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Impact on Balance Training on Walking Ability among Intellectual Impaired Children

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Abstract

The purpose of the study was found out whether the balance training would significantly improve the walking ability on intellectual impaired children. To achieve this purpose, the single group design was formulated because a single group design is maximize the treatment variance and minimize the error variance. The investigator took all possible steps to control to extraneous design factors while choosing the experimental design for the present study.The performance of the subjects was recorded in the group. In the group was given balance training for five days a week for six weeks. After the completion of training period final test was conducted for a group of intellectual impaired children. The scores were recorded and analysed. Balance training for the period of six weeks with duration of 3 minutes for one repetition up to 30 minuts. The results presented in thepre test mean value of Walking ability (M: 7.26) was improved to 6.10 after six weeks Balance training with mean difference of 1.16. The obtained' value of 2.484 was greater than the required' value of 2.144 Hence, it was proved that there was significant improvement in Walking ability among Impairment Children due to Balance training.

Keywords: Balance Training, Walking Ability, Intellectual Impaired Children.

Introduction

Adapted physical education is an attitude, a way of teaching in both main stream and segregated environment, that is reflected in the beliefs and practices of teachers who adjust learning experience to meet individual needs and assure optional success in physical and motor functioning. Adapted physical education is also a comprehensive service delivery system designed to individually solve their problems within the psychomotor domain.

Corrective Physical Education is a program that emphasizes the change or improvement in function or structure by means of selected exercises. Developmental physical education stresses the development of motor ability and physical fitness in those who are below the desired level. Adapted physical education programs, are those which have the same objectives as the regular physical education program, but in which adjustments are made in the regular offerings to meet the needs and abilities of exceptional students. It should be explained here that adapted has also been widely used as a general term for all the programs directed toward students with deficiencies and disabilities.

Balance training is the challenging the body to maintain proper postural control throughout a series of demands that can be placed upon it typically while standing still or through advanced transitional movements. Balance exercises can vary complexity and the demand placed upon the body. The simplest of balance exercises focus on pure stabilization such as standing on one leg. The exercise can be made challenging by adding specific upper or lower body movement while balance on one leg unsupported or perhaps on an unstable surface. Finally, performing more dynamic movements such as steps, hops, and jumps that result in a balanced finish position are examples of the most difficult o exercises in a progression of balancing.

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Intellectual Disabilities

Intellectual disabilities in a person is a condition and not a "disease" It cannot be reverted by any treatment. But, with training most of these persons with intellectual disabilities can be made to perform activities of daily living and thereby become less dependent on others. The person with Intellectual disability may face difficulties in the performance of age appropriate daily living task because of his limitation in his adaptive behaviour skills.

Causes of Intellectual Disabilities

Pre-Natal Causes;

- Very high fever in the pregnant mother
- Sexually transmitted disease through father or mother
- Malnutrition.

- .Hypertension, diabetes or any other chronic illness in the mother.
- Severe breathing trouble in the mother, asthma.
- Mother's and child's blood group Rh factor,may not agree with each other.
- Unprescribe or harmful drugs taken by the mother.
- Too much of drugs taken by mother.

Natal Causes

- If the child is born before 250 days
- If the period of birth is delayed by more than 10 lunar months.
- If the child is delivered with difficulty and the time of delivery is prolonged.
- If the child is delivered with head in a wrong position at the time of birth.
- If the umbilical cord coils around the neck of the child tightly.
- If unsterilized or crude instruments are used at delivery.
- If the birth cry is delayed and the child takes time to breathe.

Post Natal Causes:

- High fever like meningitis, encephalitis in the young child may damage the brain.
- Severe and incompletely treated Tuberculosis infections. Primary complex may damage the brain.
- Lead and othr poisonous materials taken even in small qualities while handling toys and so on.
- Mal-nutrition will affect the brain.

Need of physical fitness activity for intellectual disabilities

Exercise can significantly decrease the frequency of negative, self-stimulating behaviours that are common among individuals with autism, while not decreasing other positive behaviours. exercise can discourage aggressive and self-injurious behaviour while improving attention span. improving fitness, motor function, and behaviour in individuals with autism, among the most important advantages of physical activity are the social implications of participating in sports and exercise. Physical activity can promote self-esteem, increase general levels of happiness, and can lead to positive social outcomes, all highly beneficial outcomes for individuals intellectual disabilities.

Methodology

The purpose of the study to find out the effect of balance training on walking ability on intellectual impaired children.To achieve of the purpose of this study, 15 subjects, intellectual impairment children were selected from YMCA College special school, Nandanam, Chennai. The age of the subjects ranged between 13-16 years. To achieve this purpose, the single group design was formulated because a single group design is maximize the treatment variance and minimize the error variance. The investigator took all possible steps to control to extraneous design factors while choosing the experimental design for the present study.

The performance of the subjects was recorded in the group. In the group was given balance training for five days a week for six weeks. After the completion of training period final test was conducted for a group of intellectual impaired children. The scores were recorded and analyzed.

Table 1

Table showing descriptive statistics and obtained 't' value on walking ability of impairment children due to balance training

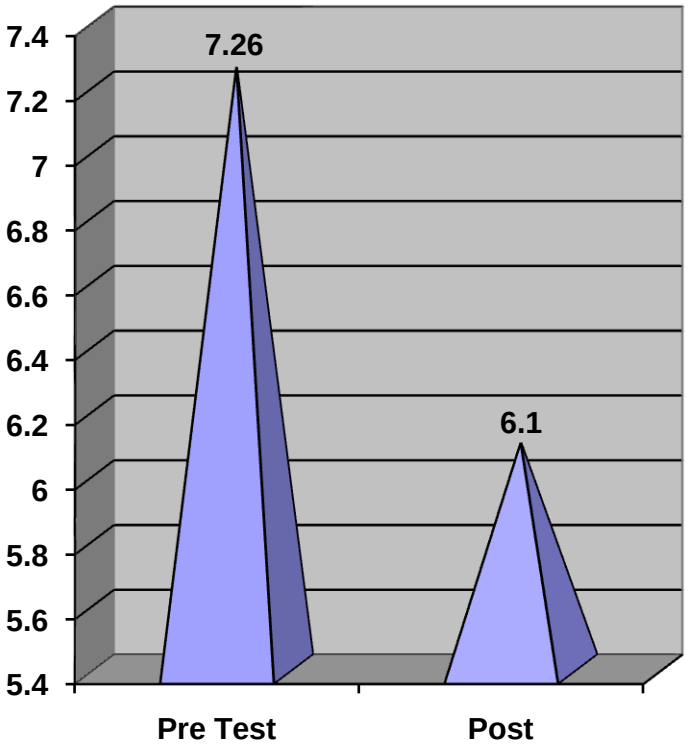
Test	Mean	MD	SD	't'
Pre	7.26	1.16	1.24	2.484*
Post	6.10			

Required table value DT (1,14), 2.144 * Significant at 0.05 level

Discussion on Findings

The results presented in Table I showed that the pre test mean value of Walking ability (M: 7.26) was improved to 6.10 after six weeks Balance training with mean difference of 1.16. The obtained' value of 2.484 was greater than the required' value of 2.144 Hence, it was proved that there was significant improvement in Walking ability among Impairment Children due to Balance training.

Figure I
Bar diagrams shows that mean values of walking ability due to balance training



Physical activity is not only important to the health of children and adults. It is also crucial that elderly people avoid inactivity, especially if they have a physical or mental disability. In particular, walking programs have been known to help improve the balance, strength, and stamina of elderly people. It improvement in their ability to endure lengthier walking distances at quicker speeds. The leg strength and balance of the individuals improvement. It has been observed that increased morbidity of elderly people who have Intellectual disabilities may be associated with decreased motivation and access to physical fitness programs. Based on the result of the study, the following conclusions were drawn.

1. Intellectual impairment children result on walking were recorded.
2. It was also concluded that have good significant improvement among intellectual impairment children on walking by balance training.
3. It was concluded that all the treatment were found to have similar effect on the selected variables.

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