

**A STUDY ON ADJUSTMENT OF SECONDARY SCHOOL BOYS
WITH HEALTH RELATED PHYSICAL FITNESS IN RELATION TO
THEIR SOCIO ECONOMIC STATUS**

¹Ali Hosen Molla, ²Arumay Jana, ³Dr. Asish Paul

¹M. Phil Scholar, Dept. of Education, Jadavpur University, Kol-32

²Ph. D. Scholar (JRF), Dept. of Physical Education, Jadavpur University, Kol-32

³Assistant Professor, Dept. of Physical Education, Jadavpur University, Kol-32.

ABSTRACT

In the present study, an attempt has been made to find out the relationship between adjustment level and Health related physical fitness in different socio-economic status of secondary boy's students. Total 85 boys were selected for the study. Two higher secondary schools of South 24 Parganas district in West Bengal were selected for the study. In this study the adjustment level has considered as independent variable and Health Related Physical Fitness (HRPF) considered as dependent variable. The data was collected by adjustment level questionnaires of Sinha & Singhand Socio economic status was measured by Kuppusswamy questionnaire of 1918. In health related physical fitness BMI was measured by Weight/Height^2 , Upper Body Strength Endurance measured by no. of push-ups, Abdominal Strength Endurance measured by no. of curl-ups, Flexibility measured by V-sit and reach test and Cardio Respiratory Endurance measured by 1500 meters run/walk test. The data were analyzed with the help of statistical procedures through mean, standard deviation, and correlation coefficient. Adjustment level of lower middle class had a positive but not significant correlation with Cardio Respiratory Endurance ($r = 0.355$), negative but not significant correlation found with flexibility ($r = -0.306$). With Upper Body Strength Endurance ($r = -0.306$), Abdominal Strength Endurance ($r = -0.205$) and BMI ($r = -0.368$) negative but not significant correlations were found. Adjustment level of upper lower class with Cardio Respiratory Endurance and Abdominal Strength Endurance bears very weak and not significant positive correlation ($r = 0.020$ and 0.048) and negative but not significant relation were found in case of Flexibility ($r = -0.031$), Upper Body Strength Endurance ($r = -0.034$) and BMI ($r = -0.216$). It has concluded that adjustment level and Health Related Physical Fitness components were not significantly correlated with each other.

Keywords: Adjustment, Cardio Respiratory Endurance, Flexibility, Abdominal Strength Endurance, Upper Body Strength Endurance, Socio Economic Status

INTRODUCTION

Physical fitness is an essential factor to continue daily activities. It often influences by socioeconomic status. Over time and place, social and economic conditions are ever changing process. In a developing country this rate of change is varies more with different influential factors. Several factors are influencing the socio-economic status. Human fitness levels are also depends on the different status of social conditions. Childs and adolescents physical fitness are mostly affected by their socioeconomic conditions. Adolescents are more affected in this period of great physical and mental stress as rapid physical and mental changes occur during this period. They perceive more stress and facing mental or behavioural problem and it directly effect on health as well as fitness. Behavioural problem leads to maladjustment in every setting i.e. home, school, peers. Some step needs to emphasis to build index to integration; a harmonious behaviour of the individual by which other individuals of the society recognize the person as well adjusted having strong mental and physical characteristics. In this context the present researchers have found no such studies which investigated the impact of physical fitness on adjustment considering the persons of different socio economic level. This study have tried to investigate the impact of health related physical fitness on adjustment level with reference to different socioeconomic status of school going boys.

OBJECTIVES OF THE STUDY

The objectives of the present study were as follows:

- To study the present adjustment status of secondary school boys.
- To study the present health related physical fitness status of secondary school boys.
- To classify the boys students in different socioeconomic status.
- To find relationship between adjustment level and health related physical fitness in different socio-economic status of secondary school boys.

Selection of Subjects:

Total 85 school boys were considered randomly from the secondary school students who were studying in class viii only and having the age ranged between 13⁺ - 14 years. The West Bengal Board of Secondary Education (W.B.B.S.E) affiliated secondary school students particularly located in the district South 24 paraganas was considered for the study.

Selection of Variables:

In consultation with the experts of the field, reviewing the literature and considering the feasibility especially from the point of view of availability of equipment and time factor the following anthropometric, physical fitness, psychological and sociological variables were considered for the study.

Name of the variables			
Anthropometric characteristics	Health Related Physical fitness variable	Psychological variable	Sociological variables
Age	Cardio-respiratory Endurance	Adjustment level	Socio-economic status
Height	Flexibility		
Weight	Upper body strength Endurance		
	Abdominal strength Endurance		
	BMI		

Criterion Measure:

A. Anthropometric Measures:

Height and Weight (Height was measured by measuring steel tape and weight measured by weighing machine).

B. Health Related Physical Fitness:

- I. BMI - -was measured by Weight /Height^2
- II. Upper Body Strength Endurance (UBSE) : - Measured by no. of push ups
- III. Abdominal Strength Endurance (ASE) : - measured by no. of Curl-ups
- IV. Flexibility- measured by V-sit and reach test.
- V. Cardio Respiratory Endurance (CRE): measured by 1500 mtr. run and walk test

Socio economic Status: Socio economic status was measured by (kuppuswamy) questionnaire.

Adjustment Level: Adjustment levels were measured by (Sinha & Singh) questionnaire.

After collecting data, the results of the study were obtained by calculating mean, S.D. and coefficient of correlation with the help of Ms-excel-2010 version.

FINDINGS OF RESULTS AND DISCUSSIONS

4.1 Results:

Descriptive statistics and inferential statistics were used

Table No. 1: Mean and S.D. of Adjustment level of the different socio-economic status

Variables	Socio-economic status of boys	
	Lower Middle class	Upper Lower class
	Mean ± S.D.	Mean ± S.D.
Socio Economic Status	13.23 ± 1.52	7.56 ± 1.78
Adjustment level	19.35± 7.51	17.90± 6.20

Table no.1 shows that the mean and S.D. of socio economics status of boys of lower middle and upper lower class were 13.23 ± 1.52 and 7.56 ± 1.78 respectively and the mean and S.D. of adjustment level of the students of lower middle class and upper lower class were 19.35 ± 7.51 and 17.90 ± 6.20 respectively.

Table No. 2: Mean and S.D. of Health Related Physical Fitness of boys of the different socio-economic status

Variables	Socio-economics status of Boys	
	Lower Middle class	Upper Lower class
	Mean ± S. D.	Mean ± S. D.
BMI (kg. /mtr. ²)	17.78 ± 5.78	18.09 ± 3.28
Push ups for Upper body Strength Endurance (in no.)	21.29 ± 11.29	20.68 ± 8.52
Curls ups for Abdominal strength endurance (in no.)	27.58 ± 7.91	25.18 ± 9.60
V-sit and reach Flexibility(in cm.)	20.70 ± 10.35	24.70 ± 7.24
1500mtr. run& walk for Cardio-Respiratory Endurance (min.)	9.00 ± 2.60	10.16 ± 1.58

The above table no. 2, shows the mean and S.D. of BMI of lower middle class was 17.78 kg. /mtr^2 and 5.78 kg. /mtr^2 . The mean and S.D. of Upper Body Strength Endurance of lower middle class of boys was 21.29 and 11.29 . The mean Abdominal Strength Endurance of lower middle class of boys was 27.58 and standard deviation was 7.91 and mean of Flexibility and Cardio Respiratory Endurance were 20.70 cm. and 9.00 min. and corresponding S.D. were 10.35 cm. and 2.60 min. respectively. In the above table the mean BMI of upper lower class of boys was 18.09 kg. /mtr^2 and standard deviation was 3.28 kg. /mtr^2 . The mean Upper Body Strength Endurance of lower middle class was 20.68 and standard deviation was 8.52 . The mean Abdominal Strength Endurance of Upper lower class of boys was 25.18 and standard deviation

was 9.60 and mean of Flexibility and CRE was 24.70 cm. and 10.16 min. respectively and corresponding standard deviation were 7.24 cm. and 1.58 min. respectively.

Table 3: Correlation coefficient between Adjustment Level and different Socio- economics status groups

Socio Economic Status Category	Adjustment Level
	'r' value
Lower Middle	0.068
Upper Lower	-0.113

0.05% level of significant

Above table no. 3 shows that Socio economics status of lower middle class has a very weak positive correlation with Adjustment level ($r = 0.068$) and upper lower class has a very weak negative correlation with Adjustment level ($r = -0.113$) of boys students. As the value is very low and hence poor correlation without no significance, thus no specific conclusion may be drawn.

Table 4: Correlation of Adjustment Level of different socio economics status groups with Health-Related Physical Fitness

Socio Economic Status Category	Adjustment Level	Health Related Physical Fitness				
		CRE	FLX	UBSE	ASE	BMI
Lower Middle		0.355	-0.306	-0.306	-0.205	-0.368
Upper Lower		0.020	-0.030	-0.033	0.047	-0.216

0.05% level of significant

From the above table it is clear that Adjustment level of lower middle class had a moderately positive but not significant correlation with Cardio Respiratory Endurance ($r = 0.355$) of boys and moderately negative but not significant correlation found with other variables as flexibility ($r = -0.306$), Upper Body Strength Endurance ($r = -0.306$), Abdominal Strength Endurance (-0.205), and BMI (-0.368). Moderate positive co-relation co-efficient between endurance and adjustment indicated some influence of endurance on adjustment although that is not significant. In the other cases all the relation is negative and almost moderate except Abdominal Strength Endurance, but not significant and hence no such conclusions also may be considered.

On the other hand the Adjustment level of upper lower class had a low positive correlation with Cardio Respiratory Endurance ($r = 0.020$) and Abdominal Strength Endurance ($r = 0.047$) and low negative correlation found with other variables as flexibility ($r = -0.030$), Upper Body Strength Endurance ($r = -0.033$), and BMI ($r = -0.216$). As the values were very poor here also

no specific conclusion may be drawn. From the above values it is clear that in case of lower middle group in comparison to the upper lower group, there was some dependence of adjustment upon the health related physical fitness factor.

It has established that socio-economic factor influences one's lifestyle and thus also physical fitness level. In the present study the investigator found poor relationship between socio-economic status and health related physical fitness. Socio-Economic Status was significantly associated with physical fitness. At some age levels, boys from the low Socio Economic Status group performed better for muscular and aerobic endurance (Freitas D et al. 2010). Although high poverty, unfertile land for cultivation, less facilities for sustainable living and lower caste composition of the poor in the suburban and village area hinders the consumption process of daily commodities, the local employment possibilities, Govt. funds for the below poverty level, different other aids for the poor driving them to raise their socioeconomic status somewhat a little bit. Political competition or literacy levels among the poor were not systematically related to targeting (Bardhan P 2006). Socioeconomic status is positively associated with physical fitness in European adolescents independently of total body fat and habitual physical activity (Jimenez Pavón D and Ortega, F B 2010). A study found that SES was significantly associated with physical health, but not with psychological health; lifestyle had significant positive effects on both physical and psychological health (Wang J and Geng L 2019). In the present study moderate correlations has existed but that was not significant.

CONCLUSIONS

According to results of the study following conclusions were drawn-

- No significant relation was found of adjustment level with Cardio-respiratory Endurance in case of the students of Lower middle socio economic group.
- No significant relation was found of adjustment level with flexibility in case of the students of Lower middle socio economic group.
- No significant relation was found of adjustment level with upper body strength endurance in case of the students of Lower middle socio economic group.
- No significant relation was found of adjustment level with abdominal strength endurance in case of the students of Lower middle socio economic group.
- No significant relation was found of adjustment level with body mass index in case of the students of Lower middle socio economic group.
- No significant relation was found of adjustment level with cardio respiratory endurance in case of the students of upper lower socio economic group.
- No significant relation was found of adjustment level with flexibility in case of the students of upper lower socio economic group.

- No significant relation was found of adjustment level with upper body strength endurance in case of the students of upper lower socio economic group.
- No significant relation was found of adjustment level with abdominal strength endurance in case of the students of upper lower socio economic group.
- No significant relation was found of adjustment level with body mass index in case of the students of upper lower socio economic group.

REFERENCES

1. Sinha, A.K.P. and Singh, R.P. (2005). Manual for Adjustment Inventory for School Students. Agra: National Psychological Corporation.
2. Mythili, B., Bharathi, T. and Nagarathna, B. (2004). Adjustment problems of adolescent students. *Journal of Community Guidance and Research*, 21 (1), 54-61 6.
3. Raju, M.V.R. and Rahamtulla, T.K. (2007). Adjustment Problems among School Students. *Journal of the Indian Academy of Applied Psychology*, 33(1), 73-79.
4. Menon S (2015) Adjustment Issues Among Adolescent School Students: Exploring The Role Of Age And Gender, *International Journal of Multidisciplinary Research Review*, Vol.1, Issue – 8, Oct -2015. Page – 48
5. Kaur S and Jiwan T (2016) Comparison of Adjustment among Adolescent Boys and Boys of Substance Using Parents, *International Journal of Advances in Nursing Management*, 4(3): 264-270. DOI: 10.5958/2454-2652.2016.00058.5
6. Bohr A D, Brown D, Laurson K, Smith P and Bass R, (2013) Relationship Between Socioeconomic Status and Physical Fitness in Junior High School Students, *Journal of School Health*, Volume83, Issue8, Pages 542-547
7. Wang J and Geng L (2019) Effects of Socioeconomic Status on Physical and Psychological Health: Lifestyle as a Mediator, *International Journal of Environmental Research and Public Health*, 16(2): 281, doi: 10.3390/ijerph16020281
8. Pronk N.P., Anderson L.H., Crain A.L., Martinson B.C., O'Connor P.J., Sherwood N.E., Whitebird R.R (2004). Meeting recommendations for multiple healthy lifestyle factors: Prevalence, clustering, and predictors among adolescent, adult, and senior health plan members. *Am. J. Prev. Med.*; 27:25–33. doi: 10.1016/j.amepre.2004.04.022.
9. Prista A, Marques A T, Maria Jar (1997) Relationship between Physical Activity, Socioeconomic Status, and Physical Fitness of 8-15-Year-Old Youth from Mozambique, *American Journal of Human Biology* 9(4): 449-457 doi: 10.1002/(SICI)1520-6300(1997)9:4<449::AID-AJHB4>3.0.CO; 2-R