FSMP Year 2 Students' Perception On Online Learning And Their Academic Performance

Chan Mei Xuan,[1] Muhammad 'Ikrimah bin Mustaffa,[1] Nurul Asyiqin binti Iskandar,[1] Wong Yu Ni,[1] Yeo Hui May,[1] Nur Hanisah binti Azmi [1]

[1] Nutrition Programme, Faculty of Food Science and Nutrition, Universiti Malaysia Sabah

Background

- The emergence of the COVID-19 pandemic has become a global threat and brought a great impact to educational institutions.
- The education system of Malaysia has been forced to temporarily shift from conventional learning to online learning as an alternative to halt the spread of COVID-19 in the entire country [1].

Objectives

- To determine the relationship between students' perceived level of understanding and their GPA throughout online learning.
- To examine the relationship between students' perceived learning engagement and their GPA throughout online learning.
- To investigate the relationship between students' perceived achievement and their GPA throughout online learning.
- To explore the effect of technical aspects (most used gadgets for online learning, usage of additional gadgets to aid online learning, strength of internet connection during online learning) on students' GPA throughout online learning.
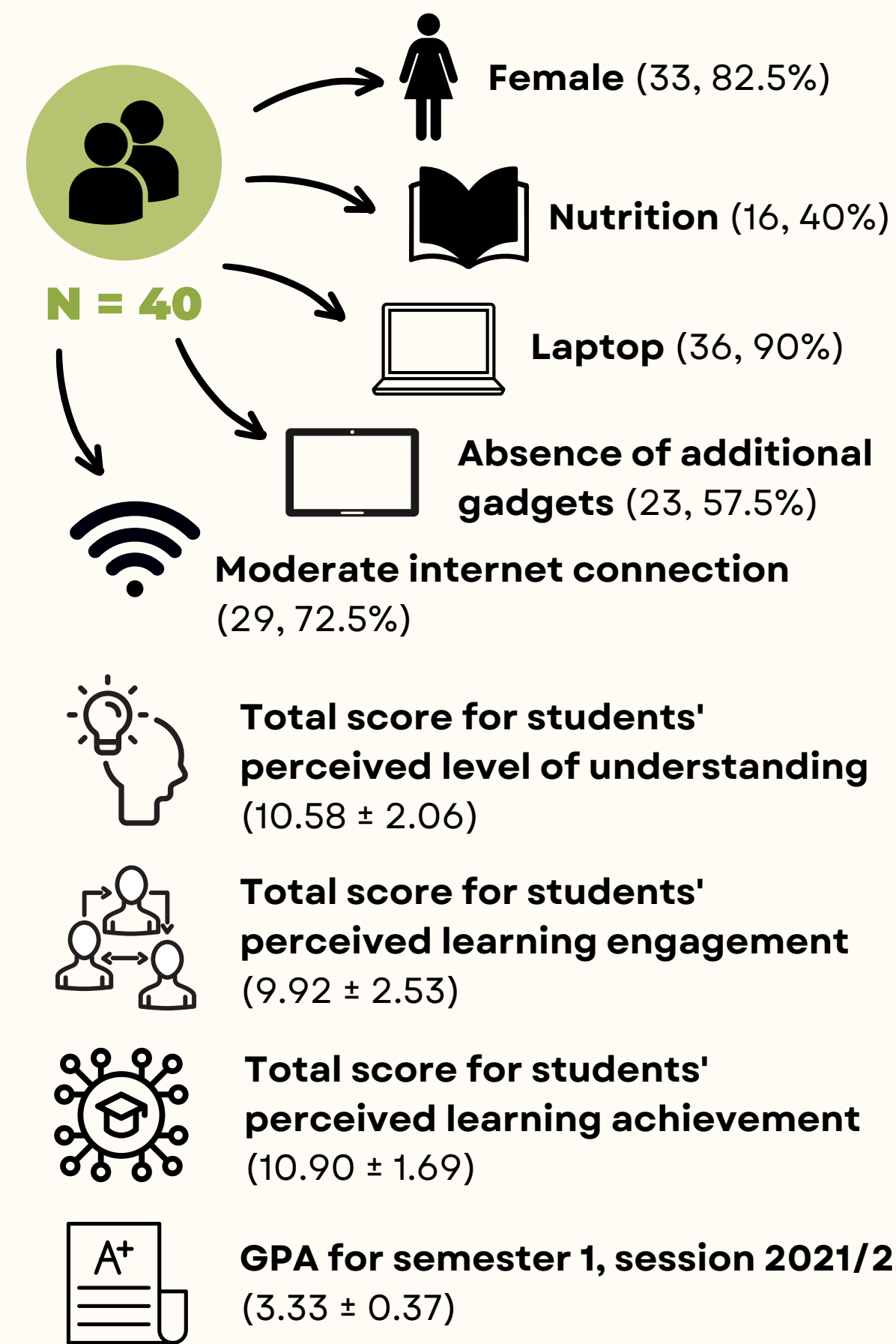
Results & Discussion

- Female (33, 82.5%)
- Nutrition (16, 40%)
- Laptop (36, 90%)
- Absence of additional gadgets (23, 57.5%)
- Moderate internet connection (29, 72.5%)
- N = 40
- Total score for students' perceived level of understanding (10.58 ± 2.06)
- Total score for students' perceived learning engagement (9.92 ± 2.53)
- Total score for students' perceived learning achievement (10.90 ± 1.69)
- GPA for semester 1, session 2021/22 (3.33 ± 0.37)

Table 1: Comparison of GPA on most used gadgets, use of additional gadgets, and strength of internet connection

Variable	GPA S1 2021/22	p-value
Most used gadgets		
Laptop/Desktop	3.34 ± 0.37	0.88
Mobile phone	3.31 ± 0.46	
Use of additional gadgets		
Yes	3.42 ± 0.25	0.158
No	3.27 ± 0.43	
Strength of internet connection		
Weak	12.13	0.20
Moderate	20.52	
Strong	25.21	

∴ Throughout the online learning, **no significant differences** in students' GPA between
- the most used gadgets (laptop/desktop, mobile phone)
- usage of additional gadgets to aid online learning (yes, no)
- strength of internet connections (weak, moderate, strong)

Table 2: Association between GPA and perceived level of understanding, learning engagement, and learning achievement

GPA S1 2021/22	Low	High (Moderate+High)	Fisher's Exact
Total score of level of understanding			
First class	**1.4**	7.7	0.306
Second class (lower+upper)	4.7	26.4	
Total score of learning engagement			
First class	**2.7**	6.3	1.00
Second class (lower+upper)	9.3	21.7	
Total score of learning achievement			
First class	**0.2**	8.8	1.00
Second class (lower+upper)	**0.8**	30.2	

∴ Throughout the online learning, **no significant associations** between students' GPA and their
- Perceived level of understanding
- Perceived learning engagement
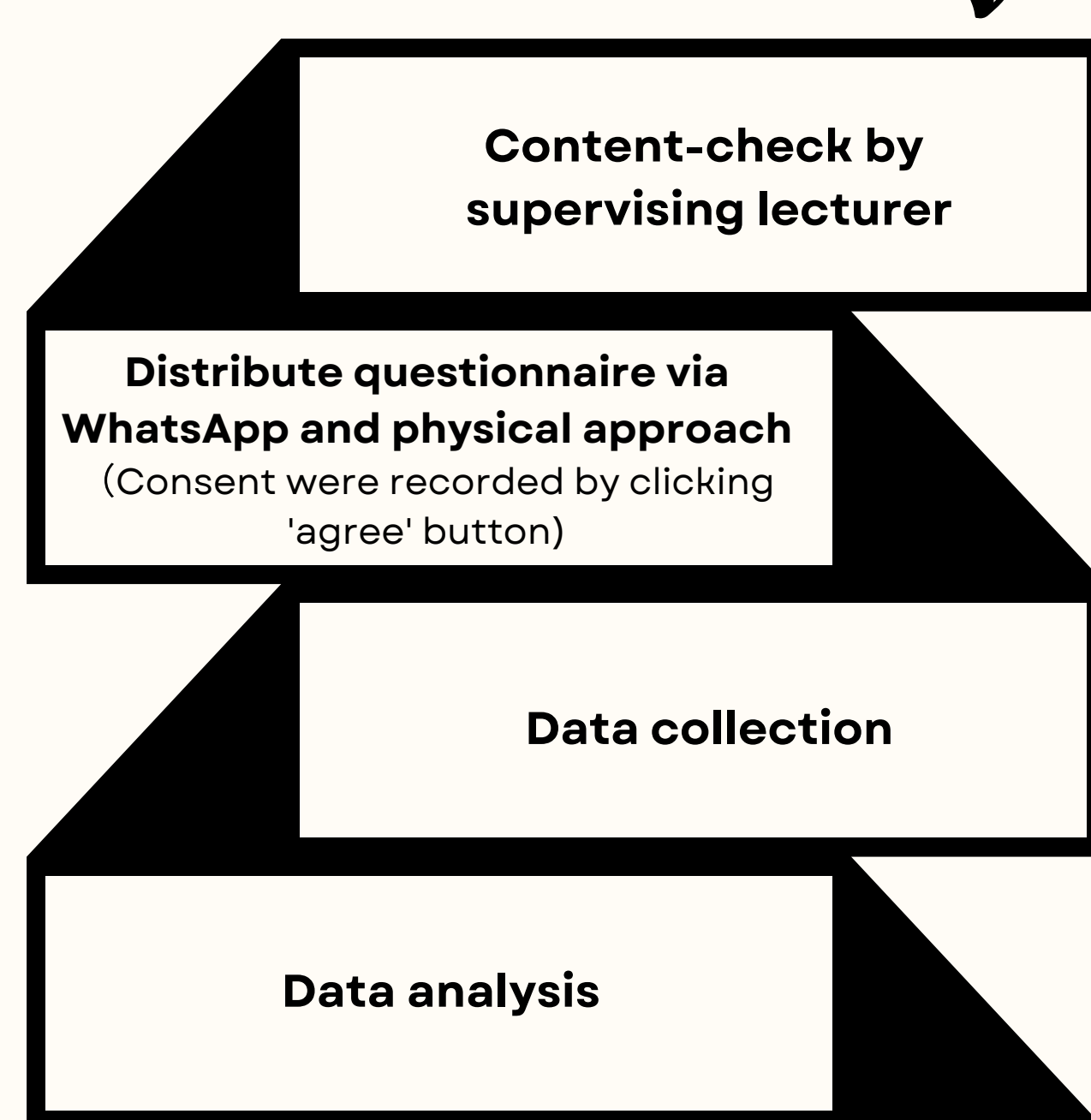- Perceived learning achievement

Despite all the results obtained in this study did not display any significant difference or association among the tested hypotheses, however the result could not be generalized to the whole FSMP year 2 population as the response rate obtained is only 29%.

Methodology

Study Design & Setting

Study Design	Cross-sectional study (Oct 2022 - Jan 2023)
Participant	Inclusion criteria: • On-seat second year students from FSMP • Experienced the fully online teaching and learning process in Semester 1 session 2021/22 • Received final examination results for Semester 1 session 2021/22
Location	Faculty of Food Science and Nutrition (FSMP), Universiti Sabah Malaysia
Sampling	Convenient sampling

Questionnaire (Google Form)

- Content-check by supervising lecturer
- Distribute questionnaire via WhatsApp and physical approach (Consent were recorded by clicking 'agree' button)
- Data collection
- Data analysis

Data Collection

- Demographic data
- Technical aspect of online learning

Use of 5-point Likert Scale [2]:
- Perceived level of understanding
- Perceived learning engagement
- Perceived learning achievement

Statistical Analysis

Confidence Interval = 95% (p=0.05)
- Descriptive analysis
- Independent Sample T-Test
- Kruskal Wallis H Test
- Chi-Square Test of Independence

Conclusion

Technical aspects of online learning such as most used gadgets for online learning, usage of additional gadgets to aid online learning, strength of internet connection during online learning do not affect student's academic performance throughout online learning among FSMP year 2 students. Despite students perceived themselves to have a moderate high understanding, learning engagement as well as learning achievement, however it does not reflect that they would be able to perform well in their academic.

Reference

1. Jafar, A., Dollah, R., Dambul, R., Mittal, P., Ahmad, S. A., Sakke, N., ... & Wahab, A. A. (2022). Virtual learning during COVID-19: Exploring challenges and identifying highly vulnerable groups based on location. International Journal of Environmental Research and Public Health, 19(17), 11108.
2. Laili, R. N., & Nashir, M. (2021). Higher education students' perception on online learning during Covid-19 pandemic. Edukatif: Jurnal Ilmu Pendidikan, 3(3), 689-697.