A Brief Digital Health Intervention Was Associated with Less Pain and Anxiety in the Clinic Waiting Room

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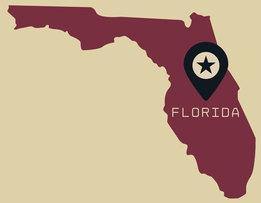
Background

- A multi-location, **multi-specialty free clinic for uninsured**, low-income patients in Central Florida
- Offers excellent quality care but **wait times often exceed 3 hours,** causing increased stress, discomfort, and dissatisfaction in patients



Brief MBIs Effects on Idle Wait Times Include:

1. Reducing Pain Intensity
2. Reducing Pain Unpleasantness
3. Reducing Anxiety

(Hanley et al., 2024; 2025)

- Little research has been done on the applications of brief MBIs in **low-income, uninsured, and linguistically diverse populations**

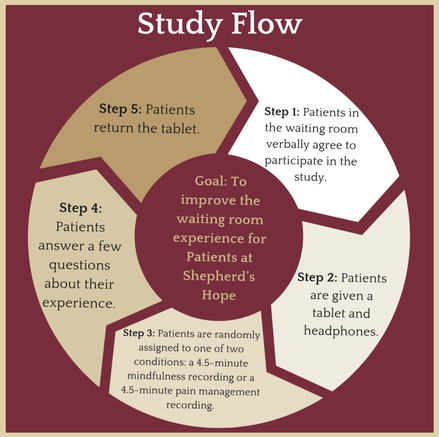
Methods

Overview

- This study evaluated the effects of a brief, audio-guided MBI on p**ain intensity, pain unpleasantness, and anxiety** among patients at Shepherd's Hope compared to a pain education control condition.
- Both interventions were time- (i.e., 4.5 minutes) and attention-matched. English and Spanish versions were available.
- **67 participants** (English: n= 33; Spanish: n= 34) completed the full intervention.

Implementation

- **Goals:** Ensure efficient clinic flow by minimizing staff burden
- **How?** Volunteer RAs deliver the intervention to patients after rooming while waiting alone in the consultation room



Discussion

- During the time patients wait for care, audio-delivered interventions can **significantly decrease acute clinical symptoms**.
- Although pain intensity, pain unpleasantness, and anxiety all declined over time, the effectiveness of mindfulness compared with pain management education in reducing anxiety differed **depending on language and the type of intervention**.
- Even though mindfulness has shown promise for relieving anxiety in this underserved population, further investigation is necessary to improve its effectiveness as a pain management tool.

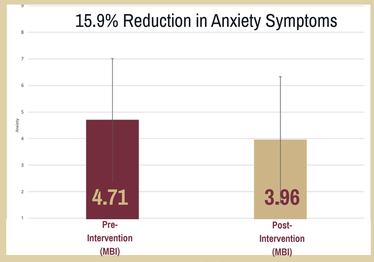
References

Results

- Primary outcomes included anxiety, pain unpleasantness, and pain intensity and were assessed pre-intervention and post-intervention. Separate mixed repeated-measures analyses of variance (ANOVAs) were conducted for each outcome.

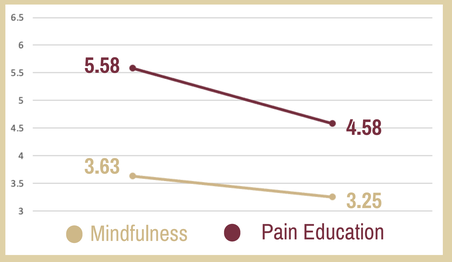
Anxiety

Overall

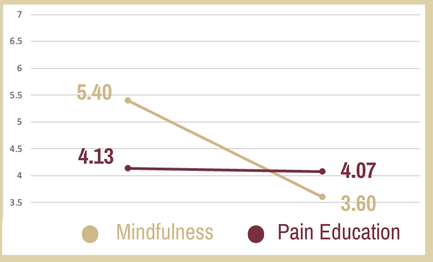


- The main effect of time ($F(1, 41) = 8.68$, $p = .005$, partial $\eta^2 = .18$) indicates anxiety symptoms decreased from pre- to post-intervention.

Spanish

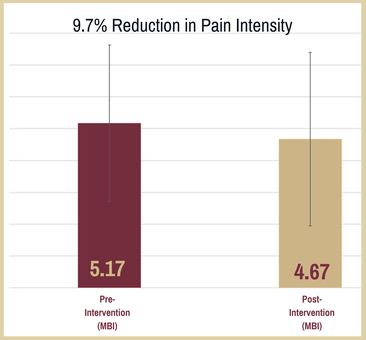


English



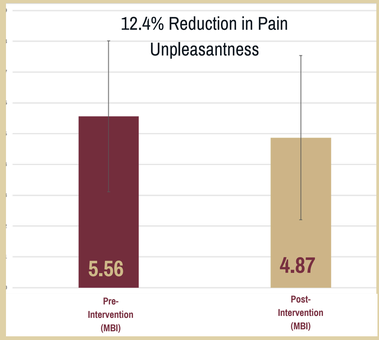
- **The time × group × sample interaction was significant**, $F(1, 41) = 4.59$, $p = .038$, partial $\eta^2 = .10$, suggesting that changes in anxiety over time varied by intervention type and language sample.

Pain Intensity



- The main effect of time ($F(1, 44) = 4.84$, $p = .033$, partial $\eta^2 = .10$) indicates pain intensity decreased from pre- to post-intervention.

Pain Unpleasantness

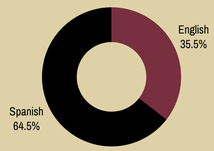


- The main effect of time ($F(1, 41) = 8.17$, $p = .007$, partial $\eta^2 = .17$) indicates pain unpleasantness decreased from pre- to post-intervention.

Overall Interest in Additional Pain Management Resources

Interest by Language

Interest in additional resources differed significantly by language, $\chi^2(1, N = 64) = 6.22$, $p = .013$.



Interest by Type of Pain

Interest in additional resources also differed based on pain chronicity, $\chi^2(1, N = 64) = 4.44$, $p = .035$.