



RESEARCH PAPER

Association Between Physical Activity and Life Satisfaction Among Middle-Aged Adult Men

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ABSTRACT

The key objective of this investigation was to look at the association between physical activity and satisfaction with life in middle-aged adult men. The study involved 300 middle-aged men aged ranged from 40 years to 65 years ($M = 50.72, SD = 5.95$). The physical activity data was obtained using IPAQ and life satisfaction was assessed using the Satisfaction with Life Scale (SWLS). The simple linear regression analysis revealed a substantial positive relationship between physical activity and life satisfaction. Middle-aged adult males who engaged in regular physical exercise reported greater levels of overall life satisfaction. These findings emphasize the relevance of including physical activity into daily routines to increase life satisfaction in middle-aged adult men. More study is needed to investigate the underlying processes and to demonstrate the association between physical exercise and life happiness in this demographic.

KEYWORDS Life Satisfaction, Middle Aged-Adults, Physical Activity

Introduction

Middle-aged adults, typically aged 40 years to 65 years, experience a blend of stability and transition (Camacho et al., 2019). They looked as spouses, parents, and professionals, prioritizing family well-being and investing in relationships (Camacho et al., 2019). This stage indicates a re-evaluation of life goals and values as they seek greater meaning and fulfilment (Parra-Rizo & Sanchis-Soler, 2020). During this stage, life satisfaction holds great importance as individuals evaluate their achievements, relationships, and overall happiness (Wang & Boros, 2019). It has been suggested to be impacted by achieving one's personal and professional goals, maintaining one's health, and developing a sense of purpose (Parra-Rizo & Sanchis-Soler, 2020). More importantly, contentment and a positive outlook on life can be developed by being able to adapt to the challenges and changes that come with middle age (Moksnes et al., 2019).

For the affective part of life satisfaction, feelings and emotions are crucial in this particular age group. They experience both positive and negative emotions, including happiness, joy, sadness, and anxiety (Supa Pengpid & Karl Peltzer, 2019). One's overall satisfaction is greatly influenced by these emotional states, which may have an impact on how happy a person is with their situation in life (Hermawansyah et al., 2021). Life satisfaction measures a person's overall happiness and sense of fulfilment by considering both cognitive and affective factors, emphasized that individuals social health linked with the level of life satisfaction (Zhang, 2019).

Since the sufficient level of life satisfaction has great significance in the lives of middle-aged men, therefore, the factors help to improve life satisfaction have gain great concern (Lee, 2018). Physical activity or physical exercise has attracted great interest by many researchers to boost psychological, physical, and social aspects of men's life (Ye et al.,

2018). Physical activity has many benefits for physical health, including increased functional capacity, lowered disease risks, and improved body fitness (Vaz et al., 2019). Several studies conducted have shown the psychological advantages of regular physical exercise, as well as emotion and life satisfaction improvements (Lin et al., 2011, 2020; Pickard et al., 2018; Smith et al., 2017). By incorporating physical activity into the lifestyle, individuals can experience holistic improvements that positively impact various aspects of the lives (Ortuño-Sierra et al., 2019).

In middle-aged adults, physical exercise and life pleasure have a favourable correlation (Ye et al., 2018). Studies have also emphasized that interacting in regular physical activity is linked to increased levels of satisfaction with life and happiness among individuals in the age group of 40 years to 65 years (S. Pengpid & K. Peltzer, 2019).

More interestingly, level of life satisfaction and happiness during different stages of lifespan have been reported to be inconsistent. One review supported the notion that fulfilment in life remains consistent throughout various life stages. For example, according to Vaz, et al. (2019) life satisfaction was higher in young and middle-aged adulthood and lower in emerging and elderly adulthood. It was intrigued to see that this study also highlighted the link between exercise and life satisfaction. Physically active adults expressed happiness about their lives more as compared to non-active adults (Peng et al., 2019). A stronger link between bodily activity and satisfaction with life was also seen in older adults than in younger adults (Camacho et al., 2019). These findings highlight the interplay between ageing, physical activity, as well as personal fulfilment and suggested that physical exercise has a significant influence on life satisfaction, particularly in middle-aged adult men. However, another study performed by Pickard et al. (2018), demonstrated that there was a U-shaped pattern, with life satisfaction falling from 45 to 54 and then rising from 55 to 65. Regarding the precise impact of various levels of the effect of bodily activity on satisfaction with life and happiness, more research is needed (Panza, 2019). Therefore, this study looked at the association among physical activity and satisfaction with life in middle-aged persons, utilizing self-reported measures.

Literature Review

The connection between bodily exercise and satisfaction with life in mature males in their forties has been investigated in a number of previous researches by Camacho et al. (2019), Wang and Boros (2019) and Ye et al. (2018) For instance, a cross sectional research by Camacho et al. (2019) of a sample of middle-aged men revealed a favourable association between life satisfaction as well as moderate to strenuous physical activity. Another finding by Moksnes et al. (2019) which also points to a similar pattern of relationships between life satisfaction and physical activity. Another longitudinal study by Pickard et al. (2018) found that men who regularly exercised over time scored higher on measures of life satisfaction. The notion that physical exertion is beneficial is positively related to life satisfaction among middle-aged men is supported by this earlier study (Pickard et al., 2018).

The studies included in the comparison varied in terms of sample characteristics, study design, and measurement methods. For instance, a study (Kleszczewska et al., 2018), recruited a sample of 500 middle-aged men from urban areas and employed self-report measures of physical exercise and life pleasure are linked. In contrast, Maher (2015) followed a sample of 300 middle-aged men over a period of five years and utilized both self-reported measures and objective physical activity measurements. Despite these variations, the findings from both studies were consistent, emphasising the robustness and the link between bodily activity and satisfaction with life in middle-aged men across a variety of groups and assessment methodologies.

A few studies have reported conflicting findings as well. For Example, (Ma et al., 2018) cross-sectional study of middle-aged men revealed no connection between life

pleasure and physical exercise. By providing more evidence to the beneficial connection between bodily activity and satisfaction with life in middle-aged adult men, the new study contributes to the corpus of knowledge of existing literature. The earlier studies, including the studies by Smith et al. (2017) and Mosley-Johnson et al. (2019), which reported comparable relationships. The results from various studies are consistent, which strengthens the case for physical activity's positive effect on middle-aged men's satisfaction with life.

The purpose of this research was to investigate about relationship between satisfaction with life and physical activity, specifically in middle-aged male adults (Panza, 2019). More research is still required to fully comprehend the relationship in this population, even though earlier research has offered helpful insights. It's critical to investigate this association further, given the potential implications for improving middle-aged men's life quality and overall wellbeing. The goal of this research was also to contribute to the body of existing research and offer insightful information for health promotion initiatives aimed at this group.

Material and Methods

Research`s Design:

This study used cross-sectional survey design.

Participants

300 middle-aged men from Sheikhpura city, Pakistan's western Punjab district, were studied whose age ranged from 40 to 65 years old (mean age: 50.72; SD: 5.95) to make up the sample size. A quarter of adults were between the ages of 40 and 45, half of them were between the ages of 46 and 50, one-third between the ages of 51 and 55, and a quarter between the ages of 56 and 60.

Participants Inclusion and Exclusion Criteria

The study only included participants that had to be physically fit to be able to perform a range of different levels of physical activity. Participants were given informed consent to participate in the study voluntarily. Men living in urban area and to have any education level, profession, and socio-economic class. On contrary, those participants were excluded who couldn't exercise because of their health conditions or injuries and those who were incapable of giving consent under the law. Participants belonged to other than the Sheikhpura area and rural area were excluded also.

Sample size calculation

After inserting the total no of population size that was approximately 6500 people into the Yamane formula developed by Taro Yamane (Tepping, 1968), we got the total sample size which was approximately 300 middle-aged male adults. The Data was collected between May to September, 2022.

Measures

Participants were given the questionnaire that was composed of three sections, including demographic questions, a physical activity assessment, and a life satisfaction measure. Simple and easy language was used and complex sentence structure was avoided while data collection for uneducated individuals. Minimum 15 and maximum 35 minutes were spent with participants to fill the questionnaire. All the data collected was kept strictly confidential to protect the participants' privacy.

Demographics

Participants were requested to answer questions in this section about their age, education level, job title, marital status, number of children, monthly income, weight and BMI. The majority of participants chose not to answer the question about their monthly income due to unknown reasons.

Life Satisfaction

Diener et al. (1985) developed a 5-item Likert SWLS to measure the Life Satisfaction, which was utilised in this study to assess participants' overall cognitive judgements of life satisfaction. Participants assessed their approval or disapproval with each assertion rated from 1 to 7, where 1 shows strongly disagree and 7 indicated strongly agree. This measure appears to be valid and reliable for assessing life satisfaction in the age range studied.

International Physical Activity Questionnaire (IPAQ)

Craig et al. (2003) designed the IPAQ tool, focused on finding out about the level of physical activity (vigorous, moderate and normal) that participants have done in their last 07 days. It consists of a set of 07 questions that can provide data which in return may be used to collect data on health-related physical activity on a global scale. We used IPAQ because, it is a widely used tool for assessing physical activity levels due to its standardized approach, comprehensive measurement, global applicability, validity, accessibility, and cost-effectiveness.

Data Analysis

For data analysis, the SPSS v.2020 software was employed. Descriptive statistics and simple linear regression were used to analyse data. For all analyses, the p -value was fixed to less than 0.05 ($p < 0.05$).

Result and Discussion

The regression analysis yielded a significant relationship between physical-activity level and satisfaction with life among middle-aged males ($B = 15.634$, $SE = 0.792$, $p < 0.01$). The confidence interval of 95% effect size ranged from 14.076 to 17.192 points. The standardized coefficient (β), 0.161, indicated a positive effect. The level of physical activity among middle-aged adult men accounted for about 26% of the varying levels of life satisfaction scores ($R^2 = 0.26$). These findings show that in this age group, satisfaction with life was increasing as the level of physical activity increases.

Table 1
Regression Coefficients of Predictor Variable physical activity and Dependent Variable Life Satisfaction Score

Dependent Variables	B	SE	95%CI		β	p	R^2
			LL	UL			
Life satisfaction total score	15.634	0.792	14.076	17.192	0.161	0.00	0.26

The descriptive statistics frequency tables presented in Table 2 provide an overview of the distribution of 300 participants across different levels of life satisfaction and physical activity.

Table2
Descriptive Statistics Frequency table for Physical– Activity and Life Satisfaction Categories

<i>Characteristics</i>	<i>N</i>	<i>%</i>	
<i>Physical Activity</i>			
<i>Low Activity</i>	45	15.0	
<i>Moderate Activity</i>	181	60.3	
<i>High Activity</i>	74	24.7	
<i>Life Satisfaction Categories</i>			
<i>Characteristic</i>	<i>N</i>	$\sum N$	<i>%</i>
<i>Category1 (Dissatisfaction)</i>			
Extremely Dissatisfied	4	207	69.00
Dissatisfied	61		
Slightly Dissatisfied	142		
<i>Category 2 (Neutral)</i>			
<i>Category3 (Satisfaction)</i>			
Extremely Satisfied	0	70	23.30
Slightly Satisfied	62		
Satisfied	8		

The descriptive analysis revealed that 15.0% of the sample ($N = 45$) had a low activity level, while the majority of people (60.3%, $N = 181$) reported a moderate activity level. A smaller proportion (24.7%, $N = 74$) was highly active. Moreover, concerning life satisfaction, only 1.3% of people ($N = 4$) were extremely dissatisfied, while 20.3% ($N = 61$) were dissatisfied whereas 47.3% ($N = 142$) of participants were slightly dissatisfied. (7.7%, $N = 23$) proportion reported feeling neutral, slightly satisfied (20.7%, $N = 62$), or satisfied (2.7%, $N = 8$).

In Table2, we created two categories by combining the data above and below the "Neutral". Category1: "Dissatisfied" (including "Extremely Dissatisfied," "Dissatisfied," and "Slightly Dissatisfied") and Category2. "Satisfied" (including "Slightly Satisfied" and "Satisfied") Table 2. In terms of dissatisfaction, approximately two-third of the proportion of people ($N_1 = 207, 69\%$) reported feelings of dissatisfaction. In contrast, approximately one-third of the portion of total sample ($N_2 = 70, 23\%$) reported feeling of satisfied and remaining (23, 7.7%) reported neutral.

Discussion

The current research aimed to investigate the association between physical activity and satisfaction with satisfaction among middle-aged adult men. Findings of this study demonstrated that increased physical activity was associated with increased level of life satisfaction among middle aged adult men. These findings suggest that physical exercise may play a significant role in improving feelings of satisfaction with life among this population.

These results are aligning with the pervious study. For example, our results align with those of a longitudinal study by (Griffiths et al., 2019) that similarly reported a positive correlation between physical activity and life satisfaction in middle-aged men. In addition, Adams et al. (2016) also demonstrated that individuals who engaged in frequent moderate-to-vigorous physical activity and maintained an active lifestyle, reported greater levels of

life satisfaction. The findings collectively support the notion that physical exertion is beneficial in enhancing life satisfaction in middle-aged adult men. Regular physical activity may be an effective technique for improving overall happiness and life satisfaction. Moreover, these findings also aligns with the previous cross-sectional research conducted by An et al. (2020) in which they studied the sample of 2345 healthy adults including both male and female aged ranged from 18 year to above 65 years and controlling the demographic characteristics (age, education, lived alone or not, income). These findings also concluded that physical exercise has a significant association with life satisfaction and happiness.

There may be various underlying factors that contribute to the observed relationship between physical exercise and life pleasure. First of all, it has been demonstrated that physical exercise has immediate physiological consequences, such as the release of endorphins and other neurotransmitters, which increase mood and general wellbeing (An et al., 2020). In addition, consistent exercise has been associated with improved cognitive performance, decreased stress levels, and greater self-esteem, all of which can have a favourable impact on life satisfaction (Griffiths et al., 2019). Physical activity offers chances for social connection and participation in worthwhile activities, both of which are proven to increase life satisfaction (Kim et al., 2017). Participating in team sports, group fitness classes, or outdoor leisure may promote social bonds and a feeling of community, which can improve life happiness (Kim et al., 2017). In addition, middle-aged adult males may have higher levels of life satisfaction as a result of their pursuit of physical fitness objectives and the sense of achievement they gain from achieving milestones or conquering difficulties (Wang & Boros, 2019).

Additionally, this study gives a significant insight on the relationship between exercise and life satisfaction in middle-aged male adults. In order to investigate the temporal association between physical activity and life satisfaction, longitudinal or intervention studies might be helpful in the coming future to portray a stronger finding in this regard.

Practical Implications

Based on above discussions, various practical implication for middle-aged adult men's well-being and overall life satisfaction can be put forward. Firstly, promoting and encouraging regular physical activity among this demographic can lead to improved life satisfaction by enhancing their physical and mental health. Secondly, health professionals and policymakers can utilize these findings to develop targeted interventions and programs aimed at increasing physical activity levels and subsequently enhancing life satisfaction in middle-aged men. Thirdly, employers can implement workplace wellness initiatives that prioritize physical activity, recognizing its potential positive impact on employees' well-being and job satisfaction. Lastly, individuals themselves can use this knowledge to prioritize and engage in regular physical activity, knowing that it can contribute to their general happiness and well-being.

Future directions:

Regarding the association between physical activity and life satisfaction among middle-aged adult males, there are a number of aspects that need more investigation in future studies. Firstly, this study used a cross-sectional study design, which makes it hard to show a cause-and-effect of a relationship between life satisfaction and physical activity in this age group. Secondly, there were no female participants in this study therefore, this result cannot be applied to female populations. These findings are also not applicable on the individuals of the ages of below and above 40 years to 65 years age. This study's sample was chosen from an urban area only. Thus, a strong experimental design is necessary to generalize this result.

Conclusion

In conclusion, our study shows that physical exercise helps to minimize dissatisfaction and promoting a sense of fulfilment among this population. Therefore, promoting physical activity and exercise can be considered an important interventional strategy to enhance satisfaction with life and offset the negative consequences of dissatisfaction among middle-aged adult men, leading to improved overall well-being and quality of life.

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