

The background of the entire cover is an abstract, high-energy image. It features a blurred figure of a person, likely a runner, in motion. The figure is overlaid with vibrant, streaky light trails in shades of teal, blue, and orange, creating a sense of speed and dynamic movement. The overall aesthetic is modern and energetic.

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## **EXTENDED ABSTRACT**

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# EXERCISE AND MENTAL HEALTH AMONG MALAYSIAN SPORTS STUDIES UNDERGRADUATES: A QUANTITATIVE ANALYSIS OF GENDER DIFFERENCES, BARRIERS, AND CORRELATIONS

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I. INTRODUCTION

This study explores the relationship between exercise and mental health among FSR students at UiTM Seremban, focusing on exercise levels, mental health status, gender-based differences, and their correlation. Despite proven benefits, barriers like time [1], motivation [1,2], and social support [3] hinder regular exercise, impacting mental health [4,5,6]. Addressing these challenges can promote healthier lifestyles among students.

II. METHODS

This quantitative, non-experimental study employed a bilingual questionnaire in English and Malay to collect data from FSR students at UiTM Seremban. A sample of 333 respondents was selected, accounting for a 20% non-response rate from the target population of 1,000 students. Data included exercise levels, mental health, and demographics such as gender, age, education level, and course.

III. RESULTS AND DISCUSSION

A. Relationship between Exercise and Mental Health

TABLE I  
RELATIONSHIP BETWEEN EXERCISE AND MENTAL HEALTH

Variables		Exercise
Mental Health	Pearson Correlation	0.603
	Significant (2-tailed)	<0.001
	N	330

Table 1 shows a positive relationship was found between exercise and mental health ( $r = 0.603$ ,  $p<0.001$ ). This means that students who exercised more had better mental health, showing that physical activity plays an important role in reducing stress, anxiety, and depression.

B. Gender-Based Differences in Exercise

TABLE II  
GENDER-BASED DIFFERENCES IN EXERCISE

Variables	Groups	N	Mean	Median	SD	t	df	p-value
Exercise	Male	171	2727	1866	2909	0.922	331	0.357
	Female	162	3048	1607	3428			

Table 2 shows no significant differences in exercise levels between male and female students ( $p=0.357$ ). This shows that both genders are equally active, and gender does not appear to influence their exercise habits significantly.

IV. CONCLUSIONS

This study confirms that regular exercise positively correlates with mental health among FSR students at UiTM Seremban. While vigorous activity predominates, mental health challenges like depression persist. Addressing barriers to exercise and implementing targeted interventions may improve student well-being. Gender differences in activity levels were minimal, suggesting opportunities for inclusive health promotion strategies.

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REFERENCES

[1] Li, L., & Wang, S. (2024). The relationship between exercise habits and mental health among university students: a cross-sectional study. BMC Public Health, 24, Article number: 825.

[2] Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. Educational and Psychological Measurement, 30(3), 607–610.

[3] Morgan, J. A., & Parker, A. G. (2019). Exercise for mental health: An evidence-based review. Australian Journal of General Practice, 48(8), 569–573.

[4] Schuch, F. B., & Vancampfort, D. (2016). Physical exercise as a treatment for depression: A meta-analysis. Journal of Affective Disorders, 210, 244–253.

[5] [https://www.jad-journal.com/article/S0165-0327\(16\)30165-6/fulltext](https://www.jad-journal.com/article/S0165-0327(16)30165-6/fulltext)

[6] Anderson, K., & Brown, H. (2024). Exercise interventions for reducing anxiety and depression: Evidence from randomized trials. Journal of Physical Activity and Health, 17(5), 331–345.