



P-ISSN: 2394-1685  
E-ISSN: 2394-1693  
Impact Factor (R,JIF): 5.38  
IJPESH 2024; 11(6): 239-241  
© 2024 IJPESH  
<https://www.kheljournal.com>  
Received: 16-09-2024  
Accepted: 21-10-2024

**Dr. Vinodkumar K**  
Associate Professor, NSS  
Training College, Pandalam,  
Pathanamthitta, Kerala, India

**Corresponding Author:**  
**Dr. Vinodkumar K**  
Associate Professor, NSS  
Training College, Pandalam,  
Pathanamthitta, Kerala, India

## Comparative effect of yoga and exercise with music on the mental health of teacher trainees

**Vinodkumar K**

### Abstract

The purpose of this study is to compare the effect of yoga and exercise with music on the mental health of teacher trainees. The present study is conducted on 120 teacher trainees of Kerala University College of Teacher Education. These students were randomly divided into experimental and control groups of forty each. After taking the pre test for the selected variable, a twelve week training programme was given to the experimental groups. The control group did not involve in any type of training. After the training programme, a post test was conducted for both groups. The data were analysed by using t test and analysis of co variance. The result reveals a significant improvement in mental health of teacher trainees due to yoga and exercise with music. Yoga group also showed significantly better improvement in mental health than the exercise with music group.

**Keywords:** Yoga, exercise, music, mental health

### Introduction

Yoga and physical exercises are good for physical and mental health of people. Yoga is an ancient Indian way of life, shows the way to perfect health of body and mind. Regular exercise helps us to maintain good fitness. Exercise is also beneficial for maintaining mental health. Exercise accompanied with music helps to improve physical and psychological traits of people. The fitness and medical experts all over the world now regard exercise, practiced on a regular basis, as essential for achieving and maintaining balance health. Many researchers believe that the music accompaniment to exercise provides an important beneficial effect to the exercise experience. Maintaining mental health of teacher trainees will allow them to develop healthy relationship with their students who will become leaders of tomorrow. Studies on effect of yoga and exercise with music on mental health of teacher trainees are scarce. This study aimed to evaluate how this type of exercise programmes will be affected on the mental health of teacher trainees.

### Objectives of the Study

The objectives of this study are

- i) To find out the effect of yoga and exercise with music on the mental health of teacher trainees.
- ii) To compare the effect of yoga and exercise with music on the selected variable.

### Delimitation

- i) The study was delimited to the female teacher trainees between 20 to 25 years of age from the Kerala University College of Teacher Education.
- ii) The study was further delimited to mental health.

### Limitations

- i) No motivational techniques used to motivate the subjects were considered as a limitation of the study.
- ii) The life style, habits, heredity and nutritional intake and other personal behaviour styles were beyond the control of the investigator were also considered as the limitations of the study.

### Hypotheses

- It is hypothesised that there would be significant improvement in mental health as a result of training programmes in yoga and exercise with music.
- It is hypothesised that there would be significant differences between yoga and exercise with music groups in the improvement of mental health.
- It is also hypothesised that yoga group would show significantly better improvement in mental health than the exercise-with-music group.

### Significance of the Study

- The findings of the study may help the people to know the effect of yoga and exercise with music on mental health.
- The result of the study may probably make an impact on the public to follow yoga and exercise with music in the form of body exercises to maintain good health and fitness.
- The results and findings of this study may also enable students of schools and colleges to be involved in yoga or exercise accompanied with music along with their academic pursuits.

### Procedure

#### Selection of subjects

For the purpose of this study, 120 female teacher trainees from Kerala University College of Teacher Education were selected as subjects. The average age of the subjects was 23

years.

### Design of the study

Randomly selected 120 subjects were divided into three equal groups as 'A', 'B', and 'C'. After taking the pre-test for the selected variable, the training programme was given to the experimental groups 'A', and 'B', where group 'C' was the control group. The experimental group 'A' had undergone the training programme in yoga and group 'B' had undergone the training programme in exercise -with -music thrice a week (ie, on Mondays, Wednesdays and Fridays) for 12 weeks. After twelve weeks of training as per the schedule, a post-test was conducted for the same variable to all the groups.

### Administration of training programme

The experimental groups were given an organised training programme by the experts for 12 weeks. The programme was of 45 minutes duration for three days in a week. This was monitored and controlled by the investigator. The control group did not involve in any session of training.

### Analysis of data and discussion of findings

The t-test was employed to analyse the significant difference between pre-test and post-test on the selected variables. The analysis of covariance was employed to compare the significant difference between pre-test and post-test among the experimental and control groups. The Scheffe's post hoc test was applied wherever the F-value was found significant. The level of significance chosen was 0.05.

**Table 1:** The significance of differences between the pre-test and post-test means of mental health scores of the yoga and control groups

Groups	Means		MD	SD	SE	't' value
	Pre-test	Post-test				
Yoga group (N=40)	71.48	83.43	11.95	3.60	0.569	20.984*
Control group (N=40)	60.03	59.95	0.08	0.27	0.042	1.778

\*Significant at 0.05 level 't' value required at 0.05 level = 2.03 (df 39)

The statistical results shown in table 1 indicate that the yoga group exhibits significant improvement in the mental health with pre-test mean score being 71.48 and the post-test mean score being 83.43. Further, it shows that the obtained 't' value (20.984) is much higher than the tabulated 't' value (2.03) at 39 degrees of freedom. Hence the obtained 't' value is found

to be highly significant at 0.05 level. On the contrary, the pre-test value (60.03) and post-test value (59.95) of the control group shows negligible difference. Further the obtained 't' value (1.778) is less than the required 't' value (2.03) at 0.05 level. Hence it shows that there is no significant difference in the mental health of the control group.

**Table 2:** The significance of differences between the pre-test and post-test means of mental health scores of the exercise with music and control groups

Groups	Means		MD	SD	SE	't' value
	Pre-test	Post-test				
Exercise with music group (N=40)	69.40	77.40	8.00	2.207	0.348	22.923*
Control group (N=40)	60.03	59.95	0.08	0.267	0.042	1.778

\*Significant at 0.05 level 't' value required at 0.05 level = 2.03 (df 39)

The above table shows that the post-test mean (77.40) of the exercise-with-music group is less than the pre-test mean (69.40). In the case of the control group, the post-test mean (59.95) and the pre-test mean (60.03) do not show any significant difference. The 't' value (22.923) of the exercise-with-music group and the 't' value (1.778) of the control

group, both derived from the 't' test, prove highly significant for the exercise-with-music group and insignificant for the control group, as compared to the tabulated 't' value (2.03), at 39 degrees of freedom at 0.05 level of significance. Hence the results of mental health of the exercise-with-music group are statistically found significant.

**Table 3:** Analysis of covariance of mental health among experimental and control groups

	Yoga group	Exercise with music group	Control group	SV	DF	SS	MSS	F-value
Adjusted post-test means	83.43	77.40	59.95	B	2	1166.830	583.415	119.512*
				W	116	566.270	4.882	

\*Significant at 0.05 level F 0.05 (2, 116) = 3.09

The statistical results show in table 3 indicates that the F-value of the adjusted post-test means is 119.512. As the obtained F-value (119.512) is greater than the tabulated F-value (3.09) at 0.05 level of significance, significant

difference exists in the adjusted post-test means among the experimental and control groups. The Scheffe's post hoc test is applied as significant difference exists and the results obtained are presented in table 4

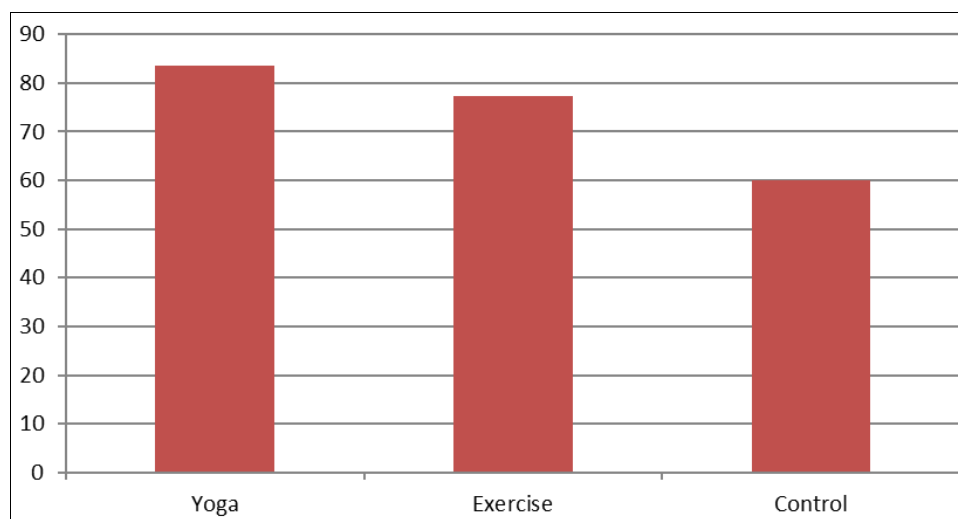
**Table 4:** Scheffe's test for differences in paired adjusted post-test means of mental health among experimental and control groups

Yoga group	Exercise with-music group	Control group	Mean differences	Confidence interval
83.43	77.40		6.03*	0.707
83.43		59.95	23.48*	0.707
	77.40	59.95	17.45*	0.707

\*Significant at 0.05 level

The table 4 indicates that the differences in paired adjusted post-test means between yoga and exercise-with -music is 6.03 and the value 23.48 between yoga and control group, 17.45 between exercise-with-music and control group. All of them are significant as the obtained values are greater than the

confidence interval value of 0.707 required for the significance. The graphical representation of the paired adjusted post-test means of the mental health of experimental and control groups is shown in figure1.



## Conclusion

The analysis of data seemed to have permitted to the following results.

1. Yoga and exercise-with-music groups showed significant improvement in mental health.
2. The analysis of mental health also proved that significant difference found between the experimental groups and the control group. Better improvement was shown by yoga group than exercise-with-music and control groups. Yoga group also showed significantly better improvement in mental health than the other groups.

## References

1. Benedetti TRB, Borges LJ, Petroski EL, Goncalves LHT. Physical activity and mental health status among elderly people. *J Exerc Sci Fit.* 2008;42:302-307.
2. Kull M. The relationships between physical activity, health status, and psychological well-being of fertility-aged women. *Scand J Med Sci Sports.* 2002;12(4):241-247.
3. Moses J, Steptoe A, Mathews A, Edwards S. The effects of exercise training on mental well-being in the normal population: A controlled trial. *J Psychosom. Res.* 1989;33(1):47-61.
4. <http://www.who.int/mediacentre/factsheets/fs220/en/>.
5. [www.livestrong.com/aerobic-exercises](http://www.livestrong.com/aerobic-exercises)
6. [www.psychology.org/links](http://www.psychology.org/links)