

EMOTIONAL CONNECTION: DEVELOPING A MOBILE INTERVENTION FOR SOCIAL AND EMOTIONAL DYSFUNCTION

THE PROBLEM



Mental health issues cause relationship problems due to difficulties in **emotion perception**.

Emotional distress hinders **emotion perception** by causing people to ignore positive emotions in favor of negative ones.



STUDY: Can a **mindful breathing intervention** reduce distress to improve emotional perception?

PROCEDURE

Sample = 80 adults (w/ emotion regulation issues)

DAY 01

INTAKE SESSION (2-4 hrs)
Assessed for psychiatric diagnoses



TRAINING SESSION (1.5 hrs)

Randomly assigned; 3 conditions; stressor tasks (all)

DAY 07

HABITUATION - tone if stress reduces
MINDFUL BREATHING INTERVENTION (MBI) - practice skill during stressor; tone if stress reduces
CONTROL - no tone



TESTING PHASE (7 days)

Mobile prompts **6x** per day
MBI - hear tone/practice skills if high distress

DAY 08



ONLINE SURVEY (0.5-1 hrs)

Self-report measures & emotional perception tasks

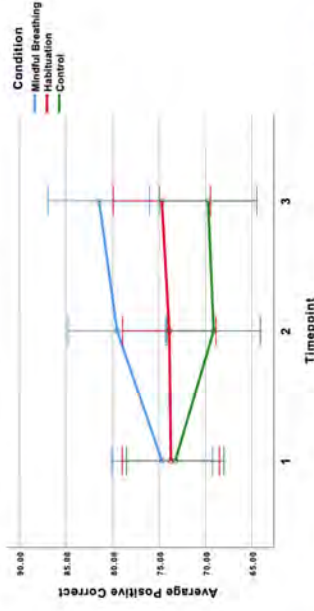
DAY 15

RESULTS

An **intervention** that combines in-person training of **mindful breathing** and **phone-based reminders** to practice those skills:

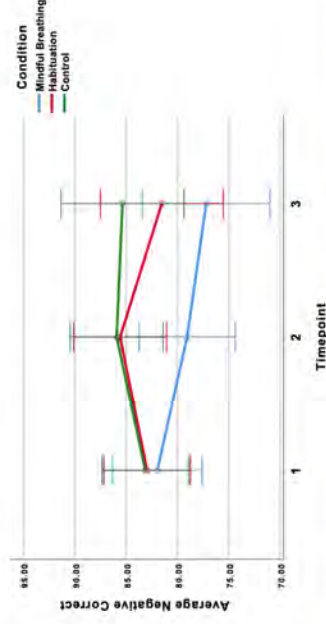
- ✓ **improves** perception of others' **positive** emotions
- ✓ **reduces** perception of others' **negative** emotions

In the training session, the MBI led to **higher** accuracy for perceiving **positive** emotions than the control condition.



Average percentage of correct scores for **happy** faces in the EPBT for each timepoint in training session by condition.

The MBI also led to **lower** accuracy for **negative** emotions than the control during the training phase AND after the week of the testing phase.



Average percentage of correct scores for **angry** faces in the EPBT for each timepoint in training session by condition

METHODS

INTERVENTION (MBI)

SKILL REMINDER TESTING



breathe in for 4,
out for 7



tone if skill
reduces distress



phone plays tone if
distressed

OUTCOME

% of correct scores when perceiving happy/angry faces in emotional perception bias task

DISCUSSION



Mindful breathing skills lead to **positive bias**



Results in a tendency to shift attention to positive social cues instead of negative ones

MOVING FORWARD



Develop **entirely digital version**



Test, fix bugs, improve version



Disseminate intervention to community