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**EXTENDED  
ABSTRACT**

# Examining the Association Between Recreational Sports Participation and Mental Health Among University Students

Muhammad Zulhairy Hashim<sup>1</sup> & Hasmiza Abdul Majeed<sup>1\*</sup>

<sup>1</sup>Faculty of Sports Science and Recreation, Universiti Teknologi MARA, Negeri Sembilan Branch, Seremban Campus, Negeri Sembilan, MALAYSIA

\*Corresponding author: [hasmiza@uitm.edu.my](mailto:hasmiza@uitm.edu.my)

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## I. INTRODUCTION

University students often contend with high academic pressure, stress, anxiety, and depression, which negatively impact their mental health. [1] A study on the prevalence of mental health disorders among undergraduate university students in the United States identified that the prevalence of mental health disorders is high, and the subsequent impact on this population is worrying. Therefore, a way to tackle this issue is by considering the participation of university students in physical and sports activities, including recreational sports. Hence, this study aims to explore how recreational sports participation may contribute to better mental health outcomes and integrate them into university programs to support students' mental well-being and promote a balanced lifestyle.

## II. METHODS

A quantitative research design was employed to examine recreational sports participation and mental health among 378 students at UiTM Seremban 3, Negeri Sembilan. Data were collected via an online survey distributed through Google Forms. In the present study, the recreational sports participation was assessed using the frequency of played in the past week [2], and the level of mental health was assessed using the Depression, Anxiety, and Stress Scale (DASS-21) [3]. These instruments were used to measure the studied variables among the target population. Chi-Square tests were conducted to determine the relationship between recreational sports participation and the mental health dimensions.

## III. RESULTS AND DISCUSSION

### A. Frequency of Recreational Sports Participation

Out of 378 respondents, the majority reported participating in recreational sports 1 or 2 times during the week, accounting for 43.4% of the sample ( $n = 164$ ). This was followed by 139 respondents (36.8%) who engaged in sports 3 or 4 times, and 39 respondents (10.3%) who did so 5 or more times. Only 36 participants (9.5%) indicated that they did not engage in sports at all during the week. The cumulative percentage shows that 89.7% of respondents engaged in sports at least once, indicating a generally active sample with a strong inclination toward recreational sports activity.

### B. Level of Mental Health

The DASS-21 scale was used to evaluate depression, anxiety, and stress levels among the students. 43.7% of the respondents reported normal levels of depression. A significant proportion (26.5%) experienced extremely severe depression. Interestingly, mild depression was found to be relatively high at 19.6%, much higher than mild levels of stress and anxiety. Combined moderate to extremely severe depression accounts for approximately 36.9%, reflecting a need for psychological intervention in a notable portion of the population.

Findings on the anxiety level showed that less than half (43.1%) had normal anxiety levels, lower than the normal stress category. A larger percentage (27.5%) experienced extremely severe anxiety, even higher than those with extremely severe stress. When combining moderate, severe, and extremely severe levels, over 56% of respondents are affected by significant anxiety, suggesting widespread issues. This may reflect chronic or untreated anxiety in the population.

The stress results depict that most respondents (64%) reported normal stress levels, indicating a relatively mentally stable group. However, a significant portion (24.9%) experienced extremely severe stress, highlighting a notable subgroup with high psychological distress. Moderate to severe stress (combined 10.6%) also presents a concern, albeit a smaller one. Very few respondents (0.5%) reported mild stress, showing a stark jump between normal and high stress levels, possibly indicating underreporting or rapid escalation of stress symptoms.

### C. Relationship Between Recreational Sports Participation and Mental Health

Chi-Square analysis revealed significant associations between recreational sports participation and both depression and anxiety ( $p < 0.05$ ), suggesting that active students were less likely to experience these conditions. However, no significant link was found between sports and stress, indicating that academic or external pressures might influence stress beyond physical activity. These findings support prior research advocating for recreational sports as a preventive mental health measure and underscore the need for institutional support to promote active student lifestyles.

#### CONCLUSIONS

This study confirms that higher engagement in recreational sports is associated with lower levels of depression and anxiety among university students. While stress was not significantly affected, the overall findings highlight the potential of non-competitive physical activity in improving mental health. Institutions should integrate recreational sports into wellness programs to enhance psychological well-being and academic performance.

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