



ISSN Print: 2394-7500
ISSN Online: 2394-5869
Impact Factor: 8.4
IJAR 2022; 8(3): 250-251
www.allresearchjournal.com
Received: 01-01-2022
Accepted: 03-02-2022

Dr. Vinod Kumar K
Assistant Professor,
NSS Training College,
Pandalam, Kerala, India

Effect of exercise with music on the cardio respiratory endurance of under graduate students

Dr. Vinod Kumar K

Abstract

This study aimed to make a clear picture on the effectiveness of music with exercise on the cardio respiratory endurance of under graduate students. For the purpose of this study eighty under graduate students were taken as subjects. They were randomly divided into experimental and control groups of forty each. After taking the pre-test, the experimental group underwent a training programme of exercise with music for twelve weeks. The control group did not involve in any type of training. After twelve weeks of training, a post test was administered for both groups. The data were analysed by using mean, standard deviation and t-test. The result reveals a significant improvement in the cardio respiratory endurance of under graduate students due to training.

Keywords: Cardio respiratory endurance, music, exercise

Introduction

Exercise is an activity requiring physical effort and improves total health and fitness. People engage in exercises to improve their physical mental and emotional health. Music exerts a powerful influence on human beings. It can boost memory, build task endurance, lighten your mood, reduce anxiety and depression, stave off fatigue, improve your response to pain, and help you work out more effectively. Since both exercise and music has marvelous effect on the human systems, their combination may create wonderful effect on cardio respiratory system. Cardio respiratory endurance refers to the ability of the body to perform prolonged, large-muscle, dynamic exercise at moderate-to-high levels of intensity. Cardio respiratory endurance is an important part of overall physical fitness. It is the ability of the lungs and heart to take in and transport adequate amounts of oxygen to working muscles, allowing activities that involve large muscle masses (eg. running, swimming, bicycling) to be performed over long periods of time (Fox, Edward, 1971). This study will give a clear picture of exercise with music on the cardio respiratory endurance of under graduate students.

Objective of the Study

The objective of this study is to find out the effect of exercise with music on the cardio respiratory endurance of under graduate students.

Delimitations of the Study

This study is delimited to under graduate students.
This study is also delimited to students under M.G. University area.

Limitations of the Study

The personal behavioural styles of students were beyond the control of the investigator is also considered as a limitation of the study.

Methodology

Selection of Subjects

For the purpose of this study, 80 students from SVR NSS College, Vazhoor were selected as subjects. The average age of the subjects was 21 years.

Corresponding Author:
Dr. Vinod Kumar K
Assistant Professor,
NSS Training College,
Pandalam, Kerala, India

Design of the Study

Randomly selected 80 subjects were divided into two equal groups as ‘A’ and ‘B’. After taking the pre-test for the selected variable, the training programme was given to the experimental group ‘A’, and ‘B’ served as the control group. The experimental group ‘A’ had undergone the training programme in exercise with music for five days in a week for 12 weeks. After twelve weeks of training as per the schedule, a post-test was conducted for the same variable to both groups.

Administration of Training Programme

The experimental group was given an organised training programme for 12 weeks. The programme was of 40 minutes duration for five days in a week. This was monitored and controlled by the investigator. The control group did not involve in any session of training.

Statistical Technique

To find out the significance of difference between the pre-test and post-test data on the selected variable for the experimental and control groups, the ‘t’-test was applied.

Results and Discussion

The t-test was employed to analyse the significant difference between pre-test and post-test on the selected variables.

Table 1: Significance of differences between the pre-test and post-test means of cardio respiratory endurance of the experimental groups

Test	N	Mean	MD	SD	SE	‘t’ value
Pre-test	40	25.48	0.70	0.254	0.0439	14.021*
Post-test	40	24.78				

* Significant at 0.05 level
t-.05 (39)= 2.03

Table 2: Significance of differences between the pre-test and post-test means of cardio respiratory endurance of the control group

Test	N	Mean	MD	SD	SE	‘t’ value
Pre-test	40	25.59	0.03	0.092	0.0143	1.562
Post-test	40	25.62				

* Significant at 0.05 level
t-.05 (39)= 2.03

The table shows that the post-test mean (24.78) of the experimental group is less than the pre-test mean (25.48). In the case of the control group, the post-test mean (25.62) is greater than the pre-test mean (25.59). The ‘t’ value (14.021) of the experimental group and the ‘t’ value (1.562) of the control group, both derived from the ‘t’ test, prove highly significant for the experimental 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 result of cardio respiratory endurance of the experimental group (Exercise with Music) is statistically found significant. The results are also diagrammatically presented in figure 1.

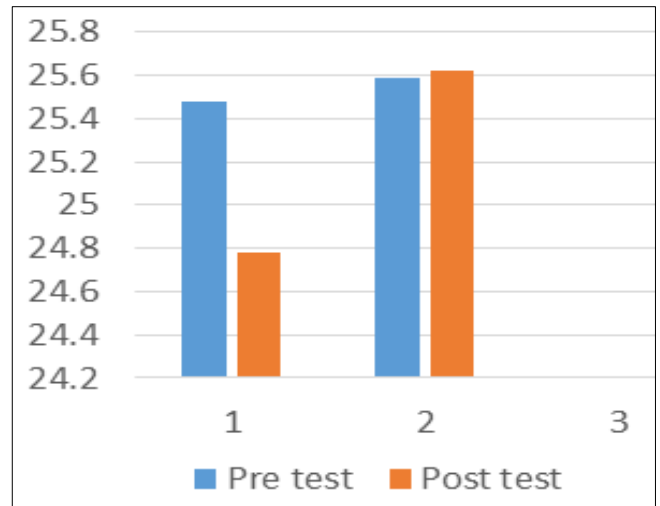


Fig 1: Hence the result of cardio respiratory endurance of the experimental group (Exercise with Music) is statistically found significant

Conclusion

The analysis of data clearly showed that due to the training of exercise with music, the cardio respiratory endurance of under graduate students was significantly improved.

References

- Bale J. In: Sporting sounds : Relationships between Sport and Music. Taylor and Francis. I st edition. 2009, 25-2
- Birnbaum L, Bornas T, Huschle B. Cardiovascular responses to music tempo during steady state exercise. Journal of Exercise Physiology Online. 2009;12:50–57.
- Edward L, Fox Charles E. .Fitness standards for college students. European Journal of Applied Physiology and Occupational physiology. 1971;31(3):231-236.
- Helper C, Kapke R. Effect of Music on cardiovascular performance during treadmill walking. Iowa Association for Health, Physical Education. Recreation and Dance (IAHPERD) Journal. Spring, 1996, 29:2
- Karageorghis CI, Jones L, Low DC. Relationship between exercise heart rate and music tempo preference. Res Qua Exer Sport. 2006;77:240-250.
- Potteiger JA, Schroeder JM, Goff KL. Influence of music on ratings of perceived exertion during 20 minutes of moderate intensity exercise. Percept Mot Skills. 2000;91:848–854
- Schwartz SE, Fernhall B, Plowman SA. Effects of music on exercise performance. Journal of Cardiopulmonary Rehabilitation. 1990;10:312-316.