



# Physical Exercise And Psychological Well-Being: A Comparative Study In Adulthood Population

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## Abstract

Psychological Well-being refers to a state of happiness and contentment, with low levels of distress, overall good physical and mental health and outlook, or good quality of life. Physical exercise is the performance of some bodily activity in order to strengthen and sustain overall health and fitness. The study was undertaken to see the association between physical exercise and psychological well-being among exercisers and non-exercisers in adulthood population. To accomplish the objective of the present study a final sample of 140 participants in the young adulthood group (i.e., aged 18-30 years) were selected. Out of which 70 participants were accorded to the group of 'exercisers' and the remaining 70 participants were of the group, 'non-exercisers'. This was followed by the administration of questionnaire to all the 140 participants using Indian Adaptation of Psychological well-being Scale (English Version) by Dr. Devendra Singh Sisodia and Ms. Pooja Choudhary. Results showed that there is significant difference among the psychological well-being of exercisers as compared to non-exercisers.

**Keywords:** psychological well-being, physical exercise, exercisers, non-exercisers.

## Introduction

Physical exercise plays an essential part in the prevention and treatment of a range of medical illnesses. This has given access to a new notion amongst all categories of people that physical exercising is the most apt lifestyle change that can be adopted to achieve both physical and mental fitness. Regular exercise has also been shown to improve not just physical and also psychological well-being and quality of life (Ussher, Owen, Cook, & Whincup 2007).

The World Health Organisation (WHO) has defined psychological well-being (PWB) or mental health as the "state in which an individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community" (WHO, 2001).

Well-being represents an individual's current self-evaluation of life and has a direct impact on the degree of contentment with one's life as a whole (Seligman, 2002). Najmeh Hamid et al (2020), compared happiness and life satisfaction in athlete and non-athlete postmenopausal, there was a significant difference in happiness and its subscales, including self-esteem, subjective well-being, positive mood, and life satisfaction, between athletes and non-athletes ( $P < 0.001$ ), athlete postmenopausal women were substantially happier and satisfied with their lives than non-athlete postmenopausal women.

Every day, people stay home from work, miss school, go to the doctor or even die because of the effects of stress or lower levels of psychological well-being in their lives. Scully et al (1998) critically evaluated the relationship between physical exercise and psychological well-being and it was found there is a positive relationship between exercise and psychological well-being of a person who is physically active in either form of activity whether aerobic or non-aerobic. In this world of burdens, it is therefore very important to understand and manage our life - situations in such a way that we can have a healthy psychological well-being throughout our lives. Regular physical exercise is one big answer to win this situation. Virtually any form of exercise, from aerobics to yoga, running to resistance training can act as a stress reliever. As per the previous research's regular physical activity and sport, for at least 20 - 30 minutes a day, thrice or more times a week, has been shown to improve psychological well-being, (Biddle et al., 2003). Regular health club members were shown to be in better mental health than irregular exercisers (Edwards, 2003). The relationship between regular physical exercise over a period of two to six months and psychological well-being was

associated with significant improvements in total well-being score and especially in the well-being. (Edwards,2006).

The objective of the present paper was to examine the significant difference in the level of psychological well-being of regularly exercising individuals as against the non-exercisers in the adulthood population.

The study also examined whether there exists any significant difference in level of psychological well-being of male exercisers vis a vis male non-exerciser.

At the same time the research also examined whether there exists any significant difference in level of psychological well-being of female exercisers vis a vis female non-exerciser.

### **Hypotheses:**

On the basis of above objective, the following hypothesis have been formulated:

1. There is no significant difference between the level of psychological wellbeing of exercisers as compared to the non-exercisers.
2. There is no significant difference between the level of psychological wellbeing of male exercisers as compared to the male non-exercisers.
3. There is no significant difference between the level of psychological wellbeing of female exercisers as compared to the female non-exercisers.

### **Research Method**

Research methodology used for the present study is described as below:

### **Research Design**

The study is quantitative in nature, based on cross sectional survey design. Participation in Physical exercises like gym is the independent variables. Scores on the various dimensions of psychological wellbeing are the dependent variables.

## Participants

A final sample of 140 participants in the young adulthood group (i.e., aged 18-30 years) 70 participants were selected for the group of exercisers and 70 participants were selected for the group for the group of non-exercisers. The ratio was maintained equally for male and female in both these groups i.e., 1:1.

**Inclusive criteria-** Individuals who exercise for 5 days and more per week and for a duration of 60 mins and more per day will be included in the exercisers group.

**Exclusive Criteria-** Individuals exercising less than 5 days per week and less than 60 minutes per day will be excluded from the sample.

## Tool used for measurement

### Psychological well-being Scale

This inventory was developed and standardized by Dr. Devendra Singh Sisodia and Ms. Pooja Choudhary. It is a five-point Likert scale, comprising of 50 statements. There are five options to each statement- Strongly agree, agree, undecided, disagree, strongly disagree. The scores assigned to each option are Strongly agree -5, agree - 4, undecided- 3, disagree- 2, and strongly disagree-1.

### Procedure

A purposive sample of 140 individuals, both male and female, of age range 18-30 years were approached. Who also provided their consent for the tests to be administered on them. The tool required was arranged and the subjects were contacted as per their convenience. Before the test administration, the subjects were informed regarding the purpose of the test and on having their consent to be the part of the study, the rapport was established with them. Detailed instructions were given to the subjects. All the queries regarding the test were sorted out, before and during the test administration. A peaceful environment was maintained. After the completion of the test, the questionnaires were collected back. The subjects were then offered thanks and were allowed to leave.

### Result

Data was carefully scored after it was collected. The raw score was structured for comparison purposes using appropriate tables supplied in the manual of the Scale used for the study, and then analyzed using the t-test in SPSS version 16, with the results presented in the tables below.

Table 1: Mean, S.D., and t-value of exercisers and non-exercisers on the level of psychological well-being.

Variable	Exercisers (70)		Non-exercisers (70)		t -value
	M	SD	M	SD	
Level of Psychological well-being	1.94	11.86	1.61	14.55	14.678**

\*\*p<.01, \*p<.05

Table-1 shows Mean, S.D., and t-value of exercisers and non-exercisers on the level of psychological well-being. The results indicate there is a significant difference between the level of psychological wellbeing of exercisers (M=1.94, SD=11.86) as compared to the non-exercisers (M=1.61, SD= 14.55), p<.01. It reveals that there is a significant difference between the level of psychological wellbeing of exercisers as compared to the male non-exercisers.

Table 2: Mean, S.D., and t-value of Male exercisers and Male non-exercisers on the level of psychological well-being.

Variable	Exercisers (35)		Non-exercisers (35)		t -value
	M	SD	M	SD	
Level of Psychological well-being	1.98	10.40	1.62	15.90	11.17**

\*\*p<.01, \*p<.05

Table-2 shows Mean, S.D., and t-value of Male exercisers and Male non-exercisers on the level of psychological well-being. The results indicate there is a significant difference between the level of psychological wellbeing of Male exercisers (M=1.98, SD=10.40) as compared to the Male non-exercisers (M=1.62, SD= 15.90), p<.01. It reveals that there is a significant difference between the level of psychological wellbeing of male exercisers as compared to male non-exercisers.

Table 3: Mean, S.D., and t-value of Female exercisers and Female non-exercisers on the level of psychological well-being.

Variable	Exercisers (35)		Non-exercisers (35)		t -value
	M	SD	M	SD	
Level of Psychological well-being	1.91	12.33	1.61	13.27	9.79**

\*\*p<.01, \*p<.05

Table-3 shows Mean, S.D., and t-value of Female exercisers and Female non-exercisers on the level of psychological well-being. The results indicate there is significant difference between the level of psychological wellbeing of female exercisers (M=1.91, SD=12.33) as compared to the female non-exercisers (M=1.61, SD= 13.27), p<.01. It reveals that there is a significant difference between the level of psychological wellbeing of Female exercisers as compared to Female non-exercisers.

## Discussion

The study was conducted with the objective of finding to see if there is a significant difference in psychological well-being of regularly exercising individuals as against the non-exercisers. The finding of the study shows there is a significant difference among exercisers as compared to the non-exercisers. Physical activity, in the form of regular exercise, has been shown to have a positive impact on psychological well-being, Steve Edwards (2014) looked into the link between regular physical activity and psychological well-being among gym members. Almost all of the wellness component relationships were highly significant. The findings add to the growing body of evidence supporting the importance of regular exercise in the improvement of mental health. Zafar Iqbal Butt et al. (2016) explored the relationship between exercise and psychological wellbeing, there were 230 participants in all, ranging in age from 18 to 33. The respondents are assessed on the domains of well-being using David Ryff's short, reliable 18-item scale of objective psychological well-being. The findings show a link between improved psychological well-being and frequent physical activity. However, it can be said that regular exercising does has an influence on psychological well-being of an individual as, the results are supporting the evidences found.

The study also aims at finding out whether there is a significant difference in psychological well-being of male exercisers vis a vis male non-exerciser. It is found that, there is a significant difference between the level of psychological wellbeing of male exercisers as compared to the male non-exercisers in this study. This could be substantiated with the findings of Eric K. O'Neal (2016) which compared the actual and desired image among the male exercisers and male non-exercisers and it was found that there is a significant difference between the body image satisfaction among the both the groups. The exercisers were more satisfied with their body image. Tennur Yerlisu Lapa (2015) compared psychological well-being and physical activity levels of males; the research findings revealed that there was a significant difference between psychological well-being of the sample population of male according to physical activity levels. At the same time the research also aims at finding out whether there is significant difference in psychological well-being of female exercisers vis a vis female non-exerciser. It is found that, there is a significant difference between the level of psychological wellbeing of female exercisers as compared to the female non-exercisers. This could be corroborated with the findings of Najmeh Hamid et al., (2020) which compared happiness and life satisfaction in athlete and non-athlete postmenopausal women. The findings demonstrated a significant difference in happiness and its subscales, including self-esteem, subjective well-being, positive mood, and life satisfaction, between athletes and non-athletes ( $P < 0.001$ ). The findings revealed that athlete postmenopausal women were substantially happier and satisfied with their lives than non-athlete postmenopausal women. Ann Goodwinn et al, (2000) compared the perceptions of body image and psychological well-being between exercising and non-exercising pregnant women. The exercise group scored lower on probable caseness, had less somatic symptoms, anxiety, and insomnia, and a greater degree of psychological well-being. Sylvia R. Cramer et al., (1990) studied the relationship between moderate exercise, psychological well-being and mood state was investigated in a group of 35 sedentary, mildly obese women for 15 weeks. Thus, it can be said that regular exercising does have an influence on the overall psychological well-being level of female exercisers.



## Conclusion

Physical exercise plays an essential part in the prevention and treatment of a range of medical illnesses. This has given access to a new notion amongst all categories of people that physical exercising is the most apt lifestyle change that can be adopted to achieve both physical and mental fitness. Regular physical exercise has been characterized as a positive health behavior which not only yields physiological benefits but it imparts psychological benefits too.

As per today's conviction mental health is being the biggest concern of the society. One of the main objectives of this research work was to test if exercising influences psychological well-being, and if it does then use the results, we can make people aware of the benefits regular exercising can impart. On the basis of the findings of this study we can suggest that exercise training improves overall psychological well-being of a person. So, it is sheerly obvious that being physically active on daily basis can be beneficial for mental health.

Although, present study has been done in the best manner possible and standard procedure, but despite that there are few limitations of the study which are:

Small size and the sample of this study was delimited to few gyms for the exercisers data. Result cannot be generalized to the larger population as the population belonged to the particular place Raipur, Chhattisgarh. In future research inclusion of variables such as-Conducting the study in larger population so it can be generalized, including people who are into various exercisers category like- jogging, Pilates, aerobics. And also finding the psychological well-being of people who are into various sports.

Thus, to deal with mental health challenges, acquiring the habit of exercising regularly and remain consistent towards it will be highly fruitful. This study provides ground for further research work based on similar objectives.

This study infers that doing regular physical exercise is the new normal for the society. With the drastic increase in the number of cases of deteriorated mental health of people it is important to make a little drift from zero exercising to exercising regularly. This would lead to freshness of mind and development of healthy psychological well-being of the people. This is especially true with the adult population of the society which was taken as the sample population of this research work.



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