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ABSTRACT

Examining the Interplay Between Environmental Barriers, Demographic Factors, and Sports Participation Among University Students

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I. INTRODUCTION

Promoting physical activity and recreational sports participation among university students has garnered attention as a critical component of fostering physical and mental well-being. A study of university students revealed that physical activity significantly impacts students' health and well-being, showing that those who are not physically active in their leisure time are more likely to have moderate levels of disbelief and high levels of emotional burnout [1]. Thus, understanding factors that influence recreational sports participation is vital for promoting student well-being. Hence, this study investigates the interplay between environmental barriers, demographic factors (i.e., age and gender), and recreational sports participation among UiTM Seremban 3 students. By identifying patterns in perceived barriers and understanding the demographic factors, the research provides insights that can support inclusive recreational planning and reduce obstacles to student engagement in recreational sports.

II. METHODS

A quantitative approach using questionnaires was employed with 365 UiTM Seremban 3 students from FSR and FSKM. Data were collected via an online survey distributed through Google Forms. The present study used the environmental barriers instruments [2] to measure the environmental barriers, and the recreational sports participation was assessed using the frequency of playing in the past week [3]. Spearman's rho tested age-based perceptions, while the Mann-Whitney U test examined gender differences.

III. RESULTS AND DISCUSSION

A. Frequency of Recreational Sports Participation

Only 40.3% of UiTM Seremban 3 students reported regular participation, typically under two times weekly. Findings revealed an average of 2.25 as the mean play frequency, implying that respondents would have participated in sports activities an average of two times the previous week. This means that not all the population is playing sports daily but are taking up recreational sport activities as they get the opportunity in some periodic way. The standard deviation of 0.869 indicates that there is a moderate difference in the frequency of participation in sports activities among people. Others are likely to play a lot, and others get less involved with

fewer activities. The low standard deviation indicates that all responses are in line, and the majority of them group around the mean frequency of play.

B. Environmental Barriers to Participation

As per the results, the average score is 6.098, and this implies that the students experience an average to severe level of environmental barriers. Minimum scores are 0.33, and the maximum scores are 10.00, which shows that the number of students who feel considerably barred is not at all high, and there is also no exception denoting having high scores, that is, feeling strongly affected. The standard deviation of 2.81 indicates a certain range in the perceptions of students on these barriers.

C. Age-Based Differences in Environmental Barrier Perception

Spearman's rho showed a very weak, non-significant correlation between age and environmental barrier perception ($r = 0.019, p = 0.719$). The analysis indicates that age does not produce any significant difference in the manner in which students perceive or feel environmental barriers. The perception of these barriers by the students, whether younger or older, is quite similar, and age is not a leading factor in their responses in the study. Shared academic demands and routines across age groups may explain the minimal variation in perceived environmental constraints.

D. Gender-Based Differences in Environmental Barrier Perception

Mann-Whitney U results indicated no significant gender-based differences. The mean rank of the male students stood at 180.51, whereas the girls stood at a slightly higher value of 187.61. This indicates a minor variation in the score of the environmental barriers by each gender. Nevertheless, p -value (Asymp). The p -value (Sig. 2-tailed) = 0.538, and it is of a higher value than the standard value of 0.05. This implies that the gap between the two groups cannot be regarded as statistically significant. The test indicates that both groups seem to feel and evaluate these obstacles in quite a similar manner.

CONCLUSIONS

This study highlights low recreational sports participation among UiTM Seremban 3 students, shaped by space constraints, inadequate facilities, and shared environmental barriers. Demographic factors such as age and gender showed minimal impact, suggesting universal challenges. Addressing these barriers could enhance inclusive participation and promote healthier student lifestyles across faculties. Hence, by introducing the campus enhancements and people-friendly policies, these concerns can be fixed, and more students can prefer more active and healthier lifestyles.

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