



# Research Week 2022

## Preliminary construct validity of the REDUCE-HARM: An interprofessional measure of attitudes and confidence with core addiction concepts in pre-clinical health professions students.

Dana Button, Patrick Brown, Rebecca Harrison, Ximena Levander  
buttond@ohsu.edu  
School of Medicine, Oregon Health and Science University, Portland, OR

### Keywords

harm reduction, education, survey, addiction, interprofessional

### Abstract

#### Background:

Existing survey measures lack contemporary concepts in addiction care and are not designed for pre-clinical health professions students. For this reason, we developed the REDUCE-HARM (an interprofessional attitudes and confidence in addiction treatment measure) but further investigation of its construct validity is needed.

#### Methods:

We sent the REDUCE-HARM, to pre-clinical nursing, pharmacy, and medical students at four large academic medical centers across the United States from December 2021 - February 2022. Participants provided information on demographics, experience with addiction care, and filled out the 24 attitudes and confidence items. Construct validity was evaluated in the full REDUCE-HARM and the predetermined attitudes and confidence sub-scales with Cronbach's alpha and principal component analysis (PCA). We used t-tests to compare the attitude and confidence scores between participants who had experience working with people who use drugs (PWUD) or had already taken an addiction focused elective.

#### Results:

Of the 171 participants who completed the survey, 69% were female, 46% white, and 56% had worked with people who use drugs or taken an addiction elective. 48% of participants were enrolled in medicine, 29% in pharmacy, and 23% in nursing programs. Cronbach's alphas were 0.91 (95% CI 0.90 – 0.93), 0.80 (95% CI 0.76 – 0.83), and 0.94 (95% CI 0.92 – 0.95) for the REDUCE-HARM, attitudes, and confidence sub-scales, respectively. PCA indicated a two-factor structure of the REDUCE-HARM, a two-factor structure of the attitudes sub-scale, and a one-factor structure of the confidence sub-scale. Differences in mean attitude and competency scores among those with prior experience working with PWUD or an addiction elective were statistically significant (attitudes,  $p = 0.026$ ; confidence,  $p < 0.001$ ).

## Conclusions:

This analysis supports the construct validity of the REDUCE-HARM and its use for measuring health professions students' attitudes and confidence in core addiction concepts. Future research should evaluate reliability and criterion validity of this measure.