

Self-perceived stress among medical students in relation to their perceptions on virtual learning during the COVID-19 pandemic.



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Introduction

Medical education has shifted from the traditional face-to-face method to virtual learning due to the COVID-19 pandemic, bringing with it many challenges.

Medical students already experience high levels of stress due to many stressors such as excessive workload. This together with the new challenges encountered during virtual learning, such as technological barriers, can cause physiological distress which can affect the mental health of medical students.

Objective

To evaluate the self-perceived stress among medical students in relation to their:

- I. socio-demographic background
- II. educational background
- III. academic behaviors and habits
- IV. perceptions on virtual learning during the pandemic.

Methodology

- Ethical approval was granted in December 2020 by the Campus Research Ethics Committee, U.W.I. St. Augustine.
- A cross sectional study was designed and conducted using a three part online questionnaire
- Convenience sampling was used as 229 responses were collected from Years 2-5 medical students enrolled in the School of Medicine
- Data collected from the questionnaire was analyzed through the IBM SPSS statistics software where t-test, ANOVA and Pearson's Correlation were used. Variables were compared

Results

Figure 1: Bar graph showing the mean perceptions of online learning according to year group

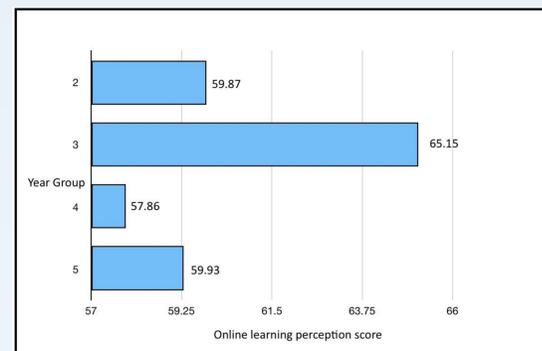


Figure 2: Bar graph showing the mean *PSS score of each year group

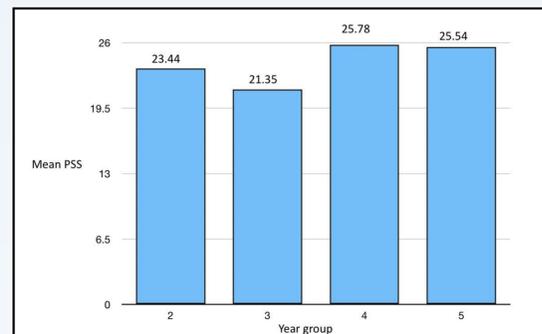
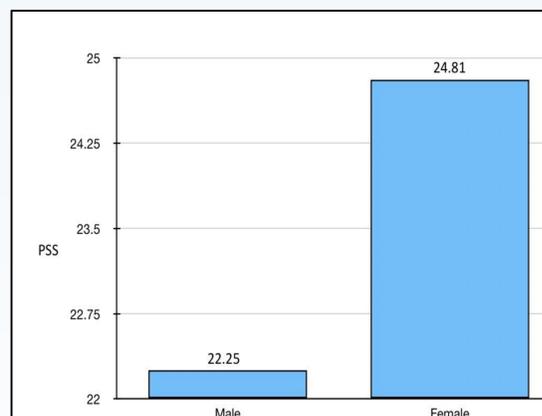


Figure 3: Bar graph showing the mean PSS scores of male and female participants



- Mean Student PSS Score: 23.96/ 40
Indicates: Moderate Perceived Stress
- Female participants *PSS score 12% greater than *PSS score of male participants

*PSS - Perceived Stress Scale

Discussion

- There is an inverse relation between perceptions of online learning and perceived stress (i.e a more negative perception of online learning will produce higher stress scores)
- Highest mean PSS score was among the clinical students (Years 4&5) Lashley et al observe similar results where clinical students had the highest degree of physical exhaustion
- Participants who maintained fewer hours of screen time pre-pandemic produced the highest PSS score. This is consistent with Baticulon et al. who concluded that persons who spent fewer hours online had more negative perceptions of online learning.
- More than half of the participants reported it was more difficult to learn via virtual classes
- Majority of participants claimed to feel more motivated during face to face interaction as opposed to virtual interaction
- Most participants found online classes to be too fast paced and claimed to have little/no time for personal activities

Conclusion

Medical students faced moderate perceived stress in response to the transition to online learning (PSS=23.9). The main factors influencing perceived stress were found to be gender and total hours of screen time. Furthermore, there was an overall negative (moderate) correlation between perceptions of online learning and perceived stress scores. Students appear to be coping well with this transition, however, it should be noted that the mean perceived stress score lies only 3.1 points below the high stress category. While online learning does have its merits, the highlighted negative perceptions should be addressed to avoid potential severe perceived stress.

References

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