Effect of Recreational Activities on Selected Physical Fitness Variable of Hearing Impaired Children's

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Abstract: The objective of the study was to find out the effect of recreational activities on cardio vascular endurance of deaf and dumb school going children. For the purpose of study eighty boys & girls school going children, age ranged between 9-13 years, were randomly selected from Dr Sailendranath Mukherjee Mukavadhir Vidyalaya, Burdwan District and Suri Deaf and Dumb School, Suri, Birbhum District, West Bengal. Among them forty were ramdomly selected for experimental group and forty were selected as control group for the study. Cardio vascular endurance was considered as the selected variables for the study. Twelve weeks recreational activities were administered to the experimental group. The data was computed by paired sample statics and ANCOVA. The result of the study revealed that the experimental group significantly improve the Self concept.

Key Words: Recreational Activities, Cardio Vascular Endurance, Deaf and Dumb Students.

1. INTRODUCTION:

Recreation is an activity of leisure, leisure being discretionary time. The "need to do something for recreation" is an essential element of human biology and psychology. Recreational activities are often done for enjoyment, amusement, or pleasure and are considered to be "fun".

Recreation is difficult to separate from the general concept of play, which is usually the term for children's recreational activity. Children may playfully imitate activities that reflect the realities of adult life. It has been proposed that play or recreational activities are outlets of or expression of excess energy, channelling it into socially acceptable activities that fulfill individual as well as societal needs, without need for compulsion, and providing satisfaction and pleasure for the participant.

The term "deaf" is frequently applied to those who are deficient in hearing power in any degree, however slight, as well as to people who are unable to detect the loudest sounds by means of the auditory organs. It is impossible to draw a hard and fast line between the deaf and the hearing at any particular point. It is yet true to say that "dumbness" in our sense of the word does not, strictly speaking, exist, though the term "dumb" may, for all practical purposes, fairly be applied to many of the deaf even after they are supposed to have learnt how to speak.

Physical Activity Guidelines for Active Children and Adolescents, children and adolescents with disabilities are more likely to be inactive than those without disabilities. Youth with disabilities should work with their health-care provider to understand the types and amounts of physical activity appropriate for them. When possible, children and adolescents with disabilities should meet the Guidelines. When young people are not able to participate in appropriate physical activities to meet the guidelines, they should be as active as possible and avoid being inactive. There are many psychological problems faced by a deaf person. The basic proble arises due to lack of communication with the society. The deaf person's unwareness of the sound also causes another defect in him or her i.e. dumbness or muteness. With out two of the vital communication means, frustration creep in them and becoe more and more rigid day by day. Recreation is an essential part of human life and finds many different forms which are shaped naturally by individual interests but also by the surrounding social construction. Recreational activities can be communal or solitary, active or passive, outdoors or indoors, healthy or harmful, and useful for society or detrimental. A significant section of recreational activities are designated as hobbies which are activities done for pleasure on a regular basis. A list of typical activities could be almost endless including most human activities, a few examples being reading, playing or listening to music, watching movies or TV, gardening, hunting, sports, studies, and travel. Some recreational activities - such as gambling, recreational drug use, or delinquent activities - may violate societal norms and laws. Recreational activities help you to take a break from monotony and diversion from the daily routine. It gives people the benefit of a positive change from the stereotypical lifestyle and involves an active participation in entertaining activities that one is interested in. When one does engage in recreating activities that he or she likes, it would naturally give them enjoyment. Recreational activities provides source of joy and relaxation to one's mind and body.

Recreational activities could help you to develop your leadership skills as well as interpersonal skills. Recreational activities also give you an opportunity for you to be able to spend time with yourself. Having the time to spend with your self can make you meet your inner self. It will give you an opportunity to know more about yourself deeper.

2. AIM OF THE STUDY:

The aim of the study was to find out the Effect of Recreational Activities on Selected Physical Fitness Variable of Hearing Impaired Children's.

3. METHODS:

For the purpose of study eighty boys & girls school going children, age ranged between 9-13 years, were randomly selected from Dr Sailendranath Mukherjee Mukavadhir Vidyalaya, Burdwan District and Suri Deaf and Dumb School, Suri, Birbhum District, West Bengal. Among them forty were ramdomly selected for experimental group and forty were selected as control group for the study. Cardio vascular endurance was considered as the selected variables for the study. Twelve weeks recreational activities were administered to the experimental group. The data was computed by paired sample statics and ANCOVA. The result of the study revealed that the experimental group significantly improve the Self concept.

4. SUBJECTS:

Eighty (80) hearing impaired school going children (boys 40 and girls 40) were selected as subject for the study. In this study the subjects (age ranged between 9 to 13 years) were randomly selected from Dr Sailendranath Mukherjee Mukavadhir Vidyalaya, Burdwan District and Suri Deaf and Dumb School, Suri, Birbhum District, West Bengal. The age of the subjects were collected from school admission register. Among them forty were randomly selected for experimental group (EG) and forty were selected as control group (CG) for the study.

5. VARIABLES-TEST & CRITERION MEASURES:

Cardio vascular endurance was considered as the selected variables for the study. It was tested by Queen's Collage Step Test (McArdle, Katch, Pecher, Jacob- Son and Ruck 1972). The data was recorded in ml/kg/min.

6. DESIGNE OF THE STUDY:

Simple randomized group design method was used for the study. They were randomly divided into two groups of equal number (N-40 in each), one experimental group and one control group. Pre-test data were collected from all the two groups. Thereafter applied the training programme of 3 alternate days in a week for 12 weeks to the experimental group and as well as the control group post test data were collected from all the two groups. The control group were not participated in any specific training but engaged in their regular practice.

7. STATISTICAL ANALYSES:

For the determining the effect of recreational activities, physiological variables, paired sample statics and ANCOVA were used for the analysis of the data.

8. RESULT:

The findings pertaining to the study are presented in table-1, 2 and table-3

Table 1: Paired Samples Statistics on Cardio Vascular Endurance of Different Groups

Treatment	Mean(ml	/kg/min)	N	Std. Deviation	Std. Error Mean
Group					
Experimental	Pre-test	42.3000	40	6.45775	1.02106
Group	Post-test	37.6250	40	5.60534	.88628
Control Group	Pre-test	41.6750	40	4.03439	.63789
	Post-test	41.0750	40	3.50375	.55399

Table-1 describes the mean (M), Number of Students (N), Standard deviation (SD) and Standard error Mean of subjects in Cardio vascular endurance. In the pre test phase, the mean of Cardio vascular endurance (Physical Fitness value) of Experimental Group (EG) and as well as the Control Group (CG) were **42.3000** ml/kg/min and 41.6750 ml/kg/min respectively. In the post test phase, the mean of Cardio vascular endurance (Physical Fitness value) of Experimental Group (EG) and as well as the Control Group (CG) were **37.6250** ml/kg/min and 41.0750 ml/kg/min respectively. The standard deviation for pre-test phase of Cardio vascular endurance (Physical Fitness value) of Experimental Group (EG)

and as well as the Control Group (CG) were **6.45775** and 4.03439 respectively. The post test standard deviation for Cardio vascular endurance (Physical Fitness value) of Experimental Group (EG) and as well as the Control Group (CG) were, **5.60534** and 3.50375 respectively. The number of students for Cardio vascular endurance of Experimental Group were **40** and as well as the Control Group (CG) were **40** respectively.

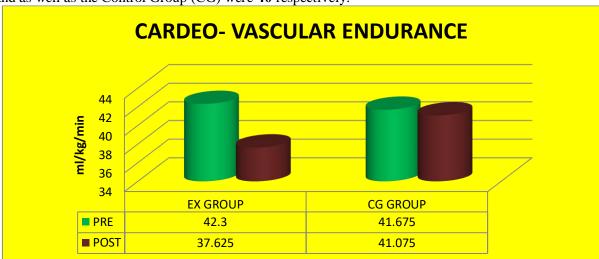


Figure 1: Graphical Representation of Group Mean of Pre-Test & Post-Test Data and Adjusted Final Mean for Distinct Treatment Groups on Cardio Vascular Endurance

Figure-7 describes the pre-test and post-test mean for Experimental Group (EG) and Control Group (CG). Here the pre-test and post-test mean of Experimental group and Control group were $42.3\,\text{ml/kg/min}$, $37.625\,\text{ml/kg/min}$ and $41.675\,\text{ml/kg/min}$, $41.075\,\text{ml/kg/min}$ respectively.

Table 2: ANCOVA for Distinct Groups on Cardio Vascular Endurance for Pre-Test and Post-Test Data

Source of							ia i ost i est bu
Variation	df	SSx	SSy	SSxy	MSSx	MSSy	Fyx
Treatment Group	1	7.813	238.050	-43.125	312.393	312.393	
Error	77	2261.175	1704.150	1841.475	204.474	2.656	117.640*
Total	78	2268.987	1942.200	1798.350	516.867		
Table value of $F(1,77) = 3.97*$ Significant at the 0.05 level							

Table-2 reveals that the significant improvement in Cardio Vascular Endurance (F=117.640*) among the Experimental Group pre-test, post-test, and Control Group pre- test, post-test of the deaf and dumb students. The obtained F value 117.640* was found to be greater than that of tabulated F value 3.97* at 0.05 level of significance with 1,77 degree of freedom.

Table 3: Pair wise Comparisons of Distinct Groups of Adjusted Means on Cardio Vascular Endurance Obtained in Pre-Test and Post-Test Data (N = 40):

Group	N	Pre-Test (ml/kg/min)	Post-Test (ml/kg/min)	Mean Adjusted Myx	Mean Difference	CD
Experimental Group	40	42.30	37.63	37.37	2 06*	0.725
Control Group	40	41.68	41.08	41.33	3.96*	0.725

*. The mean difference is significant at the 0.05 level

Table-3 (Post hoc test), in the paired adjusted final mean differences in Queen's collage step test clearly indicates significant differences between Experimental Group and Control Group (MD-3.96*) and where as the CD was 0.725. However, there was significant difference on intelligent test between the Experimental Group and the Control Group (MD-3.96*) was observed where the critical difference was 0.725 at 0.05 level of significance.

9. DISCUSSION:

The result of the study revealed that the recreational activities for twelve weeks improve cardio vascular endurance of deaf and dumb students. The result may be due to the effect of recreational training programme for 100-120 minutes per unit for three alternative days for twelve weeks. The result of the present study is supported by the study of Dr. Raj Kumar (2017) did "A Comparative Study of Physical Fitness of Deaf and Dumb Students and Normal Students of Punjab. The study aims to find or investigate the physical fitness of above students through five components from youth fitness test its speed, strength, endurance, flexibility, and co-ordination. The objective of the study was to compare the selected physical fitness components between the deaf and dumb and normal school boys of Punjab and to check the physical fitness above groups through different physical fitness components. This conducted study it can be seen that normal students have better physical fitness compared to the deaf and dumb students as they have performed better than them. Though is standing broad jump they are found better than the normal students. The study shows that a special case must be taken of the deaf and dumb students it is wrong to presume that they have better health then the normal students and ignored and malnutrated. Result of the study also revealed that the selected physical fitness variables of the training group were improved significantly to the control group.

10. CONCLUSION:

On the basis, the result of the study, it may be reasonably be concluded that recreational activities improve cardio vascular endurance of deaf and dumb students school going children.

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