Impact of aerobic exercise with music on the emotional intelligence of teacher trainees

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

Abstract
This study is an attempt to find out whether aerobic exercise with music has any effect on the emotional intelligence of teacher trainees. For the purpose of this study 80 students from the Kerala University College of Teacher Education were selected as subjects. These students were randomly divided into experimental and control groups of forty each. After taking the pre test for the selected variable, a sixteen week training programme was given to the experimental group. 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. The result reveals a significant improvement in emotional intelligence of teacher trainees due to aerobic exercise with music.

Keywords: aerobic exercise, emotional intelligence, music

Introduction
Regular physical exercise is the basis for good health and fitness. Exercise is also beneficial for maintaining mental and emotional health. Physical activity positively influences self-esteem, as well as reduces anxiety and depression (Janssen and Leblanc, 2010) [3]. We all know that exercise promotes healthier body and better sense of well-being. Aerobic exercise helps to improve physical and psychological traits of people. Many researchers believe that the music accompaniment to exercise provides an important beneficial effect to the exercise experience (www.livestrong.com/aerobic-exercises).

Also health and fitness instructors regard the addition of music to exercise similarly to an ergogenic aid, with the removal of music or an inappropriate selection of music as a sure bet to an unsuccessful class. (www.psychology.org/links)

Bar-On, define EI as the ability or capacity to perceive, integrate, understand, and manage emotions that have to do with the understanding of oneself and others, and to face different demands more successfully. According to Goleman, emotional intelligence (EI) is a person’s inherent ability to control and self-regulate one’s feelings, to know the emotions of others, and to use emotions and feeling as a beacon of one’s actions and thoughts.

Maintaining emotional intelligence of teacher trainees will allow them to develop healthy relationship with their students who will become leaders of tomorrow. People who can recognize not only their own emotions but also those ones of others effectively (empathy) can establish higher quality interpersonal rela-tionships that favour the college envi-ronment and coexistence with others (Martorell, González, Rasal and Estellés, 2009) [4]. Studies on aerobic exercise in association with emotional intelligence of teacher trainees are scarce. This study aimed to evaluate how aerobic exercise with music is effected on the emotional intelligence of teacher trainees.

Objectives of the Study
The objectives of this study is
1. To find out the effect of aerobic exercise with music on the emotional intelligence of teacher trainees.
Delimitations
1. The study was delimited to the female teacher trainees between 20 to 25 years of age from the Kerala University College of Teacher Education.
2. The study was further delimited to emotional intelligence.

Limitations
1. No motivational techniques used to motivate the subjects were considered as a limitation of the study.
2. 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.

Hypothesis
1. It is hypothesised that there would be significant improvement in emotional intelligence as a result of training programme in aerobic exercise with music.

Significance of the Study
1. Results of the study may help the people to know the effect of aerobic exercise on emotional intelligence.
2. The result of the study may probably make an impact on the public to follow aerobic exercise in the form of body exercises to maintain good health and fitness.
3. The results and findings of this study may also enable youths of schools and colleges to be involved in one or other form of exercise voluntarily with music along with their academic pursuits.

Procedure

Selection of Subjects
For the purpose of this study, 80 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 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’ was the control group. The experimental group ‘A’ had undergone the training programme in aerobic exercise with music thrice a week (i.e., on Mondays, Wednesdays and Fridays) for 16 weeks and group “B” did not involve in any type of training programme. After sixteen 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 groups were given an organised training programme by the experts for 16 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 level of significance chosen was 0.05.

Table 1: The Significance of Differences between the Pre-Test and Post-Test Means of Emotional Intelligence Scores of the Aerobic Exercise-with-Music and Control Groups

<table>
<thead>
<tr>
<th>Groups</th>
<th>Means</th>
<th>MD</th>
<th>SD</th>
<th>SE</th>
<th>‘t’ value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-test</td>
<td>Post-test</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aerobic exercise-with- music group (N=40)</td>
<td>67.95</td>
<td>74.18</td>
<td>6.23</td>
<td>1.69</td>
<td>0.267</td>
</tr>
<tr>
<td>Control group (N=40)</td>
<td>58.25</td>
<td>57.70</td>
<td>0.55</td>
<td>1.84</td>
<td>0.291</td>
</tr>
</tbody>
</table>

* Significant at 0.05 level ‘t’ value required at 0.05 level = 2.03 (df 39)

The above table indicates that the aerobic exercise-with-music group exhibits significant improvement in the emotional intelligence with pre-test mean score being 67.95 and the post-test mean score being 74.18. Further, it shows that the obtained ‘t’ value (23.339) 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 mean value (58.25) and the post-test mean value (57.70) of the control group shows negligible difference. Further the obtained ‘t’ value (1.891) is less than the required ‘t’ value (2.03) at 0.05 level. Hence it shows that there is no significant difference exists in the emotional intelligence of the control group.

Conclusion
The analysis of data seemed to have permitted the following results.
Aerobic exercise-with-music showed significant improvement in the emotional intelligence of teacher trainees.

References
5. www.livestrong.com/aerobic-exercises
6. www.psychology.org/links