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ASSESSMENT OF PHYSICAL FITNESS, SOCIO-ECONOMIC STATUS AND PSYCHOMOTOR ABILITY RELATED TO THE HEALTH OF TRIBAL SCHOOL GOING CHILDREN IN TRIPURA

Sajana Begam¹ & Dr. Abhijeet Shamrao More²

¹Research Scholar.

²Director of Physical Education and Sports,
Mahatma Phule College, Ahemadpur.

ABSTRACT

The aim of the present study is to assess the physical fitness, socio-economic status and psychomotor capacity of the children attending tribal schools in Tripura. Five hundred subjects in the age group of 14 to 16 years from four different districts of Tripura were selected for the study. The study was limited to health-related physical fitness variables, Rajiv Lochan Bhardwaj's socioeconomic status questionnaire and the ability to measure socioeconomic status and the psychomotor ability of children attending tribal schools. The socio-economic status and psychomotor abilities of tribal school children in Tripura were examined using correlation techniques. The percentile scale was then used to assess the health-related physical fitness, socioeconomic status and psychomotor capacity of tribal school children in Tripura.

KEYWORDS: Physical Fitness, Socio-Economic Status, Psychomotor Ability

INTRODUCTION

Physical activity offers many benefits, including obesity prevention, improved confidence, and overall fitness. Physical education programs in a school setting can set the stage for how children view physical fitness, activity levels, and future health. Physical education programs also include general health and safety information and provide students with the opportunity to learn how to collaborate with each other in a team setting. Nutritional information Physical education classes are ideal for introducing children to basic nutrition concepts. Wrong eating habits are common in many children and adolescents; However, a strong foundation of healthy eating choices can help lay the foundation for improved food choices. Children who eat regular, healthy meals that include a variety of food choices are better focused and less distracted at school. Healthy eating reduces the risk of serious health problems in children and reduces the risk of obesity in young people and adults. In order for a person to feel physically fit, the heart, lungs, and muscles need to function at a certain level in order for the person to feel able to function. At the same time, what humans do with their bodies has a direct effect on the state of mind, thus affecting some degree of fitness, such as mental alertness and emotional expression.

There are also other factors that affect physical activity, fitness and health: physical activity, psychomotor abilities, personal qualities, physical environment and social environment,



factors other than lifestyle, lifestyle, for example smoking, diet, alcohol and sleep patterns. Many personal characteristics, such as age, gender, socioeconomic status, personality, motivation and attitude towards physical activity, and other health habits, can shape a person's lifestyle. The social environment combines social, cultural, political, and economic conditions that affect physical activity, fitness, and health. Environmental conditions such as temperature, humidity, air quality, altitude and climate change can affect physical activity, health related fitness and health.

HEALTH RELATED PHYSICAL FITNESS:

Health-related physical fitness includes those components of physical fitness that are related to good health. Factors are generally defined as anatomy, cardiovascular fitness, flexibility, muscle endurance and strength. Psychomotor ability is related to physical and motor development. This is the main goal of physical educators. In the psychomotor domain we are providing opportunities to develop balance, eye-hand coordination, agility, flexibility, strength, reactivity and other elements of the domain. Reaction time is the interval between the onset of a signal (stimulus) and the onset of response to a movement. The development of the psychomotor domain can be important for the health and well-being of the individual as well as the health of the community. The personal, social and economic consequences of fitness activities in the school setting are significant.

The socio-economic environment refers to a wide range of interrelated and diverse aspects and references to variables related or included in the combination of social and economic factors. These aspects and variables can, in general, be classified into several categories, including demographic, public service, economic and social. Social aspects may include, for example, community life as well as social and cultural attitudes and values. Community services may include accommodation and requirements for public services such as water, sanitation, transportation, police and fire safety facilities, solid waste disposal, and health and education services. Demographic aspects may include population growth structure, distribution, and density. Similarly, economic factors may include general characteristics, structures and changes in various economic activities and employment.

Various tribal societies in India are at different stages of development, but they are still backward compared to the so-called civilized people. These tribals are the tribals of our country. They have been studied from many angles. An active life with plenty of physical activity to get daily bread and butter contributes to their physical development. The genetic ability to perform vigorous physical activity can be useful for performing well in certain sports and games. It is believed that India will be able to produce champion athletes in the near future if the tribal communities in Assam, Madhya Pradesh, Manipur, Nagaland, Orissa, Tripura and West Bengal are given due importance in selecting and training potential candidates at an early age. The right kind of training to unravel their potential into higher potential categories. Players should be selected at an early age with the idea of "catch them young and coach them right". Tribal people should be given proper type of coaching / training, selection of best practices from various training techniques, proper loading and adaptation, nutrition, fitness training, psychological training etc. Which can lead to significant improvement in performance in various sports and sports in India.

These observations should guide public health policy to develop appropriate intervention strategies to effectively address these health habits, psychomotor and social problems in early life. Therefore, it would be beneficial to assess the health related physical fitness, socio-economic status and psychomotor capacity of tribal school children in Tripura.

MATERIAL AND METHODS:

A total of five hundred school children were selected from both government and private schools in the state of Tripura. Prior consent was obtained from the concerned principals and parents prior to the test and they were accurately informed about the purpose and procedure of data collection. All tests were conducted on the school grounds and in the classroom between 7 am. to 10. a.m. The study was limited to children in the age group of 14 to 16 years in private as well as government schools in Tripura district from 10 am.

The study was limited to the following health-related physical fitness variables: lower back flexibility, body fat percentage, aerobic / cardiovascular function, abdominal muscle strength and endurance, and use of upper body muscle strength and endurance, further socioeconomic status and reaction ability. . Assess the socio-economic status and psychomotor capacity of tribal school children in Tripura, respectively.

STATISTICAL PROCEDURE:

Socio-economic status as well as health-related physical fitness and psychomotor ability of tribal school children in Tripura were examined using the correlation technique. To assess health-related physical fitness, socioeconomic status and psychomotor abilities of tribal school children on the Tripura Percentage Scale were used.

Table 1.1 Coefficient Correlation Between Health-Related Physical Fitness Variables and Socio-Economic Status of Tribal Children

Sr. No	Statement	Coefficient Correlation
1.	Lower Back Flexibility	0.168
2.	Body Fat Percentage	0.038
3.	Aerobic Function	0.118
4.	Strength and Endurance of Abdominal Muscular	0.086
5.	Strength and Endurance of Upper Body Muscular	0.041

Source: Primary Data

r' value required to be significant at 0.05 level of confidence with 498 degree of freedom was 0.195

Table 1.2 Coefficient Correlation Between Health-Related Physical Fitness Variables and Reaction Ability of Tribal Children

Sr. No	Statement	Coefficient Correlation
1.	Lower Back Flexibility	0.241
2.	Body Fat Percentage	0.199
3.	Aerobic Function	0.209
4.	Strength and Endurance of Abdominal Muscular	0.229
5.	Strength and Endurance of Upper Body Muscular	0.0213

Source: Primary Data

r' value required to be significant at 0.05 level of confidence with 498 degree of freedom was 0.195

Table 1.3 Sit and Reach Test Criteria and Measurement Result

Sr. No	Sit and Reach Test (cm)	No of Respondent	%
1.	> 37 cm	70	14.00
2.	33 - 37 cm	228	45.60
3.	30 - 33 cm	160	32.00
4.	27 - 30 cm	32	06.40
5.	< 27 cm	10	02.00
Total		500	100.00

Source: Fieldwork

The above table 1.3 describes about the sit and reach test criteria and its measurement result of the respondent and it was observed that out of 500 respondents 70 (14.00%) of the respondents having 37 cm sit and reach test and having excellent in measurement, 228 (45.60%) of the respondents are having sit and reach test between 33 - 37 cm and having above average measurement result, 160 (32.00%) of the respondents are having between 30 - 33 cm of sit and reach test which is average result of measurement, 32 (6.40%) of the respondents are having between 27 - 30 cm of sit and reach test which is below average measurement result and remaining 10 (2.00%) of the respondents are having less than 27 cm of sit and reach test which is poor measurement of result.

Table 1.4 Rating Body Fat Percentage and Measurement Result

Sr. No	Body Fat Percentage	No of Respondent	%
1.	< 10%	28	05.60
2.	10% - 20%	286	57.20
3.	20% - 25%	151	30.20
4.	> 25%	35	07.00
Total		500	100.00

Source: Fieldwork

The above table 1.4 describes about the body fat percentage and measurement result and it was observed that out of 500 respondent 28 (5.60%) respondents are having less body fat percentage which is less than 10%, 286 (57.20%) of the respondents are having between 10%-20% of body fat percentage which is count as normal measurement result, 151 (30.20%) of the respondents are having 20 - 25% of body fat percentage which is count as slightly high percentage in measurement result and remaining 35 (7.00%) of the respondents are having above 25% of body fat percentage which is count as high fat percentage in measurement result.

Table 1.5 Criteria of Partial Curl Ups and Measurement Result

Sr. No	Partial Curl Ups	No of Respondent	%
1.	> 30	50	10.00
2.	26 - 30	142	28.40
3.	20 - 25	231	46.20
4.	17 - 20	43	08.60
5.	< 17	34	06.80
Total		500	100.00

Source: Fieldwork

The above table 1.5 describes about the rating criteria of partial curl ups and measurement result and it was observed that out of 500 respondent 50 (10.00%) respondents are made less than 30 partial curl ups which is count as excellent measurement result, 142 (28.40%) of the respondents are made in between 26 - 30 partial curl ups which is count as above average in measurement result, 231 (46.20%) of the respondents are made in between 20 - 25 partial curl ups and it count in average measurement result, 43 (8.60%) of the respondents are made in between 17 - 20 partial curl ups and remaining 34 (6.80%) of the respondents are having less than 17 partial curl ups which is count as poor in measurement result.

Table 1.6 Criteria of Right-Angle Push- Ups and Measurement Result

Sr. No	Right Angle Push Ups	No of Respondent	%
1.	> 39	20	04.00
2.	29 - 38	42	08.40
3.	23 - 28	78	15.60
4.	18 - 23	181	36.20
5.	< 18	179	35.80
Total		500	100.00

Source: Fieldwork

The above table 1.6 describes about the criteria of right angle push ups and measurement result and it was observed that out of 500 respondent 20 (4.00%) of the respondents are done above 39 push ups which is measures in excellent result, 42 (8.40%) of the respondents are done in between 29 - 38 right angle push ups and its measures in above average result, 78 (15.60%) of the respondents are made in between 23 - 28 right angle push ups and it measures in average result, 181 (36.20%) of the respondents are done in between 18 - 23 right angle push ups and it measures in below average result and remaining 179 (35.80%) of the respondents are made less than 17 right angle push ups and its measures in poor result.

Table 1.7 Socio Economic Condition of the Respondent

Sr. No	Socio Economic Condition	No of Respondent	%
1.	Upper Class	00	00.00
2.	Upper Middle Class	00	00.00
3.	Middle Class	127	25.40
4.	Upper Lower Class	373	74.60
5.	Lower Class	00	00.00
Total		500	100.00

Source: Primary Class

The above table 1.7 describes about the socio economic condition of the respondent and it was observed that out of 500 respondent 127 (25.40%) of the respondents are belongs to middle class family and remaining 373 (74.60%) of the respondents are belongs to upper lower class family.

Table 1.8 Reaction Ability and Result of Measurement

Sr. No	Reaction Ability (cm)	No of Respondent	%
1.	< 7.5 cm	50	10.00
2.	7.5 - 15.9 cm	421	84.20
3.	15.9 - 20.4 cm	29	05.80
4.	20.4 - 28 cm	00	00.00
5.	> 28 cm	00	00.00
Total		500	100.00

Source: Primary Class

The above table 1.8 describes about the reaction ability of the respondent and it was observed that out of 500 respondent 50 (10.00%) of the respondents reaction ability was at less than 7.5 cm which is measured in excellent result, 421 (84.20%) of the respondents are having between 7.5 - 15.9 cm which is measured in above average result and remaining 29(5.80%) of the respondents are having 15.9 - 20.4 cm of reaction ability and it has measures in average result.

RESULT:

No significant correlation was found between health-related physical fitness and socioeconomic status ($p > 0.05$). There was a significant positive correlation between health-related physical fitness and reactivity ($p > 0.05$). The average scores of subjects for the sit and reach test, body fat percentage, partial curl up right angle push up, socioeconomic status and reaction ability were 33.76 cm, 18.92 percent, 8, 25, 22, 477.63 and 0.231 seconds, respectively.

CONCLUSION:

Current findings support the notion that physical fitness has a positive relationship with socioeconomic status. It was also particularly noted that there is a significant positive relationship between health-related physical fitness and reaction time. Further present findings also support the assumption of low physical health and socio-economic status of the tribals in the state but the psychomotor capacity of the children attending tribal schools in Tripura was found to be somewhat better.

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