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Analysis of physical growth on specific fitness training among tribal and non-tribal school boys

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Abstract

The purpose of this study was to find out the analysis of physical growth on specific fitness training among tribal and non-tribal school boys. To achieve the purpose of the present study, one hundred tribal and non-tribal school boys were selected as subjects from Karnataka state at random. Their ages ranged from and 12-14 years. The selected variables were height, weight and chest girth. The collected data on criterion measures were treated by stadiometer for height, weighing machine for weight and measuring tape for chest girth. The collected data were statistically analyzed by t ratio, one ways analysis of variance test was applied and the level of significance for the study was 0.05 level. The results revealed that there was significant difference in the height, weight and chest girth of school boys. There was significant difference exist in their interaction effect in the height, weight and chest girth level among tribal and non-tribal school boys.

Keywords: Tribal and non-tribal school boys. Height, weight and chest girth

1. Introduction

A tribe is viewed, developmentally or historically, as a social group existing before the development of, or outside, states. A tribe is a group of distinct people, dependent on their land for their livelihood, who are largely self-sufficient, and not integrated into the national society. It is perhaps the term most readily understood and used by the general public. Stephen Corry, director of Survival International, the world's only organisation dedicated to indigenous rights, defines tribal people as those who have followed ways of life for many generations that are largely self-sufficient, and are clearly different from the mainstream and dominant society." This definition, however, would not apply in countries in the Middle East such as Iraq, where the entire population is a member of one tribe or another, and tribalism itself is dominant and mainstream.

There are an estimated one hundred and fifty million tribal individuals worldwide, constituting around forty percent of indigenous individuals. Although nearly all tribal people are indigenous, some are not indigenous to the areas where they now live. The distinction between tribal and indigenous is important because tribal peoples have a special status acknowledged in international law. They often face particular issues in addition to those faced by the wider category of indigenous peoples. Many people used the term "tribal society" to refer to societies organized largely on the basis of social, especially familial, descent groups (see clan and kinship). A customary tribe in these terms is a face-to-face community, relatively bound by kinship relations, reciprocal exchange, and strong ties to place. Tribe is a contested term due to its roots of being defined by outsiders during the period of colonialism. The word has no shared referent, whether in political form, kinship relations or shared culture. Some argue that it conveys a negative connotation of a timeless unchanging past. To avoid these implications, some have chosen to use the terms "ethnic group", or nation instead.

Non-Tribal or Indigenous peoples, also known as first peoples, aboriginal peoples, native peoples, or autochthonous peoples, are ethnic groups who are descended from and identify with the original inhabitants of a given region, in contrast to groups that have settled, occupied or colonized the area more recently. Groups are usually described as indigenous when they maintain traditions or other aspects of an early culture that is associated with a given region. Not all indigenous peoples share these characteristics. Indigenous peoples may be either settled in a given locale /region or exhibit a nomadic lifestyle across a large territory, but are

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generally historically associated with a specific territory on which they depend. Indigenous societies are found in every inhabited climate zone and continent of the world. Since indigenous peoples are often faced with threats to their sovereignty, economic well-being, and their access to resources on which their cultures depend, a special set of political rights in accordance with international law have been set forth by international organizations such as the United Nations, the International Labour Organization and the World Bank. The United Nations has issued a Declaration on the Rights of Indigenous Peoples to guide member-state national policies to collective rights of indigenous people such as culture, identity, language, and access to employment, health, education, and natural resources. Estimates put the total population of indigenous peoples from 220 million to 350 million.

2. Objective of the Study

The study will help to know the difference among the groups and find out the analysis of physical growth on specific fitness training among tribal and non-tribal school boys

2.1 Hypothesis

1. It was hypothesized that specific fitness training would significantly improve the physical growth on height, weight and chest girth among the tribal school boys.

2. It was hypothesized that specific fitness training would significantly improve the physical growth on height, weight and chest girth among the non-tribal school boys.
3. To compare the mean difference among tribal school boys and non-tribal school boys due to specific fitness training.

3. Methods and Materials

The purpose of this study was to find out the analysis of physical growth on specific fitness training among tribal and non-tribal school boys. To achieve the purpose of the present study, tribal and non-tribal boys were selected as subjects from Karnataka state at random. Their ages ranged from and 12-14 years. The selected variables were height, weight and chest girth. The collected data on criterion measures were treated by stadiometer for height, weighing machine for weight and measuring tape for chest girth. The collected data were statistically analyzed by t ratio, one ways analysis of variance test was applied and the level of significance for the study was 0.05 level. The collected data were statistically analysed by one way analysis of variance test was applied. The level of significance for the study used was 0.05 level. Wherever significant differences were found scheffe’s post-hoc test was used.

4. Results and Discussion

Table 1: The Tabulation Shows the Mean Values between Pre and Post Test of Physical Growth on Specific Fitness Training among Tribal School Boys of South Karnataka State

Variables	Test	Mean	S.D	S.E.M	M.D	T-Ratio
Height in Centimeters	Pre test	150.52	7.71	1.54	2.28	14.535*
	Post test	152.80	7.86	1.57		
Weight in Kilograms	Pre test	37.96	5.98	1.19	2.08	11.427*
	Post test	40.04	5.87	1.17		
Chest Girth in Centimeters	Pre test	65.88	4.59	0.91	1.64	10.830*
	Post test	67.52	4.57	0.91		

0.05 level of significance ()

Table 2: The Tabulation Shows the Mean Values between Pre and Post Test of Physical Growth on Control Group among Tribal School Boys of South Karnataka State

Variables	Test	Mean	S.D	S.E.M	M.D	T-Ratio
Height in Centimeters	Pre test	149.60	9.74	1.94	0.12	2.00
	Post test	149.72	9.67	1.93		
Weight in Kilograms	Pre test	37.66	6.29	1.25	0.13	1.875
	Post test	37.79	6.27	1.25		
Chest Girth in Centimeters	Pre test	65.96	3.00	0.60	0.12	1.809
	Post test	66.08	3.10	0.62		

Table 3: The Tabulation Shows the Mean Values between Pre and Post Test of Physical Growth on Specific Fitness Training among Non-Tribal School Boys of South Karnataka State

Variables	Test	Mean	S.D	S.E.M	M.D	T-Ratio
Height in Centimeters	Pre test	157.44	8.75	1.75	3.64	14.807*
	Post test	161.08	8.01	1.60		
Weight in Kilograms	Pre test	41.71	11.08	2.21	2.56	10.872*
	Post test	44.28	11.10	2.22		
Chest Girth in Centimeters	Pre test	68.48	7.13	1.42	3.08	15.962*
	Post test	71.56	7.14	1.42		

Table 4: The Tabulation Shows the Mean Values between Pre and Post Test of Physical Growth on Control Group among Non- Tribal School Boys of South Karnataka State

Variables	Test	Mean	S.D	S.E.M	M.D	T-Ratio
Height in Centimeters	Pre test	157.16	9.32	1.86	0.12	1.809
	Post test	157.28	9.35	1.87		
Weight in Kilograms	Pre test	41.55	10.25	2.05	0.02	1.186
	Post test	41.57	10.24	2.04		
Chest Girth in Centimeters	Pre test	68.84	6.98	1.39	0.12	1.809
	Post test	68.96	7.06	1.41		

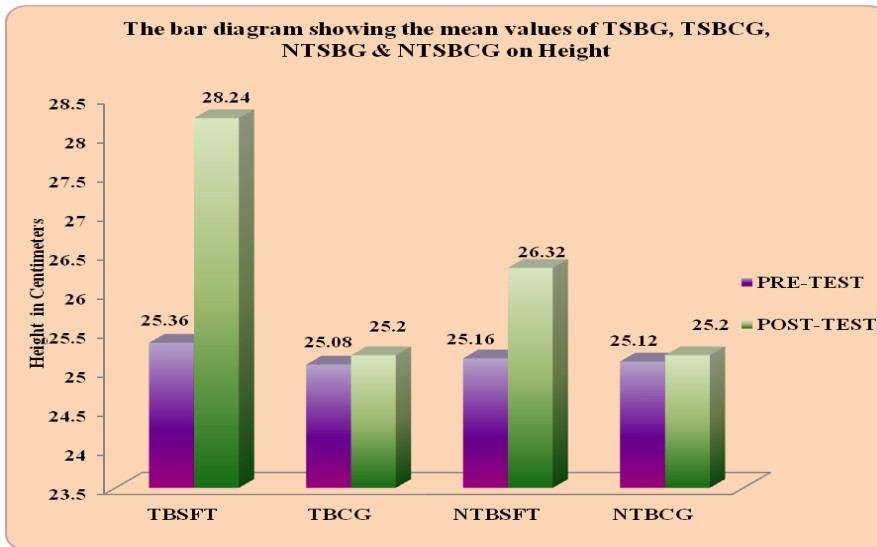


Fig 1

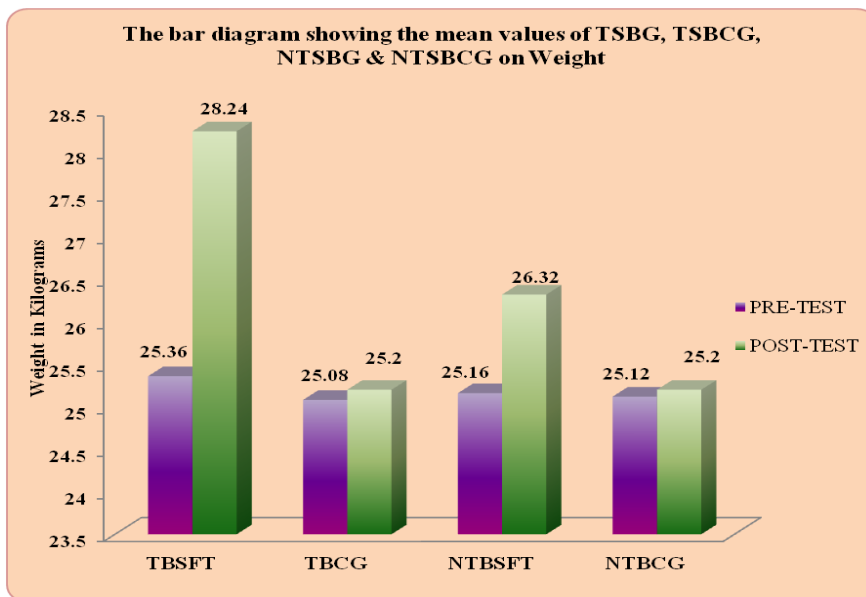


Fig 2

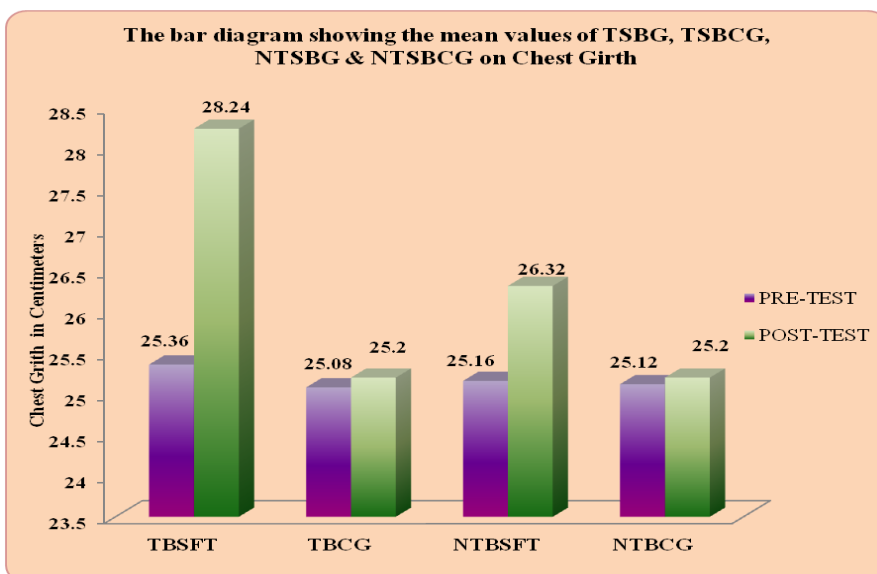


Fig 3

Table 5: Analysis of Variance on Pre Test Mean Values among the TBSFT, TBCG, NTBSFT & NTBCG on Selected Specific Fitness Variables of School Boys of South Karnataka State

Variables	Source of Variance	Sum of Squares	DF	Mean Square	F	Sig.
Height in Centimeters	Between	1322.00	3	440.66	5.54	0.001
	Within	7635.76	96	79.53		
Weight in Kilograms	Between	366.63	3	122.21	1.61	0.192
	Within	7284.74	96	75.88		
Chest Girth in Centimeters	Between	189.39	3	63.13	1.94	0.127
	Within	3115.20	96	32.45		

Table 6: Analysis of Variance on Post Test Mean Values among the TBSFT, TBCG, NTBSFT & NTBCG on Selected Specific Fitness Variables of School Boys of South Karnataka State

Variables	Source of Variance	Sum of Squares	DF	Mean Square	F	Sig.
Height in Centimeters	Between	44896.44	3	14965.48	0.75	0.520
	Within	1891960.75	96	19707.92		
Weight in Kilograms	Between	556.34	3	185.44	2.45	0.068
	Within	7253.23	96	75.55		
Chest Girth in Centimeters	Between	409.71	3	136.57	4.15	0.008
	Within	3154.70	96	32.86		

Table 7: Analysis of Co-Variance on Pre and Post Test Mean Values among the TBSFT, TBCG, NTBSFT & NTBCG on Selected Specific Fitness Variables of School Boys of South Karnataka State

Variables	Source of Variance	Sum of Squares	DF	Mean Square	F	Sig.
Height in Centimeters	Between	61379.24	3	20459.74	1.04	0.377
	Within	1862459.96	95	19604.84		
Weight in Kilograms	Between	129.26	3	43.08	72.46	0.000
	Within	56.49	95	0.59		
Chest Girth in Centimeters	Between	151.02	3	50.34	115.57	0.000
	Within	41.38	95	0.43		

Table 4.8: The Scheffe’s Post Hoc Test for the Differences between Adjusted Post Test Means of TBSFT, TBCG, NTBSFT & NTBCG on Height

TBSFT	TBCG	NTBSFT	NTBCG	M.D Difference	Confidence Interval Value
159.019	150.540	---	---	8.47	112.991
159.019	---	153.689	---	5.33	112.991
159.019	---	---	150.440	8.579	112.991
---	150.540	153.689	---	3.149	112.991
---	150.540	---	150.440	00.1	112.991
---	---	153.689	150.440	3.249	112.991

* Significant at 0.05 level of confidence

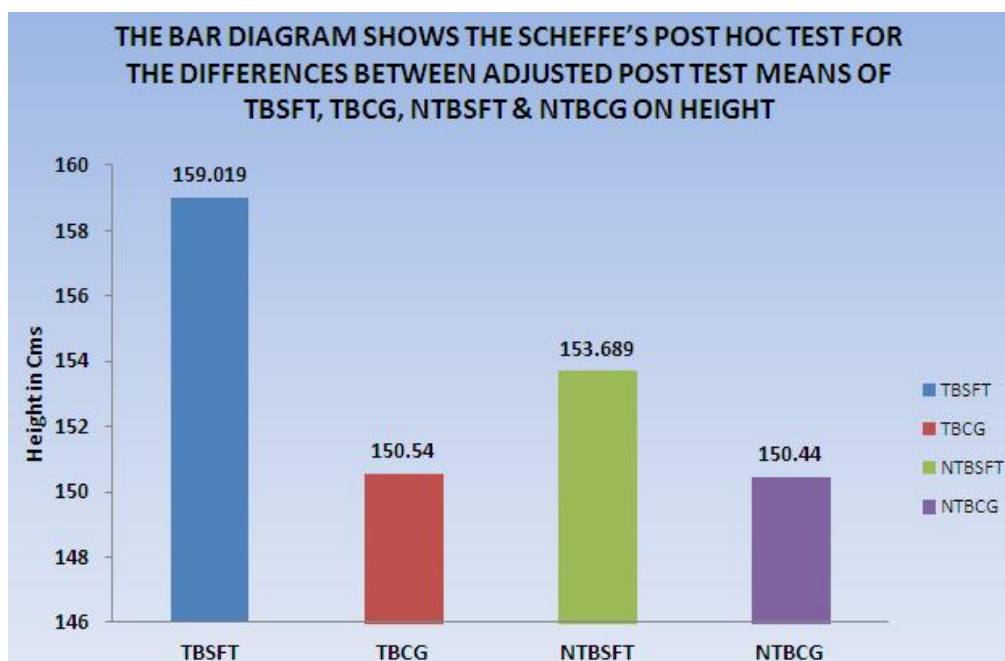


Fig 4

Table 4.9: The Scheffe’s Post Hoc Test for the Differences between Adjusted Post Test Means of TBSFT, TBCG, NTBSFT & NTBCG on Weight

TBSFT	TBCG	NTBSFT	NTBCG	Mean Difference	Confidence Interval Value
41.790	39.845	---	---	1.945	0.615
41.790	---	42.301	---	0.511	0.615
41.790	---	---	39.756	2.034	0.615
---	39.845	42.301	---	2.456	0.615
---	39.845	---	39.756	0.089	0.615
---	---	42.301	39.756	2.545	0.615

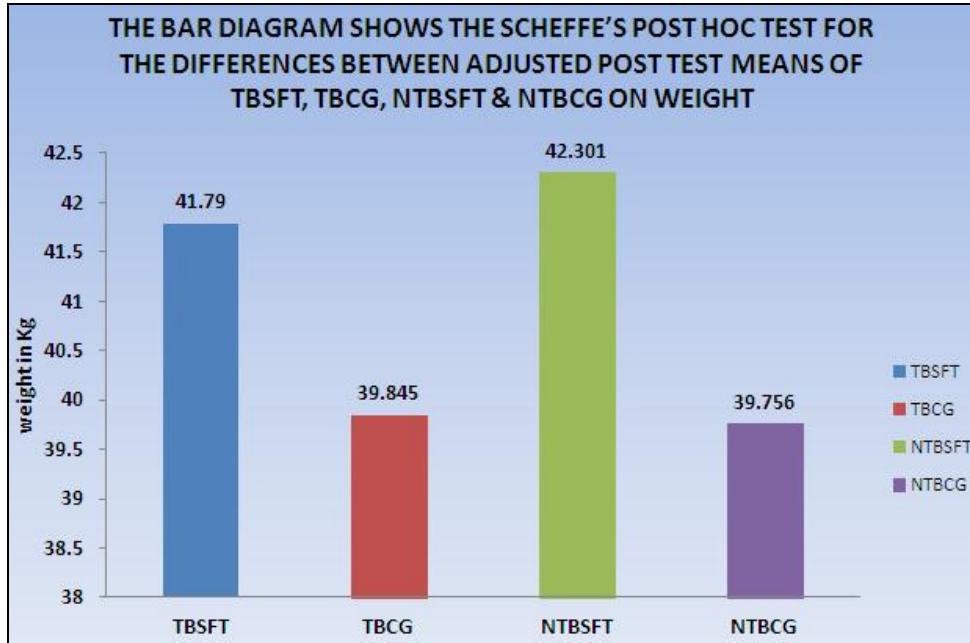


Fig 5

Table 4.10: The Scheffe’s Post Hoc Test for the Differences between Adjusted Post Test Means of TBSFT, TBCG, NTBSFT & NTBCG on Chest Girth

TBSFT	TBCG	NTBSFT	NTBCG	Mean Difference	Confidence Interval Value
68.930	67.410	---	---	1.52	0.529
68.930	---	70.370	---	1.44	0.529
68.930	---	---	67.410	1.52	0.529
---	67.410	70.370	---	2.96	0.529
---	67.410	---	67.410	0	0.529
---	---	70.370	67.410	2.96	0.529

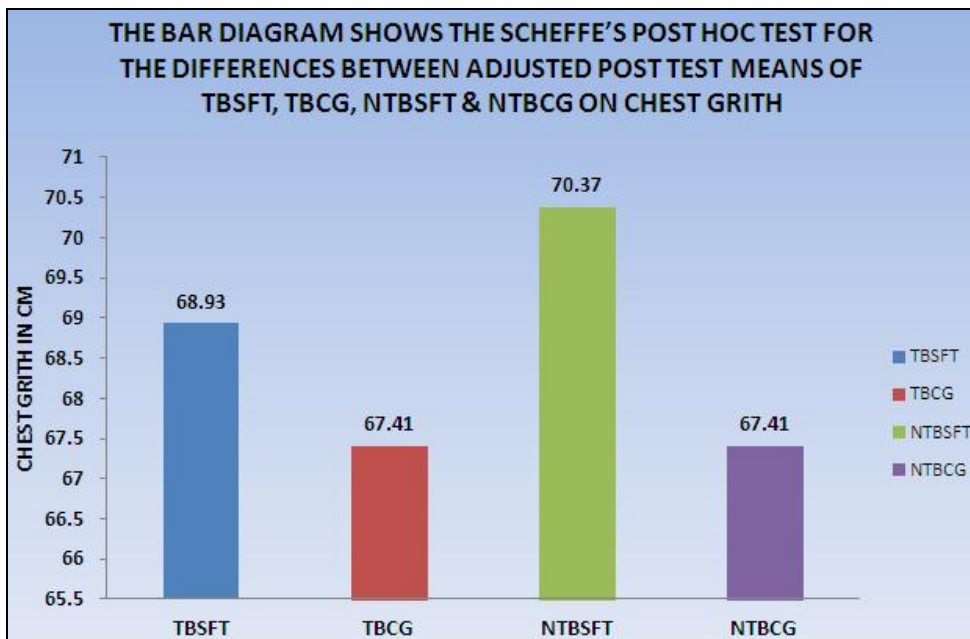


Fig 6

5. Results

1. The result of the study showed that tribal school boys showed significant improvement on height, weight and chest girth among the school boys.
2. The result of the study showed that non-tribal school boys showed significant improvement on height, weight and chest girth among the school boys.
3. The result of the study showed that tribal school boys showed significant improvement on height, weight and chest girth better than among the school boys.

6. Conclusions

1. It was concluded that tribal school boys showed significant improvement on height, weight and chest girth among the school boys.
2. It was concluded that non-tribal school boys showed significant improvement on height, weight and chest girth among the school boys.
3. It was concluded that tribal school boys showed significant improvement on height, weight and chest girth better than among the school boys.

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