

## Comparative Study of Physical Fitness between Punjab and Haryana Male Rural Elementary School Boys

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### Abstract

The purpose of this study was to compare the physical fitness of 1250 randomly selected elementary rural school boys of Punjab and Haryana state by conducting glover, 1962 physical fitness test battery. For the sample six hundred twenty five boys were taken from elementary rural schools of Punjab and six hundred twenty five from elementary rural schools of Haryana. The age of sample was 6-11 years. 't' test was employed to see the significance of mean differences between Punjab and Haryana rural elementary school boys. The findings of the study revealed that in legs power Punjab male elementary rural school boys were superior in age group of 8-9 years ( $t=2.07$ ) and 10-11 years ( $t=5.39$ ), but Haryana rural elementary school boys were superior to their Punjab counterparts in the age group of 9-10 years ( $t=5.12$ ). No significant differences were found at 0.05 level of significance in the age group of 6-7 years ( $t=1.21$ ) and 7-8 years ( $t=0.20$ ). In the age group of 6-7 years ( $t=4.22$ ), 7-8 years ( $t=4.93$ ), 8-9 years ( $t=3.61$ ), 9-10 years ( $t=3.13$ ) and 10-11 years ( $t=3.88$ ), the Haryana elementary rural school boys were found to be more agile than Punjab elementary rural school boys. In the abdominal muscular strength endurance Punjab elementary rural school boys were found more superior to Haryana school boys in age group of 6-7 years ( $t=2.76$ ) whereas, Haryana elementary rural school boys were found superior in age group of 9-10 years ( $t=2.33$ ) and 10-11 years ( $t=3.05$ ). No significant differences were observed in other age groups. In the shoulder girdle strength Punjab elementary rural school boys were found superior in age group of 6-7 years ( $t=2.96$ ) but Haryana elementary rural school boys were found superior than Punjab elementary rural school boys in age group of 7-8 years ( $t=4.13$ ), 8-9 years ( $t=2.51$ ), 9-10 years ( $t=7.10$ ) and 10-11 years ( $t=4.67$ ).

### INTRODUCTION

The term physical fitness became generally used during the late years of early 1940. These terms were applied to various capacities, which have been recognized for decades as part of the contributions of physical education objectives. While the term fitness and its usage were relatively new, the concept and its meaning to physical education were not new. Programs were modified to give more emphasis to the fitness and in many cases evaluative techniques were used. The basic concept of fit is that of an effective total response to work or activity of whatever intensity may be required. Need and level of fitness to every individual varies. The fit person is one who is free of limiting and debilitating ailment, who has the stamina and skill to the day's work and who has sufficient reserve of energy not only to meet emergencies but to provide a rest for leisure time living. Scott and French 1959. Quality school physical education programs educate young people about the essential nature of physical activity and its relationship to health, physical fitness and a more dynamic and productive life while providing them with the opportunity, skills knowledge and motivation to become and remain physically fit

(PCPFS,1087;AAHPERD,1988).Regular physical activity during childhood and adolescence is associated with improvement in numerous physiological and psychological variables(Barannowski et al 1992;Sallis and Patrick,1994).School physical education is the primary societal institution with responsibilities for promoting physical activity in youth, and 97% of primary school students take physical education (Ross and Gilbert 1985).observation revealed the physical education specialists provided students with only 3 minutes of moderate to vigorous physical activity per physical education class; that is less than 10%of class time (Simon-Morton et al 1993;Simon Morton et al 1994).This is far below the objective that children should be active at least 50% of physical education class time healthy people 2000.Well designed physical education programs have produces significant health benefits( Dwyer et al 1983;Siegel and Manfredi, 1984)

Run for health and sports for all which is the national policy can't come up until and unless we know the quality of human stuff one has to deal with .it is an established fact now that training for performance sports is a long term process and must begin in childhood (Lampart 1973;Harre 1979;Martin 1980;Dick 1980 and Mativeyew 1981).The science of growth and development has become an important sports science and can be studied from different aspects in order to exploit it maximally to enable the children and youth to achieve top level performance when they grow up. Actually motor development is the most important aspect which has direct implication for training and speed Flexibility and co-coordinative abilities can only be optimally developed in childhood (Stemmler 1976;Isreal 1976;Winter 1976 and Cratty 1979) .The study of motor development provides the scientific base for formulation and organization of training for children and youth.

Countries which are sports conscious and achieve higher ranking are in possession of valuable information regarding fitness of their children, as they have developed a system for spotting the talent. Fitness being a product of exercise and training has been shown through research to possess important implications in general health of children. The planner feels that a great deal has to be done for sports in country unless we begin at school and build the base at school level, particularly at primary school level.

So the present study has been planned to compare the physical fitness of Punjab and Haryana rural male primary school children.

#### PROCEDURE

The data was collected from 1250 male children belonging to Punjab N=625 and Haryana N=625 rural elementary schools boy. The age of the subject ranged from 6 to 11 years. The physical fitness of the subjects was assessed by conducting Glover's 1962 physical fitness test battery consisted of standing broad, shuttle run, sits-ups and seal crawl. The significance of mean difference between Punjab and Haryana elementary rural school boys were tested by applying 't' test.

## RESULTS

Computed 't' ratio to see the significance of differences, if any in means of Punjab and Haryana elementary rural school boys have been presented in table:

### **SIGNIFICANCE OF MEAN DIFFERENCE BETWEEN PUNJAB AND HARYANA RURAL MALE ELEMENTARY SCHOOL BOYS**

(AGE GROUP OF 6-11 YEARS) ON GLOVER'S (1662) PHYSICAL FITNESS TEST (N=125) EACH

ITEMS		6-7 years	7-8 years	8-9 years	9-10 years	10-11 years
Standing Broad jump (inches)	Punjab X	33.46+-6.31	42.80+-6.44	51.008+-4.93	51.06+-5.69	56.44+-6.45
	Haryana X	34.48+-7.18	42.97+-6.95	49.39+-7.56	54.85+-6.13	52.23+-6.01
	D	1.02	0.17	1.58	3.79	4.21
	SE	0.84	0.84	0.76	0.74	0.78
	't'	1.21	0.20	2.07* (PMR)	5.12* (HMR)	5.39* (PMR)
Shuttle Race (Sec)	Punjab X	48.96+-4.29	46.37+-3.36	44.29+-2.72	42.29+-3.28	41.40+-4.05
	Haryana X	46.85+-4.008	44.25+-3.54	43.06+3.005	41.16+-2.60	39.69+-3.05
	D	2.11	2.12	1.23	1.13	1.71
	SE	0.50	0.43	0.34	0.36	0.44
	't'	4.22* (HMR)	4.93* (HMR)	3.61*(HMR)	3.13* (HMR)	3.88* (HMR)
Sit-ups (No's)	Punjab X	7.63+-2.85	9.73+-2.63	11.55+-2.64	12.30+-3.12	13.72+-2.66
	Haryana X	7.36+-3.15	8.19+-3.16	11.17+-3.10	13.07+-2.49	14.82+-3.22
	D	0.27	0.94	0.38	0.77	1.10
	SE	0.36	0.34	0.34	0.33	0.36
	't'	0.75	2.76*	1.11	2.33*	3.05* (HMR)

			(PMR)		(HMR)	
SEAL CRAWL (sec)	Punjab X	15.08+-2.81	15.35+- 2.53	13.94+-2.34	12.87+- 2.80	11.05+-2.47
	Haryana X	16.003+- 2.38	13.86+- 3.30	13.11+-3.05	10.74+- 1.96	9.74+-2.24
	D	0.92	1.49	0.83	2.13	1.31
	SE	0.31	0.36	0.33	0.30	0.28
	't'	2.96* (PMR)	4.13* (HMR)	2.51* (HMR)	7.10* (HMR)	4.67* (HMR)

$t'_{.05} (248) = 1.97$

Analysis revealed that in legs power Punjab elementary rural school boys were superior in age group of 8-9 years ( $t=2.07$ ) and 10-11 years ( $t=5.39$ ) but Haryana elementary rural school boys were found superior to their Punjab counterparts in the age group of 9-10 years ( $t=5.12$ ). No significant differences were found at 0.05 level of significance in the age group of 6-7 years ( $t=1.21$ ) and 7-8 years ( $t=0.20$ ). In the age groups of 6 – 7 years ( $t=4.22$ ), 7-8 years ( $t=4.93$ ), 8-9 years ( $t=3.61$ ), 9-10 years ( $t=3.13$ ) and 10-11 years ( $t=3.88$ ), the Haryana elementary rural school boys were found to be more agile than Punjab elementary rural school boys. In abdominal muscular strength endurance Punjab elementary rural school boys were found superior to Haryana elementary rural school boys in age group of 7-8 years  $t=2.76$ , whereas Haryana elementary rural school boys were found superior in age groups of 9-10 years ( $t=2.33$ ) and 10-11 years ( $t=3.05$ ). No significant differences were observed in other age of groups. In shoulder girdle strength Punjab elementary rural school boys were found superior in age group of 6-7 years ( $t=2.96$ ) but Haryana elementary rural school boys were found superior than Punjab elementary rural school boys in age groups of 7-8 years ( $t=4.13$ ), 8-9 years ( $t=2.51$ ), 9-10 years ( $t=7.10$ ) and 10-11 years ( $t=4.67$ ).

## DISCUSSION

From the finding of the study it was conducted that in legs power Punjab elementary rural school boys were superior in age group of 8-9 years and 10-11 years, but Haryana elementary rural school boys were found superior to their Punjab counterparts in the age group of 9-10 years. No significant differences were observed in other age groups, Haryana elementary rural school boys were superior in agility to their Punjab rural counterparts in all the age groups. In the abdominal muscular strength endurance Punjab elementary rural school boys were found superior to Haryana elementary rural school boys in age group of 7-8 years whereas, Haryana elementary rural school boys were found superior in age group of 9-10 years and 10-11 years. No significant differences were observed in other age groups. In shoulder girdle strength Punjab elementary rural school boys found superior in age group of 6-7 years, but Haryana elementary rural school boys

were found superior than Punjab elementary rural school boys in other age groups. The findings of the study show that neither the different age groups nor the physical fitness parameters were found significant either in case of Punjab elementary rural school boys or Haryana elementary rural school boys. The results of the study were in line with earlier studies conducted by Meyers (1968); Cob(1972) and Robertson (1974).

## CONCLUSIONS

1. In legs power Punjab rural school boys were superior to their Haryana rural counterparts in age group of 8-9 years and 10-11 years, but in age group of 9-10 years Haryana rural school boys were better than their Punjab rural school boys. No significant differences were observed in other age groups.
2. Haryana elementary rural school boys were superior in agility to their Punjab rural counterparts in all the age groups.
3. Punjab rural school boys were superior in the abdominal muscular strength endurance than their Haryana rural school boys in the age group of 7-8 years, but in age group of 9-10 years and 10-11 years Haryana rural school boys were better than their Punjab rural school boys. No significant differences
4. In shoulder girdle strength Punjab rural school boys in age groups of 6-7 years performed better than Haryana rural school boys. However, in the other age groups Haryana elementary rural school boys were better than their Punjab rural counterparts.

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