

Body Image, Self-Esteem, and Physical Exercise as Determinants of Psychological Well-Being among University Students in Malaysia

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Abstract

The impact of physical exercise on psychological and health benefits has often been examined in both nonclinical and clinical contexts. Although physical exercise is widely recognized for its physical benefits, its psychological effects on well-being are less well understood. This study explored the relationships between physical exercise, body image, self-esteem, and psychological well-being among university students in Malaysia. Specifically, it examined how active participation in physical exercise influenced body image, self-esteem, and overall well-being. The findings highlighted that acceptance of body image contributes to self-esteem, which is further connected to self-confidence and the development of a realistic attitude towards life. Self-esteem emerged as an important safeguard for personal well-being and a strong indicator of subjective well-being. Data were collected via a self-administered questionnaire from 204 university students across Malaysia, using the International Physical Activity Questionnaire (IPAQ) for physical exercise, the Body Shape Questionnaire (BSQ) for body image, the Rosenberg Self-Esteem Scale, and the General Well-Being Schedule. The results indicated significant correlations between physical exercise and body image, as well as between physical exercise and self-esteem. However, physical exercise did not significantly influence psychological well-being. The findings are discussed with several theoretical and practical implications, alongside limitations and recommendations for future research.

Keywords: Physical exercise, well-being, body image, self-esteem, psychological

Abstrak

Kesan senaman fizikal terhadap manfaat psikologi dan kesihatan sering dikaji dalam konteks klinikal dan bukan klinikal. Walaupun senaman fizikal diakui memberi banyak kesan positif terhadap aspek fizikal, kesannya terhadap kesejahteraan psikologi masih kurang difahami. Kajian ini meneroka hubungan antara senaman fizikal, imej badan, harga diri dan kesejahteraan psikologi dalam kalangan pelajar universiti di Malaysia. Secara khusus, kajian ini menilai bagaimana penglibatan aktif dalam senaman fizikal mempengaruhi imej badan, harga diri, serta kesejahteraan keseluruhan. Hasil kajian menunjukkan bahawa penerimaan terhadap imej badan menyumbang kepada harga diri, yang seterusnya berkait dengan keyakinan diri dan perkembangan sikap realistik terhadap kehidupan. Harga diri didapati sebagai faktor penting yang melindungi kesejahteraan individu dan merupakan salah satu penunjuk utama kesejahteraan subjektif. Data dikumpulkan melalui soal selidik sendiri daripada 204 pelajar universiti di seluruh Malaysia dengan menggunakan International Physical Activity Questionnaire (IPAQ) bagi senaman fizikal, Body Shape Questionnaire (BSQ) bagi imej badan, Skala Harga Diri Rosenberg, dan Jadual Kesejahteraan Umum. Dapatan kajian menunjukkan terdapat hubungan signifikan antara senaman fizikal dengan imej badan, serta antara senaman fizikal dengan harga diri. Walau bagaimanapun, senaman fizikal tidak menunjukkan pengaruh yang signifikan terhadap kesejahteraan psikologi. Implikasi teori dan praktikal, bersama batasan kajian serta cadangan untuk penyelidikan akan datang turut dibincangkan.

Kata kunci: Senaman fizikal, kesejahteraan, imej badan, harga diri, psikologi

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1.0 INTRODUCTION

Physical exercise is any bodily movement caused by the contraction of skeletal muscles that significantly increases energy expenditure over resting levels is referred to as physical activity or physical exercise. Every movement is seen as physical exercise, whether it is done for fun, to get to and from places, or as part of a person's employment. Both vigorous and moderate physical activity promote health. (WHO, 2022). Physical exercise can include walking, cycling, wheeling, sports, active recreation, and play, and can be done at any level of skill and for enjoyment by everybody (WHO, 2022). According to the World Health Organisation, persons between the ages of 18 and 64 should exercise for at least 150 minutes a week at a moderate intensity or 75 minutes at a vigorous intensity, or an equivalent amount of both. Adults should raise their moderate-intensity PA to 300 minutes per week, or the equivalent, for extra health advantages. Two or more days a week should be dedicated to main muscle group strengthening exercises. Therefore, to measure this International Physical Activity Questionnaire is used to identify the intensity and frequency of exercise.

Body image is the concept used to describe how an individual perceives his or her own physical attributes, both objectively and subjectively. It has many different components, including attractiveness, body shape, physical fitness, and wellness (Yu-hui, 2017). Whenever someone evaluates his or her own physical qualities, both objectively and subjectively, it can be seen how they perceive their look and whether they are happy or unhappy with it. It has many different components, including attractiveness, body shape, physical fitness, and health. (Wang, 2017). Body Shape Questionnaire is used to measure the satisfaction of their body and how they feel about their body. However, self-esteem is your overall opinion of ourselves, our beliefs about our abilities and limitations. According to American Psychological Association (2023), it's the extent to which one's self-concept and the attributes and traits it contains are seen favourably. It reflects a person's physical self-image, as well as their perception of their accomplishments and abilities, values, and perceived success in upholding those ideals, as well as how others perceive them and respond to them.

Apart from that, there is proof that psychological wellbeing is influenced by self-esteem. A person's belief in their own abilities, significance, feeling of worth, and accomplishments is reflected in their level of self-esteem. It is also a good measure of subjective well-being and reflects how people see themselves. A person's sense of self-worth rises in proportion to how favorably they are viewed as a group for possessing particular attributes. Although feelings of worthlessness and low self-esteem are typical depressive symptoms, having a healthy level of self-esteem is thought to be essential for mental health (WHO, 2022). Self-affirmation and self-denial are two components of the Rosenberg Self-Esteem Scale, a questionnaire used to measure self-esteem.

Finally, how these three independent variables has relation on the dependent variable which is psychological well-being. Psychological well-being is something to do with people's feelings about their everyday-life activities. Such feelings may range from negative mental states (dissatisfaction, unhappiness, worry, etc.) to positive mental state. These negative components of well-being are best assessed through self-reports (Warr, 1978). The General Well-being Schedule is a self-administered questionnaire used to examine inner personal state of an individual.

This study further examines how self-esteem can be enhanced when individuals feel satisfied with their body image. Body image and self-esteem are closely interrelated, with each influencing the other and contributing to a stronger sense of self-worth within a socio-cultural context. Acceptance of one's body image fosters higher self-esteem, which in turn is linked to self-confidence and the development of a realistic outlook on life's challenges (Branet, 2019). Higher self-esteem has also been shown to reduce depression, improve interpersonal relationships, and enhance overall life satisfaction. These findings emphasize that self-esteem not only plays a vital role in psychological well-being but also serves as one of the most reliable indicators of subjective well-being (Shang, 2021).

In this proposed study, we will also explore the relationship of exercise has on psychological well-being. This is because we would see the gap between how exercise can also lead do a meaningful life cause this part of the variable has rarely been studied in past research. Other than that, once individual has the self-acceptance towards their body and self-esteem, how it can promote to a happy life. Furthermore, exercise can help people feel physically and mentally satisfied, increase their personal evaluation of how satisfied they are with their quality of life, foster pleasant and upbeat feelings, and improve their overall rating of their quality of life. Psychological well-being will be the additional point of view that we would like to study in this research. This is because self-acceptance, healthy relationships, autonomy, environmental mastery, a sense of purpose in life, and personal development make up psychological well-being. It is well known that these advantages are influenced by the person's prior expectations and concepts about that exercise. In this study we would want to see does physical exercise is positively correlated with psychological well-being. The conceptual framework of this study shown in the Figure 1.

The primary objective of this research is to examine how physical exercise affects an individual's body image and self-esteem, ultimately contributing to psychological well-being among university students. Overall, the study aims to analyze how participation in physical exercise impacts an individual's mental and physical well-being, lifestyle, and confidence in daily life.

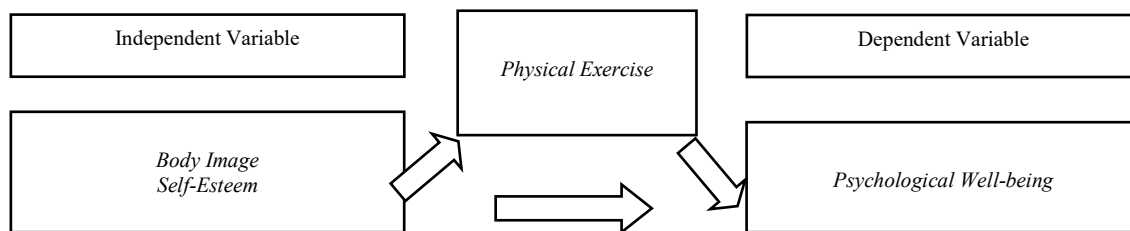


Figure 1 Conceptual framework of the impact of physical exercise on body image and self-esteem towards psychological well-being among university students in Malaysia

Research by the Mental Health Foundation (United Kingdom) conducted in 2019 provides a compelling snapshot of how social media and societal pressures impact body image and mental health across age groups. Among an online sample of 4,505 UK adults, 22% of all adults and notably 40% of teenagers aged 13–19 reported that images on social media had caused them to worry about their body image. In the same survey, over one-third of adults (34%) said they experienced anxiety, and 35% reported depression due to body image concerns; further, 13% disclosed having had suicidal thoughts linked to those concerns. The main concern addressed is how individuals, especially the younger generation, can improve their confidence, self-esteem, and overall psychological well-being amidst societal pressures. To address this issue, this proposed study aims to explore the relationship between participation in physical exercise and its potential positive impact on individuals' well-being.

The first objective of the study is to investigate the relationship between physical exercise and psychological well-being. This is investigated to see how physical exercise has good results on psychological well-being. A previous study that conducted research on the effect of regular aerobic exercise on individual showed a positive effect on happiness and subjective well-being (Susanne Buecker, 2020). Physical activity is carried out to reduce illness those days but now people feel happier to maintain and enhance their health.

The second objective of the study is to identify the relationship between body image and psychological well-being. Having a positive body image is related to many good emotions and feelings in life. It helps to lower psychological problems such as mental health problem and social avoidance. A previous study did prove that physical exercise has a good effect on the body image along college students not only that, but it's also proven that physical self-perception is as crucial as academic self-perception for a good life satisfaction (Shang, 2021).

The third objective is to determine the relationship between self-esteem and psychological well-being. This objective is also closely related to body image as the acceptance of body image led to self-esteem. Self-esteem is how individual look at themselves and that's an important factor for subjective well-being. Physical self-esteem is a component of global self-esteem and is connected to body aesthetics, health, and strength (Browska-Galas, 2021).

The fourth objective is to ascertain how regular exercisers' psychological health is affected. Although this study did not find a significant effect, previous research provides important insights. Hassmén (2000) found that regular exercisers reported better perceptions of their health and fitness compared to those who exercised less frequently. Moreover, individuals who exercised at least twice a week experienced greater psychological well-being, reporting stronger feelings of social cohesion and integration into society than their less active peers. These findings highlight the broader importance of addressing body image issues and exploring how physical exercise can serve as a potential pathway to enhance self-esteem and overall psychological well-being. In summary, this research seeks to understand the impact of physical exercise on body image, self-esteem, and psychological well-being among university students in Malaysia, with the aim of contributing valuable insights into how physical activity may support mental health improvement.

■ 2.0 LITERATURE REVIEW

Exercise has a positive impact on college students' body image, according to a prior study. Furthermore, it has been demonstrated that a positive life satisfaction depends just as much on one's physical self-perception as one's intellectual self-perception (Shang, 2021). Exercise can have a positive impact on psychological well-being and serves as a bridge to help people reach their ideal body image. Exercise can prevent college students from feeling that they have a bad body image, according to that study (Shang, 2021). Individuals who have been exercising for a long time have a more positive body image than those who don't. Thus, the study concludes that there is a substantial relationship between physical exercise and body image.

Sabistona (2019) in the study stated that in sport and exercise psychology body image is relevant as a correlate and consequence of physical activity, for instance leisure physical activity or even high intensity exercises. The study also stated that there are many studies have proven that athletes have less negative body image perception compared to non-athletes so it's present that physical exercise and sport urge actual changes to physical self. For example, appearance and body shape. An individual with who have come from a changed physical self from negative to positive body image have a better physical self because of the effort to build themselves and their confidence lead to improvements in their body image. From the result of the findings, negative body image or dissatisfied appearance is associated with lower physical activity participation and vice versa that individual who perceive a positive body image with body satisfaction spend greater time in physical activity.

Self-esteem is one's satisfaction with their physical appearance (Earl, 2022) Higher self-esteem determines their self-worth, self-compassion, and self-acceptance. Appearance satisfaction can be achieved thorough exercise and exercise is the centre of boosting physical attractiveness. However, exercising with great acceptance helps in cultivating the feeling of accepting our body and have lesser concerns about body image. Overall, in the findings of the research highlighted that potential role of self-esteem may depend on the individual's reasons for exercising. Self-esteem is one's satisfaction with their physical appearance (Earl, 2022) Higher self-esteem determines their self-worth, self-compassion, and self-acceptance. Appearance satisfaction can be achieved thorough exercise and exercise is the centre of boosting physical attractiveness. However, exercising with great acceptance helps in cultivating the feeling of accepting our body and have lesser concerns about body image. Overall, in the findings of the research highlighted that potential role of self-esteem may depend on the individual's reasons for exercising.

On the one hand, self-efficacy has a positive effect on self-esteem, and on the other, we can increase individual self-efficacy by boosting self-efficacy (Ouyang, 2020). Self-esteem is how people view themselves, and that is a significant factor for subjective well-being. Self-esteem also has a positive effect on the degree of participation in sports; it is also thought to have an uplifting effect on physical exercise participation, and the self-esteem provides motivation to exercise, and the body image is improved, and it has a positive effect on self-esteem. It has been studied that self-esteem influences sports participation by improving practical reflection on their physical and mental health. In summary, self-esteem is the interplay between body image and self-esteem.

A previous study that conducted research on the effect of regular aerobic exercise on individual showed that frequent aerobic exercise has been demonstrated to improve subjective well-being and happiness (Susanne Buecker, 2020). Exercise was originally only employed to prevent sickness, but it is now also linked to improved happiness and better health. Regular physical activity causes endorphins, or "happy hormones," to be released, which improves psychological well-being. This supports the idea that exercise has a beneficial impact on mental health. The need of psychological wellness for normal growth is emphasized by positive psychology. Exercise engagement dramatically improves subjective well-being, according to related study (Shang, 2021). Particularly with moderate to high-intensity workouts, it reduces negative emotions and depression while increasing good emotions, life satisfaction, and mental and physical fulfilment. Thus, there is a beneficial correlation between students' psychological health and physical activity.

The theories that are related to this research framework is, Self-Discrepancy Theory (Higgins, 1987) of body dissatisfaction. Body dissatisfaction has conditions; it happens when we tend to evaluate one's body-image and it happen to have a gap between us long term which then cause a discrepancy between one's current body image and their perceived ideal body image. As human we have our own idea about of body-image when we start to over evaluate ourselves with others, we go hard on ourselves, and it may cause self-criticism and damage our self-esteem eventually.

The second theory is, Tripartite Influence Model which has three influences that are parents, peers, and media. These three elements have direct influence on body dissatisfaction and people tend to compare their body type and appearance (Thompson, 1999). This model is also closely related to social comparison theory where it involves people coming to know better about themselves by evaluating their own attitudes, abilities, and beliefs. This will then continue to correlate with self-efficacy theory which individual reflects on the confidence and ability to control over their motivation behavior and social environment and then lead to cognitive self-evaluations. All these theories have relation on how individual evaluates their body-image and self-esteem based on their people around them and how it has effect on them. By referring to the theories and past research, this particular research has come up with four hypotheses based on the objectives of the study stated at the purpose of the study.

H1: Physical exercise is significantly associated with psychological well-being.

H2: Body image is significantly associated with psychological well-being.

H3: Self-esteem is positively correlated with psychological well-being.

H4: Regular exercise has a significant positive effect on participants' psychological well-being.

■ 3.0 METHODOLOGY

This study used a quantitative research design. Data collection method of this study is by distributing the questionnaire to all respondents via WhatsApp and Telegram in the form of Google Form and all university students can answer the questionnaire to collect the quantitative data that is required in this study. This is a cross-sectional study which respondents can be allowed to answer once and the data will be collected from a cross-section of the population of a short and particular period of time. This is a descriptive study and the most appropriate research design that best suits this study is correlational study to identify the relationship of independent variable and dependent variable.

The population of this study refers to all the students in Malaysia either studying in public or private universities in Malaysia. According to the Malaysian Ministry of Education's report titled "The Way Forward for Private Higher Education Institutions: Education as an Industry (2020–2025)", as of 30 September 2019, a total of 1,325,699 students were enrolled in tertiary education across higher education institutions (HEIs) in Malaysia, including both public and private institutions. Therefore, the approximate sample size as generated in Raosoft sample size calculator, is around 300 to 400 respondents. The technique of obtaining the sampling is through a non-probability sampling technique which is the snowballing sampling. Therefore, it's a random sample of individuals who want to take part in the study as the recruitment is voluntary.

There were 5 sections in the Google Form, starting from demographic information where respondents are asked to provide their background information, follow by International Physical Activity Questionnaire (IPAQ), to identify respondent's intensity, duration, and frequency of carrying out physical activity. The third section is Body Shape Questionnaire (BSQ-16B) The questionnaires are about how the respondents feel in the past four weeks about their body and appearance. It's a 6-point Likert scale from 1-6 which is starting from never, rarely, sometimes, often, very often and always. Next, is the Rosenberg Self-Esteem Scale to assess the level of self-esteem both positive and unfavorable feelings about oneself to determine overall self-worth. Finally, the General Well-Being Questionnaire by Dupuy (1977) was used to measure subjective feelings of psychological well-being and distress. The scale is designed to measure how the respondents feel about their inner state rather than external. There are 18 items with 6-point Likert scale. Six dimensions assessed include positive well-being, self-control, vitality, anxiety, depression, and general health.

Later on, for the data analysis methods, the collected data will be collected will be computed and tabulated using Statistical Package for Social Science (SPSS) software version 27.0. Once the data is key in and inserted in the SPSS software the data then will be analyzed by using descriptive and inferential statistics to analyze the relationship between the variables. For objectives 1 to 3, Pearson Correlation was used to analyze the data, while for the fourth objective, regression analysis was employed under inferential analysis.

■ 4.0 RESULTS

Based on the results on demographic information, a total of 204 participants took part in the study. Most of the respondents are dominated by the respondent's demography is observed to be dominated by the age group 21-23 years old (n=137) and the second largest age group is 24-26 years old (n=30). However, the least is from the age group 27 and above (n=24). Looking at the gender the majority are female students (n=119) and male is (n=85). The ethnicity of the respondents comprises of Malays (n=44), Chinese (n=8), Indian (n=132) and other mixed minorities (n=20). The respondents are mostly Indians 64.7%. In terms of current educational qualification, 84.3% (n=172) of the total respondents are currently pursuing degree. (n=21) are foundation students and (n=8) masters while only (n=3) PhD students who took part in the study.

All data measures were tested for normality (Shapiro-Wilk test) and variance. The data is considered normally distributed if the value is more than 0.05. Based on the Shapiro-Wilk Test, the distribution of data for the independent variable are not normally distributed which is physical exercise (<.001, $p < 0.05$). and body image at (<.001, $p < 0.05$). However, self-esteem is normally distributed (0.061, $p > 0.05$). The dependent variable, psychological well-being is normally distributed (0.612, $p > 0.05$). Spearman Correlation analysis was used to investigate the relationship between physical exercise and body image. Pearson's Correlation analysis was conducted to test the relationship between physical exercise and self-esteem. Lastly, the effect of psychological well-being on individual who exercise regularly was analysed using the regression analysis.

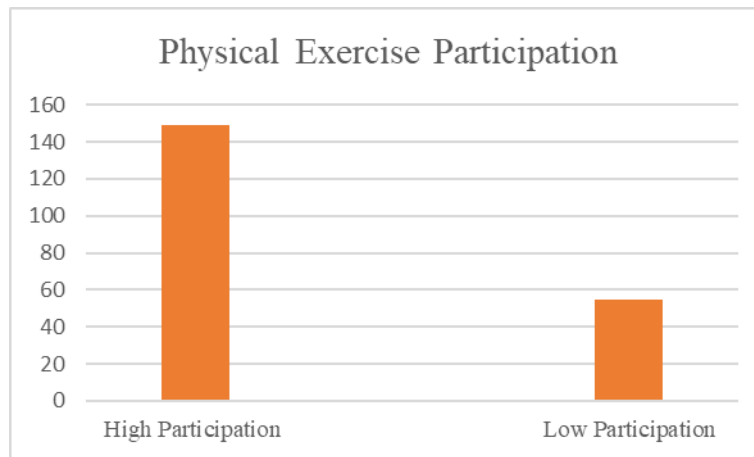


Figure 2 Comparison of high and low participation in physical exercise

A total of 204 students were evaluated, based on the Figure 2, 149 students had high level of physical activity and 55 of which were low participation in physical activity according to the IPAQ. This was evaluated based on the student’s intensity, duration, and days of exercising in a week.

Table 1 Pearson correlation values for the relationship between physical exercise, body image and self-esteem towards psychological well-being

Variables	Psychological well-being
Physical Exercise	.085
Body Image	-0.430**
Self-Esteem	.610**

*Significance at $P < 0.05$
 ** $P < 0.001$

Based on the Table 1, the values of correlation for the first three objectives are stated. The first objective the results for the relationship between physical exercise and psychological well-being. The results shows that physical exercise and psychological well-being have no relationship. ($r = .085, p > .05$). There was not enough evidence to prove from the study that physical exercise has relation with psychological well-being. With that, the hypothesis is not accepted.

The second objective was conducted to test the relationship between the independent and dependent variable body image and psychological well-being. The relation between body image and psychological well-being is observed to be significant with a negative direction of the relationship at P-value $< .001$ and r-value of $-.430^{**}$. A negative direction shows that when the individual is more concerned about their body image their psychological well-being gets low or serious. In summary, the relationship is a statistically significant and moderately strong negative correlation between body image and psychological well-being.

The third objective is to test the relationship between relationship between self-esteem and psychological well-being. The relation between self-esteem and psychological well-being is observed to be significant with a negative direction of the relationship at P-value $< .001$ and r-value of $.610^{**}$. r-value shows a moderately strong positive correlation. Therefore, a positive direction shows that when the individual self-esteem increases their psychological well-being also increases to have a positive well-being. This shows that the hypothesis can be accepted.

Table 2 Table of model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.116 ^a	.014	.007	13.50482

a. Predictors: (Constant), IPAQ_TOTAL

The fourth objective is to determine the effect of individual who exercise regularly on psychological well-being. The effect of individual who exercise regularly on psychological well-being was analyzed using the regression analysis. This is to identify the fourth hypothesis for this study. Therefore, before conducting the regression all the sum values of the International Physical Exercise Questionnaire were classified into high and low to indicate the students active or unactive participation in physical exercise. The sum of the IPAQ values were over 9. Sum values 5,6,7,8, and 9 are considered as students who exercises regularly however sum values 1,2,3, and 4 are considered as low participation in physical exercise. Later on, students who are regularly active in physical exercise were filtered and regression test was analyzed with the dependent variable which is psychological well-being to investigate how individual who exercises regularly affect them psychologically.

From the results shown in Table 2, the values are not significant ($.116, p > .05$). The r-squared value does not have strong effect on the dependent variable which is $.014$ meaning that individual who exercise regularly only contributes 1.4% to a positive

psychological well-being. It's seen that the small percentage of contribution shows that high activation on physical exercise has no effect on psychological well-being. To summarize, physical exercise is not the main factor in promoting towards positive psychological well-being.

■5.0 DISCUSSION AND RECOMMENDATION

5.1 To investigate the relationship between physical exercise and psychological well-being.

The first objective is to identify the relationship between physical exercise and psychological well-being among university students. A study by Peter (2000) people who worked out at least twice or three times a week reported much lower levels of stress, cynical mistrust, anger, and despair than people who worked out less or never at all. In addition, those who exercised frequently thought they were in better physical and mental health than those who exercised less frequently. Lastly, compared to their counterparts who exercised less frequently, individuals who exercised at least twice a week reported higher levels of sense of coherence and a stronger feeling of social integration. Physical activity is carried out to reduce illness those days but now people feel happier to maintain and enhance their health. The positive effects of psychological well-being when carrying out regular exercise is when an individual feels the joy, excitement, and the pleasurable feeling of exercising which makes their body secrete happy hormones which is the endorphins.

However, in this study the results were not significant because there are some individual exercises not for self-development or to improve their lifestyle quality but just as a leisure activity or hobby (Eime, 2013). Secondly, the conceptualization of psychological well-being varies across everyone. For instance, aspects of psychological well-being will vary depending on the age and situation. Thirdly, as the human life cycle develops, multifaceted personal, transactional, and environmental variables of psychological well-being become increasingly intricate. Non-psychological aspects of the environment include things like housing, food, and work (Edwards, 2006) Therefore, we can come to a conclusion that everyone perceives psychological well-being differently in many aspects hence why we can really see the significant results same across each individual and the intensity and minutes of exercising is also crucial and a part of that their utmost goal for caring out exercise is also crucial.

5.2 To Identify The Relationship Between Body Image And Psychological Well-Being.

In the second objective of this study, a previous study did prove that body image is also leads to acceptance to physical self-perception is as crucial as academic self-perception for a good life satisfaction (Shang, 2021). Physical exercise is a bridge to connect individual to achieve their desired body-image and it can affect good psychological wellbeing. It also states that body image is one of the most influential factors impacting psychological well-being and it determines how an individual illustrates their self-concept and feeling comfortable with their bodies. In this study it also highlighted that the importance of BMI and body dissatisfaction and how it should be taken in serious matter on how to motivate individual to improve themselves (Browska-Galas, 2021).

Based on the results from this study, its strongly proven that body image and psychological well-being is correlated. Meaning that the acceptance of body shape of physique can reduce the feeling of body dissatisfaction and leads to a meaningful life. However, physical exercise is not the main component to have a good body image this is because in a study by (Niswah, 2020) stated that body image perception is an important predictor of not of having to carry out physical exercise but also having good dietary habit. Certainly, the level of personal satisfaction on body image has a strong correlation with the active sport participation. Body image also have a positive correlation with self-efficacy. The more positive the body image the better the sense of self-efficacy. Finally, having a positive body image is related to many good emotions and feelings in life. It helps to lower psychological problems such as mental health problem and social avoidance. Example, like anxiety, depression and problem related to self-development are all important factors that contribute to subjective well-being.

5.3. To Determine The Relationship Between Self-Esteem And Psychological Well-Being.

The third objective is to determine the relationship between self-esteem and psychological well-being. Based on the findings, the hypothesis was accepted as it shows strong positive correlation between the two variables. Self-efficacy has a positive impact on self-esteem and on the other side we can promote individual self-esteem thorough boosting self-efficacy (Ouyang, 2020). Self-esteem is how individual look at themselves and that's an important factor for subjective well-being. Self-esteem also has a positive effect on the degree of sport participation. Besides that, appreciating one's body image leads to self-esteem which also has something to do with self-confidence and the development of self (Branet, 2019). Positive self-esteem in away helps individual to enhance their day-to-day performance in all sorts of activities because they're confident with themselves and they can manage to move around happy to fulfil their goals.

Therefore, in this study the hypothesis is accepted, and the results are aligned with previous studies showing that self-esteem promotes quality of life and individual acceptance towards themselves and can lead to a meaningful life. Finally, to conclude self-esteem is positively correlated with psychological well-being. Meaning that, if self-esteem increases our well-being will be high and positive creating a meaningful and contented life.

5.4 To Determine The Effect Of Regular Exercise On Participants' Psychological Well-Being.

The fourth objective aims to find the effects of participants who exercise more than 4 days in a week. This means the participants are active in participating physical exercise. However, this particular objective was not met in this study and the hypothesis was rejected based on the data that was collected and analysed. Based on the analysis being active in physical exercise have very less contribution to positive psychological well-being meaning that is it not significantly correlated to each other. Hence, why the hypothesis is rejected. However, previous research has found out that engaging in regular exercise not only contributes to physical well-being but also has

positive effects on psychological health. When individuals exercise, they experience emotions like joy, excitement, and pleasure, leading to the release of endorphins commonly known as "happy hormones" in the body.

This release of endorphins contributes to an enhanced sense of psychological well-being while exercising (Susanne Buecker, 2020). Findings show a consistent correlation between regular physical exercise and improved psychological well-being as assessed by a range of psychological assessments. However, it is obvious that the interpretation of the current results must consider the fact that the respondents' frequency of exercise and psychological characteristics were evaluated only based on their self-reports (Hassmen, 2000). To summaries, most of the result of the research indicates that there is a positive association between physical exercise and psychological well-being, and it's been consistent with most of the previous studies.

5.5 Limitations And Recommendations

The study presents a series of limitations, which might condition the results found and therefore the conclusions drawn from it. Firstly, the research did not meet the expected number of samples causing some of the results of data not normally distributed in some cases and variables. Secondly, to future researches who are interested in this topic is recommended to consider a number of aspects before proceeding. The research is on the impact of physical exercise on body image and self-esteem towards psychological well-being among university students in Malaysia lacks references in Malaysian perspectives therefore all the previous study was more towards westerners and China which can cause the results of the study to be different due to the society in Malaysia or Asian country mindset and setting. However, its were plenty of past study regarding this topic not exactly but in a more specific manner which can help future researcher to get a glimpse of the purpose of the study in a great and understanding view.

Other than that is advisable to conduct this study among adults or individuals in middle adulthood, as the findings may have greater impact given that they are more likely to relate to the research objectives. Adults, being generally busier than teenagers, are also better able to identify and articulate their specific purposes for engaging in physical exercise. While teenagers or college students in a previous study mentioned that leisure-time physical activity is one domain of physical activity (Eime, 2013). Most teenagers participate in exercise because of their hobby or a leisure time activity with their friends or alone. That is why students some can't relate this study with the variables that is examined in this study instead they answer the questionnaire generally based on their life events and not focusing on the main research objectives and findings. However, there are some students who know their exact purpose of them exercising is maybe for their self-development if in this case or some can be for health benefits. In this case, future researchers are advised to carry out this research on elderly adults or be more specific on the occupation group.

6.0 CONCLUSION

Malaysia has been identified as one of the least physically active countries, with a significant proportion of adults leading a sedentary lifestyle. This low level of physical activity has contributed to the rising prevalence of obesity and non-communicable diseases over the past two decades. In this context, examining the role of physical exercise on body image, self-esteem, and psychological well-being is highly relevant, particularly among university students.

The findings of this study highlight that physical exercise offers both physiological and psychological benefits. Engaging in regular activity can improve body image and strengthen self-concept, which in turn enhances self-esteem. A positive body image was also shown to be a significant factor influencing psychological well-being, as students who felt comfortable with their bodies reported higher levels of confidence, satisfaction, and resilience. Furthermore, self-esteem demonstrated a strong and consistent relationship with psychological well-being, suggesting that individuals with greater self-acceptance and confidence are more likely to experience meaningful and contented lives.

However, the results also indicate that the frequency of exercise alone does not guarantee improved psychological well-being, as other factors such as exercise motives, lifestyle, and individual perceptions play important roles. The correlation observed in this study does not necessarily imply causation, and broader contextual factors including social, environmental, and cultural influences must be considered.

Future research should aim to narrow the scope of investigation by focusing on fewer variables, using clearer instruments, and targeting specific populations such as adults or occupational groups who may relate more directly to the research objectives. By refining the focus and methodology, future studies can yield stronger evidence and practical recommendations for promoting active lifestyles and improving psychological well-being in Malaysia.

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Conflicts of Interest

The author(s) declare(s) that there is no conflict of interest regarding the publication of this paper

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