

# Undergraduates Choose to Participate in Music Activities During COVID-19 Restrictions

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## Background

- McMaster University suddenly transitioned to remote learning on March 13, 2020 because of the COVID-19 pandemic. These restrictions coincided with the already stressful final exam period.
- Controlled studies indicate music-related activities, such as listening to music or playing an instrument, reduce stress in both lab and naturalistic settings<sup>1, 2, 3</sup>.
- There are very few uncontrolled studies examining the impact of music-related activities on stress.

## Methods

- n=778 (634 female, median age= 19-20 years)
  - Survey
    - Demographic information (13 questions)
    - Music background (8)
    - Participation in a broad range of 16 extra-curricular activities (7)
    - Subjective ratings of how much each activity contributed to their wellness (1)
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- Interest in music, art, and verbal therapy (1)
  - Mental health supports accessed (1)
  - Open-ended question about experiences with COVID-19 (1)
  - State Trait Anxiety Inventory Tool (State Scale)
  - Ten Item Personality Inventory

## Results

**Student's Anxiety Scores**

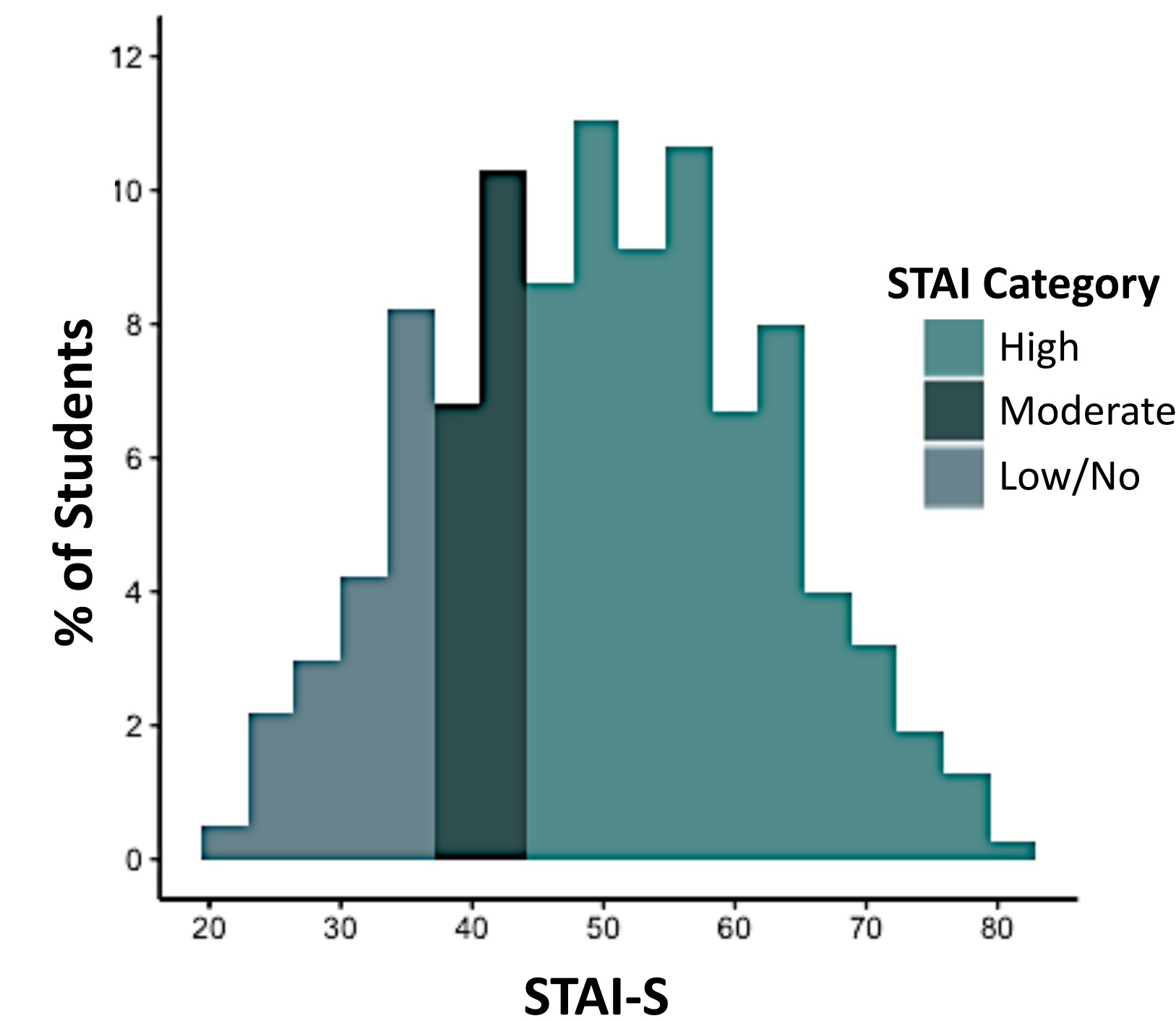


Figure 1. Students' State-Trait Anxiety Inventory (State Scale) scores, separated by score category (low anxiety: 20–37, moderate anxiety: 38–44, high anxiety: 45–80). 64.8% of participants were in the high anxiety category.

**Student's Participation in Music Activities**

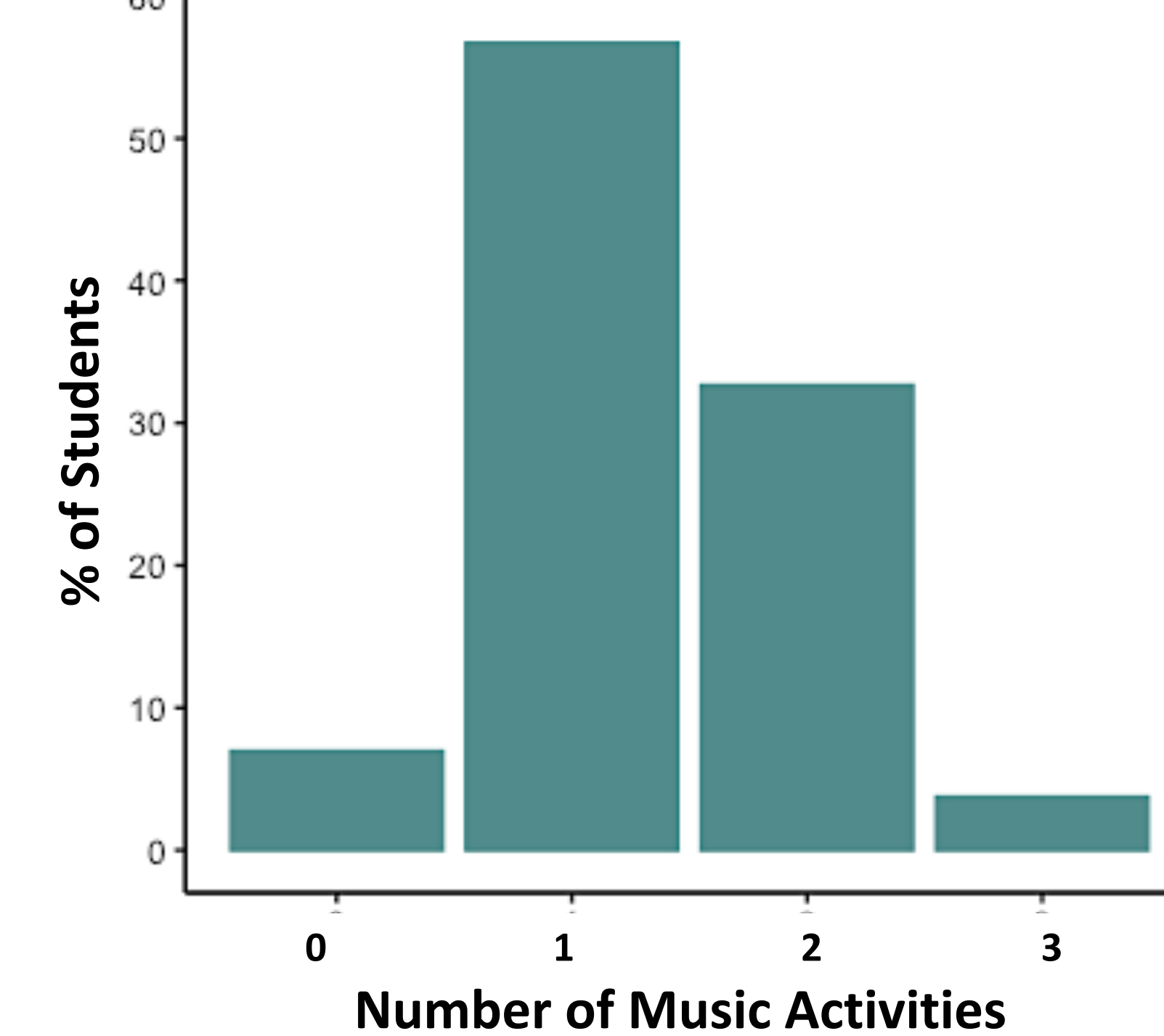


Figure 2. Percent of students who participated in 0,1,2 or 3 music-based activities (playing an instrument/singing, song-writing, music listening). 93.3% of students did at least 1 music activity.

**Perceived Benefit to Wellness**

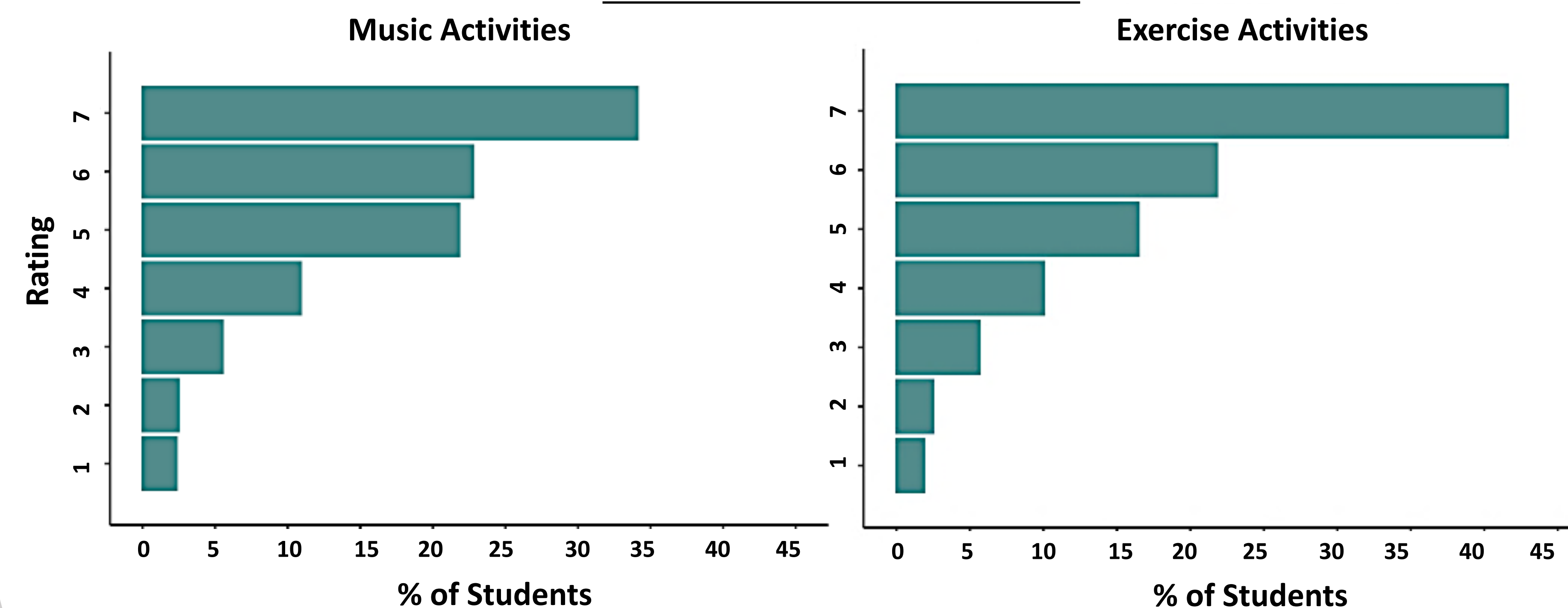


Figure 3. Students' ratings of their perceived benefit of doing music-based (playing an instrument/singing, song-writing, music listening; mean rating= 5.52, SE=0.056) and exercise-based (indoor and outdoor exercise ; mean rating= 5.69, SE=0.060) activities from 1 (not at all) to 7 (extremely). If a student did more than one activity per category, the highest rating was taken. Only students who did at least one music or exercise activity were included.

**Female's Interest in Different Types of Therapy**

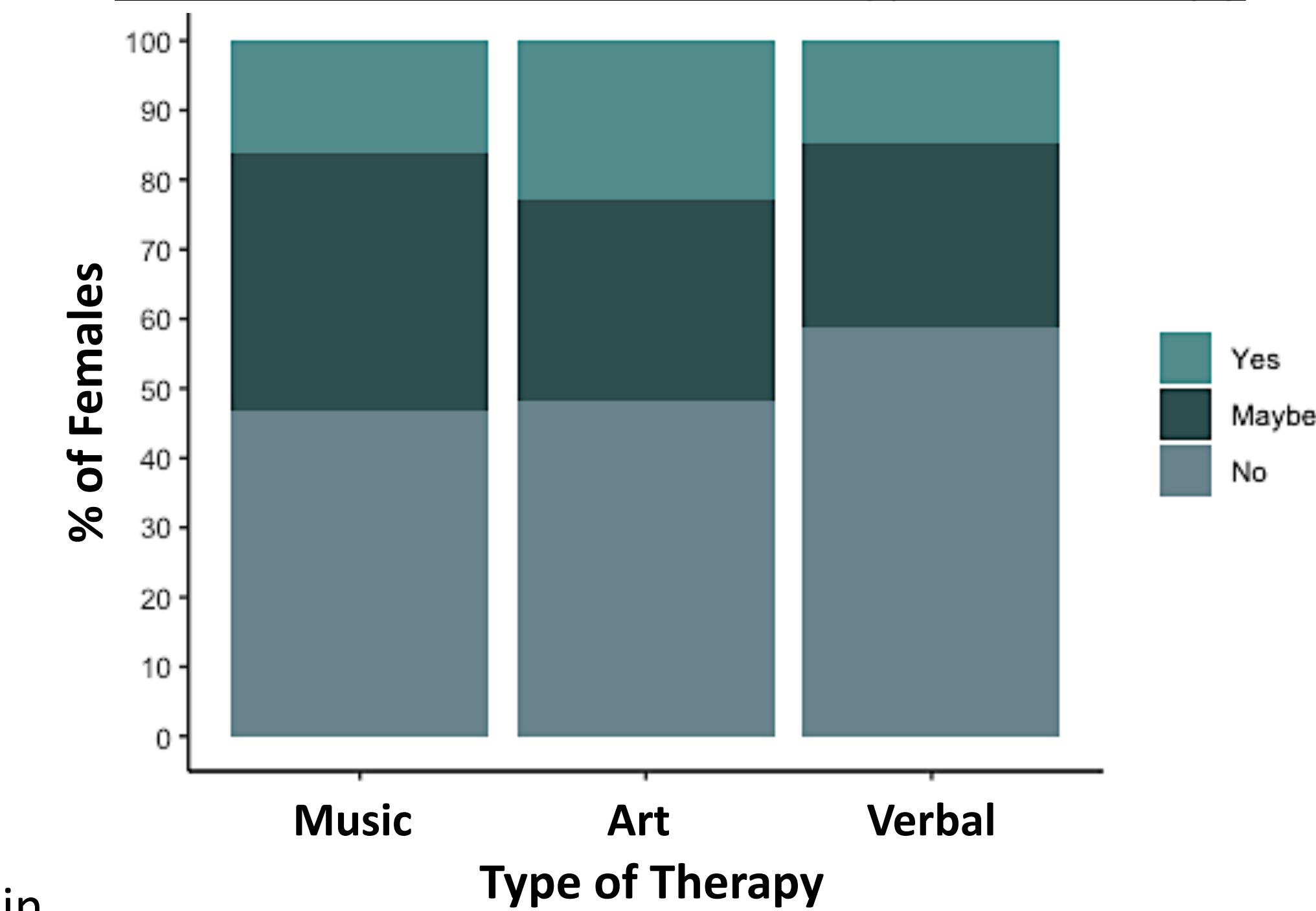


Figure 4. Female participants' responses when asked if they would be interested in a drop-in online music, art, or verbal therapy group.

**Male's Interest in Different Types of Therapy**

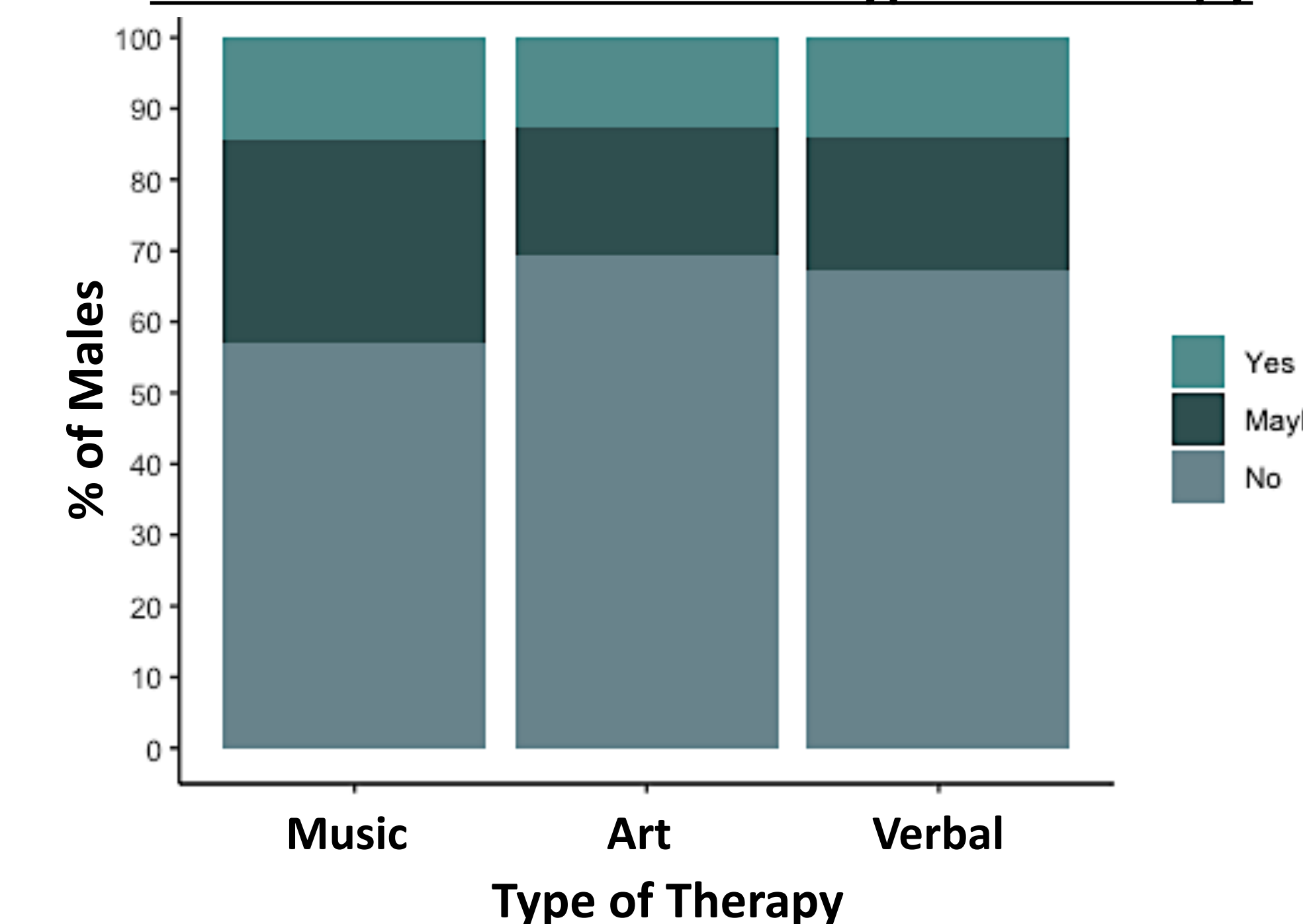


Figure 5. Male participants' responses when asked if they would be interested in a drop-in online music, art, or verbal therapy group.

## Discussion

- The majority of students participated in at least one music activity, suggesting that music has a role in daily life during stressful periods of time.
- When asked how much different activities contribute to their wellness, students rate music-based activities similarly to exercise, an activity known to reduce stress.
- The high interest in music therapy (51.3% of all students responded 'Yes' or 'Maybe') suggests that music therapy may be beneficial as a proactive wellness measure at McMaster.

## Acknowledgements



## Select References

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3. Toyoshima, K., Fukui, H., & Kuda, K. (2011). Piano playing reduces stress more than other creative art activities. *International Journal of Music Education*, 29(3), 257–264. <https://doi.org/10.1177/0255761411408505>