



EFFECT OF SELECTED PHYSICAL ACTIVITIES ON HEALTH RELATED PHYSICAL FITNESS VARIABLES AMONG MILD INTELLECTUAL DISABILITY CHILDREN

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Abstract:

The purpose of this study was to find out the effect of selected physical activities on health related physical variables among mid intellectual disability children. To achieve the purpose of this study mid intellectual disability children from Chennai were selected. The subjects were in the age group of 15 to 18. The subjects were given training programme for three days per week for six weeks. Single group design pre and post-test research design was followed by the investigator. In this study the investigator measured the physical variables score as pre-test score. After the selected physical activities for six weeks, the subjects were measured of their Physical variables which were the final scores. The difference between the initial and final scores was the effect of physical activities. The obtained data were subjected to statistical treatment using 't' test. In all cases 0.05 levels was fixed to test the hypothesis of this study

Keywords. Physical Activities, Health Related Physical Fitness, Intellectual Disability.

INTRODUCTION

According to IDEA, a child with a disability means a child having mental retardation, deafness or other hearing impairment, speech or language impairment, blindness or other visual impairment, serious emotional disturbance, orthopaedic impairment, autism, traumatic brain injury, a learning disability, deaf blindness, or multiple disabilities or other health impairments that require special education and related services. The term "child with a disability" for a child aged three to nine years may, at the discretion of the state and the local educational agency, include a child experiencing developmental delays as defined by the state and as measured by appropriate diagnostic instruments and procedures in one or more of the following areas; physical development, cognitive development, communication development, social or emotional development, or adaptive development; and who, by reason thereof, needs special education and related services.

DISABILITY

Disability is a condition or function judged to be significantly impaired relative to the usual standard of an individual or group. The term is used to refer to individual functioning including physical impairment, sensory impairment, intellectual impairment, mental illness and various types of chronic disease. Disability is conceptualized as being a multidimensional experience for the person involved. There may be effects on organs

or body parts and there may be effects on a person's participation in areas of life.

Types of Disability

- Autism spectrum disorder
- Hearing Impairment
- Intellectual Disabilities
- Serious Emotional Impairment
- Orthopaedic Impairment
- Traumatic Brain Injury
- Speech or Language Impairment
- Multiple Disability
- Deaf-Blindness

PHYSICAL FITNESS

Physical fitness and exercise participation are important contributors to a healthy life stage. The exercise plays a major role in improving the quality and most likely the longevity of our life. Most people who exercise regularly will agree that one of the main reason for their exercise is that it makes them feel good and help them to attain or maintain good health and physical fitness. The effect of regular physical activity significantly improves health, physical fitness and work capacity and enables people to use their leisure time more beneficially and thereby assists in adding life to years and also years to lives. In the past, physical fitness has been defined in broad terms, and tests have measured either an aspect of physiological function or selected aspects of motor performance. This type of test has been termed motor

fitness and includes not only strength and endurance components, but also factors of speed, power, and agility. Motor fitness test are more indicative of potential for athletic excellence than fitness for health promotion. As the concept of physical fitness has moved away from athletic participation toward health, the components have changed to include cardio respiratory function, body composition, strength, endurance, and low-back flexibility, traits shown by medical and exercise scientists to promote health and reduce the risk of disease.

STATEMENT OF THE STUDY

The purpose of the study was to find out the “Effect Of Selected Physical Activities On Health Related Physical Fitness Variables Among Mild Intellectual Disability Children”

HYPOTHESIS

Based on the literature, the investigator formulated the following hypotheses

It was hypothesized that selected physical activities would significantly improvement on health related physical fitness variable on intellectual impaired children.

SIGNIFICATION OF THE STUDY

The study is significant in assessing selected health related Physical fitness on intellectual impairment children.

- ❖ This study is significant is analysing the individual physical fitness ability to focus on their performance.
- ❖ The study would be beneficial to sports administrators, physical educationist, coaches, sports men, students and parents to know physical states for the subjects.
- ❖ The findings of this study would form base for further researches in this area.
- ❖ The study may contribute to the body of knowledge in the specialized area of talent identification and potential for their fitness level.

DELIMITATIONS

The study was delimited with following factors

1. The study was analysed with fifteen intellectual impaired children as the subjects from YMCA college special school, Chennai
2. The age of the subjects range from 13-16 years.
3. The following criterion variables and tests were selected for this study.
Speed flexibility and Balance.
4. The boy's students were selected as the subjects.

LIMITATIONS

The factors like their daily routine be controlled which might have an effect on the of the study

1. Special motivation technique used during testing.
2. Psychological factors physical condition and physiological condition food habits rest period and life style cannot be controlled.

METHODOLOGY

The purpose of the study was to determine the

Influence of physical activities on selected health related physical fitness, variables among mild intellectual disability Children. The investigator was motivated to find out the relative effect of a planned program in selected physical activities on the improvement in health related physical fitness variables among mild intellectual disability children. The investigator feels that the children with mild intellectual disability children will improve their health related fitness if they actively participated in selected physical activities regularly. Hence the investigator is trying to prove that involvement in selected physical activities will improve the health related physical fitness, variables among mild intellectual disability children.

SELECTION OF SUBJECTS

This study was designed to determine the Influence of physical activities on selected health related physical fitness, variables among mild intellectual disability children. Thirty male students who were studying in YMCA College Special School Chennai, acted as subjects for the study. They were mild intellectual disability children. 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 two groups based on their intellectual ability. They are at the age group of six to twelve years. Thirty mild intellectual disability children were chosen according to the intellectual classification of mild intellectual disability children. The investigator had to depend upon the specialists who are qualified in handling the special children.

SELECTION OF VARIABLES

Physical fitness is the ability to turn out daily task with vigor and alertness without fatigue and ample energy leisure time pursuit to meet unforeseen emergencies. We must be able to identify and measures the physical fitness. In this study, speed, coordination and flexibility were selected as variables of physical fitness. The above said variables were selected as dependent variables in this study. Since the system of education for the differentially abled is the Individualised Education Programme, the physical activities also should be taught by the Individualized physical Education programme. Physical Education Teacher, Special Educators and the parents of the mild intellectual children were included for the Individualized Physical Education programme. They were given enough orientation on physical activities and yoga to be performed. The physical activities selected for the study were Calisthenics, Minor games and in the morning session. The treatment groups underwent the programme five days a week for a period of fifty two weeks with sixty minutes per session.

CALISTHENICS EXERCISE

The Calisthenics exercise is one of most available means of developing coordination, reaction time and balance. Calisthenics exercises must be performed in an exact manner and in full range of motion. There are fifteen exercises prescribed continuously from the first to fifteen. This set of exercises can be done with graceful movement; normal speed of rhythm and with uniformity.

MINOR GAMES

The minor games was included the basic physical activities. That develops co-ordination, ability, speed and flexibility. The minor games must participate with full interest and involvement. There are ten minor games prescribed and modifies according their ability.

This set of minor games can be done with full involvement by the autistic children along with investigator and the special teacher.

Participants should perform these exercises together. Each exercise should be done for sixteen Counts.

TABLE I
SHOWING DESCRIPTIVE STATISTICS AND OBTAINED 't' VALUE
ON SPEED DUE TO SELECTED PHYSICAL ACTIVITIES

Group	Mean	MD	SD	SDM	't'
Post Test	13.25	0.78	3.11	0.11	3.40*
Pre Test	13.33		1.45		

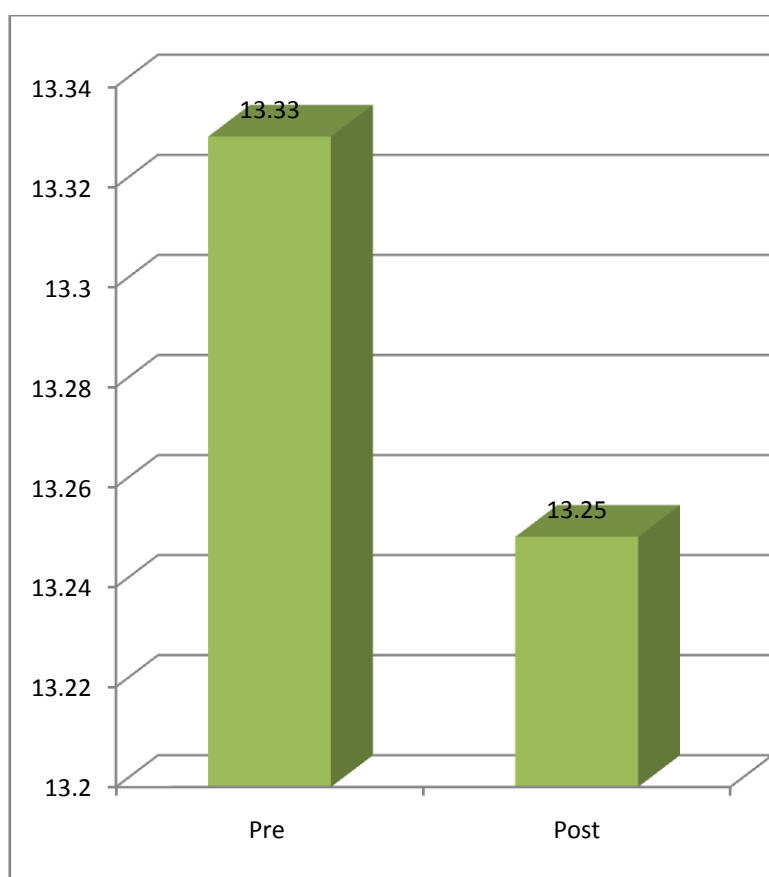
Required table value df (1,24), 2.064

* Significant at 0.05 level

The results presented in Table I showed that the pretest mean value of speed (M: 13.33) was improved to 13.25 after six weeks Selected Physical activities with mean difference of 0.78. The obtained 't' value of 3.40 was greater than the required 't' value of 2.064. Hence, it was proved that there was significant improvement in

speed among mid intellectual disability children due to selected physical activities. The obtained mean values on pre and post test scores on speed were presented through bar diagram for better understanding of the results figure I.

FIGURE I
BAR DIAGRAM SHOWING MEAN VALUE OF SPEED DUE TO SELECTED PHYSICAL ACTIVITIES
AMONG MID INTELLECTUAL DISABILITY CHILDREN



CONCLUSIONS

Within the limitations and delimitations of the study, the following conclusions were drawn.

1. It was concluded that six weeks Selected physical activities significantly improved speed of the mid intellectual disability.
2. Flexibility was significantly improved of the mid intellectual disability due to six weeks Physical activities .
3. It was concluded that six weeks selected physical activities significantly improved Co-ordination of the mid intellectual disability.

REFERENCES

1. Barrow, Harold M. and Rose Mary Mc Gee, "A Practical Approach to Measurement in Physical Education", 3rdEd, Philadelphia: Lea and Febiger, 1979.
2. Buddy Lee, Jump Rope Training, Champaign, Illinois: Human Kinetics, 2003.
3. Claude Bouchard Physical Activity Fitness and Health, Champaign. Illinois : Human Kinetics Published Inc. , 1994.
4. Claudine Sherrill, Adapted Physical Education and Recreation, U.S.A.: Wm. C. Brown Publishers, 1986.
5. David k. Miller, Measurement by the Physical Educator, New York.: McGraw-Hill companies, Inc., 2002.
6. Debbie Lawrence, Exercise in Water ii ed., London: A&C Black publishers, 2004.
7. Freddie W. Litton, Education of the Trainable Mentally Retarded, U.S.A.: C.V.Mosby company publishers, 1978.
8. Hardayal Singh "Sports Training " General Theory and Methods (Patials: NIS Publications, 1984.
9. Hoskins, Mike (January 2015). "Do Diabetes Companies Have a Blind Spot?". Braille Monitor 56 (1). Retrieved July 15, 2015.
10. Joseph ,winnick, P. Adapted Physical Education and Sports, U.S.A.: Human Kinetics, 2005.
11. Seaman, Depauw, Morton and Omoto, Making Connections from Theory to Practice in Adapted Physical Education, Scottsdale: Holcomb Hathway Publishers, 2003.
12. Staley, S.C. Calisthenics, New York.: A.S. Barnes and company publishers, 1926.