

Effect of Minor Games on Basic Strength of School Going Children

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Abstract: Objectives of the study were to find effect of minor games on basic strength of school going children. For the purpose 91 students ranging from 9 - 11 were selected by simple random sampling method. Training program of minor games was prepared by keeping in mind age group and physiological factors developed in subjects. With the help of experts in the field and was implemented one and half hours per day, six days a week for eight weeks. Pre and post test was conducted and data was collected. Collected data was analyzed by applying t test. Results of the study shown significant effect of minor games on school going students.

Keywords: Minor Games, Basic Strength.

1. Introduction

Physical education is a planned program of motor activities that help the individual to develop and control their body. Physical education is a process through which favorable adaptation and learning (organic, neuromuscular, intellectual, social, cultural, emotional, and aesthetic) resulting from a fairly vigorous activity. Physical education is a formal area of educational activity in which the main concern is with bodily movements that take place in an educational establishment (Williams J. F., 1964). The activity side of our physical education program for normal group is made up largely of five major types of work; the practice of formal exercises commonly known as calisthenics; the practice of dancing; the practice of acrobatics feats on the mats, horizontal bars, parallel bars etc. commonly known as gymnastic stunts; the practice of highly organized sports such as football, volleyball, hockey etc., commonly known as team games and the practice of sports requiring a low degree of organization such as group games, relay races, combative contests and mass athletics which are commonly known as mass physical recreational activities. All of these activities, quite properly, have a definite place in our program. These activities offer many benefits and have many advantages for gymnasium and playground use. In the first place owing to the fact that not much organization is required large numbers can be readily handled. In second place, owing to the fact that skill is not required they may be effectively used with any group without previous preparation or practice. Thirdly, they have a high degree of recreational element – they are more fun full perhaps than any activity in our program. Fourthly, they have a large hygienic content; using large muscle in a vigorous way as they do they provide a generous organic reaction. Fifthly, they offer large recreational values; new neuron - muscular coordination's are developed, body control and alertness are developed and physical reaction time is decreased. Sixthly, the social benefits are large; the qualities of good sportsmanship, loyalty, cooperation, sense of responsibility and so on, may be inculcated. And lastly, they offer more diverse kind of natural physical activity than any of the other type of work used.

Minor games in schools: Minor games have a special place in primary school. They are a major relief from monotonous

classroom scholastic activities. Such games will also help the children develop concentration in their school subjects. A physical education teacher who doesn't know more minor games will be an ineffective in a primary school. In my opinion, all primary school teachers should be aware of as many minor games as possible. Teachers can also make their own minor games if they are creative. Besides teaching values or giving enjoyment, minor games help children improve their observation skills, reaction time, neuro - muscular co - ordination, etc. If the teachers are creative, they can also invent or introduce many new or existing minor games. Through minor games, children learn a lot of values for their life. **Ajeesh and Nair (2013)**, examined the effect of Selected Minor Games on Physical Fitness among School Students for the purpose they have taken 104 school children belonging to the age range of 13 - 15 years and were randomly selected from Government Higher Secondary School, Anavoor, Thiruvananthapuram, and Kerala, India. Subjects were randomly divided in two equal groups namely Group - A and Group - B; group - A, the experimental group consisted of 29 boys and 23 girls underwent the minor game programme and group - B, the control group held 29 boys and 23 girls treated as neutral group not underwent any training. The physical fitness was measured for both group as pre and post test with the administration of AAHPERD youth fitness test. After assessment of pre test, minor games programme was induced to the experimental group (Group A) after every school session for a period of one hour for 5 days per week for 12weeks. The statistical technique Analysis of Covariance (ANCOVA) was used to assess the effect of minor game training programme on the physical fitness variables. The results suggested beneficial effects on Cardio - respiratory endurance, Explosive power, Muscular strength & endurance, agility and speed after twelve weeks of minor games programme. The study was supported by the findings of Flynn 2006 and Thomas 2004 who suggested that minor games and other recreational games were the important aspects for the development of physical fitness at school level. Minor games activity interventions do not cause harm and are associated with positive effects on physical fitness, such activities should continue and be encouraged by local public health unit staff to local schools and school boards.

Statement of the Problem

The present study is entitled as, “Effect of Minor Games on Minimum Muscular Strength of School Going Children”.

Objectives of the Study

- 1) To assess the minimum muscular strength of middle childhood school going children.
- 2) To assess the factor influencing the muscular strength school going children.
- 3) To assess the influence of minor games on minimum muscular strength school going children.
- 4) To develop the minimum muscular strength of school going children.

Delimitations of the Study

- 1) The study was delimited to age ranging from 9 years to 11 years.
- 2) The study was delimited to the school going children.
- 3) The study was further delimited to Kraus Weber Test.
- 4) The study was delimited to the selected minor games as clear fully chosen by the researcher.

Limitations of the Study

- 1) The lifestyle factor of the subjects which were not under the control.
- 2) The study was further limited to the instruments and tests available for the conduct of the study.
- 3) The response patterns of the respondents were considered as a limitation of the study.

2. Methodology.**Selection of Subjects**

A total of Ninety One (91) subjects were randomly chosen from a school in Government School Ludhiana district of Punjab. The age of the subjects were ranging from 9 to 11 years, with average age of 10 years.

Collection of Data

The data was collected from all the subjects through Kraus Weber Test. Initial data was taken on Kraus Weber test items and children were then subjected to the selected Minor Games for eight weeks. After eight weeks of practice of Minor Games post - test was conducted on each of the subject.

Criterion Measures

The following criterion measure was used: -

Kraus Weber Test - These tests are graded on a pass - fail basis. Being unable to perform even one of the six exercises qualifies as failing the test. A variation of the scoring method enables partial movements on each test scored from 0 to 10.

Administration of the Test

All the subjects were at first administered the Kraus Weber Test to assess their initial fitness level and scores were recorded. Once the pre - test was over subjects were administer the Minor Games on daily basis for about 45 minutes in their respective P. E. classes.

Kraus – Weber Test

Dr. Hans Kraus and Dr. Sonja Weber developed the Kraus - Weber Minimum Test in the 1950's. The six - item medical fitness test measures the strength and flexibility of key postural (core) muscles. The test consists of five strength challenges and one general flexibility procedure. The Kraus - Weber Tests do not require sophisticated equipment and are easy to administer.

Scoring

These tests are graded on a pass - fail basis. Being unable to perform even one of the six exercises qualifies as failing the test. A variation of the scoring method enables partial movements on each test scored from 0 to 10.

Test Descriptions

- 1) Strength of Abdominal and Psoas Muscles
- 2) Strength of Abdominal Minus Psoas Muscles
- 3) Strength of Psoas and Lower Abdominal Muscles
- 4) Strength of Upper Back Muscles
- 5) Strength of Lower Back Muscles
- 6) Floor Touch Test
- 7) **Kraus Weber Test No.1.** With his feet held on the ground by the examiner, the subject lies flat on his back with his hands behind the neck. Perform one sit - up.
- 8) **Kraus Weber Test No.2.** The subject is in the same position except that his knees are bent with his ankles close to the buttocks. Perform one sit - up.
- 9) **Kraus Weber Test No.3.** The subject lies flat on his back with his hands behind his neck. The legs straight are lifted 10 inches off the floor. Hold this position for 10 seconds.
- 10) **Kraus Weber Test No.4.** The subject lies on his stomach with a pillow under his lower abdomen and groin. The examiner holds his feet down. Lift head, shoulders, and chest off the floor and hold for 10 seconds.
- 11) **Kraus Weber Test No.5.** The subject's position is the same, but the examiner holds the chest down. With knees straight, lift legs off floor and hold for 10 seconds.
- 12) **Kraus Weber Test No.6.** The subject stands erect, barefooted, and with feet together. The examiner holds the knees straight. Bend over slowly and touch the floor with the fingertips. Hold this position for 3 seconds.

The statistical analysis of the data obtained on the assessment of the Minimum Muscular Strength of 91 students of Middle Childhood, aged 9 to 11 years are presented in this chapter.

Level of significance

The level of significance chosen was .05 for testing the significant differences on the Minimum Muscular Strength among 9 to 11 years students.

3. Findings

The purpose of the study was to find out the effect of eight weeks of Minor games training on Minimum Muscular Strength in middle childhood of school going children.

The data obtained from the age group of 9 to 11 years students were statistically analysis employing 't' - test (dependent way of analyzing of variance). The data pertaining to analysis of Minimum Muscular strength of subjects are presented in the Table that follows.

Table 1: Descriptive Statistics of Kraus Weber Test Pre – Post Paired Sample Statistics

Test	Mean	N	Std. Deviation	Std. Error Mean
Minimum muscular strength	Pre test	53.74	19.47	2.04
	Post test	164.73	13.28	1.39

*Significant at $p < 0.05$

Table 1, indicates the descriptive statistics values of Kraus Weber Test of Minimum Muscular Strength of school going children, which shows the mean and standard deviation values of Pre Test and Post Test. Mean value of Pre Test was 53.74 and Standard Deviation value was 19.47 and Mean value of Post Test was 164.73, Standard Deviation

value was 13.28 respectively. The graphical representation of data is given in figure 1.

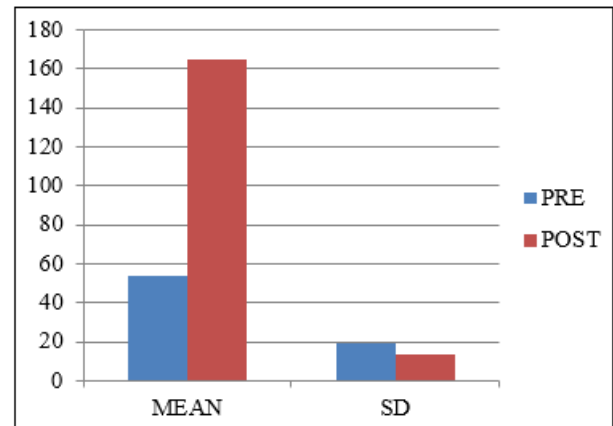


Figure 1: Graphical Representation of Mean and SD

Table 2: Comparison of Mean between Pre Test and Post Test among Selected Variables

	t - test for Equality of Means				
	T	df	Sig. (2 - tailed)	Mean Difference	Standard Error Difference
Pair Krauss Weber Test Pre - Post	60.67	90	.00	110.99	1.82

As documented in the above cited table that there is a significant difference found in minimum muscular strength of school going children. The mean of Post Test (164.73) was found to be higher than the mean of Pre Test (53.74).

4. Discussion of Findings

Physical fitness for children and youth is a fact of many physical education programs. Physical development is vitally important in school children. The emphasis during the early year of life should primarily focus on motor development and healthy growth and should be very individualized. Childhood is a period in which most motor skill (e. g. throwing, jumping, running, riding, swimming) develop. Children are inherently active, and one of the most elements adults must provide is an opportunity.

When the focus is on health related benefits, the use of wide variety of continuous physical activities (e. g. cycling, running, in line skating, etc.), Team sports, individual and dual sport and recreational activities can contribute to energy expenditure and its associate benefits.

The statically analysis reveals that significant differences were obtained on the Minimum Muscular Strength among 9 to 11 years students when 't' - test (Analysis of variants) was employed. There was a significant difference found in middle childhood minimum muscular strength of school going children. The mean of Post Test is higher than the Pre Test.

The results of the study showed that there was a significant improvement on motor variables and significant improvement found in middle childhood of school going children after eight weeks of minor games training. The results suggest beneficial effects of Minimum Muscular

strength and endurance and flexibility after four weeks of minor games programme. The study was supported by the findings of Ajeesh and Nair (2013), Flynn (2006), Kirchner and Gliner (1987) and Thomas (2004) who suggested that minor games and other recreational games were the important aspects for the development of physical fitness at school level. Minor games activity interventions do not cause harm and are associated with positive effects on physical fitness, such activities should continue and be encouraged by local public health unit staff to local schools and school boards.

5. Conclusions

Recognizing the limitations of the present study the following conclusions may be drawn:

- 1) The mean of Post - Test is higher than the Pre - Test.
- 2) There was a significant difference found in middle childhood minimum muscular strength of school going children.

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