusive and health behavior focused framework resulted in a UGS design that prioritized the needs of the community and provided evidence-informed strategies to improve the health of local residents. This paper provides unique insight into novel measurement and methods for translational health behavior research.

Board 338

Predictors of abstinence among young adult smokers enrolled in a real-world social media-based smoking cessation program

Lyu, Joanne, C; Meacham, Meredith; Nguyen, Nhung; Ling, Pamela, M

Purpose: Social media channels are promising for delivering smoking cessation support to young adult smokers. This study aimed to identify factors associated with

abstinence after treatment among young adult smokers enrolled in a real-world Facebook-based smoking cessation program.

Methods: The analytic sample consisted of 261 participants (aged 18-30) who completed both the baseline survey and the follow-up survey at 3 months.

Results: In multivariable logistic regression analyses, participants aged 25-30 years (vs. 18-24 years old), past 30-day e-cigarette users (vs. non-users), and past 30-day alcohol users (vs. non-users) were less likely to report 7-day abstinence at the 3-month follow-up. Non-daily smokers (vs. daily smokers) and those with past-year quit attempts (vs. those without past-year quit attempts) were more likely to report abstinence.

Conclusions: Findings suggest that e-cigarette use and alcohol use among young adult treatment-seeking smokers was associated with a lower rate of quitting smoking, perhaps because these behaviors are associated with heavier smoking. Smoking cessation programs for young adults may need to explicitly address other nicotine product and substances used with cigarettes, such as e-cigarettes and/or alcohol.