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EFFECTS OF INDIGENOUS ACTIVITIES ON AGILITY AND FLEXIBILITY OF CHILDREN WITH INTELLECTUAL DISABILITY

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Abstract

To achieve the purpose of the present study twenty subjects as a children with intellectual disability were be selected from RKMVERI FDMSE therapy unit, TAT Kalanilayam middle school in Periyanaickenpalayam, Coimbatore district, Tamil Nadu. Their age range from 10 to 14 years. The selected subjects equally divided into two equal groups, namely experimental group (n=10) and control group (n=10).The criterion variable agility tested with 4x10 shuttle run and flexibility tested with sit and reach test. The pre test and post test data were statistically examined for significant difference through dependent 't' test for each and every variable selected for this study. The level of confidence was fixed at 0.05. The result of the study showed that the indigenous activity training was better improvement on agility, flexibility of experimental group improve of children with intellectual disability.

KEYWORDS: Indigenous activity, flexibility, agility and Intellectual disability.

INTRODUCTION

Indigenous Exercise

Exercise is any bodily activity that enhance or maintains physical fitness and overall health and wellness. It is performed for various reason, to aid growth and improve strength, prevent aging develop muscles and the cardiovascular system, hone athletic skill, weight loss or maintenance, improve health or simply for enjoyment. Many individuals choose to exercise outdoor where they can congregate in groups, socialize, and improve well-being as well as mental health. In terms of health benefits, the amount of recommended exercise depends upon the goal, the type of exercise, and the age of the person. Even doing a small amount of exercise is healthier than doing none.

PHYSICAL FITNESS

Physical fitness is a state of health and well-being and, more specifically, the ability to perform aspects of sports, occupations and daily activities. Physical fitness is generally achieved through proper nutrition, moderate-vigorous physical exercise and sufficient rest along with a formal recovery plan. **(Chen W et al., 2018)**

INTELLECTUAL DISABILITY

In the early part of the 20th century, individuals with intellectual disability were generally kept in isolation. However, the last 40 years have seen dramatic changes in the sentiments and perceptions regarding such persons. The most noticeable thing that has happened is a change in the public policy towards them with an emphasis on efforts towards their normalization and inclusion. As a result, much debate and research continuous to be focused in the developed countries on the prevention of the intellectual disability, the deinstitutionalization of its victims besides the education and the employment of such individuals**.** The term intellectual disability (id) is used as synonym for mental retardation (mr). It refers to substantial limitations in their day to day present functioning of its victims. The researcher here has followed this line of approach.

METHODOLOGY

Twenty students were selected from RKMVERI FDMSE therapy unit, TAT Kalanilayam middle school in Periyanaickenpalayam, Coimbatore district, Tamilnadu. Their age range from 10 to 14 years. The selected subjects equally divided into two equal groups, namely experimental group (n=10) and control group (n=10). The criterion variable agility tested with 4x10 shuttle run and flexibility tested with sit and reach test. The experimental group treated with indigenous activities training for five days per week, for the period of 8 weeks and each training session for 60 minutes in the evening from 3.00pm to 4.00pm.

The following statistical techniques were used for the analyses for the data in this study. The data were collected from the two groups, prior and after the experimental treatment. The pre test and post test data were statistically examined for significant difference through dependent ‘t’ test for each and every variable selected for this study.

TABLE- I
COMPUTATION WITH 't' TEST BETWEEN THE PRE AND POST TESTS OF EXPERIMENTAL AND CONTROL GROUP ON AGILITY

Variable	Group	Test	Mean	S.D	D.M	σ DM	't'	'table' Value
Agility	Experimental group	Pre Test	26.83	7.44	0.37	0.05	7.78*	2.26
		Post Test	26.45	7.38				
	Control Group	Pre Test	30.29	6.56	0.06	0.03	2.0	
		Post Test	30.23	6.58				

*Significant Level of significant was fixed at 0.05

It observes from the Table-I that the experimental group's means value for pre test was 26.83 and post test was 26.45. The standard deviation for the pre test was 7.44 and post test 7.38. The mean difference for the pre test and post test was 0.37. The standard error of the difference between the mean was 0.05. It revealed that the obtained 't' ratio 7.78. Since 't' value is greater than the table value 2.26 it was significant at 0.05 level of confidence. The results of the study indicated that there was a significant improvement in the agility due to indigenous training of children with intellectual disability.

It may be seen that the control group's mean value for pre test was 30.29 and post test was 30.23. The standard deviation for the pre test was 6.56 and post test 6.58. The mean difference for the pre test and post test was 0.06. The standard error of the difference between the mean was 0.03. It revealed that the obtained 't' ratio 2.0. Since the 't' value is lesser than the table value 2.26

FIGURE-1

BAR DIAGRAM SHOWING THE MEAN VALUE OF PRE AND POST TEST OF EXPERIMENTAL GROUP AND CONTROL GROUPS ON AGLITY

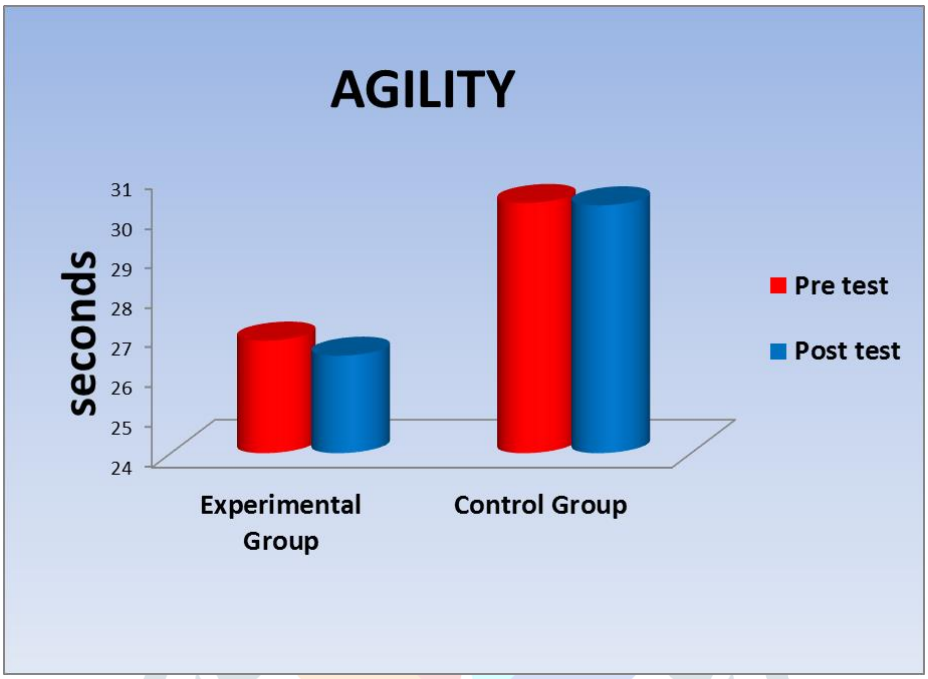

Figure: 1 It clearly indicates that the experimental group compared with control group there is a significant improvement on agility of children with intellectual disability.

TABLE II

COMPUTATION WITH 't' TEST BETWEEN THE PRE AND POST TEST OF EXPERIMENTAL AND CONTROL GROUPS ON FLEXIBILITY

Variable	Group	Test	Mean	S.D	D.M	σ DM	't'	'table' Value
Flexibility	Experimental group	Pre Test	18.1	4.36	2.4	0.16	15.0*	2.26
		Post Test	20.5	4.43				
	Control Group	Pre Test	19.8	3.91	0.35	0.21	1.66	
		Post Test	20.15	4.08				

*Significant Level of significant was fixed at 0.05

It observes from the Table-II that the experimental group's means value for pre test was 18.1and post test was 20.5. The standard deviation for the pre test was 4.36 and post test 4.43. The mean difference for the pre test and post test was 2.4. The standard error of the difference between the mean was 0.16. It revealed that the obtained 't' ratio 15.0. Since 't' value is greater than the table value 2.26 it was significant at 0.05 level of confidence. The results of the study indicated that there was a significant improvement in the flexibility due to indigenous training of children with intellectual disability.

It may be seen that the control group's mean value for pre test was 19.8 and post test was 20.15. The standard deviation for the pre test was 3.91 and post test 4.08. The mean difference for the pre test and post test was 0.35. The standard error of the difference between the mean was 0.21. It revealed that the obtained 't' ratio 1.66. Since the 't' value is lesser than the table value 2.26.

FIGURE-2

BAR DIAGRAM SHOWING THE MEAN VALUE OF PRE AND POST TEST OF EXPERIMENTAL AND CONTROL GROUPS SCORES ON FLEXIBILITY

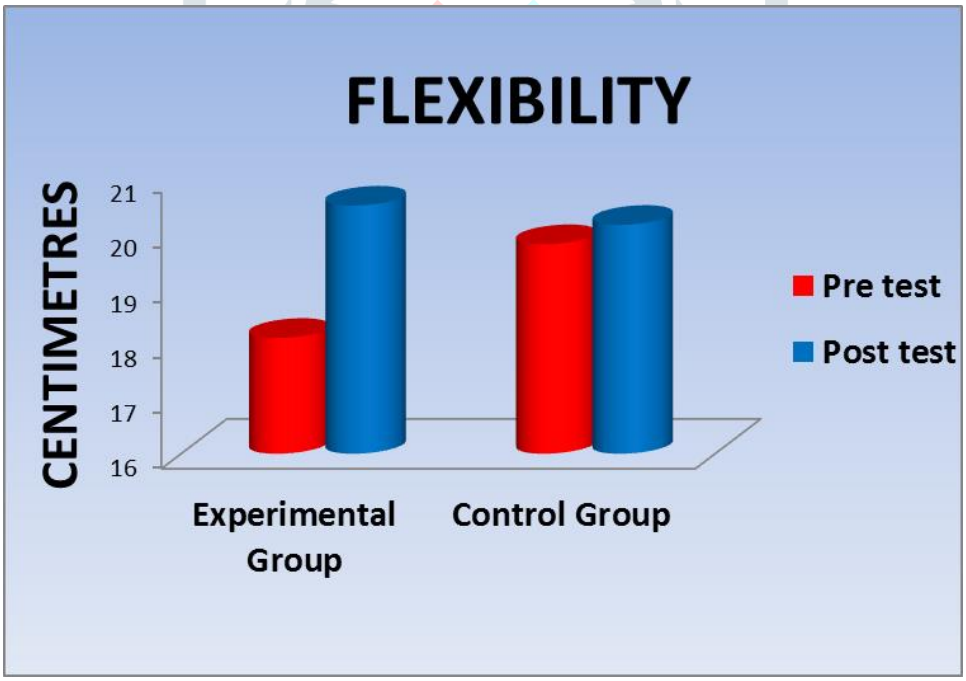

Figure: 2 It clearly indicates that the experimental group compared with control group there is a significant improvement on flexibility of children with intellectual disability.

DICUSSION ON FINDINGS

The analysis of the study the variables agility and flexibility of revealed that the after experimental period, the experimental training group had significantly increased the agility, flexibility when compared with control group. Hence the obtained't' ratio was significant greater than table value 2.26 at 0.05 level of confidence.

The results conformity with other studies indigenous training increases the physical fitness variables. **(Elbasan B et al., 2012).**

CONCLUSIONS

1. The indigenous activity training had significantly improved agility and flexibility of children with intellectual disability.
2. There is a significance difference from experimental and control group due to effect of indigenous activities on agility and flexibility components of children with intellectual disability

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