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**EXTENDED
ABSTRACT**

The Impact of Physical Activity on Mental Health Among FSR Students

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I. INTRODUCTION

Physical activity plays a crucial role in promoting both physical and mental health. Among university students, especially those in sports and recreation programs, regular engagement in physical activity may significantly impact mental well-being. This research focuses on students from the Faculty of Sports and Recreation (FSR) at UiTM Seremban 3 to examine how various types of physical activity such as leisure, domestic, occupational, and travel-related affect mental health outcomes, including stress, anxiety, and depression. Mental health challenges among students are on the rise due to academic pressure, social expectations, and lifestyle changes. Regular exercise has been linked to improved mood, reduced stress, and better academic performance. However, little research has been done specifically on FSR students who are more exposed to physical activities through their academic programs. This study aims to explore this connection and provide insights that could guide future student support and wellness initiatives.

II. METHODS

This study used a quantitative cross-sectional survey design to examine the impact of physical activity on mental health among students in the Faculty of Sports and Recreation (FSR), UiTM Seremban 3. A sample of 342 students was selected using stratified random sampling to ensure balanced representation based on gender and academic year. Data were collected using a structured questionnaire consisting of three sections: demographic information, the International Physical Activity Questionnaire (IPAQ) to assess levels and types of physical activity, and the Depression Anxiety Stress Scales (DASS-21) to measure mental health indicators. Descriptive statistics were used to summarize demographic data and activity levels, while Pearson correlation and multiple regression analysis were applied to identify relationships between physical activity and mental health outcomes. Ethical approval was obtained, and participation was voluntary and anonymous. This methodology ensures reliability and validity in exploring how physical activity influences student well-being.

III. RESULTS AND DISCUSSION

A. Physical Activity Among FSR Students

Out of 253 respondents, 216 students considered physical activity important, with most engaging in it more than twice a

week for at least 30 minutes. Male students reported higher activity levels than females. These findings highlight gender differences in participation and a general recognition of physical activity's benefits among FSR students.

TABLE I
FREQUENCIES OF PHYSICAL ACTIVITY RECORDED

Programme	Counts	% of Total	Cumulative %
1	32	12.6%	12.6%
2	5	2.0%	14.6%
3	216	85.0%	99.6%
Category (Recorded)	1	0.4%	100.0%

B. Factors of Mental Health Among FSR Students

The descriptive findings reveal that among the three mental health factors, anxiety recorded the highest mean score at 1.83, followed by depression (1.50) and stress (1.32). All three factors had relatively low standard deviation values (1.28) for anxiety, 0.848 for depression, and (0.621) for stress, indicating that most students had similar responses with only slight variations. A total of 253 students completed this section with no missing data. These results suggest that anxiety is the most experienced mental health concern among FSR students. While the average levels are not alarming, they reflect the presence of emotional challenges. Therefore, efforts like awareness campaigns and counselling services are essential to support student mental well-being and reduce these issues.

TABLE II
DESCRIPTIVE ANALYSIS

	Depression	Anxiety	Stress
N	253	253	253
Mean	1.50	1.83	1.32
Standard deviation	0.848	1.28	0.621

C. Influence of Physical Activity and Mental Health Among FSR Students

To address RO3, a Pearson correlation analysis was conducted to examine the relationship between physical

activity (PI Numeric) and mental health variables anxiety, stress, and depression among FSR students. The results show no significant correlation between physical activity and anxiety ($r = -0.069, p = 0.274$), stress ($r = 0.067, p = 0.286$), or depression ($r = 0.018, p = 0.772$), indicating that physical activity does not significantly influence mental health levels. However, strong and significant positive correlations were found among the mental health variables themselves: anxiety and stress ($r = 0.828$), anxiety and depression ($r = 0.942$), and stress and depression ($r = 0.832$), all with $p < 0.001$. This suggests mental health components are closely interrelated among FSR students.

TABLE III
DESCRIPTIVE ANALYSIS

		Anxiety	Stress	Depression	PI Numeric
Anxiety	Pearson's r	—			
	df	—			
	p-value	—			
Stress	Pearson's r	0.828	—		
	df	251	—		
	p-value	<0.001	—		
Depression	Pearson's r	0.942	0.832	—	
	df	251	251	—	
	p-value	<0.001	<0.001	—	
PI Numeric	Pearson's r	-0.069	0.067	0.018	—
	df	251	251	251	—
	p-value	0.274	0.286	0.772	—

IV. CONCLUSIONS

Physical activity, particularly regular walking, shows a positive trend toward reducing anxiety among FSR students. Though not statistically significant, the results suggest its importance in student wellness strategies. Gender and age-related patterns also highlight the need for targeted mental health support in university settings.

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