

A Comparative Study of Selected Physical Fitness between Tribal and Non-Tribal High School Boy Students in Kodagu District

OPEN ACCESS

Volume: 12

Special Issue: 1

Month: October

Year: 2024

E-ISSN: 2582-0397

P-ISSN: 2321-788X

Impact Factor: 3.025

Citation:

Raghavendra, M., et al.
“A Comparative Study of Selected Physical Fitness between Tribal and Non-Tribal High School Boy Students in Kodagu District.”
Shanlax International Journal of Arts, Science and Humanities,
vol. 12, no. S1, 2024,
pp. 199–203.

DOI:

<https://doi.org/10.34293/sijash.v12iS1-i2-Oct.8408>

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Abstract

To reach the goal of this investigation was to find out whether there was a significant difference of selected physical fitness ability between the high school boy students of tribal (TB) and Non-tribal (Non-TB) in kodagu district. Total ninety-six ($n=96$) samples has chosen through the technique of purposive sampling for the tribal students ($n=48$) and simple random technique for the students of non-tribal ($n=48$), the aged between 13 – 15 years in 2023-24th academic years. With the literature support, this study was taken point out their physical fitness components such as Leg-explosive Strength (ST) and Flexibility for investigation. The Standing broad jump (SBJ) and sit & reach (S & R) flexibility test was exercised to assess the variables. After collection of the data with systematic manner, the ANOVA technique was exercised which was considered appropriate to identify the significant variations of selected variables between the sample of TB and Non-TB. The significant level was fixed at 0.05 %. The results was indicated that selected tribal secondary school students had more mean score of explosive ST than the students of non-tribal ($f=4.05; p=0.05<$). In the meanwhile, the ability of flexibility was higher in students of non-tribal than the tribal which is shows the statistical similarities. In other words, there was no significant difference at 0.05% between these kinds of students in this study. The present investigation suggested and recommended that if tribal students get opportunities in strength based sports events, they can give excellent performance than non-tribal students.

Keywords: Tribal, Non-tribal, Physical Fitness, Flexibility, Explosive Strength

Introduction

Physical movement in the kind of sports, activity, if engage every day have a positive effect on our internal various systems. This fitness and physical activity are closely associated with each other. Conditional fitness is too important and essential to every individual those one who are desire to participate in sports and games. Because, it is one of the determining key factor to the sports persons to become more successful an activity and increase their achievement in any competitive sports. When the individual's fitness increased, can help him to become more enthusiast during an activity feel more boosted after the sport event. And it can also help to the persons one who involve in the sports for prevent the chronic and acute injuries.

There are different types of tribes are found in Karnataka state. According to the 2011 senses, they are considering only 6.95 % of population. Almost the tribals are residence at forest area which area was not sophisticated and facilitated to fulfil their basic needs like food and nutrition, house, health-based facilities and other. They are far away from the modern civilization. The tribes are very famous for own arts and crafts like wooden work, bamboo crafts, weaving, carpentry works, Forming, Fishing, Hunting are major professional work of them. Their very low socio-economic status leads to engage everyone in laborious work with their children those who drop the school to get there needs and they are comes under low fat percentage (Ray, Drishan,1979). But they have a great chance to away from environment pollutions which are affect by modern civilization. The natural food forming is reaching very easily their hand than the urban peoples. Many studies were recommended to the government body about the tribal populations and their life style to take them from the mute area and added to the normal populations. The government also facilitating to develop and grown equally with the urban populations.

The area to reach all children from an early age to stimuli their development is at school. The elementary schools are presently play a vital in the searching and improvement of gifted athletes; there children are having remedial teaching opportunity in academic programme which is opening the chances for essential improvement. When they are older stage, these children should get optimum developmental chances for talent selection team. This could be give an vital boost by progressing and applying academic plans which designed for new talented children to enhanced their moment skills which are fundamental.

The individuals always having inner connections with their environment to develop themselves. So, the environment is always rolling vital in enhancing the personal characteristics, specially it is in training and learning ((Bloom B S et. al., 1985).Hence, the researcher was interested to conduct a study of comparison of selected physical fitness ability between TB &non-TB high school boy students in Kodagu district.

Objective

To verify the sleeted physical fitness ability in-between high school boy students tribal (TB) and non-tribal (Non-TB)in Kodagu District.

Hypothesis

There is a statistical significant difference of selected physical fitness ability between TB and Non-TB high school boy students in Kodagu district.

Methodology

The aim of the investigation to know the status of Flexibility and Strength abilities through the examination of SBJ test for leg explosive strengths and sit & reach test for flexibility (Clark David H. and Clark H Harison, 1993) among TB and Non-TB boy students of Kodagu district. The total size of samples for the study has been considered based on the availability of secondary level male students of TB. The researcher has selected total ninety-six (N=96) samples with appropriate sampling techniques for this investigation. The purposive sampling techniques was exercised to select the TB samples with the size of forth eight (N=48), and simple random sample technique was also exercised to select the Non-TB samples size of forty eight (N=48), the aged between 13 to 15 years of 2023-24th academic. With the literature support, this study was taken point out their physical fitness components such as Leg-explosive Strength (ST) and Flexibility for investigation. The Standing broad jump (SBJ) and sit & reach (S & R) flexibility test was exercised to assess the variables. Analysis of Variance (ANOVA) technique was exercised which

was considered appropriate to identify the significant variations of selected variables between the sample of TB and Non-TB. The significant level was fixed at 0.05 %.

Results

The statistical analysis of data and revealed the following findings which have been presented in table 1 to 3.

Table 1 Reveled the Descriptive Statistics on the Ability of Leg Explosive ST & Flexibility among Secondary Level School Boy Students of TB and Non-TB in Kodagu District

Students	Variables	N	Min.	Max.	Mean	SD	Sd. Error
Tribal Students	Leg Ex. St.	48	1.36	5.58	2.00	0.60	0.09
	Flexibility	48	8.00	37.00	24.85	6.80	0.98
Non- Tribal	Leg Ex. St.	48	1.22	2.48	1.81	0.28	0.04
	Flexibility	48	8.00	39.00	25.42	6.91	1.00

Table no. 1; express the descriptive statistics on leg explosive STand flexibility ability of TB and Non-TB Students in kodagu district. The mean score of leg explosive STand flexibility for tribal and Non-TB Students is 2.00, 1.81 and 24.85, 25.42 respectively. Their respective standard deviations are 0.60, 0.28, and 6.80, 6.91. Their minimum and maximum sores are 1.36, 8.00, 1.22 and 8.00, and 5.58, 37.00, 2.48 and 39.00 respectively. The result indicated that the TB students had more leg explosive STthan the Non-TB students. And also the better flexible ability has shown in Non-TB Students than the TB students.

Table 2 Shows the Significant Deference of Selected Physical Fitness Components among Secondary Level School Boy Students of TB and Non-TB in Kodagu Districts

ANOVA		SS	df	MS	Mean Dif.	F	P-value	F crit
Leg Explo- sive st.	Source of Variation							
	Between Groups	0.88	1.00	0.88	0.19	4.05	0.0469	3.94
	Within Groups	20.49	94.00	0.22				
Total	21.37	95.00						
Flexibility	Between Groups	7.59	1.00	7.59	0.57	0.16	0.69	3.94
	Within Groups	4419.65	94.00	47.02				
	Total	4427.24	95.00					

In above table 2, the statistical analysis of One-way ANOVE which revealed a significant variation of leg explosive STbetween TB and Non-TB students. The result shows that the tribal students have more leg explosive STthan the Non-TB students. The 'f' value of 4.05 (p= < 0.05) shows that there is a significant mean differences of leg explosive STbetween the two groups of students. In case of flexibility the Non-TB boy high school students are more flexibility level and TB students are less flexibility when compare with each other. So, above the result clearly indicated that there is a very minor variation was established between the samples. But, the significant value is more than the 0.05 % which is not significantly difference between the group (f=0.16, p=0.69).

Table 3 Shows that the Scheffe’s Post Hoc Result on Leg Explosive ST and Flexibility Scores

Variables	Tribal	Non-Tribal	Mean Dif.	Sig.
Leg Ex. St.	2.00	1.81	0.19	0.05
Flexibility	24.85	25.42	0.57	0.16

Above the table confirms the pair wise comparison of leg explosive ST among high school students of TB and Non-TB category. The consequence originated that there was significant dissimilarity in the LES between two categories of students (MD=0.19; P=0.05) which was higher value than the critical difference. Whereas, in the case of flexibility, there is no significant mean variations among two groups (MD=0.57; P=0.16). Because of both the group students had good and equal level of flexible ability. In other words, there is a significant similarity of flexibility among TB and Non-TB groups was agreed at 0.05% confidence. The graphical presentation for the same has been presented in below the Figure for better understanding of the results.

Similarity of mean scores of selected physical fitness variables among secondary level school boy students of TB & Non-TB.

Discussion

It was mentioned in the hypothesis that there may be a significant deference of selected physical fitness due to the influence of nature of residential status. This findings were indicated the hypothesis which state that the different residential status might be influence on level of selected fitness ability such as leg explosive ST to be significant difference among TB and Non-TB students. And also the other factors like genetic factor, the socio - economic condition, due to the poor relationship with modern technology and also they are engaging in labor work, hunt of their daily livings might influenced to be there is a significant variation among TB and Non-TB Students (Devi, Satya. A, 2000, Haider, 1987). Hence, the hypothesis was strongly accepted at 0.05% level of confidence. The previous studies also concluded that the TB populations were better physical fitness ability than the Non-TB populations (Bakshi, B.K, 2001). Another one study was concluded that the Muscular explosiveness of the tribal boys was higher than the non-tribal boys (Dahl. E et. al., 1993). Bakshi B.K, was explored on physical fitness of secondary level school boy students (N=1200) which drawn from high altitude. In their study, the Non-TB students were had less Explosive ST of legs than the TB boys.

Whereas the Flexibility, the Non-TB Students are better than the TB students which was not reached up to the significant level. This result indicated that, our hypothesis which states that there is a significant mean difference of selected Physical fitness ability between TB and Non-TB high school boy students in kodagu district was rejected and Nul-hypothesis was accepted at 0.05% level of confidence. The previous findings also concluded that the Non-TB boys were better in extending flexibility than the TB boys (Devi & Satya, 2000). In this study, there is a mean variation between said samples. But, there is no significant variation was found between them. In other words, all students were having similar level of flexibility in kodagu districts. So, these findings are agreed with previous studies (Ray & Drishn, 1979), the experts also, accepted these results as a valued. Hence, this study reviled the fact based result which is strengthening the results of the previous studies.

Conclusion

On the basis of this study, the researcher has concluded that the tribal students are more leg explosive ST ability when compare with non-tribal students. And the flexibility ability was distributed equally in both TB and Non-TB students. Hence, the TB high school boy students had

well enough with selected physical fitness components. And, the present investigation suggested and recommended that if tribal students get opportunities in strength based sports events, they can give excellent performance than non-tribal students (Haider et.al. 1987).

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