



EXAMINE THE EFFECTS OF SPECIFIC EXERCISES IN DIFFERENT TIME DURATIONS TO IMPROVE DYNAMIC BALANCE IN THE DEAF & DUMB, CHILDREN

Gajraj Singh

Assistant Professor. Department of (S.O.S) Physical Education Jiwaji University Gwalior (M.P.)

ABSTRACT:

The objective of the study was to find out the effect of exercise on coordinative abilities of deaf and dumb children's. For the purpose of study 40 boys (treatment group) from school for special children's, Gwalior having age group of 11 to 14 years were randomly selected. The subjects have approximately a similar kind of lifestyle off the ground also in the terms of diet, sleeping time and hours, daily curriculum related activities, as they resided in campus hostels and shared common mess. All the subjects were informed about the objective of the study. It was hypothesized that there will be significant difference in mean scores at different time points at regular intervals of two weeks at which data was collected from the participants. The specific coordinative (dynamic balance) abilities was measured with appropriate test,



Mortify bass test. To maintain the validity and reliability, valid and reliable test items were used. Pre -Data for the study was collected 0 week and after that the data was collected at different duration as per training of 0 week 2 week, 4 week, 6 and 8 weeks repeatedly. To find out the effect of training program. Repeated measure ANOVA was used as statistical technique to find out the significant difference. To test the hypothesis, the level of significance was set at 0.05. It was concluded that a significant difference was found in the different levels of time durations in the dynamic balance, whereas.

KEY WORDS: (1). dynamic balance (2) **Mortify bass test**. (3). Coordination. .

INTRODUCTION: -

Motor abilities are primarily dependent central nervous system it is the main part of the human body for motor coordination. It is very essential for human coordination. The central nervous system is the regulation process for every human person. It helps with co-coordinative ability every human parson does any activity smoothly. Co-coordinative abilities also explain the difference between man to man. The Motor abilities depend on five sense organ in our body. Like ears, tongue. Eyes, Nose, and skin. The sense is receptors. They collect the information form varies parts of the body and as they also collect environmental information. In this process, the human body's nerves system plays a main and imprudent roll. The Nerves system of the human body divided into two parts central nerves system and peripheral nerves system. Throw nerves system central and coordinate of every human physical and mental activates. They also regulate other systems of the human body. Physical fitness is commonly defined as the ability to take out daily tasks, without undue fatigue, with sufficient energy to enjoy

leisure-time pursuits and to meet unforeseen emergencies (A.C.S.M) Physical fitness is the basic requirement of every individual for the purpose to compete dally task. Most of the tasks that a person must perform in their daily lives. If the human body is not sufficiently developed or becomes soft or inactive, and if it fails to develop physical skill, it undermines its performance, which is vital for its life and society. Regular involvement in energetic exercise increases physical fitness. A high level of physical fitness is attractive and beneficial for productive life. Inactive living propensities and poor physical wellness negatively affect both wellbeing and day by day living.

The word physical refers to the body, and indicates bodily characteristics i.e. height, weight, constituents of fitness- strength, speed, endurance, flexibility, health coordinative and performance. It seemingly contrasts the body with mind. The term education when used in conjunction with physical refers to a step by step process of 'education' to develop the human body especially, the movement skills. Therefore, it nullifies all misconceptions and misunderstandings about physical education as a field of teaching and an ingredient of general education.

METHODOLOGY

For the purpose of study 40 boys (treatment group) from school for special children's, Gwalior having age group of 11 to 14 years were randomly selected. In order to select a specific motor abilities tests, first of all a list of selective test items were finalized, keeping in mind the relevance of measuring the motor abilities of school level student of physical education .a systematized . Test items was chalked out by the researcher with help of reviews literature and experts in the field. The specific motor **coordinative abilities** dynamic balance Ability. - **Mortify bass test**.(It was kept in mind to prepare valid and reliable test items.

The data on selected test items were collected from government school for special children's Gwalior but before the testing program was organized, the researcher assembled all the subjects together to brief them about the nature .modalities and objectives of the present investigation and demonstrate them various test so that they could have the mental picture of the various tests in which they are going to perform.pri data for the study was collected and after that the data was collected at different duration as per training 0 weeks, 2 weeks, 4weeks , 6 weeks, 8 weeks, repeatedly. To find out the effect of training program on the special children's.

STATSTCAL TECHNIQUE

To compare the effects of various training duration of exercise on coordinative abilities, one way repeated measure ANOVA test was used as statistical technique. To describe the characteristics of the data, simple descriptive statistics was used. SPSS version 20 was used to apply the statistical technique and the level of significance was set at 0.05.

Table 1
DESCRIPTIVE STATISTICS OF THE DATA ON DYNAMIC BALANCE

		Test 1 (0weeks)	Test 2 (2weeks)	Test 3 (4weeks)	Test 4 (6weeks)	Test 5 (8weeks)
N	Valid	38	38	38	38	38
	Missing	0	0	0	0	0
Mean		37.8538	52.7820	57.9534	76.0737	78.7411
Std. Error of Mean		1.08888	1.14707	.90427	1.28610	.96998
Std. Deviation		6.71234	7.07098	5.57429	7.92806	5.97936
Variance		45.055	49.999	31.073	62.854	35.753
Skewness		.163	-.093	-.039	-.489	.087
Std. Error of Skewness		.383	.383	.383	.383	.383
Kurtosis		-.751	-.666	-.274	-.382	-.394
Std. Error of Kurtosis		.750	.750	.750	.750	.750

Table 1 shows the descriptive statistics of the data on Dynamic balance (i.e. mean, standard deviation, standard error, skewness and kurtosis) of participants at different times of day i.e. before the training (0 weeks). During training (after 2 weeks) During training (after 4 weeks).During training after (after 6weeks) After training of (after 8 weeks).

The mean, standard deviation, standard error, skewness and kurtosis of the variable Dynamic balance at Test 1 (Pre data or before the training) were 37.8538, 6.71234, 1.08888, .163, and-.751, respectively, at Test 2 (After 2 weeks) were 52.7820, 5,57429, 1.14707, -.093, and -.666, respectively, at Test 3 during the training (after 4 weeks) 57.9534, 5,57429, .90427, -.039, and -.274, respectively, at Test 4 during the training (after 6 weeks) 76.0737, 7.92806, 1.28610, -.489, and -.384 respectively, at Test 5 after the training (after 8 weeks) 78.7411, 5.97936, .96998, .087, and -.394, respectively,

TABLE 2
MAUCHLY'S TEST ON THE DATA SETS OF DYNAMIC BALANCE

Mauchly's Test of Sphericity^a
Measure :Dynamic Balance

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	Df	Sig.	Epsilon ^b		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Dynamic Balance	.646	15.479	9	.079	.807	.893	.250

It is evident from the table 23 that the assumption of sphericity by the data on orientation ability has been fulfilled as the Mauchly's **W (0.646)** was found insignificant (pvalue>0.05).

Since all the assumptions were fulfilled by the data, now, test of within-subjects effects was employed to see whether the training was effective in the development of dynamic balance. The table for the Tests of Within-Subjects Effects is presented in the table below.

TABLE 3
TESTS OF WITHIN-SUBJECTS EFFECTS FOR THE DATA OF DYNAMIC BALANCE
Tests of Within-Subjects Effects

Measure: Dynamic Balance

Source		Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Dynamic Balance	Sphericity Assumed	43852.640	4	10963.160	270.293	.000	.880
	Greenhouse-Geisser	43852.640	3.228	13583.547	270.293	.000	.880
	Huynh-Feldt	43852.640	3.573	12272.139	270.293	.000	.880
	Lower-bound	43852.640	1.000	43852.640	270.293	.000	.880
Error Dynamic Balance	Sphericity Assumed	6002.932	148	40.560			
	Greenhouse-Geisser	6002.932	119.449	50.255			
	Huynh-Feldt	6002.932	132.214	45.403			
	Lower-bound	6002.932	37.000	162.241			

Table 3 shows the Tests of Within-Subjects Effects and it is evident from the table that the **F-Value (270.293)** was found to be significant as the p-value <0.05. Here, the researcher has taken values

of sphericity assumed row because all the assumptions were duly checked and has been fulfilled by the data.

TABLE 4
PAIRWISE COMPARISONS OF STATIC BALANCE SCORES TAKEN AT DIFFERENT DURATIONS

Dynamic Balance (I)	Dynamic Balance (J)	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
					Lower Bound	Upper Bound
1	2	-14.928*	1.441	.000	-19.231	-10.625
	3	-20.100*	1.176	.000	-23.612	-16.587
	4	-38.220*	1.639	.000	-43.113	-33.327
	5	-40.887*	1.519	.000	-45.422	-36.352
2	3	-5.171*	1.166	.001	-8.652	-1.690
	4	-23.292*	1.676	.000	-28.294	-18.290
	5	-25.959*	1.518	.000	-30.489	-21.429
3	4	-18.120*	1.636	.000	-23.005	-13.236
	5	-20.788*	1.483	.000	-25.216	-16.359
4	5	-2.667	1.242	.384	-6.376	1.041

Based on estimated marginal means

When we have compared Test 1 mean value with the other means values, Table 25 reveals that it was significantly different than Test 2 (sig. value = .000), Test 3 (sig. value = .000), Test 4 (sig. value = .000) Test 5 (sig. value = .000) were found less than 0.05.

Similarly, Table 4 shows that the difference between the mean values of Test 2 and Test 3 was found significant as the p-value (.001) was found to be less than 0.05. A same result has been found between Test 2 and Test 4 and also, significant difference was found between the mean values of Test 2 and Test 5 as the p-value (0.000) was found less than 0.05.

Tests 3 mean score was found significantly different than Test 4 means as the p-value (0.00) was found less than 0.05. And significant differences were seen between Test 3 and Test 5 mean values.

Test 4 and Test 5 mean scores were found insignificant at 0.05 level of significance.

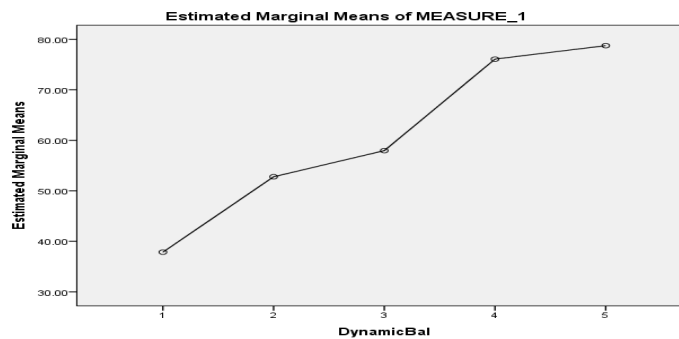


FIGURE 10
GRAPHICAL REPRESENTATION OF THE MEAN SCORES OF DYNAMIC BALANCE AT SELECTED TIME PERIODS

Figure 10 suggests that the Dynamic balance timings of the participants decreased with the training, which confirms that the improvement in the same has taken place.

DISCUSSION OF FINDINGS

The dynamic balance ability was found to be significantly affected due to the administration of the training program. The lack of significant difference may be attributed to the less sample size and short duration of training. The rhythmic ability.

CONCLUSION

The benefits or the advantage of a motor development training program are well established on children of the normal population. However, the motor abilities of the special children with the hearing and speech impairment reduces to a greater extent as their involvement of two sense organs is restricted? In the scenario, the effects are motor development Exercise that is doable by those children on the different components of motor abilities is a questionable matter. To study this research gap the researcher conducted 8 weeks training program for deaf and dumb children. Each week three training was conducted by the researcher. In this study, readings were recorded on five intervals of 0 weeks, 2 weeks, 4 weeks, 6 weeks, and finally 8 weeks. The present investigation was carried out to fulfil the objective to find out the effect of exercise on motor abilities on special (deaf & dumb).

The specific motor abilities dynamic balance was kept in mind to prepare valid and reliable test items.

It was concluded that a significant difference was found in the different levels of time durations in the dynamic balance.

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