

## Question: Is group music therapy effective in proactively reducing stress and anxiety?

### Background

**Online** music therapy offers promising results for the management of undergraduate students' stress and anxiety. (Finnerty et al., 2023)

This study follows a similar protocol, offering **in-person** group music therapy sessions on campus at McMaster University.

### Participants & Methods

#### All students complete

- (1) Demographic questionnaire
- (2) Ten Item Personality Inventory
- (3) Goldsmiths Music Sophistication Inventory

Randomly assign students to six-weeks of **group Music Therapy** or **Control group**

#### Music Therapy

(Song writing, lyric analysis, Student directed music listening, improvising, singing, verbal processing)

#### Control Group

Student Life as Usual

#### Measurements before and after each Music Therapy session

- (1) 5-point scale (perceived stress)
- (2) State Trait Anxiety Inventory- State version
- (3) Heart Rate Variability: phone App (Welltory)

#### Week 1 and Week 6 measurements: Music Therapy and Control Groups

- (1) Hair sample for cortisol analysis
- (2) Perceived Stress Scale
- (3) World Health Organization Quality of Life questionnaire
- (4) 5-point scale (perceived stress)
- (5) State Trait Anxiety Inventory- State version
- (6) Heart Rate Variability: phone App (Welltory)

### DAILY NEWS



A study of undergraduate students during the pandemic found that online music therapy was as effective at lowering stress and anxiety as traditional talk therapy. <https://dailynews.mcmaster.ca/articles/music-therapy-improves-student-mental-health-study-shows/>

### Preliminary Results

Data collection is currently underway.

- ~ 150 students recruited to date (  $n=70$  music therapy ,  $n=80$  Control )
- 7 music therapy groups (~10 participants per groups)

Based on the **online** version of this study we predict reductions in stress and anxiety scores for the music therapy group reflected in the questionnaires and cortisol.

We also anticipate an increase in the heart rate variability scores.

Post-hoc analyses will be conducted to determine the impact of personality and music sophistication on changes in stress and anxiety scores.

### #CollaborationIsKey

Thank you to all the partners across campus who have shared about this project.

Particularly Dr. Mayu Nishimura who added the *option* to participate in the study to the **HUMBEHV 2AP3: Introduction to Applied Psychology** course outline.

Including wellness options in a course, makes wellness a part of student life, opposed to yet another activity to fit into the student schedule.

### Overall Significance of Study

The healthcare system currently focuses on providing support for those in crisis or with a diagnosis. This study aims to highlight the efficacy of **PROACTIVE** wellness – engaging in music therapy to manage stress and anxiety – **for all students**.

Thank you. Please email any questions to [finnerr@mcmaster.ca](mailto:finnerr@mcmaster.ca)