

## A STUDY OF POSTURAL ASSESSMENT ON TRIBAL & NON-TRIBAL OF CHHATTISGARH

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### Abstract:

*Proper alignment of body and its segments is Posture. Balanced alignment provides a body appearance which when viewed from the side, is vertical rather than zigzag, the various body masses joining smoothly in symmetry. The erect position is maintained by a constant effort to overcome the force of gravity, which all the time tends to pull the body forward, but deviation from the alignment may cause various physical difficulties. Disproportion in height and weight, disturbance of physiological functions, nutritional faults and physical stresses on the growing skeleton all may affect the growth and development of a child. New York state posture rating test (1966) was used for the present study, in which all the 13 areas of the body were evaluated fewer than three profiles. The examinee stands on a line in front of screen and a plumb line is suspended just in front of the line. Total 207 subjects were selected for the present study, consisting of 107 (tribal) from various Vanvasi Ashram of C.G., 100 (non-tribal) from various schools of Raipur. For all the 13 categories scoring was distributed in three profiles which score as 5, 3 and 1. Descriptive analysis was done in computer program MS Excel. After analysis it was found that significant difference was found between the posture of tribal and non-tribal players and it was concluded that maximum number of players belonged to mark 55 to 60. However, when tribal and non-tribal were compared, non-tribal showed better posture position than tribal.*

### KEYWORDS:

TRIBAL, NON-TRIBAL, POSTURE

### INTRODUCTION

The performance depends not only on physiological patterns but also on principles of controls, support and release in the domain of applied kinesiology. We analyze the body movement pattern and rectify the defective stance, move and application of force. The good posture helps for rights application of force in games situation. The posture is the product of evolutionary process. The erect posture has many effects on muscular formation circulatory process and mechanical aspects of the force application, which have to confirm to the basic laws of physics. The explosive strength generated throughout the body especially from thighs, stomach, hips, neck and hands are important for execution of various sport skills. The knowledge of correct posture to the physical education teacher or coach in correcting the postural defects is important for children in schools. There must be record of the defects of posture of every child in the schools, which can be rectified through practice, corrective and curative exercises which will improve his or her efficiency in the execution on the play fields or in the production.

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### HYPOTHESIS

It is hypothesized that there shall be significant difference in the postural state of tribal and non-tribal players.

### Delimitation

1. The study was delimited to the boys of age 13-18 undergoing school education.
2. The study was further delimited to assessment of postural state by using New York Posture Rating Test (1966).

### Limitation

Various geographic variability in living condition of subjects residing in various tribal and non-tribal areas of Chhattisgarh belonging to different socio-economic status. Variations in life cycle, daily routine of a child, nutritional habit of subject might be considered as some of the limitations of this research study.

### Methodology

In this chapter, selection of subjects, administration of test, and statistical techniques employed for analyzing the data.

### Selection of Subject

For the present study, total 207 boys were selected from various districts of Chhattisgarh, out of which 107 tribal subjects were from Vanvasi Ashram of Chhattisgarh and 100 subjects were from various public schools of Raipur.

### Tools

These players were assessed by using New York Posture Rating Test (1966).

### Statistical Techniques

Descriptive methods where mean for each category were calculated. Comparative analysis was done by applying t-test to find difference between two groups under this study.

### RESULTS:

**Table No. 1**  
Scores of different Positions of Postural Assessment of Tribal and Non-Tribal

Position	Tribal						Non-Tribal					
	5 Marks	%	3 Marks	%	1 Mark	%	5 Marks	%	3 Marks	%	1 Mark	%
1	88	82.50	17	15.89	2	1.87	75	75	23	23	3	3
2	88	82.24	19	17.76	0	0	55	55	42	42	3	3
3	56	52.34	51	47.66	0	0	82	82	18	18	0	0
4	90	84.11	17	15.89	0	0	85	85	15	15	0	0
5	40	37.38	64	59.81	3	2.8	81	81	10	10	9	9
6	87	81.31	14	13.08	6	5.61	93	93	7	7	0	0
7	9	83.18	178	15.89	1	0.93	80	80	17	17	3	3
8	53	49.53	50	46.73	4	3.74	93	93	7	7	0	0
9	81	75.70	23	21.5	3	2.8	81	81	8	8	11	11
10	76	71.03	28	26.17	3	2.8	96	96	3	3	1	1
11	70	65.42	34	31.78	3	2.8	62	62	38	38	0	0
12	94	57.85	13	12.15	0	0	84	84	16	16	0	0
13	86	80.37	20	18.69	1	0.93	75	75	25	25	0	0

**Table No. 2**  
**Marks obtained by Tribal and Non-Tribal Players on Postural Assessment**

S.No.	Tribal		Non-Tribal	
	Marks	No. of Players	Marks	No. of Players
1	45 – 50	4	45 – 50	0
2	50 – 55	19	50 – 55	6
3	55 – 60	63	55 – 60	61
4	60 – 65	21	60 – 65	33

Cumulative score obtained by tribal and non-tribal player are given in table no. 2, the score obtained by subjects are classified into four category. Which indicate that for maximum range of marks i.e. 60-65, 21 tribal and 33 non-tribal subjects fall in this category. And maximum subject i.e. 63 tribal and 61 non-tribal scores between 55-60 marks. This result indicates that there was not marked deviation in various postural positions in boys of the two group under study. 45-50 in the lowest score of tribal whereas no non-tribal fall in this range. In range 50-55 mo. of tribal players is 19 and 6 non-tribal.

**Table No. 3**  
**Difference of Scores on Posture Position**

Tribal		Non-Tribal		t <sup>1</sup>	P Value
Mean ± SE	SD	Mean ± SE	SD		
56.73 ± 3.69	3.82	58.94 ± 2.87	2.877	4.71	2.277

The present study shows significant difference between the postural state of Tribal and Non-tribal players. But most of the players belonged to good posture category. It may be due to the fact that the, players are engaged in proper and systemic physical activity and are fit and have good muscle tone, strength and balance.

Better posture position of non-tribal may also attribute to the fact that the non tribal players have batter environment condition and awareness regarding posture. The social economic status and life style may be the reason for deviation from good posture of non-tribal.

#### CONCLUSIONS

1. The mean score of all the 13 categories indicates that 71.74% tribal players and 78.94% non-tribal players scored 5 marks.
2. 3 marks were scored by 26.38% tribal players and 18.82% non-tribal players.
3. 1 mark was scored by 1.86% tribal players and 2.22% non-tribal players.
4. The significant difference in tribal and non-tribal players on cumulative score shows that non-tribal subjects scored higher marks than tribal.