Comparative Study of Motor Educability between Normal and Specially Abled Children

Gurpreet Singh
Research Scholar
Department of Physical Education
Punjabi University Patiala, India

Abstract— The purpose of the present was to compare the motor educability between normal and specially abled children. Total 40 children were taken as a sample (20 children were normal and 20 specially abled children). Normal children were taken from S. S. M. School, Punjabi university Patiala and children with deaf & blind were taken from Patiala school for the Deaf, Saifdipur. Age of all the children was ranging between 10 to 15 years. The 't' test was applied to compare the mean scores of two groups. The level of Significance was set at 0.05. The results powerfully prove that, significant differences were observed between normal and specially abled children for their motor educability test. In this test Normal children are superior as compare to specially abled children in motor educability.

Key words: Motor Educability, Specially Abled Child, Normal Child

I. INTRODUCTION

Human motor educability has always been the subject of many research projects. The theory of coordinative abilities is still in the stage of infancy. Though there is rapidly increasing acceptance of the term motor educability yet there is no agreement regarding the number of motor educability important for sports. The methodology of improving different motor educability is also yet not available in full detail. But in the future it is expected that there will be a clear cut system of improving means and methods of each and every motor educability. Motor educability is primarily dependent on the motor control and regulation process of CNS. Motor educability have also important and strong links with the motor skill as motor coordination forms the basis of both coordinative abilities and motor skills. Motor educability becomes effective in movement only through the motor abilities and activity determined drives and cognitive processes. Most people have the ability and opportunity to attend to their own physical activity needs. However, others may require assistance to live a healthy and active lifestyle. This includes individuals with an intellectual disability, previously referred to as mental retardation. It is questionable whether they are aware of the debilitating consequences of a sedentary lifestyle or have enough self-direction to modify their lifestyle, particularly when one considers how difficult it is for people without a disability to initiate and adhere to an exercise program.

It is well known that people with an intellectual disability exhibit poor fitness performance on standard fitness tests. This has been demonstrated with adult son measures of cardiovascular endurance, body composition, muscular strength and endurance and flexibility. Reid and Montgomery (1999) attributed the low levels on fitness tests to five potential factors: (a) a sedentary lifestyle (Hoge & Dattilo, 1995) and fewer opportunities for participation in structured programs; (b) physical characteristics such as short stature (Dobbins,G arron, &Rarick, 1981; Reid, et.aI., 1985); (c) lack of coordination and efficiency (Seidl, Montgomery, &Reid, 1989); (d) infrequent opportunities to practice test items; and, (e) lack of motivation during testing and atendency to stop when uncomfortable (Reid et al., 1985; Rimmer,1994). People with intellectual disabilities face many challenges in community living (Pedlar,1990) as they continue to be included in all phases in society. Many facets such as work, maintaining a household, cooking, selfcare, and recreation require the individual to possess a certain degree of physical stamina. People with an intellectual disability will need an adequate amount of fitness to contribute to work-related tasks and enjoy and benefit from participation in recreational activities (Fernhall, Tymeson, & Webster, 1988).

II. STATEMENT OF PROBLEM

The problem entitled as follows "Comparative study of motor educability between normal and specially abled children."

III. METHODOLOGY & PROCEDURE

In this chapter the design of study was in descriptive type with special reference to the procedure adopted for the selection of the subjects, selection of variables, criterion measures, collection of data, procedure for administration of tests, statistical technique and analysis of data are presented.

IV. SELECTION OF SUBJECTS

The purpose of the study to compare the motor educability of normal and specially abled children. For present study total 40 children were taken as a sample. 20 children were normal and 20 specially abled children. Normal children were taken from S. S. M. School, Punjabi university Patiala and children with deaf & blind were taken from Patiala school for the Deaf ,Saifdipur . Age of all the children was ranging between 10 to 15 years.

V. SELECTION OF TEST

Metheny Johnson motor educability test were applied to measure the motor educability of children. There are four batteries in the test which was applied on both normal children and specially abled children.

VI. STATISTICAL TECHNIQUES

The data was analyzed and compared with the help of statistical procedure in which mean, standard deviation, df & t test were used to compare the data and the level of

significance will be set at 0.05 percent. There are as follows:-

VII. RESULTS

Group	N	Mean	Standard Deviation	t-value
Normal	20	6.60	2.58	5.78*
Specially abled	20	2.35	2.03	

Table 1: Significant mean differences of front roll test between Normal and Specially abled children

Tabulated 't' value $_{0.05}(38)$= 2.02
*Significance at 0.05 level

Table and Figure I showed that the mean and standard deviation values of Front roll test with regard to Normal children were recorded as 6.60 and 2.58 respectively where as in case of specially abled children, were recorded as 2.35 and 2.03 respectively. The calculated t-value 5.78 was more than tabulated t-value (2.02) at 0.05 level. So, it indicates that significant differences were found in Front roll test of normal children and specially abled children.

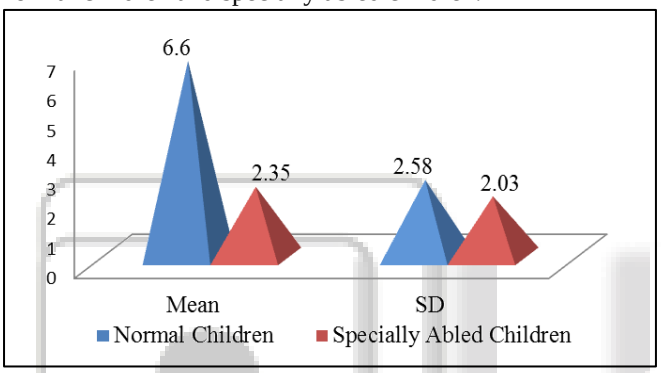


Fig. 1: Mean and Standard deviation of front roll test between Normal and Specially abled children

Group	N	Mean	Standard Deviation	t-value
Normal children	20	3.70	0.47	7.16*
Specially abled children	20	1.10	1.55	

Table 2: Significant mean differences of back roll test between Normal and Specially abled children

Tabulated't' value $_{0.05}(38)$= 2.02
*Significance at 0.05 level

Table and Figure II represents the mean and standard deviation values with regard to Back roll test of normal children which were recorded is 3.70 and 0.47 respectively, where as in the case of specially abled children were recorded is 1.10 and 1.55 respectively. The calculated t-value 7.16 was more than tabulated t-value (2.02) at 0.05 level. So, it indicates that significant differences found in Back roll test of normal children and specially abled children.

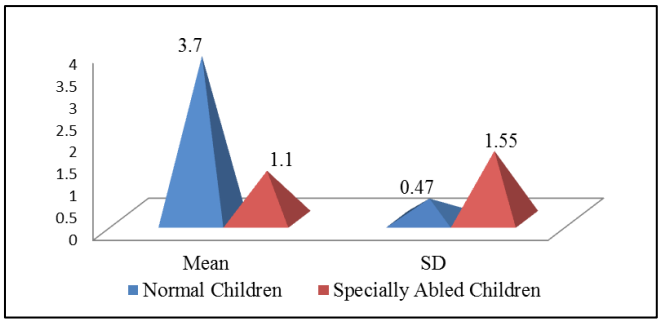


Fig. 2: Mean and Standard deviation of back roll test between Normal and Specially abled children

Group	N	Mean	Standard Deviation	t-value
Normal children	20	4.40	0.68	2.69*
Specially abled children	20	3.65	1.04	

Table 3: Significant mean differences of jumping half turn test between Normal and Specially abled children

Tabulated 't' value $_{0.05}(38)$= 2.02
*Significance at 0.05 level

Table and Figure III present that the mean and standard deviation values of Half turn testwith regard to Normal children were recorded as 4.40 and 0.68 respectively where as in case of specially abled children, were recorded as 3.65 and 1.04 respectively.The calculated t-value 2.69 was more than tabulated t-value (2.02) at 0.05 level. So, it indicates that significant differences were found in Half turn test of normal children and specially abled children.

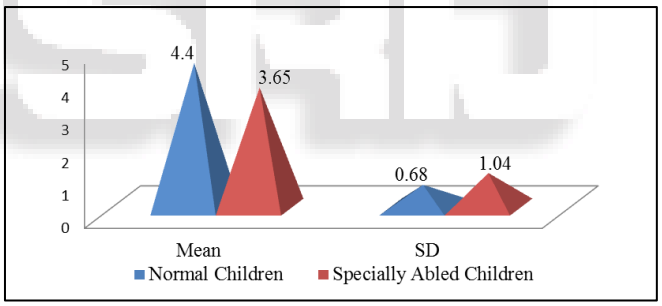


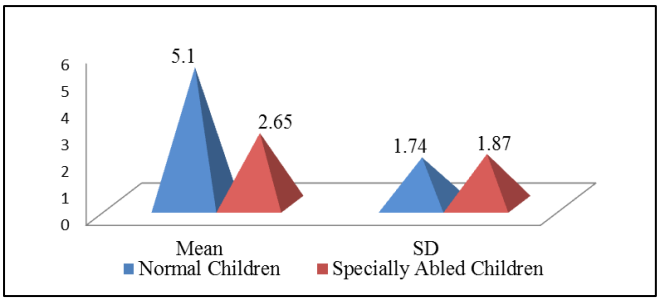
Fig. 3: Mean and Standard deviation of jumping half turn test between Normal and Specially abled children

Group	N	Mean	Standard Deviation	t-value
Normal children	20	5.1	1.74	4.28*
Specially abled children	20	2.65	1.87	

Table 4: Significant mean differences of jumping full turn test between Normal and Specially abled children

Tabulated 't' value $_{0.05}(38)$= 2.02
*Significance at 0.05 level

Table and Figure IV display that the mean and standard deviation values of Jumping full turn test with regard to Normal children were recorded as 5.1 and 01.74 respectively where as in case of specially abled children, were recorded as 2.65 and 1.87 respectively. The calculated t-value 4.28 was more than tabulated t-value (2.02) at 0.05 level. So, it indicates that significant differences were found in Jumping full turn test of normal children and specially abled children.



VIII. Discussion of the Findings

The result of the study established that there was significant difference found in motor educability between normal and specially abled children. But while comparing the mean values of both the groups, it has been observed that normal children have demonstrated better motor educability than the specially abled children. The reason behind this study results, specially abled children are mentally disabled they can't proper understand & perform well test. On the basis of analysis of the data, investigator found that the earlier study of Singh (2017)conducted a study to analysis the motor educability variables between sprinters and middle distance runners and he found that sprinters had significantly greater Front Roll and Jumping Half Turns ability as compared to middle distance runners. Karkare (2012), as he concluded that tribal boys & girls had significance dominance on front roll and jumping half turn compare to their counterparts. Results also supported by the investigation of Das (2014)he concluded that group of under-13 girls had significantly better front roll and jumping half turn score than other groups. Another study also in line with our finding, as Bal (2014) found significance difference in their study that on the account of front roll and jumping half turn among district, state and national level cricket players. Study done by Yadav& Kumar (2013) also discovered same result as present study find. They found significance difference in respect to front roll and jumping half turn among state and district level foil and epee fencers, supported the present study.

IX. Conclusion

On the basis of findings of present study, the following conclusions were drawn:

The results powerfully prove that, significant differences were observed between normal and specially abled children for their motor educability test. In this test Normal children are superior as compare to specially abled children in motor educability.

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