



Introduction

- Young adults gain independency and experience some substantial life changes during transition into university life
- They are making their own decisions in food choices, sleeping time and social activities, which may indirectly influence their health
- This study was carried out to investigate the relationship between stress level, sleep quality and eating behavior among university students in Malaysia.

Methodology

Study Design: Cross-sectional study

Study Location: Online self-reported survey

Sampling Method: Convenience & Snowball sampling



Study Instrument

PSS-10

PSQI

DEBQ



Data analysis (SPSS)

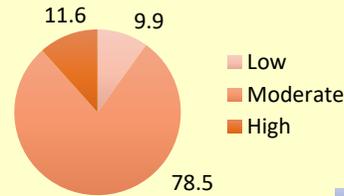
- Descriptive statistics
- Independent T-test
- Pearson Correlation

Reference

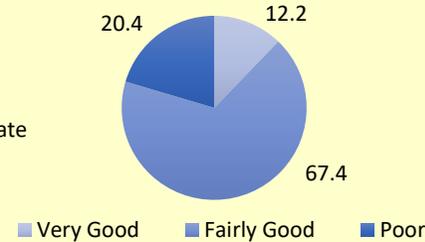
- [1] Elias, H., Ping, W.S. and Abdullah, M.C., 2011. Stress and academic achievement among undergraduate students in Universiti Putra Malaysia. *Procedia-Social and Behavioral Sciences*, 29, 646-655.
- [2] Franckle, R., Falbe, J., Gortmaker, S., Ganter, C., Taveras, E., Land, T. and Davison, K., 2015. Insufficient sleep among elementary and middle school students is linked with elevated soda consumption and other unhealthy dietary behaviors. *Preventive Medicine*, 74, 36-41
- [3] Haghghatdoost, F., Karimi, G., Esmailzadeh, A. and Azadbakht, L., 2012. Sleep deprivation is associated with lower diet quality indices and higher rate of general and central obesity among young female students in Iran. *Nutrition*, 28(11-12), 1146-1150.
- [4] Hong, J. and Kim, S., 2014. Correlation between Eating Behavior and Stress Level in High School Students. *Journal of the Korean Society of Food Science and Nutrition*, 43(3), 459-470
- [5] Teh, C., Ngo, C., Zulkifli, R., Vellasamy, R. and Suresh, K., 2015. Depression, Anxiety and Stress among Undergraduate Students: A Cross Sectional Study. *Open Journal of Epidemiology*, 05(04), 260-268.

Result

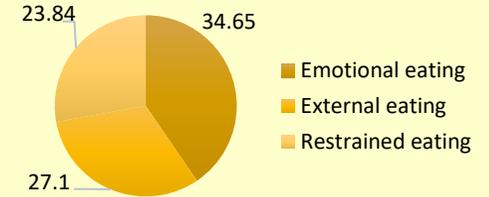
Prevalence of stress



Prevalence of sleep quality



Prevalence of eating behaviour



- Mean PSS score was 20.74 ± 5.324
- The sleep quality of the participants was generally good with a mean global PSQI score of 6.21, and the mean of the DEBQ score was found to be 85.59
- A significant gender difference found in eating behavior among individuals ($t=2.048, p=0.042$)
- There was a weak significant positive correlation between eating behavior and stress level ($r=0.207, p=0.007$), but not significant for sleep quality.

Discussion

- High prevalence of moderate stress level among university students shown in result was in line with previous studies, with academic stress was the top stressor [1,5].
- Higher stress level results in negative changes in dietary behavior in students [4] and the stress-induced eating behaviors generally could be explained as an emotional relief.
- The result shown was not consistent with recent studies as there was no significant association between eating behavior and sleep quality. This may due to smaller sample size and high prevalence of good sleepers found in the participants in study.
- A stronger correlation found between sleep quality and diet quality, rather than eating behavior in studies [2,3].

Conclusion

- Students tend to have abnormal eating behaviors when they were experiencing higher stress level and this may negatively affect their health consequently
- However, sleep quality has shown to be not significantly associated with eating behavior in our findings
- Further research is required to establish the significant relationship between eating behaviors with sleep quality among university students.

Table 1: Socio-demographic characteristics of participants

Variables	N(%)	Mean \pm SD
Age		21.77 \pm 1.691
Gender		
Male	50 (29.1)	
Female	122 (70.9)	
Ethnicity		
Malay	17 (9.9)	
Chinese	150 (87.2)	
Indian	5 (2.9)	
Current University		
Public	39 (22.7)	
Private	133 (77.3)	
Degree level		
1 st	24 (14.0)	
2 nd	28 (16.3)	
3 rd	58 (33.7)	
4 th	53 (30.8)	
5 th	9 (5.2)	
Financial aids per month		
<RM1000	80 (46.5)	
RM1000-RM1500	52 (30.2)	
RM1500-RM2000	16 (9.3)	
>RM2000	24 (14.0)	