

INTRODUCTION

- Physical activity (PA) is any real movement created by skeletal muscle that results in energy expenditure.
- PA has been considered a major modifiable factor for preventing and reducing the mortality from cardiovascular disease, diabetes, and some cancers, improving musculoskeletal and mental health (WHO, 2009).
- Target population in this study is university student because, university and college years represent an important opportunity for students to learn about healthy lifestyles and enhance nutritional awareness (Maryam & Farouk, 2016).
- This study was conducted during COVID-19, because this new norm made student stays at home most of the time rather than being outdoors.
- WHO (2020) has recommended for adults aged 18 to 64 years old to do at least 150–300 minutes of moderate-intensity aerobic physical activity or at least 75–150 minutes of vigorous-intensity aerobic physical activity; or an equivalent combination of moderate- and vigorous-intensity activity throughout the week, do muscle-strengthening activities at moderate or greater intensity that involve all major muscle groups on 2 or more days a week, as these provide additional health benefits and Increase moderate-intensity aerobic physical activity to more than 300 minutes; or do more than 150 minutes of vigorous-intensity aerobic physical activity; or an equivalent combination of moderate- and vigorous-intensity activity throughout the week

OBJECTIVE

To determine the physical activity level during COVID-19 pandemic among students in UiTM Shah Alam.

METHODOLOGY

Study design: Cross-sectional study

Study location: Universiti Teknologi Mara Shah Alam, Selangor

Sample selection: Randomly selected 186 students from Faculty of Applied Sciences

Inclusion criteria: Malaysian, Undergraduate students of Faculty of Applied Sciences

Exclusion criteria: students who have physical disabilities, mental or chronic diseases

Study Instruments

Variables	Instrument
Socio-demographic factors	Socio-demographic form
Environmental factors	Physical Activity Neighborhood Environment Survey (PANES)
Psychosocial factors	Depression Anxiety Stress Scale (DASS) Social Support and Exercise Survey (SSES)
Physical Activity Level	Global Physical Activity Questionnaire (GPAQ)
Sedentary lifestyle	Adults' Past Day Recall of Sedentary Time (PAST)

Statistical Analysis: All data was analyzed by using IBM SPSS Statistics 26 (IBM Corp., Armonk, NY). Descriptive statistic, Pearson Correlation test and chi square test were used in this study

DISCUSSION

- Figure 1:** Overall, majority of the participants was in low level of physical activity with a total of 105 (61.4%) participants. There were more participants in vigorous level than low level with 49 (28.7%) and 17 (9.9%) respectively.
- Table 1:** There was a significant association between family support and physical activity level ($r = .$, $p = .$) This finding was supported with previous study that stated it also stated that family social support has a substantial impact on physical exercise participation (Chiu et al., 2016). Meanwhile, age, gender, ethnicity, parents' education level, friend support, environmental factor and sedentary lifestyle were not significant associated.
- Table 2:** No significant found for parents' education level (Father; $\chi^2 = 0.111$, $p = 0.946$), (Mother; $\chi^2 = 0.822$, $p = 0.663$) gender ($\chi^2 = 3.964$, $p = 0.46$) and ethnicity ($\chi^2 = 1.163$, $p = 0.281$) with physical activity level. Present study was contradicted with previous study that showed there was significant association between education and total physical activity, ($r = -.135$, $p < .01$) (Tam et al., 2016). In this study, finding shows there was no significant association between gender and physical activity level, however this was contradicted with previous study before the existence of COVID-19 that stated Malaysian women were less physically active compared to men (Tam et al., 2016). In terms of ethnicity, previous study found that there was a link between the degree of physical activity and ethnicity, where the Malay ethnic group was substantially more involved ($p < 0.5$) than the Indian or Chinese subjects (Yusoff et al., 2018).

CONCLUSION

The findings from this study shown that the prevalence for low physical activity level among students UiTM Shah Alam was 61.4%. Next, there were no significant association between gender, age, ethnicity, parents' level education, home environment and sedentary lifestyle with physical activity level. The findings revealed that family support was significant associated with physical activity level, ($p = 0.001$, $r = 0.247$).

FACTORS ASSOCIATED WITH LEVEL OF PHYSICAL ACTIVITY

DURING COVID-19 PANDEMIC AMONG STUDENTS

IN UNIVERSITI TEKNOLOGI MARA SHAH ALAM

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RESULTS

Table 1: Association between socio-demographic factors, psychosocial factors, environmental factors, and lifestyle factors with physical activity level (METs)

Variables	Mean ± SD	r/χ ²	p value
Sociodemographic			
Gender		3.964	0.460
Age	21.94±1.360	0.021	0.784
Ethnicity		3.359	0.187
Father Education Level		0.111	0.946
Mother Education Level		0.822	0.663
Psychosocial			
Social support			
Family	23.76±7.588	0.247	0.001
Friends	25.77±8.594	0.147	0.055
Stress	6.02±3.353	-0.36	0.641
Anxiety	5.77±3.024	-0.49	0.527
Depression	5.79±3.528	-0.023	0.767
Environmental			
Home environment	19.11±3.500	0.010	0.899
Lifestyle factor			
Sedentary lifestyle	12.00±3.33	0.082	0.283

Table 2: Distribution data of chi square test for parents' education level, gender and ethnicity

Variables	n (%)		χ ²	p
	Low	Moderate		
Father's education				
Diploma, SPM and other	47 (44.8)	29 (43.9)	0.111	0.946
Bachelor	44 (41.9)	27 (40.9)		
Master, PhD	14 (13.3)	10 (15.2)		
Mother's education				
Diploma, SPM and other	58 (55.2)	32 (48.5)	0.822	0.663
Bachelor	39 (37.1)	29 (43.9)		
Master, PhD	8 (7.6)	5 (7.6)		
Gender				
χ ² = 3.964, p = 0.46				
Female	88 (83.8)	46 (69.7)		
Male	17 (16.2)	20 (30.3)		
Ethnicity				
χ ² = 1.163, p = 0.281				
Sabah & Sarawak	13 (12.4)	13 (19.7)		
Malay	92 (87.6)	53 (80.3)		

Total Physical Activity Level

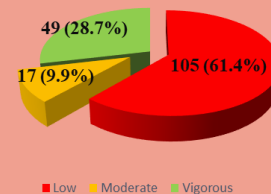


Figure 1: Pie chart of total physical activity level

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