

# **Fall Research Symposium Additional Projects**



**Presented by**

**UF**

**College of Public Health  
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# **Examining Mobile Ecological Momentary Assessment (Mema) Compliance In A Youth Sample**

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## **Background**

Mobile ecological momentary assessment (mEMA) is increasingly used for repeated, naturalistic data collection. A significant potential limitation of mEMA is poor compliance to study protocol, and mEMA studies with youth report suboptimal compliance rates (<70%). The present study examines 1) rates of EMA compliance in a youth sample over time, 2) text message engagement and self-reported motivators of study participation as predictors of compliance, and 3) differences in compliance across group membership including age, gender, race/ethnicity, and SES.

## **Methods**

The sample in this study were US high school students recruited from social media as part of a larger study examining alcohol content exposure in the media. The final sample (N=100, Mage=16.21, SD=0.74, 53% female, 17% gender nonbinary, 51% minoritized race, 29% Hispanic/Latine, 39% with parents with at least a 4-year degree) ranked and rated their motivations for study enrollment, and completed two, 21-day mEMA bursts over a 5-month duration. Multilevel modeling estimated participant daily compliance rates nested within data bursts, and variables of text engagement, motivators, and group membership were tested as predictors.

## **Results**

An ICC value of 0.36 for daily participant compliance indicated that MLM was appropriate. For aim 1, mean compliance in our sample was 82.59%, and decreased by 9.4% from burst one to two. For aim 2, motivator ratings for "fun" ( $\beta=-0.015$ ,  $p=0.007$ ) was significantly predictive of compliance between bursts and for "learning about social media" ( $\beta=0.001$ ,  $p=0.003$ ) was significantly predictive of compliance within bursts. Text engagement (M=8.02, SD=7.95), mean motivator rating (M=5.32, SD=1.50), and top-ranked motivator ("money") were not significant predictors. For aim 3, Hispanic/Latine participants demonstrated greater decrease in compliance within ( $\beta=-0.004$ ,  $p=0.02$ ) and between bursts ( $\beta=-0.087$ ,  $p=0.017$ ), whereas Asian participants demonstrated increased compliance between bursts ( $\beta=0.092$ ,  $p=0.027$ ). No group differences in text engagement or motivators were identified.

## **Conclusions**

The present study found acceptable rates of overall compliance in this youth sample that fluctuated within bursts and decreased between bursts 1 and 2. Significant differences in compliance were identified by self-reported motivators for participation and by race/ethnicity. Preliminary study protocol recommendations to improve mEMA compliance rates may include intensive orientation and culturally-responsive engagement that considers motivation for enrollment.

## **Source of Funding**

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# **Understanding Medical and Dental Trainee Decision Making in Alcohol Screening: A Preliminary Analysis**

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## **Background**

Chronic heavy alcohol use increases risk for adverse health outcomes. Racial/ethnic discrimination predicts poor health status, including elevated risk for alcohol-related problems. Similarly, research among Hispanic/Latino/a/x (H/L) populations suggests that compared to non-Hispanic individuals (NH), H/L experience more barriers to accessing and engaging in treatment for alcohol use. Previous vignette studies regarding pain have assessed provider bias using the lens model, showing patient demographics are often used as cues to make treatment decisions. This study aimed to explore differences in alcohol use assessment and referral, including whether medical and dental trainees may exhibit ethnicity-related biases.

## **Methods**

We conducted preliminary analysis among 33 medical and 56 dental trainees (n = 89) using 32 clinical case vignettes with varied sex, age, ethnicity, and drink frequency cues. Trainees used 0-100 visual analog scales (VASs) to make decisions on likelihood of discussing the patient's alcohol use, likelihood the patient has AUD, comfort discussing alcohol use directly, and likelihood of referring to AUD-related treatment. Individual idiographic regressions were conducted to characterize decision-making policies based on each cue. Group-level analysis determined influence of trainee ethnicity on use of patient ethnicity in each clinical rating scale.

## **Results**

As predicted, 100% of trainees who had a reliable decision-making policy used the drinking frequency cue. Results supported hypotheses that ethnicity would influence trainee's treatment decisions: 27 to 54% of trainees used ethnicity as a reliable cue, most commonly to the detriment of H/L patients. Finally, we hypothesized that trainees' own ethnicity would moderate the effect of patient ethnicity treatment decisions. However, no significant interactions were found ( $p > 0.182$ ).

## **Conclusions**

Results indicated ethnic biases against H/L patients for a significant minority of the sample, suggesting that medical and dental trainees, regardless of their own ethnicity, could carry these biases into their careers and ultimately contribute to barriers of treatment for alcohol use among H/L patients.

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