

## Relationship between Physical Activity and Happiness among Students of Faculty of Sport Science and Recreation in UiTM Seremban

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To Link this Article: <http://dx.doi.org/10.6007/IJARBS/v12-i10/14841> DOI:10.6007/IJARBS/v12-i10/14841

*Published Date:* 07 October 2022

### Abstract

Happiness is the key factor in part of human life. A growing number of studies had highlighted health benefits derived from happiness. Physical activity had gained increasing attention on its association with happiness. Psychologists are focusing more on physical activity as it relates to happiness. The purpose of this study is to identify the relationship between happiness and level of physical activity among students of FSR in UiTM Seremban. A total of 317 respondents had participated to complete the survey. The respondents were primarily female 55.2% (N = 175) and male 44.8% (N=142). The age of respondents is 18 – 20 years old 23.3% (N=74), 24 to 26 years old 1.6% (N=5) and above than 26 years old 0.3% (N=1). The survey was getting its respond highest from students at the age of 21 to 23 years old 74.8% (N=237). There were 317 respondents who took part and the results of the respondent's physical activity level shows that majority 67.2% were in moderate intensity (N=213), 19.2% were in high physical activity intensity level (N=61) and 13.6% were in low level of physical activity (N=43). As for happiness level score the results illustrated that majority 92.4% were in moderate level of happiness (N= 293), followed by 6.6% respondents were in high level of happiness (N=21) and 0.9% were in low level of happiness (N=3). The result showed the relationship between physical activity and happiness among students of FSR shows significant positively strong relationship between both variables. Overall, the present result from this study will provide theory and understanding that sports improve people's enjoyment by decreasing tension and improving mood that in turn makes people happy.

**Keywords:** Physical Activity, Happiness, Relationship.

### Introduction

The main element in several aspects of human life is happiness. According to MentalHealth.gov (2019), it is also possible to describe happiness as the condition where is a person is in when they are experiencing or displaying pleasure or contentment because of anything they have just completed. Happiness, as a beneficial aspect of mental health, is

typically defined as a subjective mental state that reflects an individual's overall subjective well-being and is characterised by enjoyment and happiness (Diener, 2000; Veenhoven, 2010).

A rising number of literature emergence on highlighting happiness's positive effects on health. For instance, a 15-year follow-up study by Koopmans et al. (2010) revealed that greater levels of happiness are associated with lower mortality and morbidity. Past studies have shown many impacts of happiness on human life, including enhanced physical and mental health, better quality of sleep, reduced stress levels of hormones, improved efficiency of the cardiovascular, increased adherence with life, boosting of immune systems, improved quality of life and increased life satisfaction (Mehrdadi et al., 2016).

Physical activity is one of the elements that psychologists are paying greater attention to as it relates to happiness. According to recent cross-sectional research using data from a sizable general population, physical activity is linked to happiness (Lathia et al., 2017; Richards et al., 2015). There are positive relationships between physical activity and life satisfaction (Maher et al., 2015) and physical activity and happiness (Zhang & Chen, 2019). According to a large survey conducted across 24 nations, young adults between the ages of 18 and 30 who engaged in moderate to vigorous physical activity reported feeling happier and more satisfied with their lives also better perceived health (Pengpid & Peltzer, 2019). Based on the physiological process, effect of physical activity on happiness can be explained by physical activity elevates the transmission of monoamines (i.e., noradrenaline, dopamine, and serotonin) in the brain (Ransford, 1982) and increases the production of endorphins (Thoren P et al., 1990). Both physiological responses are known to decrease depressive symptoms and anxiety and to promote well-being (Morgan, 1985).

Physical activity, on the other hand, is defined as any skeletal muscle-driven movement of the body that causes an increase in energy expenditure (Stults-Kolehmainen & Sinha, 2014). This excludes lying down or sitting still. Physical activity includes activities like gardening, household chores, walking around the yard, and other activities that can be done in leisure time to pass the time or complete tasks. The positive effects of physical activity on several different health aspects have been well documented. Additionally, it is said that physical activity has a substantial impact on musculoskeletal and cardiovascular illness, enhances academic performance and self-esteem, and lessens the signs of anxiety and depression in adolescents (Moljord et al., 2011).

Research conducted from (Zhang & Chen, 2019) narrated on psychologists growing attention upon association between physical activity and happiness. Subsequently the objective of the current study is to determine the relationship between happiness and level of physical activity among students in Faculty of Sport Science and Recreation (FSR).

**Methodology**

In order to produce numerical data for statistical analysis, this study used quantitative research. An online survey was employed as the quantitative methodology. The design had been chosen to meet the objective of the current study. The sample is selected by convenience sampling technique which involved both female and male students answering the questionnaire voluntarily.

There are approximately 786 number of total population of students enrolled in the Faculty of Sports Science and Recreation (FSR), UiTM Seremban Campus Negeri Sembilan. (Academic Registrar, 2019). As such, in reference to the Krejcie and Morgan Table (1970), total numbers of sample size in this study are 260 participants of FSR's students. Additional of 60 subjects were recruited to fulfil 20% of the dropout rate thus 312 students were recruited for the total sample size of this study.

The questionnaire was adopted and adapt developed with two sections which section A and B. Section A is a demographic data and combination set of questions developed by (Kowalski & Crocker, 1997) on Physical Activity Questionnaires for Adolescents (PAQ-A). There are 9 items in total in PAQ-A. The PAQ-A is a 7-day recall test that is self-administered and provides a summary of physical activity score derived from nine items, each scored on a 5-point scale. Item 1 is on Spare time activity where the scoring is done by taking the mean of all activities on the activity checklist ranging by ("no" activity = 1, "7 times or more" = 5). For item 2 to 7 the answers for each item start from the lowest activity response and progress to the highest activity response. This can be scored by simply use the reported value as (lowest activity response = 1 and the highest activity response = 5). To form a composite score for item 8, the mean of all days of the week are taken where ("none" = 1, "very often" = 5). Lastly for item 9, this item can be used to identify respondent who had unusual activity during the previous week. However, this question is not used as part of the summary activity score. The final PAQ-A activity summary score is obtained by taking the mean of the 8 items, each of which has a value between 1 and 5 and is used to calculate the physical activity composite score.

In section B is Oxford Happiness Inventory Questionnaire was developed by (Hills & Argyle, 2002) which consists of 29 questions. All questions in section B were rated on a six-point Likert scale ranging from (1= strongly disagree, 6=strongly agree). Cronbach's Alpha was used to measure the reliability scale which is 0.9 and 0.8 respectively for section A and B. Descriptive statistics and Spearman Rank correlation were used for data analysis. Descriptive statistic is used to illustrate how central tendency is measured and calculated which includes calculation of mode, mean and median as well as how variability is calculated via range, variance and standard deviation. Spearman Rank correlation was used to measure the relationship between level of physical activity and happiness among students in Faculty of Sport Science and Recreation (FSR).

## Results and Discussion

### *Demographic Profile*

Data showed a total of 317 respondents who have completed the survey. The respondents were primarily female 55.2% (N = 175) and male 44.8% (N=142). The age of respondents is 18 – 20 years old 23.3% (N=74), 21 to 23 years old 74.8% (N=237), 24 to 26 years old 1.6% (N=5) and above than 26 years old 0.3% (N=1).

There were 317 respondents who took part and the results of the respondent's physical activity level shows that majority 67.2% were in moderate intensity (N=213), 19.2% were in high physical activity intensity level (N=61) and 13.6% were in low level of physical activity (N=43). As for happiness level score the results illustrated that majority 92.4% were in moderate level of happiness (N= 293), followed by 6.6% respondents were in high level of happiness (N=21) and 0.9% were in low level of happiness (N=3).

Table 1

*Descriptive statistic of the respondent's age, gender, physical activity and happiness level*

Item		Frequency (N)	Percentage (%)
Gender	Female	175	55.2
	Male	142	44.8
Age	18 – 20	74	23.3
	21 – 23	237	74.8
	24 – 26	5	1.6
	26 above	1	0.3
Level of Physical Activity	Low	43	13.6
	Moderate	213	67.2
	High	61	19.2
Level of Happiness	Low	3	0.9
	Moderate	293	92.4
	High	21	6.6

### **Relationship between Level of Physical Activity and Happiness among students in FSR**

To determine the normality of data distribution, a preliminary analysis was carried out in this research. The Kolmogorov-Smirnov value was used to determine the normality of the data. The result from Shapiro-Wilk indicating the current data analysed for this study was abnormally distributed hence nonparametric test of Spearman Rank correlation was used.

Based on the result, it indicated there was significant positive correlation between physical activity and happiness level  $r = 0.777$ ,  $p < 0.001$ . The table shows that the relationship between the level of physical activity and happiness showed a positive strong correlation to each other. It can be inferred from this result that a person's level of physical activity will have an impact on their level of happiness. Current study corroborates with Mohammadi et al., (2015) stated that compared to people who were not physically active, those who were physically or semi-active showed higher levels of happiness. Another study that also in line with the current finding is the one published by Lathia et al (2017), in which 12 838 participants aged between 15 and 44 stated that both self-reported physical activity and objectively evaluated physical activity were positively associated with happiness.

The above findings can be supported by (Richards et al., 2015), where it shows that rising amounts of physical activity are correlated with higher rates of happiness. This is because physical activity or exercise can have a strong manipulative effect on psychological distress and can contribute to a sense of well-being. In addition, it is stated that physical activity can improve someone's self-confidence and increase social interactions, which would be better their mood and possibly increase their happiness (Wang et al., 2012).

Table 2

*Relationship between level of physical activity and happiness among students in FSR*

			Physical activity	Happiness Score
Spearman's rho	Physical activity	Correlation	1.000	.777**
		Coefficient		
		Sig. (2-tailed)	.	.000
		N	317	317
	Happiness Score	Correlation	.777**	1.000
		Coefficient		
		Sig. (2-tailed)	.000	.
		N	317	317

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### Conclusion

The results of this study showed there was a strong positive relationship between level of physical activity and happiness among students of FSR. The findings of this research concluded that physical activity has a positive impact on the mental health of students. To put all the outcomes and discussion of this report in a nutshell, the purpose of this study is to identify the relationship between level of physical activity and happiness among students in FSR and this study has achieved its objective.

Besides, the findings of this study will provide theory and understanding that physical activity and sports increase people's enjoyment by lowering stress and boosting mood, which in turn makes people happier and demonstrates favourable outcomes that contribute to long-term happiness. It can also help students' psychological health by lowering depression rates and other harmful effects. Lastly, the finding in this current study can serve as a guidance and reference to university and other educational institution to create awareness on significance of physical activity for mental health.

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