# EFFECTIVENESS OF AEROBIC EXERCISE ON REDUCING STRESS AMONG TEACHERS WORKING IN A SELECTED SPECIAL SCHOOL FOR MENTALLY-CHALLENGED 

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#### Abstract

Introduction: Most teachers working in special schools are stressed, especially mentally challenged school educators because these children are different from other children. This study was conducted to assess the effectiveness of aerobic exercise in reducing stress among teachers working in special schools for the mentally challenged. Methods: This was a quasi-experimental design study conducted among teachers working in a special school for the mentally challenged using consecutive sampling technique in 2020-2021 in Kanyakumari district. Each participant gave consent and was subjected to screening for stress using a modified stress inventory scale. Result: Among 30 participants, 24 teachers had moderate stress, 2 had severe stress, and 4 had mild stress. After administering the aerobic exercises, the teachers' stress level was reduced, 7 teachers had no stress, 19 had mild stress and 4 had moderate stress. There is no significant association between stress level and demographic variables such as age, gender education, marital status, and year of experience. conclusion; There was a significant reduction in the level of among teachers working with mentally challenged school after undergoing aerobic exercise.


Key words: Stress, mentally challenged, aerobic exercise.

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## INTRODUCTION

Stress is simply a fact of nature, forces from the inside or outside world affecting the individual. Because of the overabundance of stress in our modern lives, we usually think of stress as a negative experience. Stress is a situation that will force a person to deviate from normal functioning due to the change (i.e. disrupt or enhance) in his/her psychological/physical condition. Teachers face numerous stressors including student behavior problems, heavy workload, dealing with aggressive parents, maintaining discipline, being evaluated by others, attending evening meetings, lack of stimulation, and high external expectations. Aerobic dance therapy can be extremely effective in terms of stress management. Aerobic dance benefits by means of releasing opiate betaendorphins into the system, which induce feelings of calmness, satisfaction, and strengthening, defense against physiological stress responses. It is usually performed to
music, although it can be done solo and without musical accompaniment.

## NEED FOR THE STUDY

Nearly thirty percent of teachers leave the profession within five years. In particular, mentally challenged school teachers continue to leave the field in greater numbers than general education teachers, because the mentally challenged school teacher had to provide direct services to children with disabilities, collaborate with ancillary personnel (e.g. speech therapist, occupational therapist, and physiotherapist.) and maintain contact with parents.

The incidence of mental stress was $44.6 \%$ among teachers working in the mentally retarded, tending to be higher among nurses, and significantly higher than among general office workers. Zabel (2020) had performed study on "stress among teachers of exceptional
children". He selected 601 teachers of children who were classified as having a visual

Impairment, hearing impairment, learning disability and mentally challenged school teachers, Perceived stress scale and general health questionnaire were used in this study. The questionnaire included items related to characteristics of the age, teaching experience and certification and job conditions. Results showed that, teachers of students with mentally challenged reported the greatest occupational stress. He found that, the age and experience were closely related to stress such as older and more experienced teachers reported less emotional exhaustion and depersonalization and more personal accomplishment. Physical exercise would improve a person's mental health and relieves the side effects of stress. Aerobics is a form of physical exercise that helps to improve mental well-being and also relieves stress. Toivo stated the effect of aerobic exercise on physiological stress responses at work. He scientifically proved that aerobic exercise will reduce perceived work stress in teachers during their working hours Enochs (2018) conducted a study among 76 Norwegian school teachers, to find out the "effect of aerobic exercise on reducing job stress". The perceived stress visual analogue scale was used in the study. Six sessions of aerobic exercise per week for 10 weeks was given. Aerobic exercise associated with reduced health complaints ( $\mathrm{f}=3.4, \mathrm{P}=0.07$ compared to stress management intervention). The result showed that, aerobic exercise reduced the stress and health compliance.

## STATEMENT OF THE PROBLEM

A study to assess the effectiveness of aerobic exercise on reducing stress among teachers working in a selected special school for the mentally challenged at Kanyakumari District

## OBJECTIVES

1. To assess the level of stress before giving aerobic exercise.
2. To assess the level of stress after giving aerobic exercise.
3. To compare the level of stress before and after giving aerobic exercise.
4. To determine the association between the level of stress and selected demographic variables such as age, gender, education, marital status, and year of experience.

## RESEARCH METHODOLOGY

A quasi-experimental design was used in this study. The participants of this study were teachers working in a special school for the mentally challenged in Kanyakumari
district. A consecutive sampling technique was used for selecting the samples. The modified teacher stress inventory tool was used for the data collection procedure. Thirty teachers who had stress and met the inclusion criteria were included in the study. The teachers were motivated to do warm-up exercises, aerobic dance, and cool-down exercises. The duration of aerobic exercise lasts for 15-20 minutes per day for 6 weeks. After 6 weeks post-test was conducted with the same tool.

## CRITERIA FOR SAMPLE SELECTION <br> Inclusion criteria

Teachers who
$>$ Are willing to participate
$>$ Has more than one year of working experience.
$>$ Are between the age group of 25 and 54 years.

## Exclusion criteria

## Teachers

> With chronic illness
$>$ Who have undergone stress management courses within one year
$>$ With spinal deformities and other major orthopedic problems.
$>$ Absent during the study.

## RESULTS 1: Frequency and percentage distribution of mentally challenged school teachers according to their demographic variables

Based on age, the majority 16 ( $53.7 \%$ ) of the teachers were between the age group of 35 and 44 years and $14(46.7 \%)$ were between the age group of 25 and 34 years. Pertaining to gender, all the participants were females 30(100\%). Regarding educational status, most of the teachers $17(56.7 \%$ ) finished undergraduate in special education, $11(36.6 \%)$ finished postgraduate in special education and 2(6.7\%) finished other courses. Regarding marital status, most of the teachers 23(76.7\%) were married and 7 ( $23.3 \%$ ) were unmarried.

According to the year of teaching experience, the majority of teachers $15(50 \%)$ had 1-5 years of experience, $12(40 \%)$ had $6-10$ years of experience, and $3(10 \%)$ had experience between 11 and 15 years.

## Assessment of stress before and after exercise

The findings revealed that before undergoing the aerobic exercise $24(80 \%)$ teachers have moderate stress, $2(6.7 \%)$ had severe stress, and 4 ( $13.3 \%$ ) had mild stress. After undergoing the aerobic exercise, 7(23.4\%) teachers had no stress, 19(63.3\%) had mild stress and 4(13.3\%) had moderate stress. (Fig 1)

Figure 1:


## Effectiveness of aerobic exercise

The results revealed that the mean stress of the teachers before the aerobic exercise was $62.9 \pm 11.0$ and the same after undergoing the exercise was $36.7 \pm 11$. The mean reduction was $26.4 \pm 8.5$. The calculated' test value (16.895) was greater than the table value (3.66) at the degree of freedom $=29$ at a 0.001 level of significance. Hence, the test is statistically very highly significant.

## Association between stress levels with demographic variables

There is no significant association between stress level and demographic variables

## CONCLUSION

The study findings revealed that there was a significant reduction in stress levels among teachers working with mentally challenged school after undergoing the aerobic exercise.

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