

**153 - EFFICACY OF SELECTED MOBILITY EXERCISES AND PARTICIPATION IN SPECIAL GAMES ON FUNCTIONAL ABILITIES AMONG INTELLECTUALLY DISABLED CHILDREN OF UNDER 18 AGE GROUPS**

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**Introduction**

Mobility Exercise is an integral aspect of human life. Our daily lives are sustained and enriched when we are physically active and adopt active healthful life styles that will continue throughout the life span. The emphasis on fitness, wellness and health promotion through active living is highly sought now days.

Physical Activity is for everybody. Exercise is a Key factor in maintaining and improving overall health. In 1996, the Surgeon General of the United States reported that " significant health benefits can be obtained with a moderate amount of physical activity, preferably daily." These benefits are even more important in a disability,

Since people with disabilities have a tendency to live less active lifestyles. Yet, It is just as important for our body to get exercise. Physical activity and exercise programs of all sorts are indoor and outdoor, sports or recreational, solitary or team. It doesn't matter what we choose, so long as we choose to get a moderate amount of physical activity each day.

Mobility exercise in the context of the study includes calisthenics exercise, Aquatic exercise and Yogasana ( Dynamic).

**Methodology**

Thirty male students who were studying in Balar Kalvi Nilayam and YMCA College Special School, Chennai, acted as subjects for the study. They were only mild and moderate in intellectual disability. These students did not undergo any special training or coaching programme apart from their regular routine physical

Activity classes as a part of the curriculum in the school. They were attached at random to one of the three groups based on age in which 30 belonged to under 18 age group, the age group was divided into three equal groups of ten for each experimental treatment.

In the under 18 age group 10 students ( Treatment group I) underwent calisthenics and special games participation, 10 students ( Treatment group II) underwent aquatics and special games participation, 10 students (Treatment group III) underwent yoga and special games participation. The subjects in all the three groups were tested on selected criterion variables prior ( pre test) and after twelve weeks of training ( post test).

**Analysis and interpretation of the data**

The pre and post test data collected from three groups on functional abilities ( Self-care, Learning, Independent living), were statistically examined for significant difference, by applying the analysis of covariance (ANACOVA).

Computed 'F' ratio for find out significant improvement due to the training on functional abilities. Whenever an 'F' ratio for adjusted test was found to be significant for adjusted post test means, Scheffe's test was followed as a post-hoc test to determine which of the paired mean differences was significant.

**Results and Discussions**

The influence of independent variable on each criterion variable was analysed and Presented below

Table I reveals that The adjusted post-test mean on self care of experimental group Under-18 Years category are 14.099, 14.25, and 12.85 respectively. The obtained 'F' ratio value of 3.457 for adjusted post-test data is greater than the required table value of 3.37 for significance at 0.05 level. It reveals that there is significant difference among experimental treatment groups on self-care. Scheffé S test was used as post hoc test to determine the paired mean differences.

The adjusted post-test mean on learning of experimental group Under-18 Years category are 12.13, 11.24, and 11.23 respectively. The obtained 'F' ratio value of 0.467 for adjusted post-test data is lesser than the required table value of 3.37 for significance at 0.05 level. It reveals that there is no significant difference among experimental treatment groups on learning.

The adjusted post-test mean on Independence living for experimental group Under- 18 Years category are 15.189 for adjusted post-test data is lesser than the required table value of 3.37 for significance at 0.05 level. It reveals that there is no significant difference among experimental treatment groups on Independence living.

Table II reveals that for calisthenics group, the obtained 't' ratio of self-care is 7.746 for

Aquatics group, the obtained 't' ratio of self-care, Independence living 3.157,2.89 respectively are greater than the required table value 2.26 for significance with df 9 at 0.05 level of confidence.

The result of the study showed that there was a significant improvement on selected criterion variables such as, self-care, Independence living due to calisthenics exercises, aquatics exercises and yogasana, however no significant differences among the groups.

Test variables	calisthenics	aqua	Yoga	source of variance	sum of Squares	df	Mean Squares	F Ratio
Adjusted Post test Mean								
Self care	14.099	14.25	12.85	Between within	11.507 43.65	2 6	5.804 7.275	3.457
Adjusted Post test Mean								
Learning	12.13	11.24	11.23	Between within	2.661 74.056	2 6	1.33 12.343	0.467
Adjusted Post test Mean								
Independence Living	15.189	15.53	14.98	Between within	1.507 61.571	2 6	0.754 10.262	0.318

\* Significant at 0.05 level.

The Table value required for significance at 0.05 level of confidence with degrees of freedom 2,26 is 3.37 and degree of freedom 2,27 is 3.35

Table – II  
 Computation 'T' Ratio for Functional Abilities of Calisthenics, Aquatics and  
 Yogasana Treatment Groups of Under 18 Age

Variables	Treatment group- 1 Calisthenics T' test	Treatment group- 2 Aquatics T' test	Treatment group- 3 Yogasana T' test
Self care	7.746	3.157	0.58
Learning	1	1.901	1.221
Independent living	1.908	2.89	2.077

\* Significant at .05 level of confidence  
 Table value required for significance at 0.05 level of confidence for the df of 9 is 2.26.

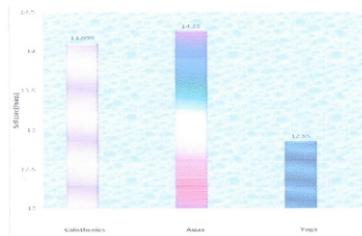


FIGURE I: THE ADJUSTED POST TEST VALUES OF UNDER 18 AGE CALISTHENICS TREATMENT GROUP, AQUATICS TREATMENT GROUP AND YOGA TREATMENT GROUP ON SELF CARE

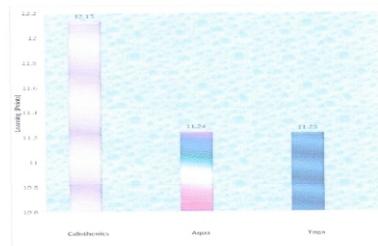


FIGURE II: THE ADJUSTED POST TEST VALUES OF UNDER 18 AGE CALISTHENICS TREATMENT GROUP, AQUATICS TREATMENT GROUP AND YOGA TREATMENT GROUP ON LEARNING

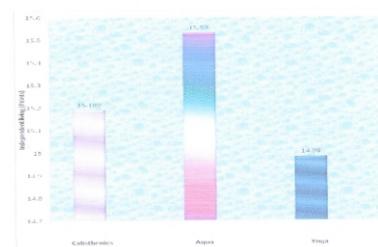


FIGURE III: THE ADJUSTED POST TEST VALUES OF UNDER 18AGE CALISTHENICS TREATMENT GROUP, AQUATICS TREATMENT GROUP AND YOGA TREATMENT GROUP ON INDEPENDENT LIVING

**Results**

The result of the study showed that among under 18 age group there was a significant improvement on selected criterion variables such as, self-care, Independence living due to mobility exercises and Participation in special games, however no significant differences among the groups.

**Conclusions**

Based on the results of the study, the following conclusions were drawn. There was a significant improvement on selected criterion variables such as, self-care, Independence Living due to mobility exercises and participation in special games, however no significant differences among the groups.

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#### ABSTRACT

The purpose of the study was to find out the efficacy of selected mobility exercises and participation in special games on functional abilities among intellectually disabled children of age group under 18, Thirty male students who were studying in Balar Kalvi Nilayam and YMCA College Special School, Chennai, acted as subjects for the study. They were only mild and moderate in intellectual disability.

These students did not undergo any special training or coaching programme apart from Their regular routine physical activity classes as a part of the curriculum in the school. They were attached at random, based on age in which 30 belonged to under 18 age group, Which was divided into three equal group of ten for each experimental treatment. 10 students ( Treatment group I) underwent calisthenics and especial games participation, 10 students ( Treatment group II) underwent yoga and special games participation, 10 students ( Treatment group III) underwent yoga and special games Participation. The subjects were tested on selected criterion variables prior (pre test) and after twelve weeks of training (post test). The pre and post test data collected from three groups on functional abilities ( Self-care, Learning, Independent living), were statistically examined for significant difference, by applying The analysis of covariance (ANACOVA). To find out significant improvement due to the training on functional abilities. Whenever an 'F' ratio for adjusted test was found to be significant for adjusted post test means, Scheffe's test was found to be significant for adjusted post test means, Scheffe's test was followed as a post hoc test to determine which of the paired mean differences was significant.

The result of the study showed that among under 18 age groups there was a significant improvement on selected criterion variables such as, Self-care, Independent Living due to mobility exercises and participation in especial games, however no significant differences among the groups.

Keywords: Mobility exercises, functional abilities, Self-care, Learning, Independent Living,