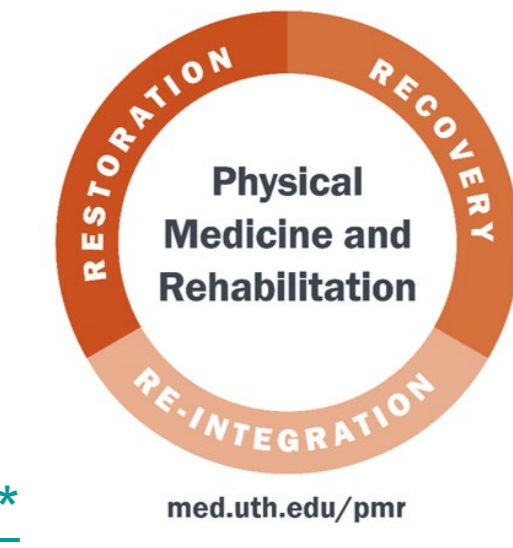


ACADEMY OF SPINAL CORD INJURY PROFESSIONALS

Feasibility of Mindfulness Meditation Training and Home Practice in Persons with Spinal Cord Injury: A Pilot Study

Shrasti Lohiya, MBBS, MPH,^a Susan Robinson-Whelen, Ph.D.,^{b,d} Heather B. Taylor, Ph.D.,^{a,b} Chelsea Ratcliff, Ph.D.,^{c*} Radha Korupolu, MD, MS,^{a,b*}

^aDepartment of Physical Medicine and Rehabilitation, University of Texas Health Sciences Center at Houston, Houston, Texas; ^bTIRR Memorial Hermann, Houston, Texas; ^cDepartment of Psychology, Sam Houston State University, Huntsville, Texas; and ^dDepartment of Physical Medicine and Rehabilitation, Baylor College of Medicine, Houston, Texas, *Study CO-Pi



BACKGROUND

- Prevalence of chronic pain in SCI patients: 65-85%.
- Chronic pain leads to anxiety, depression, and reduced quality of life.
- Current treatment options, including pain medications, are often ineffective and have several side effects.
- Barriers to non-pharmacological therapies: insurance coverage, expenses, transportation, and psychological care perception.
- COVID era highlights telemedicine, therapy apps, and remote data collection as treatment options.

OBJECTIVES

- Evaluate feasibility and acceptability of two accessible, no-cost mobile apps in persons with SCI who have chronic pain:
 - Mindfulness Coach app (MM) from the VA's National Center for PTSD
 - Ted Talk app (AC) on health education as an active control condition

Figure 1. Mindfulness Coach MM App Interface

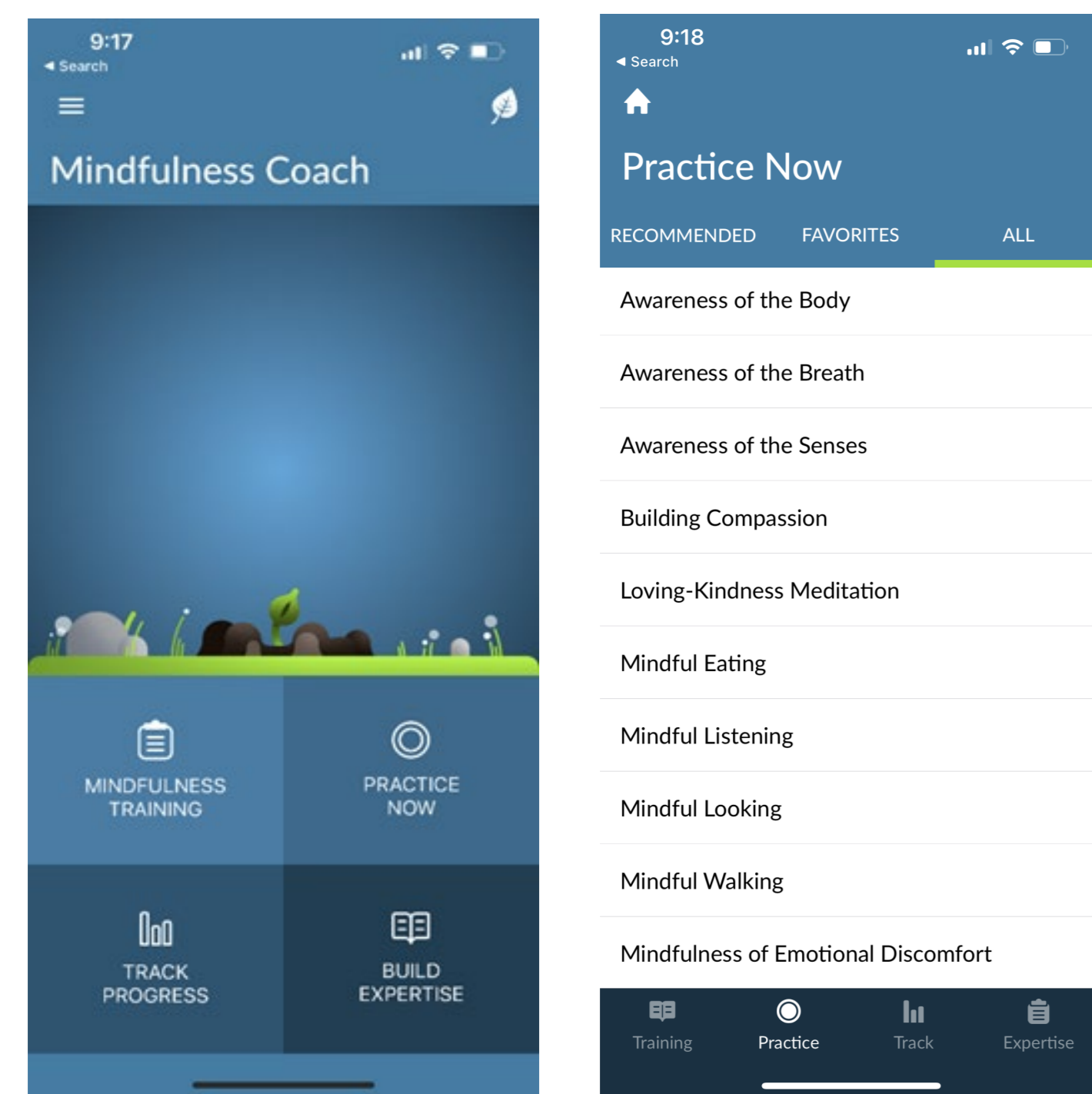
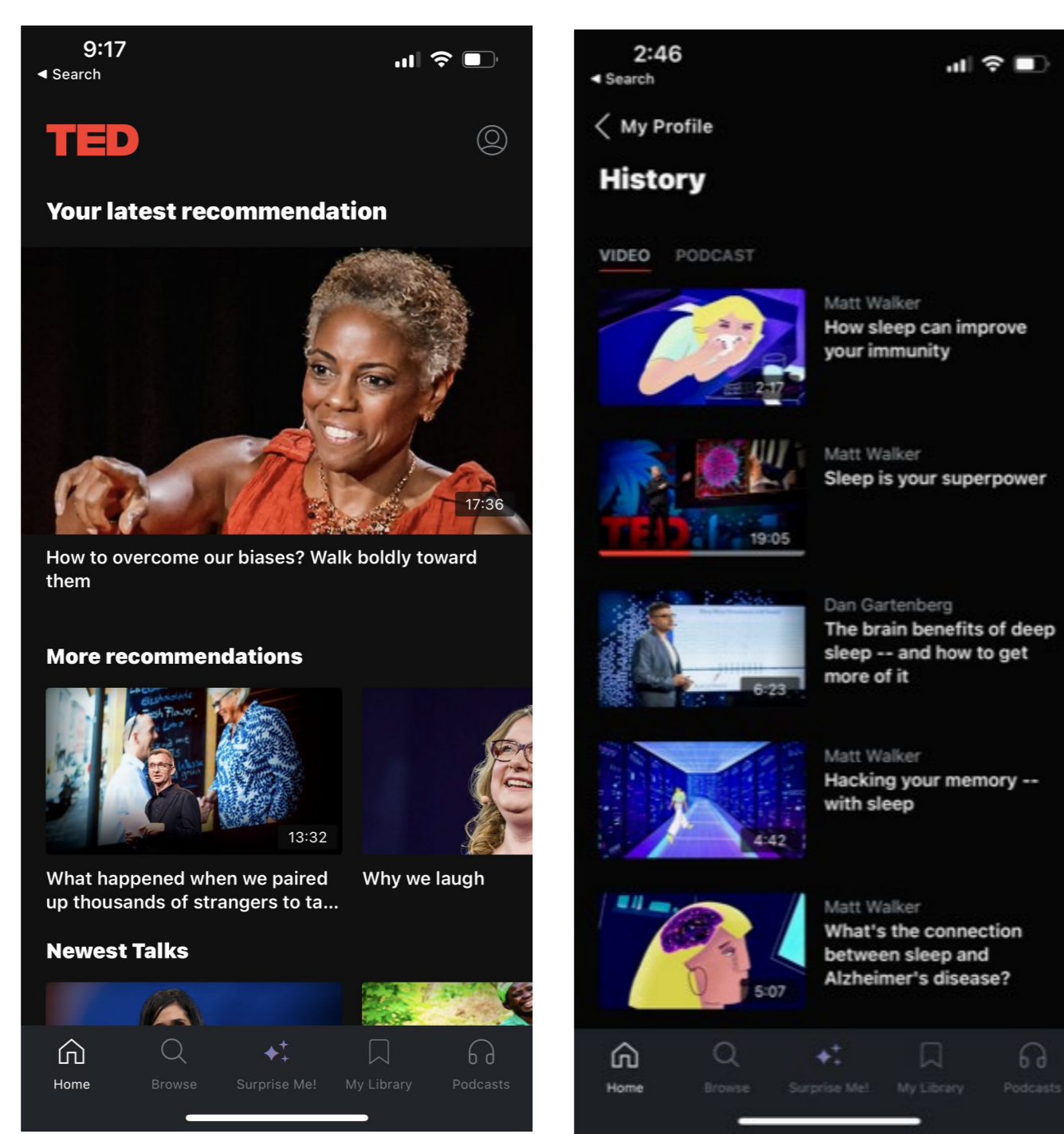


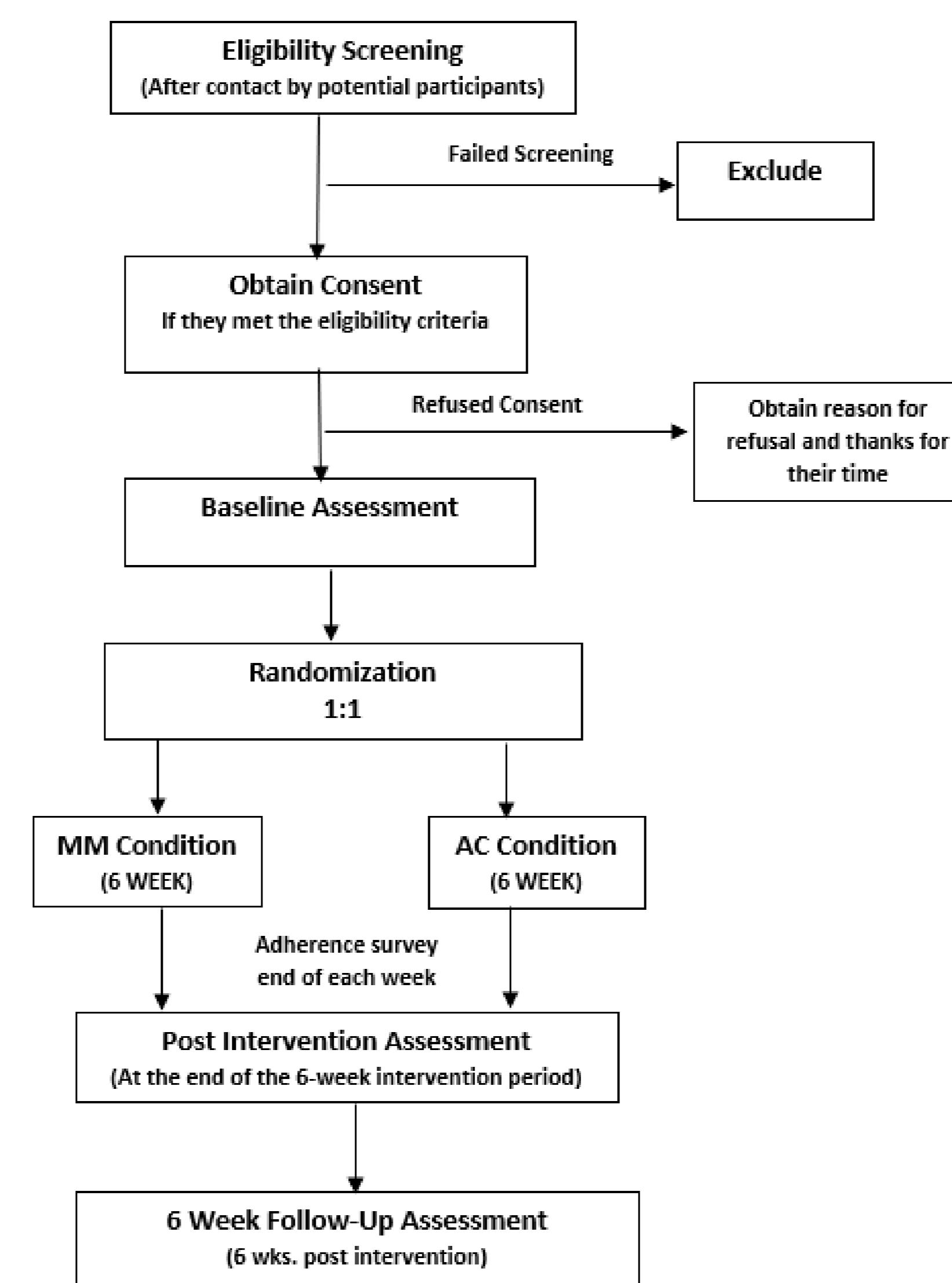
Figure 2. Active Control (TED) App Interface



METHODS

- Sample:** 60 SCI patients with chronic pain.
- Randomization:** Participants randomly assigned (1:1) to:
 - Mindfulness Meditation (MM) Condition: Practice audio-guided mindfulness meditations for 10+ minutes/day for 6 weeks using the "Mindfulness Coach" app
 - App has a selection of 12 audio-guided meditations
 - Active Control (AC) Condition: View health-related TED talks for 10+ minutes/day for 6 weeks using the TED app
 - Study team selected 50 TED talks related to chronic pain, sleep, nutrition, mood, and relationship health

Figure 3. CONSORT Diagram of Study Activities



RESULTS

- Recruitment:** (Dec 2022 to June 2023)
 - 96% (25/26) eligible participants provided consent, surpassing the 80% benchmark.
- App Adherence** (n=13 were randomized 12+ weeks prior to June 2023):
 - 69% (9/13) participants began the intervention after randomization.
 - 56% (5/9) of participants who began the intervention used the app for the recommended time (60 mins/week).
- Assessment Adherence:**
 - 78% (7/9) of participants completed the immediate post-intervention follow-up assessment.
 - 89% (8/9) of participants completed the 6-week follow-up assessment.

Figure 4. Participant Demographics and Adherence Data

No	Age	Gender	Condition (MM/AC)	Avg Mins/Wk	Weeks app used	Completed Post-Intervention	Completed Assessments 6-Week Follow-Up
1	43	F	AC	143	6	Y	Y
2	30	M	MM	110	6	Y	Y
3	32	M	AC	88	6	Y	Y
4	44	M	AC	39*	6	Y	Y
5	60	M	MM	69	6	Y	Y
6	70	M	MM	127	6	Y	Y
7	48	F	AC	33*	6	Y	Y
8	47	M	AC	0*	0	N	Y
9	48	M	AC	0*	0	N	N

*Participants 8 & 9; Dropped due to health issues **Participants dropped for unknown reasons

CONCLUSION

- Initial data suggests recruitment and completion of assessments may be feasible.
- Adherence to daily app use may be a challenge. Many participants experienced health issues (e.g., inpatient admissions), which prevented some from daily app use. Accessibility and continued interest in the app may also be a barrier to adherence. This data is being collected in a post-intervention program evaluation.

Take a picture to download the poster, abstract & references! →

