

Comparative Analysis of Postural Deformities between School Boys Participating and Non-Participating in Sports Activities

¹Dr.P.Manikandan & ²Dr.S.Sethu

¹Assistant Professor (T), Dept. of Physical Education and Sports, Manonmaniam Sundaranar University, Tirunelveli (India)

²Assistant Professor, Dept. of Physical Education and Sports, Manonmaniam Sundaranar University, Tirunelveli (India)

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*Corresponding Author

Email: [sprmanimped\[at\]gmail.com](mailto:sprmanimped[at]gmail.com)

ABSTRACT

The purpose of the study was to find out the Comparative Analysis of Postural Deformities between School Boys participating and Non-participating in Sports Activities. To achieve the purpose of the study, 300 School boys' (150 Sports Activities boys and 150 Non-participate Sports Activities boys) students were selected as subjects randomly from Tirunelveli District, Tamilnadu. The age of the subjects were ranged from 8-13 years.

The following variables were be chosen to analysis the posture in Side view 3 parts only they are Neck, Chest, Shoulder. The experimental procedure for this study was static group comparison design. The data collected from the two groups on selected variables such as posture were statistically examined for significant differences, if any applying the Descriptive Statistics. There was significant difference on posture between school boys participating and non participating in sports activities. School Boys participating person had good posture compared to nonparticipation in sports activities.

1. Introduction

In humans, posture can provide a significant amount of important information through nonverbal communication. Psychological studies have also demonstrated the effects of body posture on emotions. This research can be traced back to Charles Darwin's studies of emotion and movement in humans and animals. Currently, many studies have shown that certain patterns of body movements are indicative of specific emotions. Researchers studied sign language and found that even non-sign language users can determine emotions from only hand movements. Another example is the fact that anger is characterized by forward whole body movement. The theories that guide research in this field are the self-validation or perception theory and the embodied emotion theory. Poor posture is the posture that results from certain muscles tightening up or shortening while others lengthen and become weak which often occurs as a result of one's daily activities. There are different factors which can impact on posture and they include occupational activities and biomechanical factors such as force and repetition. Risk factors for poor posture also include psychosocial factors such as job stress and strain. Workers who have higher job stress are more likely to develop neck and shoulder symptoms.

Studies have shown that drivers of trucks and public transport vehicles are at a greater risk of lower back and neck pain syndromes as well as other musculoskeletal disorders than clerical workers, partly because of their poor sitting posture and lack of breaks

2. Purpose of the study

The purpose of the study was to find out the Comparative Analysis of Postural Deformities between School Boys participating and Non-participating in Sports Activities

3. Methodology

To achieve the purpose of the study, 300 School boys' (150 Sports Activities boys and 150 Non-participate Sports Activities boys) students were selected as subjects randomly from Tirunelveli District, Tamilnadu. The age of the subjects were ranged from 8-13 years.

Selection of Variables

The following variables were be chosen to analysis the posture in Side view 3 parts only they are Neck, Chest, Shoulder.

Table I
Tests Selection

S.No.	Criterion Variables	Test items
1	Postural deformities	Newyork Posture Rating Test

Statistical Technique

This study was conducted to determine possible cause and the Comparative analysis of postural deformities between School Boys participating and Non-participating in Sports Activities. A test randomized design was employed for this investigation. This study consisted of analyze group. All the participants were tested on Neck, Chest, Shoulder; No attempt was made to equate the groups in any manner.

The experimental procedure for this study was static group comparison design. The data collected from the two groups on selected variables such as posture were statistically examined for significant differences, if any applying the Descriptive Statistics. In all cases 0.05 levels was fixed as significant level of test the Hypothesis

4. Analysis and Interpretations of the Data

1. Neck

The Mean and standard deviation of Postural deformities in Neck between Sports participant and non-sport participant among School boys were collected and Presented in Table II.

TABLE II
SUMMARY OF POSTURAL DEFORMITIES IN NECK BETWEEN PARTICIPATING AND NONPARTICIPATING IN SPORTS ACTIVITIES

Neck	Total	Mean	SD	T Test
Sports Participant	150	4.17	1.01	8.56*
Non-Sport Participant	150	3.03	1.29	

The table value required of 0.05 levels with df 298 is 1.97.

Table II shows that the Mean values of Postural deformities in Neck between Sports participant and non-sport participant among School boys.

From the table above the means values for Sports participant and Non-participant are 4.17 and 3.03 respectively. The obtained value between Sports participant and non participant on Neck Postural deformities is 8.56, which is greater than the tabulated 't' value of 1.97 with degree of freedom 298 at 0.05 level significances. Therefore it was concluded that there was significant differences on Neck Postural deformities between Sports participant and non participant.

Hence, it was concluded that most of the non-sportsman were having Neck deformities compared to sportsman. Sports participants were having correct posture.

2. Chest

The Mean and standard deviation of Postural deformities in Chest between Sports participant and non-sport participant among School boys were collected and Presented in Table III.

TABLE III
SUMMARY OF POSTURAL DEFORMITIES IN CHEST BETWEEN PARTICIPATING AND NONPARTICIPATING IN SPORTS ACTIVITIES

Chest	Total	Mean	SD	T Test
Sports Participant	150	4.17	1.07	13.02*
Non-Sport Participant	150	2.59	1.04	

The table value required of 0.05 levels with df 298 is 1.97.

Table III shows that the Mean values of Postural deformities in Chest between Sports participant and non-sport participant among School boys.

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From the table above the means values for Sports participant and Non-participant are 4.17 and 2.59 respectively. The obtained value between Sports participant and non participant on Chest Postural deformities is 13.02, which is greater than the tabulated 't' value of 1.97 with degree of freedom 298 at 0.05 level significances. Therefore it was concluded that there was significant differences on Chest Postural deformities between Sports participant and non participant. Hence, it was concluded that most of the non-sportsman were having Chest deformities compared to sportsman. Sports participants were having correct posture.

3. Shoulder

The Mean and standard deviation of Postural deformities in Shoulder between Sports participant and non-sport participant among School boys were collected and Presented in Table IV.

TABLE IV
SUMMARY OF POSTURAL DEFORMITIES IN SHOULDER BETWEEN PARTICIPATING AND NONPARTICIPATING IN SPORTS ACTIVITIES

Shoulder	Total	Mean	SD	T Test
Sports Participant	150	3.99	1.11	12.09*
Non-Sport Participant	150	2.41	1.15	

The table value required of 0.05 levels with df 298 is 1.97.

From the table above the means values for Sports participant and Non-participant are 3.99 and 2.41 respectively. The obtained value between Sports participant and non participant on Shoulder Postural deformities is 12.09, which is greater than the tabulated 't' value of 1.97 with degree of freedom 298 at 0.05 level significances. Therefore it was concluded that there was significant differences on Shoulder Postural deformities between Sports participant and non participant. Hence, it was concluded that most of the non-sportsman were having Shoulder deformities compared to sportsman. Sports participants were having correct posture.

5. Conclusions

1. There was significant difference on posture between school boys participating and non participating in sports activities.
2. School Boys participating person had good posture compared to nonparticipation in sports activities.

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