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EXTENDED ABSTRACT

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The Relationship Between Physical Activity and Mental Health Among Faculty of Sport Science and Recreation UiTM Seremban 3 Students

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I. Introduction

Students in universities experience stress, anxiety, and depression because of both academic and social pressures. Physical activities have been proven to improve moods and reduce psychological distress [1]. However, most students fail to meet the recommended physical activity levels, which has negative effects on mental health [2]. In Malaysia, mental health problems have increased dramatically in recent years, with the prevalence of mental health issues rising from 10% in 1996 to 29% in 2015 [3]. This study was conducted on students from the Faculty of Sport Science and Recreation (FSR), Universiti Teknologi MARA (UITM) Seremban 3, and its purpose was to explore the relationship between physical activities and mental health in order to provide evidence for better student well-being initiatives.

II. Methods

This study used a quantitative design with 200 students from the Faculty of Sport Science and Recreation (FSR), UiTM Seremban 3. Physical activity was measured using the International Physical Activity Questionnaire–Short Form (IPAQ-SF), while mental health was assessed with the Depression, Anxiety, and Stress Scale (DASS-21). Data were collected through self-administered questionnaires and analyzed using descriptive statistics and correlation tests to examine the relationship between physical activity and mental health.

III. Results and Discussion

A. Physical Activity Level

The descriptive statistics from the table below indicate that the majority of students reported a high physical activity level (62.0%, $N = 124$), followed by moderate activity (24.5%, $N = 49$), while only a small proportion had low activity levels (13.5%, $N = 27$).

Table I
Frequency

PL	Counts	% of Total	Cumulative %
High	124	62.0%	62.0%
Low	27	13.5%	75.5%
Moderate	49	24.5%	100.0%

B. Mental Health Level

Most students reported being in the normal range for depression, making up over 80% of the sample. Only a small percentage showed mild or moderate symptoms, while a smaller group experienced severe or extremely severe depression. Overall, this indicates that while most students are mentally healthy, a notable minority still face significant challenges that may require attention and support.

Table II
Frequency of Depression Level

DL	Counts	% of Total	Cumulative %
Normal	161	80.5%	80.5%
Mild	9	4.5%	85.0%
Moderate	11	5.5%	90.5%
Severe	6	3.0%	93.5%
Extremely severe	13	6.5%	100.0%

Most students reported being in the normal range for anxiety (80%), showing no significant symptoms. A small proportion experienced mild (5%) or moderate (5%) anxiety, while fewer students reported severe anxiety (3%). Notably, 7% of students fell into the extremely severe category, indicating that although most students are mentally stable, a meaningful minority face high levels of anxiety that may require support.

TABLE III
FREQUENCIES OF ANXIETY LEVEL

A L	Counts	% of Total	Cumulative %
Normal	160	80.0%	80.0%
Mild	10	5.0%	85.0%
Moderate	10	5.0%	90.0%
Severe	6	3.0%	93.0%
Extremely severe	14	7.0%	100.0%

Most students reported being in the normal range for stress (93%), showing very low levels overall. Only a few experienced mild (0.5%), moderate (2.5%), or severe (1.5%) stress, while 2.5% were in the extremely severe category. This indicates that stress levels among most students are well managed, with only a small minority facing higher stress that may require additional support.

TABLE IV
FREQUENCIES OF STRESS LEVEL

SL	Counts	% of Total	Cumulative %
Normal	186	93.0%	93.0%
Mild	1	0.5%	93.5%
Moderate	5	2.5%	96.0%
Severe	3	1.5%	97.5%
Extremely severe	5	2.5%	100.0%

C. Relationship Between Physical Activity and Mental Health Among FSR Students in UiTM Seremban

All three chi-square tests show significant relationships: depression ($\chi^2 = 39.0$, $df = 8$, $p < 0.001$), anxiety ($\chi^2 = 16.4$, $df = 8$, $p = 0.037$), and stress ($\chi^2 = 29.4$, $df = 8$, $p < 0.001$), indicating that each construct is statistically associated with the variables examined.

TABLE V
X^2 TESTS

	Value		
Depression	39.0	8	<0.001
Anxiety	16.4	8	0.037
Stress	29.4	8	<0.001

IV. CONCLUSIONS

Most of the students in UiTM Seremban 3 experienced normal levels of depression, anxiety, and stress, but a small number experienced moderate to extremely severe symptoms. This shows that although most of them are mentally healthy, a small number are experiencing challenges that can influence their lives. This shows how important it is to encourage physical activities and other strategies to boost mental health among university students.

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