

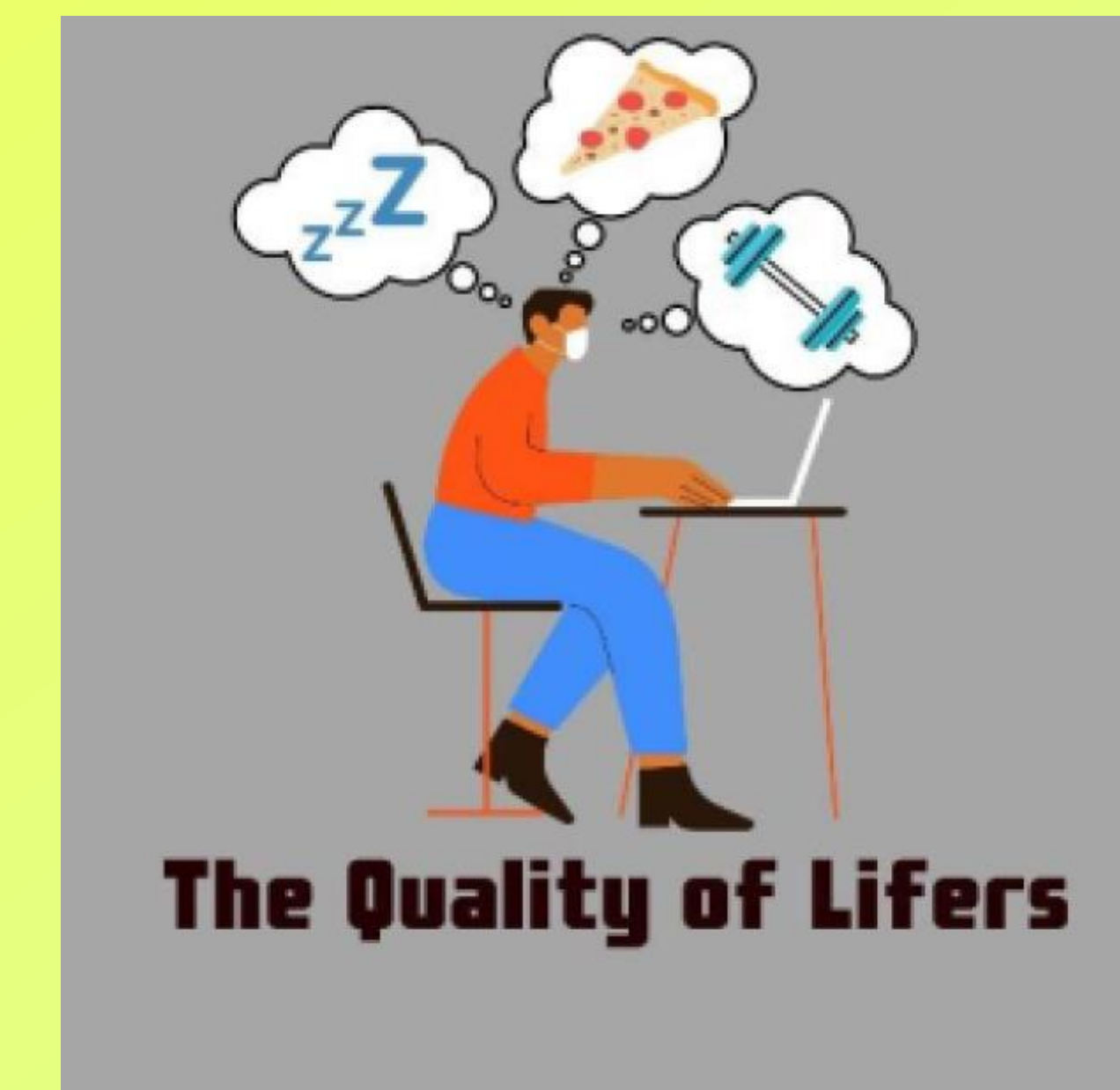
Health-related quality of life (HRQoL) during the COVID-19 pandemic on undergraduate students at the University of the West Indies, St. Augustine

Diana Bissoon¹, Dianni Weekes¹, Donteja Boodram¹, Durell Gracen¹, Dylan Ramkissoon¹, Ejaaz Hosein¹, Emily Jennings¹, Enrique Belfon¹

Ms. Marsha Ivey¹, Dr. Henry Bailey²

¹Faculty of Medical Sciences, The UWI, St. Augustine, ²Faculty of Social Sciences, The UWI, St. Augustine

e: ejaaz.hosein@my.uwi.edu Marsha.Ivey@sta.uwi.edu



Introduction

- During the COVID-19 pandemic, the shift to online education led to behavioural/lifestyle changes, which can affect health-related quality of life (HRQoL).
- HRQoL is an individual's perceived physical and mental health over time, and highlights how these changes can impact health.

Objectives

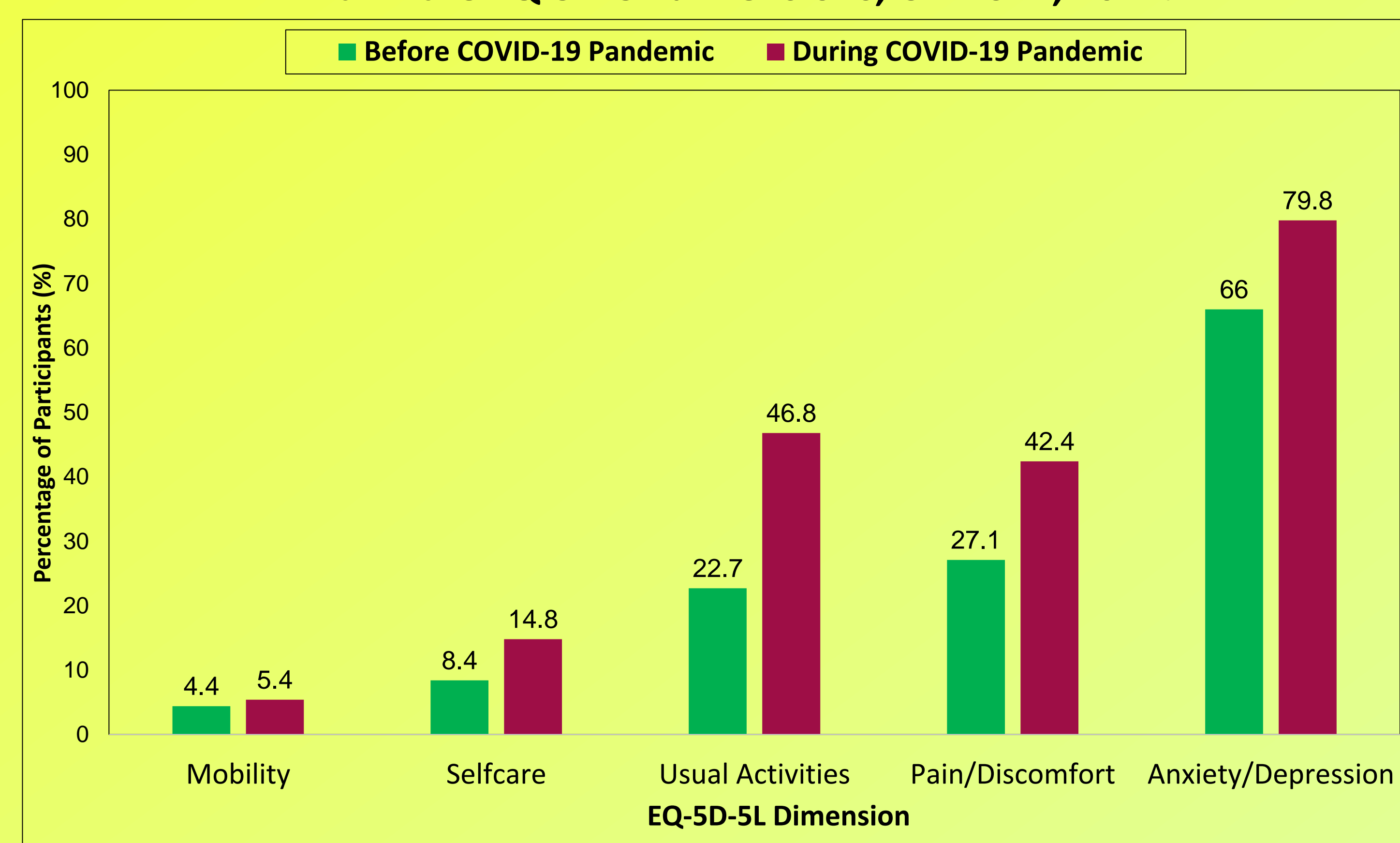
- To assess the HRQoL of undergraduate students at the UWI STA, before (BC) and during (DC) the COVID-19 pandemic using the EQ-5D-5L instrument.
- To identify the behavioural and psychosocial changes in undergraduate students at the UWI STA, before (BC) and during (DC) the COVID-19 pandemic.

Methodology

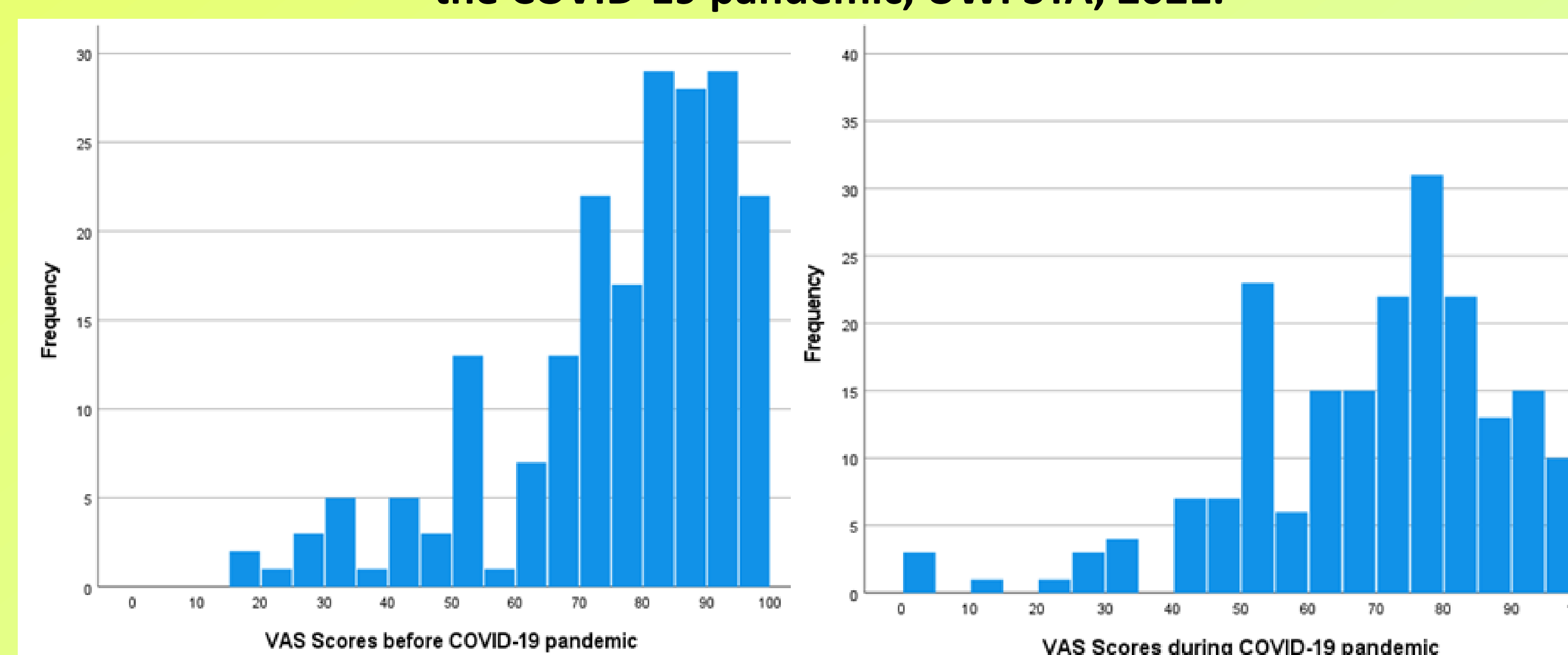
- 203 first and final year undergraduate students (≥ 18 years) were selected from the Faculties of Medical Sciences, Social Sciences, Science and Technology and Engineering through convenience sampling.
- A questionnaire was designed and disseminated via social media.
- Data on students BC and DC was collected.
- HRQoL was measured using the EQ-5D-5L instrument.
- EQ-5D-5L is a standardized instrument used to measure HRQoL by assigning an index value based on the participants' responses.
- ANOVA test was used to investigate differences in EQ-5D-5L scores.
- Changes in lifestyle, behavior and academic activity were assessed using the Wilcoxon Signed Rank Test.

Results

Prevalence of physical and mental health challenges among students within the EQ-5D-5L dimensions, UWI STA, 2021.



Distribution of Student EQ-VAS scores for before and during the COVID-19 pandemic, UWI STA, 2021.



Student behavioural/lifestyle changes before compared to during the COVID-19 pandemic, UWI STA, 2021

BEHAVIOUR	CHANGE EXPERIENCED
Exercise	↓ (29.1% to 32.5% 'never exercising')
Productivity	↓ (61.6% to 49.8% reporting 'productive') (p<0.001)
Daily Meal Consumption	↓ (70.0% to 55.2% eating 3-4 meals) (p<0.05)
Time Management	↓ (29.1% to 13.3% reporting 'very good management') (p<0.001)
Workload Management	↓ (35.5% to 14.3% reporting 'very good management') (p<0.001)
Daily Recreational Activities	↑ (8.9% to 27.1% reporting '>6 hours daily') (p<0.001)

Discussion

- There was an overall decrease in HRQoL DC.
- Anxiety/depression being the highest frequency dimension differed from Ping et al [1], where pain/discomfort was most reported. This prevalence of anxiety/depression may be linked to how close final exams were to the time of data collection.
- Increased problems with Usual Activities can be linked to the prevalence of Anxiety/depression, as this may make it difficult to perform usual tasks.
- Behaviours/lifestyles changed considerably DC, and can be linked to the overall decrease in HRQoL DC.
- Decline in physical activity observed DC, similar to Chopra et al [2].
- Productivity and time and workload management decreased significantly DC, which contradicts findings by Khalil et al [3].
- The decrease in daily meals contradicts Chopra et al [2] which observed improvements in meal consumption patterns.
- One potential limitation is that since convenience sampling was used, results are not generalizable to the entire student population.

Conclusions

- Students' HRQoL are affected by behavioural/lifestyle changes
- Anxiety/depression was the most reported EQ-5D-5L dimension both BC and DC.
- Self reported health of participants was lower DC than BC
- 15% of students reported improved health status
- Engagement in daily recreational activities increased from 8.9% BC to 27.1% DC.

References

- [1] Ping W, (2020). PloS one. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7302485/>
- [2] Chopra S, et al (2020). *Diabetes Metab Syndr*. Dec;14(6):2021–30. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7537601/>
- [3] Khalil R, et al. (2020). *BMC Med Educ*. Dec;20(1):285. <https://bmcmmeduc.biomedcentral.com/articles/10.1186/s12909-020-02208-z>

Acknowledgments

- All students who took time to participate.
- The Office of the Campus Registrar and Campus Research Ethics Committee
- Our supervisors, Ms. Marsha Ivey and Dr. Henry Bailey
- Everyone who was instrumental in the successful execution of this project.