

## Effectiveness Of Physical Training Programme on Mental Health on Sedentary Students

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### Abstract:

*A sedentary lifestyle has been associated with mental health disorders. Many medical conditions result in the cessation of exercise, which may increase the risk of developing mental health problems. Mental disorders are of major public health significance. It has been claimed that vigorous physical activity has positive effects on mental health. This research paper reviews the evidence for this claim and provides recommendations for future studies. The several evidence suggests that physical activity and exercise probably alleviate some symptoms associated with mild to moderate depression. The research also suggests that physical activity and exercise might provide a beneficial to come out the mental disorders and improve self-image, social skills, and cognitive functioning; reduce the symptoms of anxiety too. The study of the effects of Physical exercise on Anxiety, Emotional, Intelligence, and Personality of psychological variables has become a major topic of interest to physical educationist in the recent years. The degree of perceived Anxiety, Emotional, and Intelligence & Personality is an important variable to be considered in the health of an individual.*

*Therefore, this study endeavours to examine the effects of Physical education training programme on mental health of sedentary students.*

**Keywords:** Physical Training, Mental Health, Positive & Negative Mental Health.

### Introduction:

Usually in sports we use term sports training which denote the sense of preparing sportsmen for the highest level of performance. But now-a-days sports training are not just a term but is very important subject that affects each and every individual who takes up physical activity of sports either for health and fitness or competition at different level.

Sports training needs not be confused with physical exercise which is more validly used in conjunction with health and fitness. It does not however, mean that the athletes do not engage in a physical activity programme. As a matter of training for competition require much harder regimes of physical exercise to condition body than one does to achieve health objective. The training programme for athletes in reality is a comprehensive it includes physiological, physical conditioning, nutritional and managerial factors. In its broadest sense, sports training is the physical, technical, intellectual,

psychological and moral preparation of an athlete by the means of physical exercise. Sports training is thoroughly systematic it is very personal to each athlete and is based on certain well tested scientific principles. In expert hands, sports training becomes a magic wand of making people perform to the best of their potential and satisfaction of the trainers. There are no shortcuts in sports training it is a long-term phenomenon requiring utmost patience, restraint, commitment and continuity on the parts of both trainees and trainers.

Association between physical activity and mental health in young people is evident, but research designs are often weak and effects are small to moderate.

This level of exercise has the potential to alter the ways in which people think, feel, and conduct their lives on multiple levels. These effects could most likely to be seen in sedentary people who undertake a regular exercise program. In general, experimental studies of exercise have found improvements in various aspects of quality of life [Ellingson T et. al. 2000] including general

functioning [Courneya KS et. al. 2002, Rippe JM et. al. 1998] and depression and anxiety symptoms [Dunn AL et. al. 2001]. Most of these studies have found positive effects of exercise on multiple aspects of quality of life and functional status during the active intervention period or at relatively short-term intervention follow-up periods of 4 – 20 weeks. The mechanisms by which these improvements occur are not known, but hypotheses include improvements in psychological factors, such as body image or perceptions of physical fitness, as well as more physiological changes, such as sympathetic nervous system activity. Long-term quality of life effects due to large increases in exercise are unknown. Further, if increases in quality of life and functional status remain after the initiation of intervention they could contribute to long-term adherence (Deborah J.B. 2006).

**Statement of the problem**

Effectiveness of physical training programme on Mental Health on sedentary students.

**Objective of the study**

- The objective was to study and examine the effect Physical education training programme on Mental health on sedentary student.

**Selection of variables**

**a) Psychological variables**

- i) Mental Health -positive mental health, Negative mental health,

**Hypothesis:**

1. There would be significant effect of Physical education training programme on psychological variables with respect to **positive Mental health** of sedentary student.
2. There would be significant effect of Physical education training programme on Psychological variables with respect to **Negative Mental health** of sedentary student.

**Sample size and Sampling Method**

Only one group was targeted experimental group, there was no control group. The 75 male sedentary students from different colleges in Marathwada region of Maharashtra participated in

the study and their age ranged between 18-30years. Training was given to the experimental groups. The sampling method of the study is purposive sample.

**Inclusion And Exclusion Criteria**

The inclusion and exclusion criteria for participants were as follows:

**The inclusion criteria are:**

1. The participant agreed to participate in the study via an informed consent.
2. The participants must be sedentary student in their under and post graduate degree programme aged range was 18 to 30 years.
3. The participants were not rotating through other health facility at the time of study.

**The exclusion criteria are:**

1. Active Physical illness. The participants advised not to participate if under any injuries and management within 2 weeks of study.
2. Inability to obtain the consent of the respondent.
3. Presence of chronic medical conditions such as asthma, heart disease or any other condition. And
4. Participants free from the smoking, drug abuse and alcohol consumptions during the experimental period

**Delimitations of the study**

1. Study was conducted on 75 sedentary students. Only experimental group was targeted there was no control group.
2. The age group of sedentary student was 18-30.
3. The study was delimited to the following psychological variables.
  - a) Psychological Variables: Mental Health.

**Limitation of The Study**

1. The weather condition that would affect the results of the study was considered as limitations.
2. The background of the subject was not considered in this study.
3. There was no control of researcher scholar on the diet of the subjects.
4. Inherent potential of the subjects was unknown.

5. Other exercises and activities which affect the result of this study were recognized as limitations.

**Research Design**

The research design refers to “the researcher’s overall plan for testing the research hypotheses. This study involves a cross sectional, comparative pre and post-test of two groups of students in an experimental research. Since only experimental group will be taken by the investigator and there will be no control group so this study will be conducted in a quasi-experimental design. This explores and measures the cardiovascular efficiency body composition and health outcome within the environment and culture.

**Administration of The Test**

**Psychological Test:**

The data was collected before & after training to the students through questionnaires. The instruction was given by the investigator to the students before filling these questionnaires. Pre and post psychological Test was taken by the following procedure.

**Tools of the Study**

**Psychological Tools: Mental health Questionnaire (GHQ -12)**

For the present study, Mental health was measured by the using General Health Questionnaire (GHQ -12) . The General Health Questionnaire (GHQ) is a measure of current mental health and since its development by Goldberg in the 1970s it has been extensively used in different settings and different cultures. The questionnaire was originally developed as a 60-item instrument but at present a range of shortened versions of the questionnaire including the GHQ-30, the GHQ-28, the GHQ-20, and the GHQ-12 is available. The 12-item GHQ-12 comprises six ‘ positive ’ and six ‘negative’ items . Positive items included ‘Have you recently felt capable of making decisions about things ? ’, while negative items included ‘Have you recently felt constantly under strain? ’ Items were classified in this way according to wording, with positively worded items having responses ‘Better than usual’, ‘Same as usual’, ‘Less than usual’ and ‘Much less than usual ’. Responses to negatively worded items are ‘Not at all ’, ‘No more than usual’, ‘Rather more

than usual’ and ‘Much more than usual’. Questions 1, 3, 4, 7, 8 and 12 as positively worded items. The remainder are negatively worded. Responses will be coded using an un weighted four-point Likert scale (0, 1, 2, 3). Positively worded items will later rescored so that a high score was indicative of endorsement of these items (e.g. ‘better than usual ’). Higher scores on negative items indicate greater distress and or difficulty.

**Statistical Analysis**

The obtained data was in Pre & Post form therefore to analyse the obtained data Mean, Standard Deviation and T-test was utilized by the investigator. The level of significant was set up at 0.05 level.

**Interpretation of Data And Results of The Study**

**Table-1**

**Mean Scores, Standard Deviation and t-ratio of pre and post test the positive mental health**

Dimensio n	Player s	Numbe r	Mea n	S.Ds .	t- ratio
Positive mental health	Pre test	75	8.23	1.27	8.40 *
	Post Test	75	10.33	1.78	

**\*= Significant**

*Table 1 shows that* Mean Scores, Standard Deviation and t-ratio of pre and post test the positive mental health .

With regards to positive mental health of sedentary students, they have obtained the mean values of 8.33 and 10.33 respectively, which are given in the Table 1 reveals that there was significant effect of physical education training was found in positive mental health of sedentary students, Thus the hypothesis of the study was accepted.

The Mean Scores and Standard Deviation of pre and post test positive mental health of sedentary students has been presented graphically in figure 1.

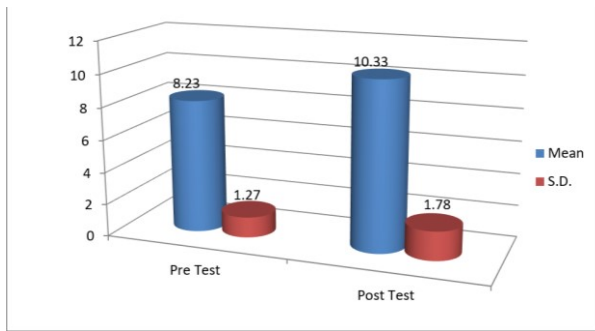


Figure- 1 shows the mean scores and Standard Deviation of pre and post test positive mental health of sedentary students.

Table-2

Mean Scores, Standard Deviation and t-ratio of pre and post test the Negative mental health

Dimension	Players	Number	Mean	S.Ds.	t-ratio
Negative mental health	Pre test	75	8.20	1.19	0.30 NS
	Post Test	75	8.26	1.32	

NS= Not Significant

Table 2 shows that Mean Scores, Standard Deviation and t-ratio of pre and post test the Negative mental health

With regards to negative mental health of sedentary students, they have obtained the mean values of 8.20 and 8.26 respectively, which are given in the Table 2 reveals that there was insignificant effect of physical education training was found in negative mental health of sedentary students, Thus the hypothesis of the study was not accepted.

The Mean Scores and Standard Deviation of pre and post test negative mental health of sedentary students has been presented graphically in figure 2.

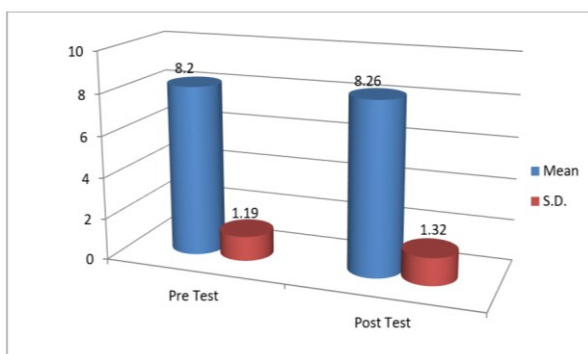


Figure-2 shows the mean Scores and Standard Deviation of pre and post test negative mental health of sedentary students.

Table-3

Mean Scores, Standard Deviation and t-ratio of pre and post test the positive mental health of age group (21-25) students.

Dimension	Players	Number	Mean	S.Ds.	t-ratio
Positive mental health	Pre test	49	8.01	1.20	*
	Post Test	49	10.17	1.71	

\*= Significant

Table 3 shows that Mean Scores, Standard Deviation and t-ratio of pre and post test the positive mental health age group (21-25) sedentary students.

With regards to positive mental health of age group (21-25) sedentary students, they have obtained the mean values of 8.01 and 10.17 respectively, which are given in the Table 3 reveals that there was significant effect of physical education training was found in positive mental health of age group (21-25) sedentary students, Thus the hypothesis of the study was accepted.

The Mean Scores and Standard Deviation of pre and post test positive mental health of age group (21-25) sedentary students has been presented graphically in figure 3.

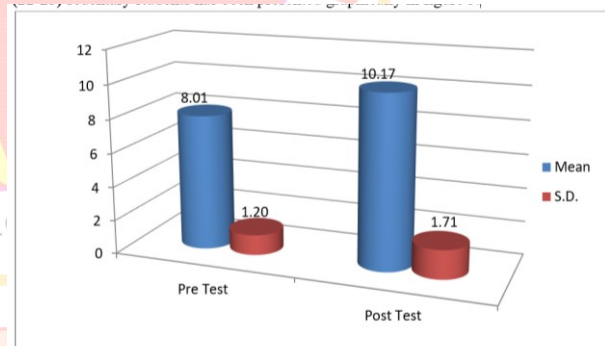


Figure- 3 shows the mean scores and Standard Deviation of pre and post test positive mental health of age group (21-25) sedentary students.

Table-4

Mean Scores, Standard Deviation and t-ratio of pre and post test the Negative mental health age group (21-25) sedentary students

Dimension	Players	Number	Mean	S.Ds.	t-ratio
Negative mental health	Pre test	49	8.03	1.14	0.30 NS
	Post Test	49	8.22	1.29	

NS= Not Significant

Table 4 shows that Mean Scores, Standard Deviation and t-ratio of pre and post test the Negative mental health age group (21-25) sedentary students

With regards to negative mental health of sedentary students, they have obtained the mean values of 8.23 and 8.22 respectively, which are given in the Table 4 reveals that there was insignificant effect of physical education training was found in negative mental health of age group (21-25) sedentary students, Thus the hypothesis of the study was not accepted.

The Mean Scores and Standard Deviation of pre and post test negative mental health of age group (21-25) sedentary students has been presented graphically in figure 4.

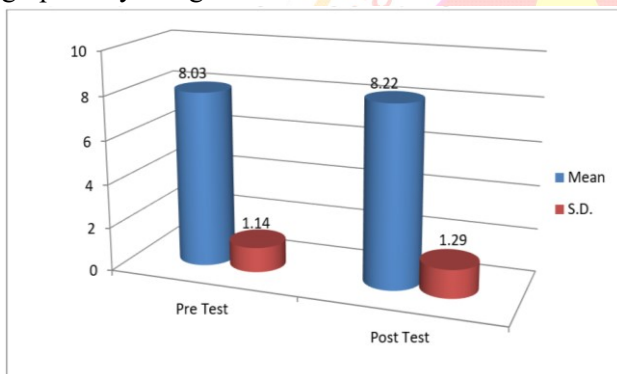


Figure-4 shows the mean Scores and Standard Deviation of pre and post test negative mental health of age group (21-25) sedentary students.

Table-5

Mean Scores, Standard Deviation and t-ratio of pre and post test the positive mental health of age group (26-30) students.

Dimension	Players	Number	Mean	S.Ds.	t-ratio
Positive mental health	Pre test	26	8.68	1.43	*
	Post Test	26	10.70	1.95	

\*= Significant

Table 5 shows that Mean Scores, Standard Deviation and t-ratio of pre and post test the positive mental health age group (26-30) sedentary students .

With regards to positive mental health of age group (26-30) sedentary students, they have obtained the mean values of 8.68 and 10.70 respectively, which are given in the Table 5 reveals that there was significant effect of physical

education training was found in positive mental health of age group (26-30) sedentary students, Thus the hypothesis of the study was accepted.

The Mean Scores and Standard Deviation of pre and post test positive mental health of age group (26-30) sedentary students has been presented graphically in figure 5.

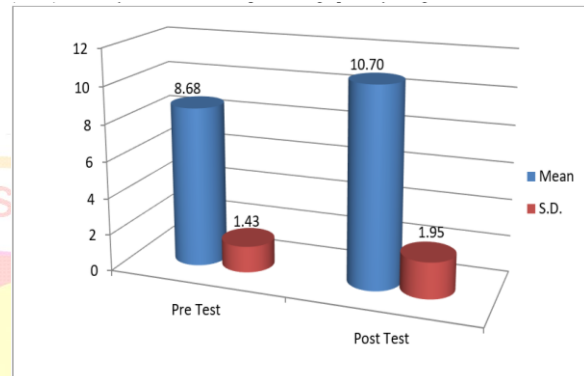


Figure- 5 shows the mean scores and Standard Deviation of pre and post test positive mental health of age group (26-30) sedentary students.

Table-6

Mean Scores, Standard Deviation and t-ratio of pre and post test the Negative mental health age group (26-30) sedentary students

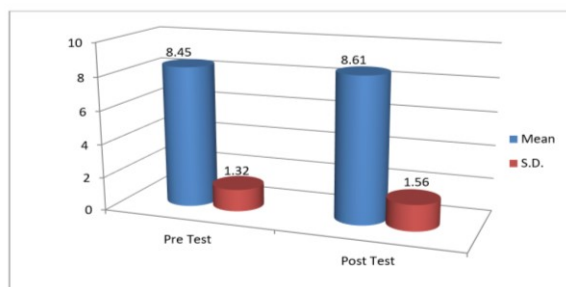
Dimension	Players	Number	Mean	S.Ds.	t-ratio
Negative mental health	Pre test	26	8.45	1.32	NS
	Post Test	26	8.61	1.56	

NS= Not Significant

Table 6 shows that Mean Scores, Standard Deviation and t-ratio of pre and post test the Negative mental health age group (26-30) sedentary students

With regards to negative mental health of sedentary students, they have obtained the mean values of 8.45 and 8.61 respectively, which are given in the Table 6 reveals that there was insignificant effect of physical education training was found in negative mental health of age group (26-30) sedentary students, Thus the hypothesis of the study was not accepted.

The Mean Scores and Standard Deviation of pre and post test negative mental health of age group (26-30) sedentary students has been presented graphically in figure 6.



**Figure-6 shows the mean Scores and Standard Deviation of pre and post test negative mental health of age group (26-30) sedentary students.**

### Conclusion:

1. With regards to positive mental health of sedentary students, they have obtained the mean values of 8.33 and 10.33 respectively, which are given in the Table 1 reveals that there was significant effect of physical education training was found in positive mental health of sedentary students, Thus the hypothesis of the study was accepted.
2. With regards to negative mental health of sedentary students, they have obtained the mean values of 8.20 and 8.26 respectively, which are given in the Table 2 reveals that there was insignificant effect of physical education training was found in negative mental health of sedentary students, Thus the hypothesis of the study was not accepted
3. With regards to positive mental health of **age group (21-25)** sedentary students, they have obtained the mean values of 8.01 and 10.17 respectively, which are given in the Table 3 reveals that there was significant effect of physical education training was found in positive mental health of **age group (21-25)** sedentary students.
4. With regards to negative mental health of sedentary students, they have obtained the mean values of 8.23 and 8.22 respectively, which are given in the Table 4 reveals that there was insignificant effect of physical education training was found in negative mental health of **age group (21-25)** sedentary students, Thus the hypothesis of the study was not accepted.
5. With regards to positive mental health of **age group (26-30)** sedentary students, they have

obtained the mean values of 8.68 and 10.70 respectively, which are given in the Table 5 reveals that there was significant effect of physical education training was found in positive mental health of **age group (26-30)** sedentary students, Thus the hypothesis of the study was accepted.

6. With regards to negative mental health of sedentary students, they have obtained the mean values of 8.45 and 8.61 respectively, which are given in the Table 6 reveals that there was insignificant effect of physical education training was found in negative mental health of **age group (26-30)** sedentary students, Thus the hypothesis of the study was not accepted.

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