

# Feasibility and acceptability of an mHealth cognitive behavioral stress management intervention to ameliorate HIV-related fatigue

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## PURPOSE

- Fatigue remains one of the most troubling symptoms for people living with HIV infection
- This fatigue is chronic and does not spontaneously remit
- It is not correlated with CD4 count or HIV viral load
- Our work, and that of others, points to stressful life events being related to increased fatigue intensity and greater fatigue-related impairment of functioning
- Interventions should thus focus on enhancing skills to cope with current stressful life events and the sequelae of prior traumatic stressors
- We adapted Antoni's Cognitive Behavioral Stress Management (CBSM) Program to an app, to increase scope of delivery

## METHODS

- We developed the app for use on a smartphone, and tested it in 2 phases
- In the 1st phase, a small group of key informants went through the 1<sup>st</sup> 5 (of 10) modules over several weeks, and gave us feedback on ease of use, readability, feasibility, and acceptability
- In the 2nd phase, we recruited 30 people to an RCT, with the intervention group receiving the CBSM app (10 modules over 10 wks.) and the control group receiving a healthy lifestyles app with no coping content

### Eligibility Criteria:

- HIV infection with fatigue (score of 5.0 or greater on the HIV-Related Fatigue Scale [HRFS])
- No active psychosis, chemical dependency, or current suicide risk as assessed by the Mini International Neuropsychiatric Interview

## RESULTS / ACHIEVEMENTS

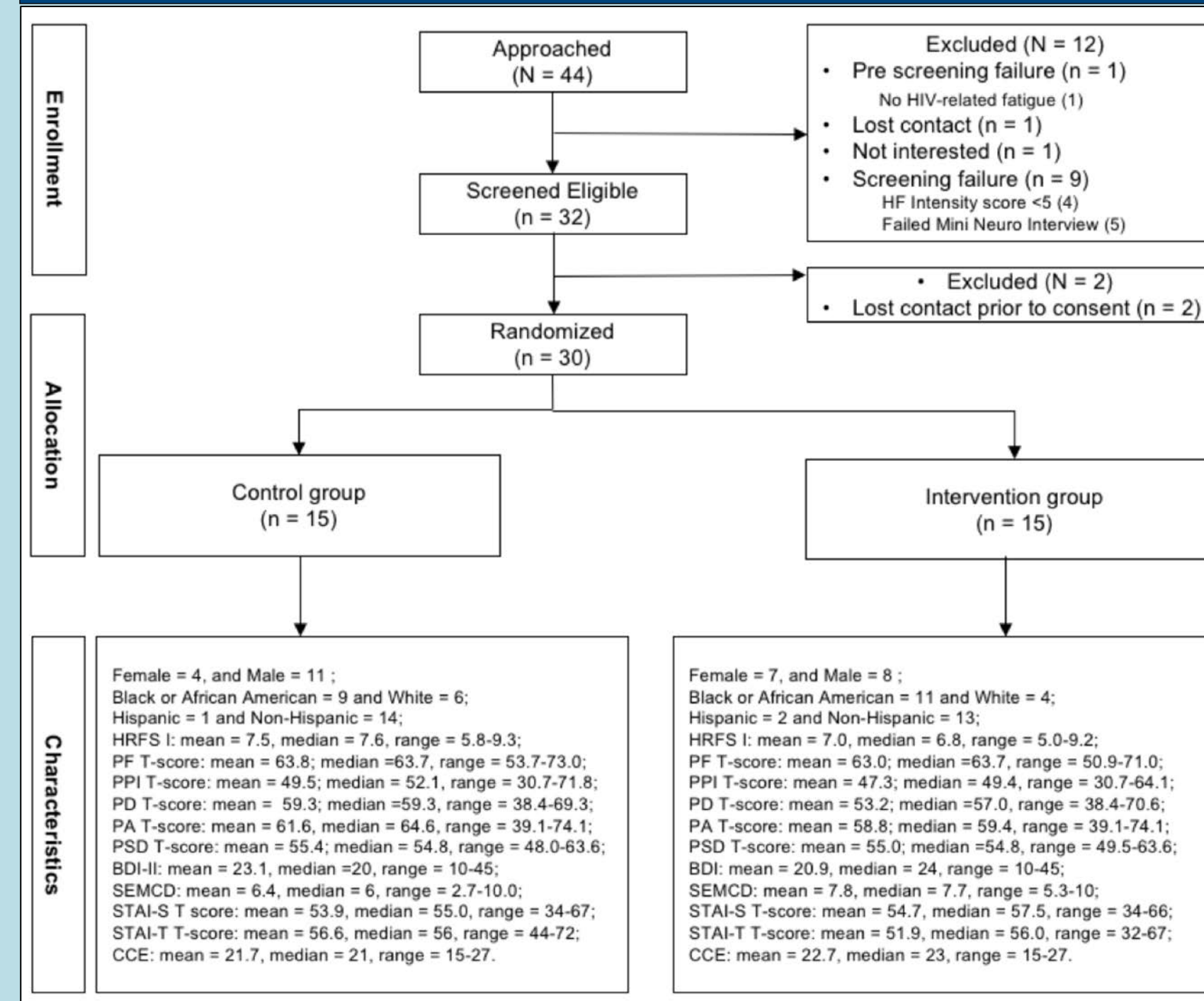


Fig. 1. Phase II Participant flow diagram and characteristics

### Abbreviations:

HRFS – HIV Related Fatigue Scale	PSD - PROMIS Adult SF V1.0 Sleep Disturbance 6a
PF – PROMIS Adult V1.0 Fatigue 6a	BDI – Beck Depression Inventory-II
PPI - PROMIS Adult V1.0 SF Pain Intensity 3a	SEMCD – Self-Efficacy for Managing Chronic Disease 6-item Scale
PD - PROMIS Adult V1.0 Depression 6a	STAI-S – State-Trait Anxiety Inventory State Score
PA - PROMIS Adult V1.0 Anxiety 6a	STAI-T - State-Trait Anxiety Inventory Trait Score
	CCE – Credibility and Expectancy Evaluation Questionnaire

## CONCLUSION and NEXT STEPS

- We are still collecting data (data collections points: baseline, 5 weeks, 10 weeks, 3 months after completion of intervention)
- We will complete data analysis and resubmit an R01 which lacked these very data to be competitive!

## HIV-RELATED FATIGUE CBSM APP

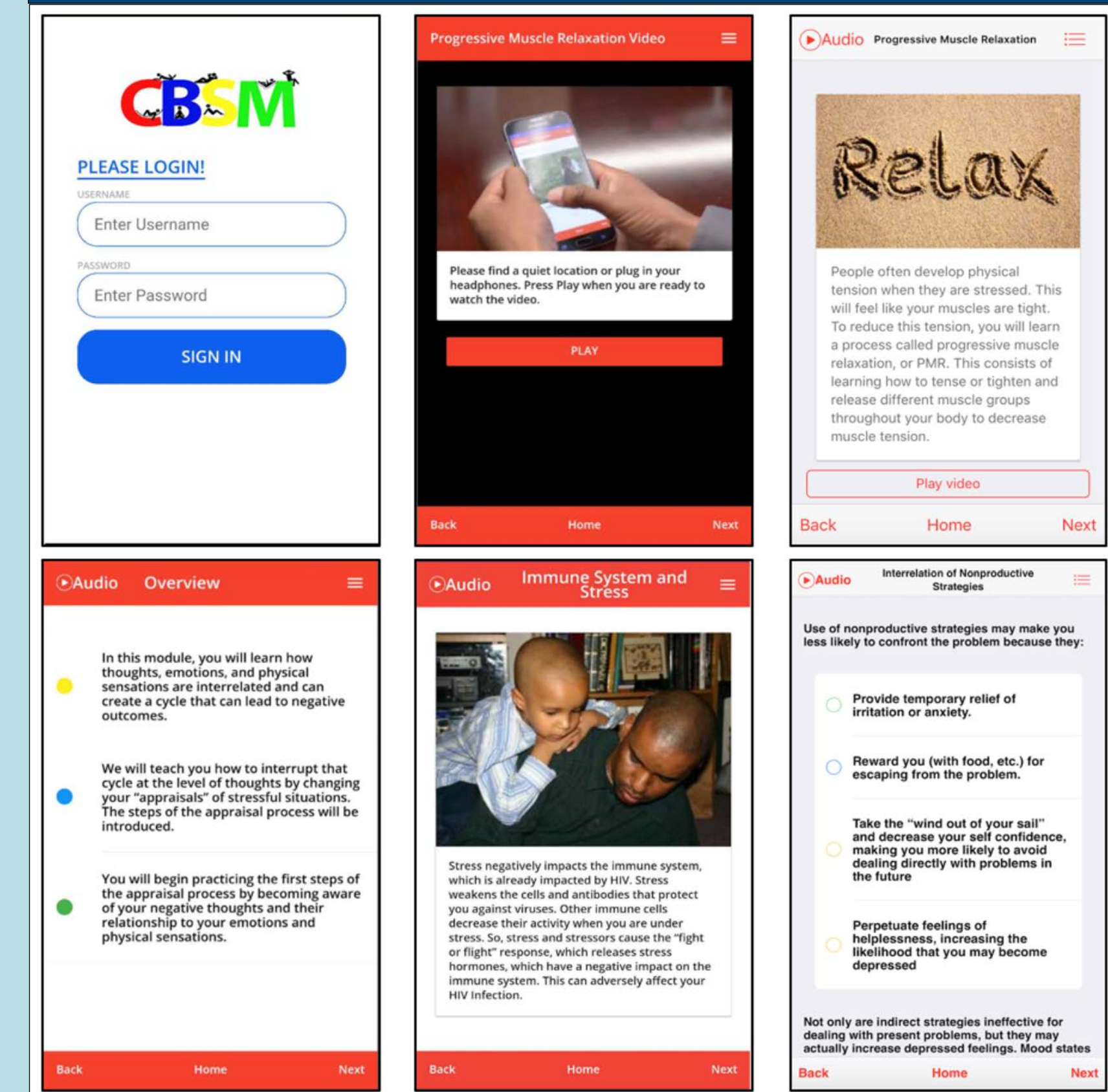


Fig. 2. Sample screenshots of the developed CBSM app

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