

DEPRESSION, ANXIETY, STRESS AND EATING HABITS OF UNISZA STUDENTS DURING COVID-19 PANDEMIC



Noorul Aysha Arifin, and Sharifah Wajihah Wafa SST Wafa
 School of Nutrition & Dietetics, Faculty of Health Science, UniSZA Gong Badak Campus
 Corresponding author: Sharifah Wajihah Wafa SST Wafa; Email: sharifahwajihah@unisza.edu.my

INTRODUCTION

- A variety of strict preventative measures were imposed to curb the spread of the COVID-19 such as a movement restriction order.
- Whilst effective for containing outbreaks, disrupted habits involving strict isolation measures can adversely affect the daily life of university students.
- Due to separation from the families, insufficient income, or a lack of time and awareness about proper diet, several studies have found that university students lack adequate and balanced meals.

OBJECTIVES

- To determine eating habits of UniSZA students during COVID-19 pandemic
- To determine depression, anxiety, and stress (DASS) level of UniSZA students during COVID-19 pandemic.
- To determine association between DASS and eating habits among UniSZA students during COVID-19 pandemic.

METHODOLOGY

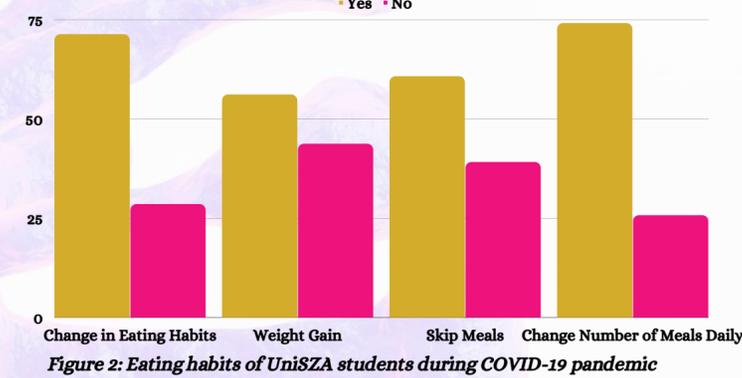
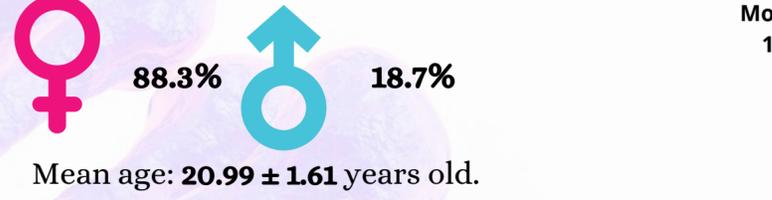


- Eating Habits And Lifestyle Changes in COVID-19 Lockdown (EHL-COVID19) Questionnaire
- 21-item Depression Anxiety Stress Scale (DASS-21)



- Sample: 283 UniSZA students
- Cross-sectional Study
- Convenience Sampling
- A descriptive test & Pearson's Chi-Square test

RESULTS & DISCUSSION



- Most of the students were found to be favored **homemade meals** (76.0%), skipped meals due to **lack of appetite** (23.7%), and drank **1L-2L water** daily (52.7%).
- Most of the students **increase** their consumption of bread (38.9%) and sweets (39.2%); and **reduced** their consumption of milk (42.0%), sweet drinks (45.6%), and fast foods (39.6%).

Table 3: Association between anxiety and eating habits

EHL-C Components	Anxiety		X ² (df)	p-value
	Normal - Moderate	Severe - Extremely severe		
Skipped meals				
Yes	98 (55.1)	74 (70.5)	6.587 (1)	0.010
No	80 (44.9)	31 (29.5)		
Fruits				
No change	71 (39.9)	33 (31.4)	7.033 (2)	0.030
Consume LESS	43 (24.2)	41 (39.0)		
Consume MORE	64 (36.0)	31 (29.5)		

*Pearson's Chi-Square test was applied

CONCLUSION

- University student experienced eating habits changes during COVID 19 and it was associated with depression, anxiety, and stress namely in fruits and vegetables intake
- Future research should consider a larger study population by including all university students from various educational level in Malaysia.

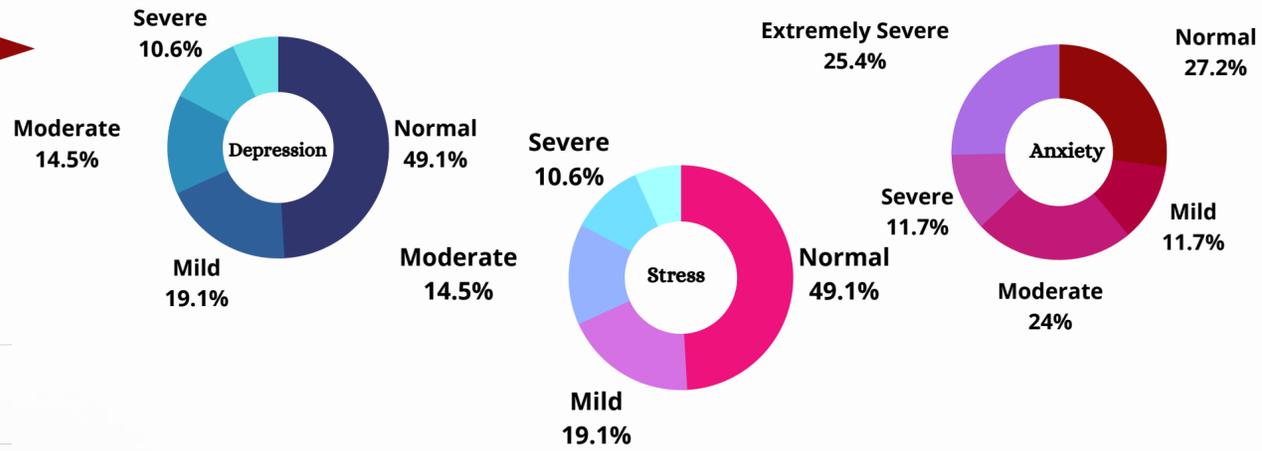


Figure 1: Depression, anxiety, and stress (DASS) level of UniSZA students during COVID-19 pandemic.

Table 1: Association between depression and eating habits

EHL-C Components	Depression		X ² (df)	p-value
	Normal - Moderate	Severe - Extremely severe		
Fruits				
No change	92 (39.5)	12 (24.0)	10.112 (2)	0.006
Consume LESS	60 (25.8)	24 (48.0)		
Consume MORE	81 (34.8)	14 (28.0)		
Vegetables				
No change	91 (39.1)	22 (44.0)	6.816 (2)	0.033
Consume LESS	49 (21.0)	17 (34.0)		
Consume MORE	93 (39.9)	11 (22.0)		
Sweet drinks				
No change	61 (26.2)	13 (26.0)	6.509 (2)	0.039
Consume LESS	113 (48.5)	16 (32.0)		
Consume MORE	59 (25.3)	21 (42.0)		

*Pearson's Chi-Square test was applied

Table 2: Association between stress and eating habits

EHL-C Components	Stress		X ² (df)	p-value
	Normal - Moderate	Severe - Extremely severe		
Changes in eating habits				
Yes	161 (68.8)	41 (83.7)	4.385 (1)	0.036
No	73 (31.2)	8 (16.3)		
Fruits				
No change	93 (39.7)	11 (22.4)	18.382 (2)	<0.001
Consume LESS	57 (24.4)	27 (55.1)		
Consume MORE	84 (35.9)	11 (22.4)		
Vegetables				
No change	97 (41.5)	16 (32.7)	10.247 (2)	0.006
Consume LESS	46 (19.7)	20 (40.8)		
Consume MORE	91 (38.9)	13 (26.5)		
Sweet drinks				
No change	65 (27.8)	9 (18.4)	12.538 (2)	0.002
Consume LESS	113 (48.3)	16 (32.7)		
Consume MORE	56 (23.9)	24 (49.0)		

*Pearson's Chi-Square test was applied

Inadequate dietary habits often coexist with psychological disorders such as depression and anxiety (Aoun et al., 2019)

Mental health problems caused by the pandemic, coupled with restrictions imposed to slow the spread of COVID-19, can significantly influence dietary intake which means that there were changes in the caloric intake of meals due to the quantity and quality of the food consumed daily in the period of the pandemic (Di Renzo et al., 2020).

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