

Mindfulness in the Digital Age: Exploring the Impact of Virtual Meditation Programs on Higher Education Students

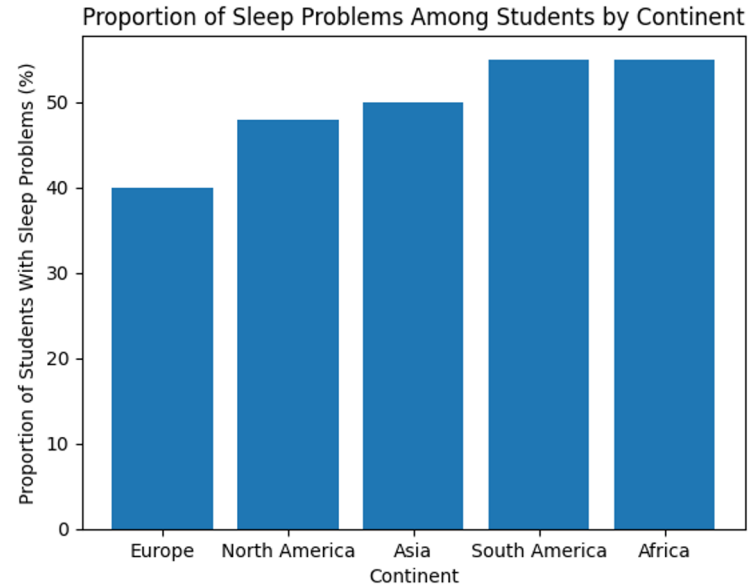
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Background

- About 50% of general students' population worldwide are estimated to have sleep problems (Bjørnnes et al., 2021)
- There is a strong evidence that stress plays a key role in development of sleep problems in higher education students (Alwhaibi & Al Aloola, 2023)
- Higher education students report both poor sleep quality and increased stress levels due to the invers relationship of the variables (Lund, et al., 2021)
- There is a limited evidence on occupational therapy interventions to address poor sleep quality and increased stress among higher education students



(Bjørnnes et al., 2021)

Literature Review



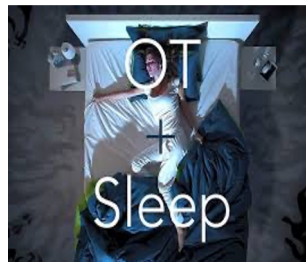
Sleep difficulties in higher education students

- A majority of students in higher education face challenges in sleep quality (Becker et al., 2018)



Sleep quality, stress, academic performance in higher education students

- Sleep quality positively correlated with academic performance and negatively correlated with stress (Baert et al., 2015; Garret et al., 2017)



Occupational therapy's role in sleep and telehealth

- Occupational therapists' can address sleep (American Occupational Therapy Association [AOTA], 2020)
- Telehealth is equally effective as traditional in-person services (Cason, 2015; Ho and Siu 2018)



Mindfulness meditation

- Mindfulness meditation effective in improving sleep quality and perceived stress in higher education students (Ho & Siu, 2018; Greeson et al., 2014)

Research Questions

Objectives:

- To explore the benefits of virtual mindfulness meditation programming to improve sleep quality and reduce perceived stress in higher education students.

Research Questions:

- After 8-sessions of mindfulness meditation practice is there a change in sleep quality for higher education students?
- After 8-sessions of mindfulness meditation practice is there a change in perceived stress for higher education students?

Method

Design:

- Mixed methods

Setting:

- Private university on the East Coast, USA

Participants:

- Non-probability convenience sampling of undergraduate and graduate students
- Inclusion criteria: Full or part-time students enrolled at the university during the 2020-2021 academic year, 18 years or older, has access to internet connection and device, and able to speak and understand English
- Participants were excluded from data analysis if they failed to complete the 8-session mindfulness meditation program and all outcome measures

Intervention:

- 8 mindfulness meditation sessions over 12 weeks
- The program consisted of eight 30-minute virtual sessions via Zoom, a 5-minute introduction, a 15-minute verbally guided meditation, and a 10-minute discussion

Outcome Measures:

- Pittsburgh Sleep Quality Index (PSQI), Perceived Stress Scale (PSS), and semi structured interview

Data Analysis

Quantitative:

- IBM SPSS statistics package used to analyze all quantitative data (SPSS Version 26.0; IBM Corp., Armonk, NY)
- Descriptive statistic used to analyze demographic information
- PSQI and PSS were analyzed using within group Wilcoxon signed rank, alpha set at .05

Qualitative:

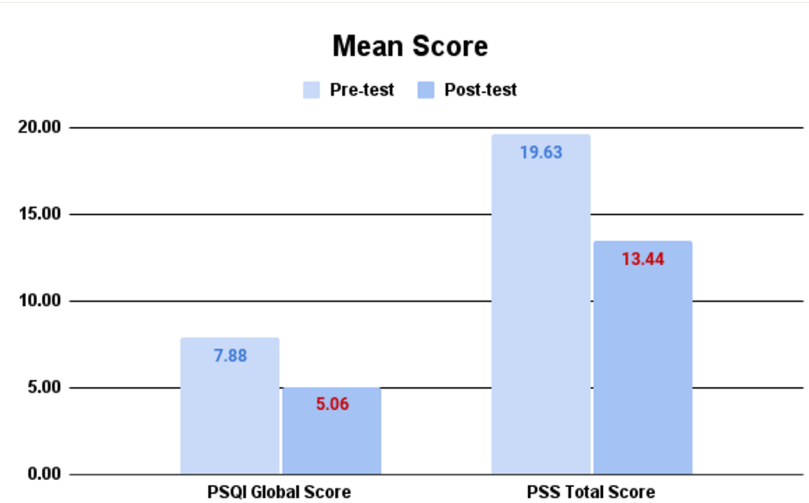
- Codebook developed prior to data analysis
- Semi-structured interviews audio-recorded and transcribed verbatim
- Data independently hand-coded by research team
- Consensus meeting held until 100% agreement achieved
- Coded data entered into Dedoose software
- An external reviewer conducted additional code review
- Four main themes identified through analysis

Quantitative Result

Participants (n=16)

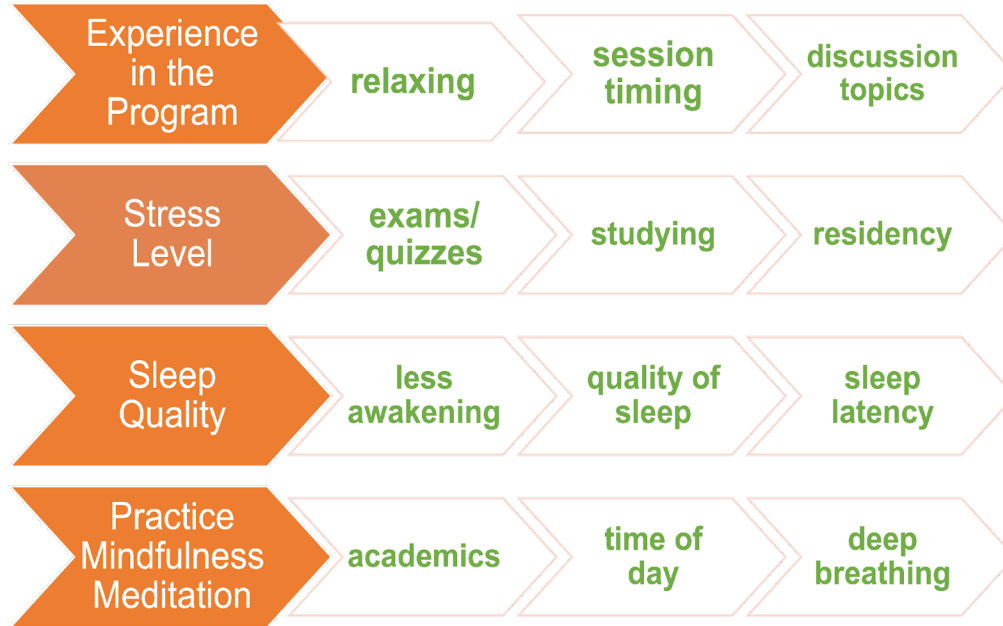
Demographic	n (%)
Female	15 (93.75%)
Male	1 (6.25%)
Asian	7 (43.75%)
Black	1 (6.25%)
White	8 (50.00%)

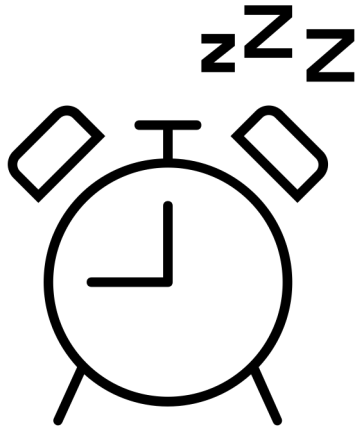
Demographic



PSQI Global Score Changes $p=0.0012$;
PSS Total Score Changes $p=0.0019$

Qualitative Result





Limitations

- Non-probability convenience sampling with potential self-selection bias
- Absence of a control group limits conclusions about intervention efficacy
- Small sample size reduces generalizability
- Reliance on self-report measures introduces potential response bias

Discussion and Conclusion

- Results suggest virtual mindfulness meditation program had a **positive** change on **sleep quality and perceived** stress
- The mindfulness meditation program **reduced stress** related to academics and **promoted a feeling of relaxation**
- Results can inform **university-level programming** focused on sleep and stress prevention
- Future research should include **larger samples, control groups, objective sleep measures**, and comparison of **virtual vs. in-person delivery**

Saint Joseph's University Initiatives

- Sleep and mental health resources on the university webpage
- Mindfulness meditation sessions in-person & virtual

SAINT JOSEPH'S UNIVERSITY Division of Student Life | Student Health Center

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Sleep
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STRATEGIES FOR MANAGING STRESS

- Short Term Strategies for Managing Stress
- Long Term Strategies for Managing Stress
- Relaxation Techniques

Sleep

COMMON SLEEP PROBLEMS IN COLLEGE STUDENTS

According to a poll by the National Sleep Foundation (NSF), more than half of the country's young adults report "waking up feeling unrefreshed" (55%), and the percentage of young adults suffering from significant daytime sleepiness (32%) is comparable to that of shift workers (29%), a notoriously sleepy group who try to remain alert at times when their brains are naturally inclined to sleep.

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Mental Health Awareness Week (April 7-11)

MORE INFORMATION ON MENTAL HEALTH AWARENESS WEEK!

MONDAY, APRIL 7TH - "Mindful Monday"

- 9:30-11AM: Mindful Monday Guided Meditations, Campion Sun Room 2 (HH)
[REGISTER HERE](#)
 - sessions are offered by DOT Capstone Student, Lauren Del Giudice and run every 15 minutes from 9:30-11am.
- 10AM-12PM: SELF CARE REFLECTIONS WITH RES LIFE, SOURN LOBBY (HH)
- 12:30PM: Virtual Guided Mindfulness Meditation Session, [zoom link here](#)
- ALL DAY: SELF-GUIDED MINDFUL MEDITATION WALK, BARNES ARBORETUM (HH)
[LINK TO WALKING MEDITATION](#)

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