

**A STUDY ON ADJUSTMENT OF SECONDARY SCHOOL STUDENTS
WITH RELATION TO SOCIO ECONOMIC STATUS AND
HEALTH RELATED PHYSICAL FITNESS**

**A DISSERTATION SUBMITTED TO THE DEPARTMENT OF EDUCATION
JADAVPUR UNIVERSITY FOR THE PARTIAL FULFILMENT FOR THE
DEGREE OF MASTER OF PHILOSOPHY IN EDUCATION**

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*This Dissertation Dedicated to
MY Respected Parents
For their Endless Love,
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LIST OF ABBREVIATIONS

<i>SES</i>	<i>Socio economic Status</i>
<i>HRPF</i>	<i>Health Related Physical Fitness</i>
<i>UBSE</i>	<i>Upper Body Strength Endurance</i>
<i>ASE</i>	<i>Abdominal Strength Endurance</i>
<i>CRE</i>	<i>Cardio Respiratory Endurance</i>
<i>BMI</i>	<i>Body Mass Index</i>
<i>IQ</i>	<i>Intelligence Quotient</i>

CHAPTER I:

INTRODUCTION

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CHAPTER-I

INTRODUCTION

This chapter has been devoted to introduce the present investigation in its different aspects. General introduction, statement of the problem, objectives of the study, hypothesis, limitation, delimitations, definition of the terms, and significance of the study all have been included in this chapter in proper sequence.

1.1 General Introduction

Human beings are the supreme creation of the God endowed with the capacity of reasoning and thinking. By these virtues, he is able to make adequate adjustments with himself and his surroundings. Many times, he has to resolve the conflicts between the strong desires or motives. He has to overcome them and adjust to the reality in a realistic way. Education is said to be the powerful equalizer of people's endowments, with which they expand the horizon of life choices, grasp economic opportunities, gain higher living standards, pursue happiness and enjoy a life of well-being. It acts like a foundation upon which one can build the rest of their life. In psychology, adjustment refers to the behavioural process of balancing conflicting needs or needs challenged by obstacles in the environment. Humans and animals regularly adjust to their environment.

The students enrolled in secondary classes are experiencing the 'storms and stresses' of adolescence, a very critical stage of their lives. During this period, they keep vacillating between being children and being adults. Though adjustment is a major concern at all life stages, it becomes especially critical at the stage of adolescence. Being a phase of rapid growth and development during which physical, sexual and emotional changes occur, adjustment problems are at their peak during this period. Most adolescents experience adjustment difficulties in emotional, social and/or educational aspects of their lives. Adjustment has been described by the Encyclopaedia Britannica as a behavioural process for maintaining equilibrium among one's needs and obstacles offered by the environment. Adjusting to constant changes in their internal as well as external environment becomes a major challenge for the adolescents. It seems, over the years, very limited amount of research has been done on adjustment problems of adolescents.

Most of the problems centring adolescents are physical appearance, health and physical development, marks scored, relationship with members of their families, their teachers, and peer of both sexes and home adjustment. This maladjustment may lead to absenteeism, truancy, low achievement and other unworthy habits of children (Subramanyam, 1986). There is a need to explore the adjustment problems of school going adolescents and the influence of various demographic factors on their adjustment abilities. The present study was aimed at exploring the adjustment problems of secondary school students.

Adolescence is a transition from childhood to adults wherein children feel a great storm and stress from various aspects. They are expected to be behaving like adults while they are still longing for their childhood wishes from inside. This internal conflict, when overcome by proper guidance and support from all sectors leads to successful adolescence. Where such guidance is lacking, this transition period ends up in severe adjustment problems ranging from depression, scholastic backwardness and even anti-social behaviour.

Human body is a gift by nature. Scientific discoveries have changed the entire face of our planet. It has changed the thorny life into the bed of roses. Good health provides sound and solid foundation on which fitness rests and at the same time fitness provides one of the most important key to health and living one's life to fullest. In villages which formed the first habitation of civilized man rural sports grew out of sheer necessity. Joint defence against on sleight of a common foe and dangerous animals must have given birth to sports like wrestling, running, jumping, weight lifting and such performing arts as measuring strength by holding wrists, twisting hands etc. Same is the case with games and sports in rural and urban settings. We notice that there is a lot of difference in the interest of children. Like we observe that in rural areas children are indulging in minor, indigenous activities and field games like football, kabaddi, kho-kho, hockey, wrestling, athletics etc. whereas, in urban we find children playing basketball, swimming, badminton, tennis, squash, golf etc. The main cause of difference is the availability of facilities and financial support of parents.

Adolescent population is about one fourth of the total population of India which constitutes about 20% of world's population. Researchers suggest that more young people are suffering from mental health problems because they perceive more stress and are incapable of coping with stress. According to World Health Organisation (WHO), overall prevalence rate in world of about 20% has been documented for child and adolescent mental disorders whereas in

India, 12.8 per cent of children (1-16 years) suffer from mental health problems as per Indian Council of Medical Research (ICMR) report.

Opportunities for physical activity, including recess and organized physical education classes, have been reduced or eliminated from the daily school schedule in many schools. Growing academic accountability standards resulting from the No Child Left behind Act have caused a reduction of time spent in physical education classes, to allow more time spent in academic classes (Coe, Pivarnik, Womack, & Malina, 2006). These outcomes at an inopportune time as obesity levels of all Americans, especially among children and adolescents, have risen over several decades.

It is common knowledge that inactivity and poor nutrition influence a person's amount of body fat. The prevalence of obesity and overweight increases as physical activity levels decrease. Self-esteem and motivation is typically lower in obese and overweight individuals, and incidents of depression are increased. Data from a 2003-2004 report from the National Health and Nutritional Examination (NHANES) estimates that 17% of children and adolescents are obese or are in the 95th percentile for weight (Centres for Disease, 2003). Between 1980 and 2002, the obesity rate among adults doubled and the rate among children tripled. The prevalence of obesity and overweight in almost all subgroups is at unprecedented levels and continues to increase in the United States (U.S. Department, 2007). An inactive lifestyle during childhood and adolescence can lead to unhealthy habits and sedentary related diseases in adulthood such as diabetes, heart disease, and musculoskeletal maladies. In fact, many sedentary related diseases are occurring at earlier ages among children and adolescents. The number of adolescents categorized as at risk for obesity and overweight are at unprecedented levels. Unhealthy children miss more school than healthy children, and standardized test scores and course grades are correlated to attendance. As young people become more sedentary, their level of physical fitness also declines. The impact of a non-active lifestyle not only affects the physical domain of young people, but also the cognitive realm as well. Obesity and the prevalence of overweight of children, adolescents, and adults is reaching epidemic proportions and affects the human body and spirit in a multitude of negative ways. Though the prevalence of obesity is higher, this problem is not just limited to minorities or lower socio-economic groups. Obesity is a national health concern touching individuals from all lifestyles, and it is becoming a global issue, not just limited to the United States. The mind and body are negatively affected by obesity, which is reflected in academic scores of children and adolescents. Over the last fifty years, the obesity issue has been studied briefly. However, a renewed interest in the topic is a result of more

accountability on academic performance evidenced by standardized tests from local, state, and national government agencies.

A portion of the research over the last fifty years concerning the relationship between physical fitness and academic performance centres on the physiological changes during exercise, and how those changes aid memory and learning. All of the body's systems change dramatically when a person transit from resting state to exercise. Increased blood flow, because of cardio respiratory response to exercise, includes an increase of blood flow to the skin and active skeletal muscles (U.S. Surgeon General, 1996). Short term and long-term effects of improved cardio respiratory fitness may include a reduction of depression and anxiety, and an increase in self-esteem. These effects may lead to a positive relationship with academic performance (Sigman, 2008). Increased brain-based research has complimented research in the areas of student physical fitness and academic performance levels. However, relatively few studies explore the relationship between the two topics, as it has proven difficult to establish randomized studies in schools. Another difficulty is selecting an adequate sample with complete physical fitness scores and academic scores while using reliable and valid instruments. According to studies by The Philanthropic Collaborative for Healthy Georgia (2007), fitness surveys of children are not common. Therefore, there is a need for more research on the topic, especially for practicing physical education professionals. Advocates for physical education and personal health classes are reluctant to make the assertion that physical fitness and physical activity lead to improved academic performance. Many physical education proponents believe that improved fitness levels and increased time for physical activity have health benefits separate from, and that outweigh, the relationship to academics (Vail, 2008). However, today's physical education teacher and school administrators must account not only for the increased emphasis on academic testing and accountability, but also lean on past research to determine how physical education classes can aid academic performance.

Socio-economic background has a unique and distinct relationship with the progress and level of education among Indians. It may be surprising but the fact is that there is no agreed definition of Socio-Economic Status (SES) because the construct SES necessarily entails political ideologies about existing and desired social structures. For the last three decades or so, some scholars have defined SES as equivalent to simple, measurable things such as annual income. Others think race or ethnicity should be included. Some believe health status should be part of an SES measure since SES and health are so highly correlated and clearly cause each other, while few assign SES to the labour force. In sum, the definition of SES revolves around

the issue of quantifying social inequality. The SES of a child is most commonly determined by combining parents' educational level, occupational status, and income level (William H. J 2002). According to American Psychological Association (APA), socioeconomic status is commonly conceptualized as the social standing or class of an individual or group, and it is often measured as a combination of education, income and occupation. Socioeconomic status (SES) is often measured as a combination of education, income, and occupation. It is commonly conceptualized as the social standing or class of an individual or group. Socioeconomic status (SES) is known to influence children's health-related quality of life. Many SES indicators assess distinct dimensions of a family's position rather than measuring the same underlying construct. Many researchers, however, see SES indicators as interchangeable. The primary aim of this study was to determine which measure of SES had the strongest impact on health-related quality of life. Family income, occupational prestige, and educational attainment are measures of Socio-Economic Status (SES) that have been found to influence an individual's life opportunities.

The urban people with the growth of cities have brought a great transformation in the living habits of society. The city is the hub of much social life, and it influences its standards. Intellectual growth and habits, moral codes and conditions, behaviour patterns and cultural conditions resolve around it. New communities, new group, new ethnic relations and a multitude of classes make of the city an intricate and complex unit of modern society. Schools have the potential to improve the health of young people by providing instruction in physical education that promotes enjoyable lifelong physical activity. Diseases and health problem resulting from an inactive life style have their origins early in life. This is when an active lifestyle should be established.

Fitness begins at birth and should continue throughout a person's life. Physical activity and fitness behaviours should be normal and necessary part of everyone's life. Fitness improves s general health and it is essential for full and vigorous living. The physically fit child feels more alert and eager to do things. A weak child is a weak brick in the wall of the nation. The wealth of a nation depends entirely upon the health of every citizen of the country.

Hence physical fitness of school students is major factor to be considered. So, School physical education programmes should include multi furious activities appropriate to each age group. The complex nature of physical fitness can best understood in terms of its components such as cardio-vascular endurance, strength, flexibility and muscular endurance. In addition to these components of physical fitness has two dimensions viz. health related fitness and motor

fitness (Malina, 2004). Physical fitness is a highly complex phenomenon. In the literature various definition of Physical fitness is given. According to President's Council on Physical fitness and sports (1971), Physical fitness is the ability to carry out daily tasks without undue fatigue and with ample energy to leisure time pursuits and to meet unforeseen emergencies. Life opportunities can manifest themselves in various ways, such as availability of resources to an individual within the health care system or an individual's perception about their health related physical fitness. Physical fitness can be defined as a set of characteristics that are either health-related or skill-related. It refers to your ability to perform physical tasks efficiently as it relates to a particular sport or your day-to-day activities. In addition to physical health, being physically fit helps improve your mental, emotional, and social health. Health-related physical fitness is primarily associated with disease prevention and functional health. Participating in regular health-related fitness helps you control your weight, prevents diseases and illness, improves your mood, boosts energy, and promotes better sleep. It is made up of five sections: cardio respiratory endurance, muscular strength, muscular endurance, flexibility, and body composition.

1.2 Statement of the Problem

The adjustment capacity of school students greatly depends on the physical fitness as the different fitness factors influence the psychological functions of human being and the physical fitness also varied with the different socioeconomic status. The culture, lifestyle, calorie intake capacity, immunity power etc. influence the physical fitness and ultimately stimulate the adjustment capacity. Under this proven facts the title of this thesis considered as, **“A STUDY ON ADJUSTMENT OF SECONDARY SCHOOL STUDENTS WITH RELATION TO SOCIO ECONOMIC STATUS AND HEALTH RELATED PHYSICAL FITNESS”**

1.3 Objectives of the Study

The objectives of the present study were as follows:

- To study the present Adjustment status of secondary school students.
- To study the present Health related physical fitness status of secondary school students.
- To classify the students in different socioeconomic status.
- To create a relationship between adjustment capacity and Health related physical fitness in different socio-economic status of secondary school students.

1.4 Delimitations of the Study

The present study were delimited to-

1. Secondary boys and girls school students studying in class viii only and having the age between 13⁺ - 14 years.
2. The students of West Bengal Board of Secondary Education affiliated secondary school particularly located at the district South 24paraganas.
3. The variables of adjustment capacity, health-related physical fitness and socio-economic status.

1.5 Hypothesis of the Study

H₀-There would be no significant relation between the adjustment level and health related physical fitness in different socio-economic status of secondary school students.

1.6 Definitions of terms

A. Adjustment:

In psychology, Adjustment refers to the behavioral process of balancing conflicting needs or needs challenged by obstacles in the environment. Humans and animals regularly adjust to their environment. For example, when they are stimulated by their physiological state to seek food, they eat (if possible) to reduce their hunger and thus adjust to the hunger stimulus. disorder occurs when there is an inability to make a normal adjustment to some need or stress in the environment.

B. Socioeconomic status (SES)

Socioeconomic status (SES)is an economic and sociological combined total measure of a person's work experience and of an individual's or family's economic and social position in relation to others, based on income, education, and occupation. When analysing a family's SES, the household income, earners' education, and occupation are examined, as well as combined income, whereas for an individual's SES only their own attributes are assessed. However, SES is more commonly used to depict an economic difference in society as a whole.

C. Health-related Physical Fitness

Health-related physical fitness is defined as fitness related to some aspect of health. This type of physical fitness is primarily influenced by an individual's exercise habits; thus, it is a dynamic state and may change. Physical characteristics that constitute health-related physical fitness include strength and endurance of skeletal muscles, joint flexibility, body composition, and cardio respiratory endurance. All these attributes change in response to appropriate physical conditioning programs, and all are related to health. Health-related physical fitness component are:-

- a. Body Mass Index
- b. Upper body Strength Endurance
- c. Abdominal Strength Endurance
- d. Flexibility
- e. Cardio Respiratory Endurance

a. Body Mass Index:

The body mass index (BMI) is a value derived from the mass (weight) and height of an individual. The BMI is defined as the body mass divided by the square of the body height and is universally expressed in units of kg/m^2 , resulting from mass in kilograms and height in meters. The BMI is an attempt to quantify the amount of tissue mass (muscle, fat, and bone) in an individual, and then categorize that person as underweight, normal weight, overweight, or obese based on that value.

b. Upper body Strength Endurance

Muscular strength refers to the amount of force a muscle can produce with a single maximal effort. Muscle strength is measured during muscular contraction. The size of your muscle fibres and the ability of nerves to activate muscle fiercer related to muscle strength. In addition to understanding the definition of muscular strength, it's also important to understand the benefits of strong muscles. Building muscle strength helps with body alignment, makes performing everyday actions easier, increases metabolism, and relieves stress.

c. Abdominal Strength Endurance

Muscular endurance is the ability of a muscle or group of muscles to repeatedly exert force against resistance. Performing multiple repetitions of an exercise is a form of muscular endurance, as is running or swimming. If your muscles have to contract in a similar pattern more than one time you are using muscular endurance.

d. Flexibility

Flexibility is defined as the range of motion of your joints or the ability of your joints to move freely. It also refers to the mobility of your muscles, which allows for more movement around the joints. Range of motion is the distance and direction your joints can move, while mobility is the ability to move without restriction.

e. Cardio Respiratory Endurance

Cardio respiratory endurance is a health-related component of physical fitness that relates to the ability of the circulatory and respiratory systems to supply fuel during sustained physical activity and to eliminate fatigue products after supplying fuel. Cardio respiratory endurance is a measurement of how well your heart, lungs and muscles work together to keep your body active over an extended period of time. Exercisers can improve cardio respiratory endurance by participating in regular aerobic exercise.

1.7 Significances of the Study

1. The study may provide some information regarding the importance of health-related physical fitness in case of adjustment capacity.
2. The result of the study may clearly indicate the influence of socioeconomic status upon the physical fitness and hence ultimately may show how it affects the adjustment capacity.
3. The study may provide a clear idea about the relationship between socioeconomic status and Adjustment capacity of secondary school students.

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CHAPTER II:

REVIEW OF THE RELATED LITERATURE

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CHAPTER II

REVIEW OF RELATED LITERATURE

2.1 INTRODUCTION

Every piece of ongoing research needs to be connected with the work already done, to attain an overall relevance and purpose. The review of literature thus becomes basis between the research to be conducted and the studies already done. It reflects various aspects that have been already explored and established by researchers and encourages the coming researchers to appreciate the evidence that has already been collected by previous research and thus helps to carry out the current research work in the proper perspective.

2.2 Studies in Abroad Context

Tesfaye, A. (2013) conducted a study to compare physical fitness components namely speed, strength, endurance, agility and flexibility between female students belonging to rural and urban set-ups. The study is carried out on 80 female students, 40 rural and 40 urban of home secondary school in Hadiya zone. The data was collected by use of measurements of height and weight as well as by application of tests like jumping, stepping, running, flexibility test, etc. The data are analysed and compared with the help of statistical procedures in which arithmetic mean, standard deviation (S.D), standard error of mean (SEM), t-test were employed. Rural female students were found to be superior in strength, endurance, and speed. Urban female students on the other hand, were found to be heavier and superior in tasks like flexibility and agility.

Bohr AD, Brown DD, Laurson KR, Smith PJ, Bass RW. (2013) investigated the impact of Socio Economic Status on physical fitness in both males and females, with an economic-based construct of Socio Economic Status. The sample consisted of 954 6th, 7th, and 8th graders from a public, urban, Illinois middle school. The students participated in the FITNESSGRAM battery of fitness assessments as part of physical education. Descriptive statistics were calculated for height, weight, age, and sex. Students were grouped as high or low Socio Economic Status depending on whether they qualified for the federal free lunch program.

A multivariate analysis of variance controlled for age and stratified by sex compared the raw scores from the fitness test for low and high SES students. Odds ratios stratified by sex were calculated for the likelihood of not achieving the FITNESSGRAM Healthy Fitness Zone standards among SES groups. Girls of the low SES group had significantly lower scores on the FITNESSGRAM assessments and were significantly less likely to achieve Healthy Fitness Zone status than the girls from the high SES groups. For boys, SES was a significant main effect for body composition but not for the other fitness tests conducted. SES is related to physical fitness in girls but not in boys. A potential explanation for this is that boys are more likely to engage in vigorous leisure time activity regardless of SES than girls.

Chien-heng Chu Feng Tzu Chen Matthew B Pontifex Yu-Kai Chang (2016) conducted a study to examine the relationships between health-related physical fitness and academic achievement among children and adolescents, as well as to assess the association between health-related physical fitness and event-related potentials indicative of neurocognitive processes. Cardio respiratory fitness was positively associated with performance in the majority of academic subjects as well as with core neurocognitive processes that are foundational to scholastic performance. The association among muscular strength, muscular endurance, and flexibility with academic achievement was less consistent. As expected, body mass index (a surrogate measure of body composition) was negatively associated with academic scores in the majority of academic subjects as well as being predictive of impaired attention resource allocation and inefficient action monitoring. These findings suggest differential relationships between components of health-related fitness and academic achievement as well as underlying neurocognitive processes. Future research regarding the effect of multiple aspects of health-related physical fitness on youth's academic achievement and adopting a neuroelectric perspective is warranted.

Duane F. Alwin D F, Thronton A (1984) explores the potential role of family socioeconomic factors in school achievement outcomes at two separate periods in the life course—early in childhood and during late adolescence. Using data from an 18-year longitudinal study of families and their children which provides measures of parental socioeconomic characteristics across this entire period, we examine several issues related to the influence of early and late family factors on achievement outcomes assessed during the period of the completion of secondary schooling. We examine the extent to which differing conclusions are reached through the use of parental socioeconomic variables assessed during these two periods, and we explore

the question of the relative impact of these two sets of influences. Our results indicate that, in part due to the intertemporal consistency of some socioeconomic variables; most relationships are quite similar using either the early or later variables. While these patterns make it very difficult in some instances to ascertain the relative effects of early and late socioeconomic factors, our analytic results point to a potentially stronger role of early socioeconomic factors in cognitive development and school learning. In a single instance-the case of family size-we find independent effects on school achievement from both early and late socioeconomic experiences.

Petroski E, Silva D, Silva J, Pelegrini A (2012) investigated the associations between health-related physical fitness and socio demographic factors in students from a capital city of a Brazilian state. The percentages of students with unhealthy body composition, unhealthy skeletal muscle fitness and aerobic fitness levels were 23.8%, 34.4% and 30.5%, respectively. There was a trend for fewer male adolescents to have unhealthy body composition. Students from lower socioeconomic families were less likely to have musculoskeletal unfit. In relation to aerobic fitness, male students and those aged 17–19 years were more likely to be unfit.

Ogunshola F (2012) indicated that Parental socio-economic statuses and parental educational background did not have significant effect on the academic performance of the students. However, the parental educational qualification and health statuses of the students were identified to have statistical significant effect of the academic performance of the students. The two variables that indicated significant influence do reflect nature of the student' home environment and played notable role in the academic achievement of the respondents. Government could intervene to raise level of academic achievement among students in rural area.

Gun-Soo Han (2018) conducted a study to identify the relationship between physical fitness level and academic achievement in middle school students. A total of 236 students aged 13-15 years from three middle schools in D city, South Korea, were selected using a random sampling method. Academic achievement was measured by students' 2014 fall-semester final exam scores and the level of physical fitness was determined according to the PAPS (Physical Activity Promotion System) score administrated by the Korean Ministry of Education. A Pearson correlation test with SPSS 20.0 was employed. The Pearson correlation test revealed a significant correlation between physical fitness and academic achievement. Specifically, students with higher levels of physical fitness tend to have higher academic performance. In addition, final

exam scores of core subjects (e.g., English, mathematics, and science) were significantly related to the PAPS score. Results of this study can be used to develop more effective physical education curricula. In addition, the data can also be applied to recreation and sport programs for other populations (e.g., children and adult) as well as existing national physical fitness data in various countries.

Woodward J B (Jr.) (2009) conducted a study on Physical Fitness and Academic Performance Levels of Sixth and Seventh grade students (Under the direction of Dr. Vicky Martin) School of Education, November 2009. The purpose of this study was to examine the difference in academic performance levels between physically fit and physically unfit sixth and seventh grade students. Fitness levels were determined by assessing participants on the Fitness gram® battery of physical fitness tests, which measures body composition, aerobic capacity, muscular strength, muscular endurance, and flexibility. Academic levels were assessed using the school district's academic benchmark tests as well as Grade Point Average (GPA). The researcher used a series of nine independent *t*-tests to determine if there was a significant difference between the academic performance levels of physically fit and physically unfit students according to the Fitness gram® assessments. The null hypothesis was rejected and a significant statistical difference was discovered when comparing Language Arts/Reading Benchmark Test scores, Math Benchmark Test scores, as well as the Grade Point Average of participants that achieved the Healthy Fitness Zone (HFZ) for all six tests in the Fitness gram® battery of assessments, and those that did not achieve the HFZ. The null hypothesis was also rejected and a significant statistical difference was discovered when comparing Language Arts/Reading Benchmark and Math Benchmark Test scores of the participants that achieved the HFZ on the aerobic capacity test, to those that did not achieve the HFZ.

Michubu M J (2013) conducted a study to investigate the socio-economic factors influencing student's academic performance in public secondary schools in Igembe South District. The objectives of the study were: to establish how parental level of education affected student's academic performance, examine the extent to which parental involvement in their children education influenced student's academic performance, assess how the amount of income of the parent affected student's academic performance and to establish the extent to which parents provided financial and material support to their children for successful academic performance. The study used the descriptive survey design. The target population for this study consisted of 12 school principals, 36 class teachers and 120 students. The sample was selected

using simple random sampling, stratified random sampling and purposeful selection. The study used questionnaire as research instruments which had structured, closed ended and open-ended questions, they achieved a return rate of 88.7%. The research used SPSS to analyse data using descriptive statistics to generate frequencies and percentages. The main findings of the study were parental level of education has no influence on the student's academic performance. The finding also established that parent involvement in child education, income of the parent and financial and material support given to students by their parents influenced student's academic performance. Based these findings the following recommendations were made: sensitization of the parents by government agent on the importance of involvement towards their children education is necessary so that they can be more involved. Parent-school cooperation should be encouraged by the school management and parents need to be encouraged to buy necessary support materials for better academic performance. Parents should be encouraged to buy extra textbooks and other learning material for the students to use at home especially for day scholars. Government should provide textbooks and other learning materials required by secondary school learners in all secondary schools. Government need to provide fees bursaries to the needy students because majority of the parent are not able to pay school on time due to irregular income and poverty. Finally, since the study was carried in a rural district there is a need to conduct a similar study in as urban setting in other districts to find out if the same findings will be obtained.

William W A and Wilson B L (1989) reviews that the school effects literature is replete with discussions of whether any factors, beyond socioeconomic status (SES), contribute to an explanation of student achievement. Recent attention has focused on the role of the school administrator. One argument is that a strong, controlling principal is a key to improved student performance. Another argument is that, through supportive efforts, administrators can facilitate teachers' work, which in turn affects student achievement. This paper presents findings of a study that examined two related issues-the administrative factors that influence student achievement and the effect of family SES on the working of those factors. Data were obtained from a survey of 175 elementary and 128 secondary southeaster Pennsylvania schools. Findings indicate that, independent of SES, supportive administrative behaviour was positively associated with achievement at both the elementary and secondary levels. Tight administrative control over teaching was negatively associated with achievement, but only at the elementary level. In conclusion, school conditions do influence what students learn.

Stockie M L (2009) conducted a study “The Relationship between Socioeconomic Status and Physical Activity among Adolescents” and found that the three major themes were access, time, and awareness and related to the indicators of income, occupation, and education respectively. For each theme specific sub-themes were identified. Access is related to one's income which impacts adolescent PA by determining whether parent/family: 1) has money available to cover the direct costs of PA programs, 2) has transportation and travel options available for PA programming, 3) is able to meet basic needs with limited stress, and 4) is eligible to access subsidies or low-cost programs. Time is the theme related to one's occupation which impacts one's employment schedule. Awareness is related to both formal and informal education which impacts one's: 1) knowledge of the importance of PA and, 2) access to resources and exposure to PA, and 3) knowledge of subsidies and low-cost programs. Other social-ecological factors also emerged from the data.

2.3 Studies in India Context

D Alwin and T Arland (1994) compared the effects on high school achievement of family socioeconomic factors present during students' early childhood and during students' late adolescence. Results point to the potentially stronger role in cognitive development and school learning of early socioeconomic factors, except in the case of family size.

Shannonhouse A K (2012) investigated the effects of physical activity on academic achievement in kindergarten children across the 2008/09 school year. The main hypothesis examined in the study was whether children who participated in the Interactive Physical Activity Center (IPAC) would perform better academically than the control group on the Dibels Oral Reading Fluency, Retell Fluency, and Group Mathematics Assessment and Diagnostic Evaluation (G-Made) achievement tests. To ensure that children in the experimental group were physically active, participation, changes in heart rate, activity scores and perceived exertion were examined across the year. School attendance was examined to determine if the experimental group had fewer school absences than the control group. A longitudinal non-equivalent control group design was used to investigate the relationship between physical activity and academic achievement. To determine if the children were active in the IPAC, a one-way ANOVA examined changes in fitness variables. For the main question of the study concerning physical activity and academic achievement a two-way (Group X Time) ANOVA was used to compare

academic progress of the experimental and control group. To assess school attendance of the two groups, a one-tailed independent samples t-test was used. Results demonstrated that kindergarten children who received the IPAC program increased their physical activity and reached the academic performance level of the control group by the end of the school year. The experimental group experienced a greater rate of improvement over time in three out of four of the Dibels subtests compared to the control group, and improved the same as the controls in the Growth Scale Value of the G-Made. These results expand previous research on the relationship between physical activity and academic performance in kindergarten children. Results of this study are important for administrators and teachers because quality physical activity experiences have the potential to impact cognitive, physical and academic outcomes in our schools.

Choudhuri D, Choudhuri S, Kulkarni V (2002) had investigated and indicated that non-residential school children had poor physical anthropometry and showed a less PFI score. Regular physical activity with uniform diet provides better physical fitness to the students of Sainik School in comparison to their sedentary Non-Residential counterpart.

Ganguly and Maiabika (1989) conducted a study on socio-economic status and scholastic achievement and found that the mean achievement of upper socio-economic students of urban area in three groups of subjects differed significantly from those of lower groups. In rural areas also the upper socio-economic status group differed significantly in its achievement from the lower socio-economic status group in all those group of subjects and all these were found to be significant.

Garg V P and Chaturvedi S (1992) found that there exists a linear relationship between IQ and academic performance which held good both for rural and urban students. They also found that academic performance is related to socio-economic status and also has linear correspondence. This position also held good for both rural and urban students. They states that academic performance is related to socio-economic status and also has a linear correspondence. This position also held good for both rural and urban students. Rural students had found a higher mean IQ as compared to urban students.

Ghosh D K (1979) revealed that academic achievement does not have significant relationship with physical fitness, motor fitness and general ability in cases of subjects studying in classes ninth, tenth and eleventh of the Kendriya Vidyalaya, Gwalior. The score of academic

achievement and physical fitness, motor fitness, and general motor ability were separately compared for athletes and non-athletes and in none of the cases the value of coefficient of correlation obtained was found significant.

Mishra H P (2017) conducted a study of academic achievement of students of the higher secondary in relation to achievement motivation and socio-economic status. It was found that girls obtained a higher mean in achievement than boys.

Akande J A, Ikediashi N N (2018) investigated the level of emotional adjustment among secondary school students in the Federal Capital Territory (FCT) Abuja. The study was a descriptive survey and the population comprised all senior secondary school students in both public and private schools in the FCT. A sample of 450 students made up of male and female students from both private and public schools were involved in the study. Patil (1989) 'Adolescent's Emotional Adjustment Inventory' was adopted by the researchers to collect relevant data. The data collected were analysed by using percentage to analyse data on the research question while t-test and ANOVA were used to test the hypotheses. The results indicated that secondary school students had a low level of emotional adjustment. There was no significant difference in the level of students' emotional adjustment on the basis of gender or school type. However, a significant difference was found between public and private school students in their level of emotional adjustment. It was recommended that both public and private secondary school management and teachers should promote conducive psychological environment in their schools that will enhance emotional adjustment ability of the students.

Krishna J Vaghela (2015) conducted a study on difference of adjustment between adolescent girl students of secondary schools with respect to their type of family. For that purpose, eighty adolescent girl students were taken from the randomly selected secondary schools, out of which forty from nuclear families and forty from joint families. All the participants were administered the adjustment inventory for measurement of their social, emotional and educational adjustment. The obtained data were analysed and interpreted using statistical tool such as mean, standard deviation and t – test. The present study concluded that adolescent girl students from nuclear and joint families differ significantly on their scores of social adjustment as well as emotional adjustment. The nuclear and joint families' adolescent girl students do not differ significantly on their score of educational adjustment.

Indra (1991) observed the relation of social class, religion, family size and birth order to academic achievement of high school students. It was concluded that students belonging to different social class differed in their academic achievement. Hindu, Muslim and Christian students differed in their academic achievement scores. Family size of the student had its effect on the academic achievement.

Alam M (2018) conducted a study to examine the effect of adjustment on the senior secondary school students of Aligarh district. The sample of 220 11th class students was selected from government and private 10+2 schools located in the located in rural and urban areas of district. Tool for collecting the data included Adjustment Inventory for School Students constructed and standardized by A.K.P. Sinha and R.P. Singh (1971). The data were analysed using descriptive and inferential statistics. The findings of the study revealed that there is significant difference in adjustment of senior secondary school students across gender (male and female), locale (rural and urban), academic stream (science and social sciences) and types of school (government and private). The findings of the study may be used in devising skill training programme to develop a harmony between need and circumstances of the individual.

Master Arul Sekar J (2016) conducted a study to investigate whether there is any significant relationship between adjustment and academic achievement of higher secondary school students. In this survey study, the investigators used stratified random sampling technique for selecting the sample from the population. The stratification was done on the basis of gender and locality of students. The sample consists of 350 higher secondary school students from ten schools in Thanjavur district. The tools used for the present study were Adjustment Inventory developed by A.K.P Sinha and R.P. Singh (2007) and academic achievement constructed by the investigator. The statistical techniques used for analysing the data for the present study was Karl Pearson's product moment co-efficient of correlation. The finding shows that, there is significant relationship between emotional, social, educational adjustment of higher secondary school students in relation to academic achievement.

Islam M R and Khan Z N (2017) intended to examine and explore the impact of Socio-economic Status on Academic Achievement of Senior Secondary School Students. The investigator used descriptive survey research method for the present study and selected 170 Senior Secondary School students as a sample population from four Secondary schools by using

Simple Random Sampling Technique. Socio-economic Status Scale (SESS) developed by Kalia and Sahu (2012) was used for data collection regarding student's Socio-economic Status and previous annual marks of the students considered as Academic Achievement of the students were collected from office record book. The researcher analysed the data by applying Pearson's Correlation Coefficient and t-test as statistical techniques with the help of IBM SPSS 20.0. The findings of the study showed that there is positive correlation exist between Socio-economic Status and Academic Achievement of Senior Secondary School students, it also highlight that significance difference is present among different SES group in their Academic Achievement. It further revealed that there is no significant difference between male and female students in their Academic Achievement.

Hussiain K (2002) found that there is significant difference in the mean achievement scores of secondary school pupils belonging to educationally forward and educationally backward areas of Kerala. He conducted the study on 1200 standard IX students consisting of 600 educationally forward and 600 educationally backward area students by administering Calicut University Achievement Test Scores Part 11.

Rajkumar G, Saravanan M, Anbarasi M (2016) conducted a study on the mental health in adolescents and their adjustment used standardised questionnaires. They found that there was significant increase in social dysfunction ($p = 0.03$) and poor adjustment in all categories ($p < 0.05$) as age advanced. Government school students showed more somatic symptoms ($p = 0.03$) than the private schools, while private school students showed poor educational adjustment ($p = 0.01$). Students from English medium had significant social dysfunction when compared to those from Tamil medium ($p = 0.03$). Day scholars showed poor social dysfunction, while hostellers showed poorer social and overall adjustment. There was correlation between mental health and adjustment with poor mental health leading to poor adjustment.

Sarah Basu (2012) investigated the adjustment abilities of secondary school students. The Adjustment Inventory for School Students (AISS) developed by Sinha & Singh was employed to assess the adjustment level of the students. The study was carried out on a sample of 120 secondary school students, keeping in mind various demographic factors. The survey method of research was employed to collect the requisite data. The data so collected was

analysed using statistical measures of Mean, Standard deviation and t- test. The findings of the present study reveal that there exist highly significant differences between the adjustment of secondary school students when compared on the basis of gender, type of family structure and medium of instruction in school.

Dutt S (2005) keeping in view the lack of information about health-related physical fitness of young boys, the present investigation was carried out on 797 male children and youth belonging to Punjab and falling in the age range of 8 to 18 years. Four components of health-related physical fitness namely cardiovascular endurance, muscular strength/endurance, flexibility and body composition were assessed using standard techniques. The results in general indicate a trend of improvement in cardio respiratory fitness of the boys belonging to the present study with increase in age. However, when comparison is made with Prudential fitness gram standards Results indicate poor level of Vo₂ max in boys of the present study, the results of muscular strength and endurance, an important health related component of fitness indicate variations in its development with respect to different body regions in boys of the present study from age 8 to 18 years. The muscles related to the upper body region like triceps, deltoid, pectorals major etc. are observed to develop relatively better in their strength endurance ability than the muscles belonging to abdominal, hip and leg regions. It is believed that disproportionate development of muscular strength endurance in boys of the present study may be due to their habitual life style and a craze for some selected muscular strengthening exercises, like use of dumbbells, lifting weights etc. in order to develop their body for an attractive physical appearance. Average percent body fat of these boys at all age level is observed to fall in the health fitness zone. However, the percent body fat of boys of the present study after the age of 14 years and onwards exhibit a sharp rise, which continues up to 17 years of age.

Sonali S (2016) investigated to find out the difference between academic stresses of students belonging to different socioeconomic status. A sample of 200 students studying in 6 senior secondary schools of Samastipur (Bihar, India) was selected through simple random sampling method. Personal datasheet of students was used to determine their socio-economic status and self-developed Academic Stress Questionnaire (ASQ) was used for the data collection. The result revealed that students belonging to low socio-economic status have higher level of academic stress as compared to the students belonging to high socio-economic status, especially boys. However, Girls belonging to different socioeconomic status didn't exhibit any significant difference in their academic stress. The findings also revealed that personal inadequacy and

inadequate study facilities causes more academic stress among students belonging to low socio-economic status. In the case of boys belonging to low socio-economic status, inadequate study facilities cause more academic stress while in the case of girls belonging to low socio-economic status, personal inadequacy causes more academic stress. It was concluded that socio-economic status has a significant impact on the academic stress as low socio-economic status and its correlates, such as lower education, poverty, and poor health, ultimately affect our society as a whole. So it is recommended through this study that government should take serious initiatives to provide jobs and raise the socio-economic status of people throughout the country.

Akhtar Z (2012) tries to predict which socio-economic status (SES) factors effects Pakistani students' achievement. The indicators of SES were taken from the national documents of Pakistan. The SES questionnaire was constructed keeping in view the defined indicators. The sample of the study was secondary school students enrolled in four districts of Rawalpindi Division. The achievement of students was collected in form of grades from the gazette of respective Board of Intermediate and Secondary Education. Linear regression showed mother's education, income, refrigerator, and source used to travel to school has positive effect on achievement. Number of siblings and transport facility (car/van) has negative effect on achievement. The linear regression equation was used to get SES score of each student. The obtained SES score was interpreted by five SES classes/groups. In the sample the A+ grade achievers were not upper and lower class students. Majority of the students of middle class were average achievers. The students belong to lower class remain low achievers.

2.4 Conclusions

Several studies showed that child and adolescent adjustment ability and Health Related Physical Fitness have been largely neglected area in India. Looking into this perspective, current research work has been carried out in the area of secondary school students to identify the adjustment ability with relation to health related physical fitness so that an adequate management could be formulated. That is why Investigators paid their attention on gender difference and Socio economic Status in the adjustment ability of secondary school students.

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CHAPTER-III

METHODOLOGY

This chapter deals with selection of subjects, selection of variables, Criterion measures, design of the study, instruments and tools used, reliability, procedures of collecting data, administration of test, statistical procedures for analyzing the data.

3.1 Selection of Subject:

The purpose of the study was to enquire about the status of the relationship between adjustment on secondary school students with relation to socio economic status and health related physical fitness. With the secondary school students free from any major ailment, of south 24 parganas district, West Bengal who were in their age of 13⁺ to 14 years, were recruited as subject or Samples. Total 200 students were considered at first. After classification of the student in different socioeconomic status it has found that in Upper class, Upper Middle class, and in lower class there are only 20 students, so the present researcher considered only rest 180. The score of 22 students excluded because of their high and low extreme value and ultimately there were 75 girls and 83 boys. Among them the no. girls in Lower middle and upper lower class were 21 and 54 respectively and in boys there were 18 and 65 in Lower middle and upper lower class respectively.

3.2 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's and time factor the following anthropometric, health related physical fitness and psychological measurements were selected for the study.

Table No: 1 Name of the variables

Name of the variables			
Anthropometric Characteristics	Health Related Physical Fitness variables	Psychological variables	Sociological variables
Age	Cardio-respiratory Endurance of the subjects.	Adjustment Level of the Students	Socio-economic Status
Height	Flexibility level of the subjects.		
Weight	Upper body strength Endurance of the subjects.		
BMI	Abdominal strength Endurance of the subjects.		

3.3 Criterion Measure:

A. Anthropometric Measures:

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

B. Health Related Physical Fitness:

- I. BMI: - was measured by $\text{Weight} / \text{Height}^2$
- II. Upper body Strength Endurance: - was measured by no. of pushups/ Duration of flex arm hang
- III. Abdominal Strength Endurance: - was measured by no. of Curl-ups
- IV. Flexibility: - was measured by V-sit and reach test.
- V. Cardio respiratory Endurance: - was measured by 1500 meters run/walk Test.

Unit of Measurements:

Table No. 2: Unit of Measurements

Variables	Measurement Units
Age	Years
Height	Centimetres
Weight	Kilogram
BMI	Kilogram/metre ²
Upper Body Strength Endurance	No. Count/ Total duration in sec
Abdominal Strength Endurance	No. count
Flexibility	Centimetres
Cardio-respiratory Endurance	Time in minute

C. Socio economic Status: Socio-economic status of the secondary students measured by Standardized Kuppuswami questionnaire (2018).

D. Adjustment Level: Adjustment level was measured through the (Sinha & Singh) questionnaire.

3.4 Design of the Study:

The subject for the present study were consisted of 180 secondary school students randomly selected who are studying at two Govt. Added schools in south 24 parganas district, West Bengal, having minimum stage of participation was class VIII and IX.

Table No. 3: No of Subjects selected

School	Male	Female	Total
A	55	45	100
B	40	40	80

3.5 Instruments Used:

In order to collect relevant information for the present study following instruments were used-

- a. Weighing machine (Libra) for measuring body weight in kg.
- b. Stadiometer (calibrated anthropometric rod) for measuring height in cm.
- c. Questionnaires

3.6 Procedure for Collection data:

The researcher collected the data personally with prior permission of the schools and concerned teachers. Procedure for collection data of different parameters for the present investigation was as follows:-

3.6.1 Procedure of Height Measurement

1. Check that shoes, hair ornaments and braids have been removed.
2. The participant is asked to stand with his/her back to the height rule. Help the person to stand on the wall with feet slightly apart (at approximately a 60° angle) and against the vertical wall. Make sure the body weight is evenly distributed and both feet are flat on the floor.
3. Make sure the shoulders are levelled and the hands, arms and shoulders are relaxed. The back of the head, shoulder blades, buttocks, calves, and heels should all touch the vertical backboard of the Stadiometer. Legs should be straight and feet flat.
4. Position the head so that a horizontal line from the ear canal to the lower border of the eye socket runs parallel to the base board (Frankfurt plane) and perpendicular to the vertical backboard. If it is required, gently tilt the head up or down until proper alignment is achieved with eyes looking straight ahead. Keep the head in this position.
5. Tell the person to look straight ahead.
6. Ask the person to take a deep breath and hold it; push gently on the tummy to help the person stand to full height.

7. Still keeping the head in position use your other hand to pull down the headboard to rest firmly on top of the head and compress the hair.
8. Read the measurement and record the height in centimetres to the last completed unit (mm).
9. In case of doubt or uncertainty about this height measure, repeat the measurement. Record your readings. Do not erase the previous recorded measures.



Figure No.1: Procedure of Height Measurement

3.6.2 Procedure of Weight measurement:

1. Check that shoes have been removed. Ask the person to remove wallets, cellular phones, key chains, belts, empty the pockets.
2. The weighing scale should be placed in a way that the display is clearly visible.
3. The surface of the scale should be clean and there should be enough light in the room. If an electronic scale is used the indoor temperature should not exceed 45°C.
4. Ask the person to stand in the middle of the scale with feet slightly apart, weight distributed evenly on both feet (standing off-centre may affect measurements) and to remain still until the weight appears on the display. Ask the person to stand completely still until the weight is registered.
5. Record the body weight to the nearest 0.1 kg.

6. In case of doubt or uncertainty about this body weight measure, repeat the body weight measurement. Record your readings. Do not erase the previous recorded measures.

3.6.3 Body Mass Index (BMI):

Step 1: Weigh yourself.

Step 2: Write down your height in meters. To obtain height in meters, divide height in centimetres by 100.

Step 3: Calculate your BMI using the formula: Weight in kilograms divided by the square of height in meters, i.e. $\text{weight (kg)} / [\text{height (m)}]^2$

Example: Weight = 60 kg, Height = 166 cm (1.66 m)

Calculation of BMI: $60 \div (1.66)^2 = 21.77 \text{ kg./mtr.}^2$

Interpretation:

BMI less than 18.5: Underweight

BMI between 18.5 – 25: Healthy weight

BMI between 25 – 30: Overweight

BMI between 30 – 40: Obese

BMI over 40: Very obese

3.6.4 (a) Upper body Strength Endurance (Push up):

Purpose:

The push-up fitness test (also called the press up test) used to measure upper body strength and endurance.

Possible Equipment's required:

Depending on which protocol you use, need a floor mat, metronome (or audio tape, clapping, drums), stopwatch, wall, and chair.

Procedure:

A standard push up begins with the hands and toes touching the floor, the body and legs in a straight line, feet slightly apart, the arms at shoulder width apart, extended and at a right angles to the body. Keeping the back and knees straight, the subject lowers the body to a predetermined point, to touch some other object, or until there is a 90-degree angle at the elbows, then returns back to the starting position with the arms extended. This action is repeated, and test continues until exhaustion, or until they can do no more in rhythm or have reached the target number of push-ups. See push up videos for some examples of push up fitness.



Figure No. 2. a.: Procedure of Upper Body Strength Endurance (Push up)

Scoring: Record the number of correctly completed push-ups.

3.6.4 (b) Flexed-Arm Hang Test

Purpose: to measure upper body strength and endurance by timing how long they can hang with the chin above the bar.

Equipment required: Stopwatch, Horizontal overhead bar at an adequate height

Procedure: Grasp the overhead bar. The grip for the President's Challenge allows using either an overhand grip (palms facing away from body) or underhand grip (palms facing toward body), while for Fitness Gram the overhand grip is required. Position the body with the arms flexed and the chin clearing the bar. The chest should be held close to bar with legs hanging straight. The subjects should be assisted to this position. The subject holds this position for as long as possible. Only one trial is required.

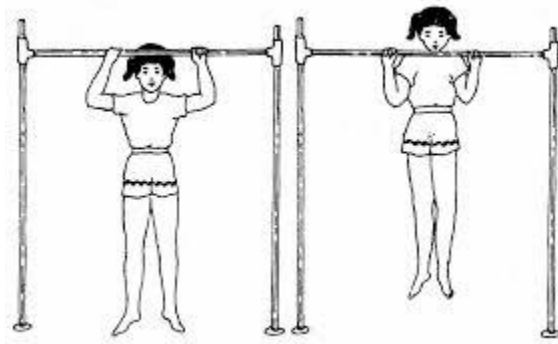


Figure No. 2.b: Procedure of Upper Body Strength Endurance (Flex Arm Hang)

Scoring: The total time in seconds is recorded - timing is stopped when student's chin touches or falls below the bar. The type of grip used should also be recorded with the results.

3.6.5 Abdominal Strength Endurance:

Purpose:

The curl up test measures abdominal muscular strength and endurance of the abdominals and hip-flexors, important in back support and core stability.

Equipment's required:

Flat clean cushioned surface, stopwatch, recording sheets, and pen etc.

Procedure:

Described here are the commonly used methods and some general guidelines. The subject lies on a cushioned, flat, clean surface with knees flexed, usually at 90 degrees. Some techniques may specify how far the feet are from the buttocks, such as about 12 inches. A partner may assist by anchoring the feet to the ground. The position of the hands and arms can affect the difficulty of the test. They are generally not placed behind the head as this encourages the subject to stress the neck and pull the head forward. The hand may be placed by the side of the head, or the arms crossed over the chest, reaching out in front. Some protocols use curl up strips or other marks on the ground to slide the hands along and indicate how much to curl up. The subject raises the

trunk in a smooth motion, keeping the arms in position, curling up the desired amount. The trunk is lowered back to the floor so that the shoulder blades or upper back touch the floor.



Figure No 3: Procedure of ASE test



Figure No4: Students performing ASE test

Scoring: The completion of one complete curl up (up and back) counts as one. The curls-up must be performed correctly for it to be counted. For the tempo tests, the test is continued until the subject cannot maintain the rhythm or has reached the target number for the test.

3.6.6 V- Sit and Reach Test (Flexibility):

Purpose:

This test measures the flexibility of the lower back and hamstring muscles.

Equipment's required:

A tape for marking the ground, marker pen, and ruler were used. With the tape mark a straight line two feet long on the floor as the baseline, and a measurement line perpendicular to the midpoint of the baseline extending two feet on each side. Use the marker pen to indicate every half-inch along the measurement line - the point where the baseline and measuring line intersect is the zero point.

Procedure:

The subject removes their shoes and sits on floor with the measuring line between their legs with the soles of their feet placed immediately behind the baseline, heels 8-12" apart. The thumbs are clasped so that hands are together, palms facing down and placed on measuring line. With the legs held flat by a partner, the subject slowly reaches forward as far as possible, keeping the fingers on baseline and feet flexed. After three practice tries, the student holds the fourth reach for three seconds while that distance is recorded. Make sure there are no jerky movements and that the fingertips remain level and the legs flat.



Figure No 5: Students performing V- Sit and Reach Test

Scoring:

The score is recorded to the nearest half inch as the distance before (negative) or beyond (positive) the baseline.

3.6.7 Cardio-respiratory Endurance:

Purpose

The 1500 Meters Run is a middle distance run. In this study 1500 meter run test was used to measure a cardio-respiratory endurance.

Equipment's required: 200 meters running track, marking cones, recording sheets, stopwatch.



Figure No6: 1500 meters run and walk test

Procedure:

Explain the test procedures to the subjects. Measure and mark out the test area. Then appropriate time was given for warm up. Start from a stationary standing position (hands cannot touch the ground), with one foot in front of other. The front foot must be behind the starting line. Once the subject is ready and motionless, the starter gives the instructions 'set' then 'go'. The subjects were given seven and half lap run for covering 1500 metres. Official start the stopwatch and stop after crossing the finishing line Walking was allowed, though the participants must be encouraged to push themselves as hard as they can (Stephen A. Ingham 2008).

Scoring: -

The total time taken by the participants was recorded from start to end of 1500 meters.

3.6.8 Socio-economic Status:

Socio economic status was measured by the kuppuswamy questionnaire, 2018 version. The original scale was published in the year 1981 and incorporated four characteristics were assessed and scored: Education level of the head of family (HOF), occupation of the HOF, and income per month and family size. There is specific norm of different categories. According to the reply of the respondents the specific score was calculated and then as per the given norms they were categorized into different category as per following:-

Upper class- 26-29

Upper Middle- 16-25

Lower middle- 11-15

Upper lower- 05-10

Lower-<05

3.6.9 Adjustment Level Was Measured Through Questionnaire:

To investigate adjustment level of the students, a dedicated questionnaire was used. The administration of the tool viz., Adjustment Inventory for School Students by Sinha and Singh (1971) was completed following the instructions given by the author of the tool.

Adjustment Inventory for School Students by Sinha and Singh (1971) questionnaire was used. Adjustment Inventory for School Students has been constructed and standardized by A.K.P. Sinha and R.P. Singh (1971). The inventory measures the adjustment of secondary school students in three areas of adjustment - emotional, social and educational. The inventory contains 60 items, 20 items in each area of adjustment. 20 items measure emotional adjustment, 20 items measure social adjustment and 20 items measure educational adjustment. Emotional adjustment: High scores indicate unstable emotion. Students with low scores tend to be emotionally stable. Social Adjustment: Individuals scoring high are submissive and retiring. Low scores indicate aggressive behaviour. Educational Adjustment: Individual scoring high are poorly adjusted with their curricular and co-curricular programmes. Persons with low scores are interested in school programmes. The high score at each sub- scale and total test are considered as the syndrome for maladjustment. The tool is highly reliable and valid. The coefficient of reliability by Split half, Test retest and KR formula - 20 are respectively .95, .93 and .94 and coefficient of validity with hostel superintendent ratings of adjusted students is .51.

3.7 Reliability of data:

For scientific work the collected data must be reliable. In the present study reliability of data was ascertained by confirming the reliability of tester and instruments used. All the measurement was taken by the researcher herself. Reliability of the researcher was tested by computing correlation between her measurements and the measurement of the expert. Reliabilities of instruments were tested by computing correlation method.

3.8 Conditions for Data Collection:

- I. Competency of the Testers.
- II. Reliability of the Instruments.
- III. Reliability and validity of the tests.
- IV. Environmental condition.

3.8.1 Competency of the testers:

All the data of this study were collected by the investigator himself with the assistance of some Masters of Physical Education students and Research scholars of the department of Physical Education, Jadavpur University, Kolkata, and West Bengal. Before collecting the data properly, the investigator with his investigating team had practice the administration of all the tests and recording of all relevant data under the guidance of the supervisor.

To observe testers competency, one hundred and eighty (180) numbers of subjects from 13+ to 14 years of age group were chosen randomly and measurements were taken on them in all the parameters both by the investigator and the experts, under identical conditions.

3.8.2 Reliability of the Instruments:

The reliability of collected data depends upon the reliability of the instruments which have been used for collecting the data. The instruments used in this study were taken from the laboratory of test and measurements, Physical Education Department, Jadavpur University, Kolkata, West Bengal. The instruments were of standard one and supplied by standard organizations. Their efficiency, accuracy and reliability were generally accepted.

3.8.3 Reliability and validity of the tests:

The test and measurements conducted in this study were widely accepted, used, reliable and valid tests. The tests were all standard tests and references in this regard have already been mentioned and are all considered as valid tests.

3.8.4 Environmental condition:

The climate was almost good when the data were collected. The tests and measurement of the study were conducted during March. As it remained more or less the same, it could be accepted that environment conditions did not affect all the measurement of the subjects on that day. The recorded temperature was in the range from 26⁰C-35⁰C during the time of data collection. The humidity was found average.

3.9 Statistical procedure:

After collecting data, the results of the study were obtained by following statistical procedure as mentioned hereunder –

Associations of Health related Physical fitness with Socio Economic Status of tribal School going Children was examined by using Pearson correlation coefficient technique. To find out the relation of socioeconomic status with health related physical fitness of tribal school going children, co-efficient of correlation was computed by Pearson product moment method.

Ms-Excell2010 was used for the statistical analysis. For the Descriptive statistics for each variable were calculated for the total sample (n= 180). Values are presented as mean values and \pm S.D. and Correlation was used to assess the adjustment on secondary school students with relation to socio economic status and health related physical fitness.

3.10 Exclusion Criteria:

Following exclusion criteria were applied -

- a) Cardiovascular or respiratory disease
- b) Patient of diabetes mellitus
- c) Participation in game
- d) Caste, religion etc.

3.11 Inclusion Criteria:

- a) Secondary school students with regular conditioning.
- b) Free from any major ailment.

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CHAPTER IV: ANALYSIS AND INTERPRETATION OF DATA

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CHAPTER IV

ANALYSIS AND INTERPRETATION OF DATA

In this chapter the result of statistical calculation of the present study has been presented. The analysis and interpretation of that result has also been presented here.

The data obtained from standardized questionnaire and Health related physical fitness test tabulated and analysed by MS-Excel software. Descriptive statistics such as the mean and S.D. was used to analyse data of BMI, Cardio-respiratory Endurance, Flexibility level, Upper body strength Endurance, Abdominal strength Endurance, Adjustment level, Socio-economic status that help to describe, show or summarize data of respondents in a meaningful way. In addition to this, Coefficient of correlation a statistical test was used to examine the relation between adjustment level and Health Related Physical Fitness of different socio economic status groups (Lower middle class and Upper Lower class). The results are presented in the following manner.

4.1 Results:

Descriptive statistics and inferential statistics was used-

Table No 4: Mean and S.D. of Adjustment level and different socio-economic status of Girls and Boys students

Variables	Socio-economic status of girls		Socio-economic status of boys	
	Lower Middle class	Upper Lower class	Lower Middle class	Upper Lower class
	Mean \pm S. D.	Mean \pm S. D.	Mean \pm S.D.	Mean \pm S.D.
Socio Economic Status	12.55 \pm 1.09	7.62 \pm 1.85	13.23 \pm 1.52	7.56 \pm 1.78
Adjustment level	16.95 \pm 4.72	15.38 \pm 4.71	19.35 \pm 7.51	17.90 \pm 6.20

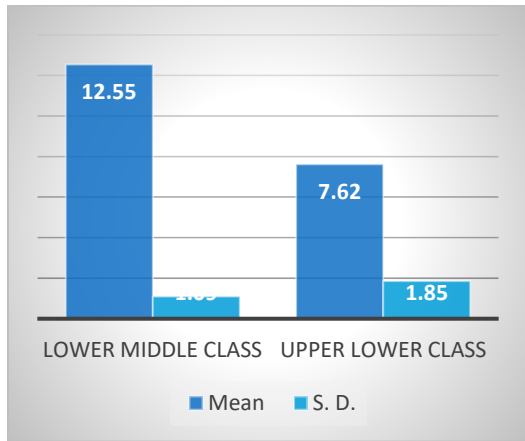


Figure No 7: Socio-economic Status Girls

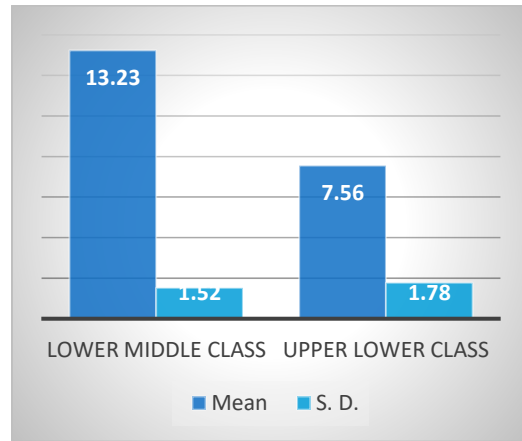


Figure No 8: Socio-economic Status Boys



Figure No 9: Adjustment level of the Girls

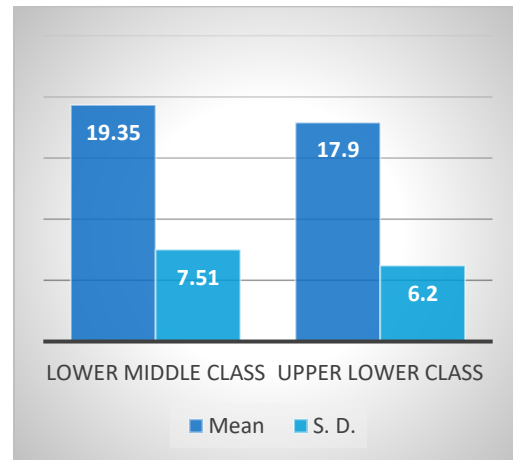


Figure No 10: Adjustment level of the Boys

Table no. 4 shows that the mean and S.D. of socio economics status of girls of lower middle and upper lower class were 12.55 ± 1.09 and 7.62 ± 1.85 respectively and the mean and S.D. of adjustment level of the students of lower middle class and upper lower class were 16.95 ± 4.72 and 15.38 ± 4.71 respectively. The 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. 5: Mean and SD of Health-Related Physical Fitness of the different socio-economic status Girls and Boys students

Variables	SOCIO-ECONOMICS STATUS OF BOYS		SOCIO-ECONOMICS STATUS OF GIRLS	
	Lower Middle class	Upper Lower class	Lower Middle class	Upper Lower class
	Mean ± S. D.	Mean ± S. D.	Mean ± S.D.	Mean ± S.D.
BMI (kg. /mtr.²)	17.78 ± 5.78	18.09 ± 3.28	19.31 ± 6.46	18.29 ± 3.82
Upper body Strength Endurance (Push-ups, in no. for boys and flexed arm hang in sec. for girls)	21.29 ±11.29	20.68±8.52	49.4 ± 32.85	67.24 ± 49.31
Abdominal curls ups (in no)	27.58 ± 7.91	25.18 ± 9.60	19.05± 8.00	20.38 ± 8.43
Flexibility (cm)	20.70 ±10.35	24.70 ± 7.24	28.45 ± 9.70	27.83 ± 6.87
Cardio-Respiratory Endurance (min.)	9.00 ± 2.60	10.16 ± 1.58	13.00 ± 5.23	13.39± 3.40

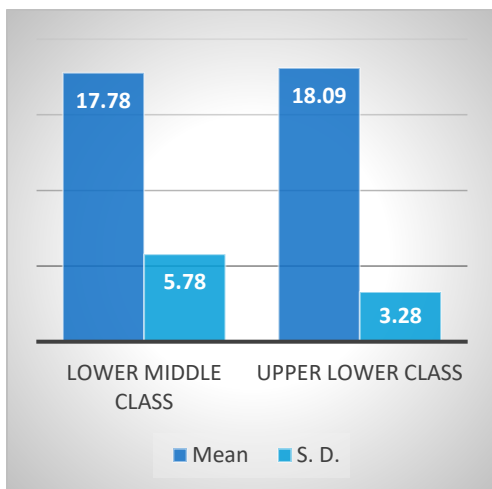


Figure No 11: BMI of the Boys

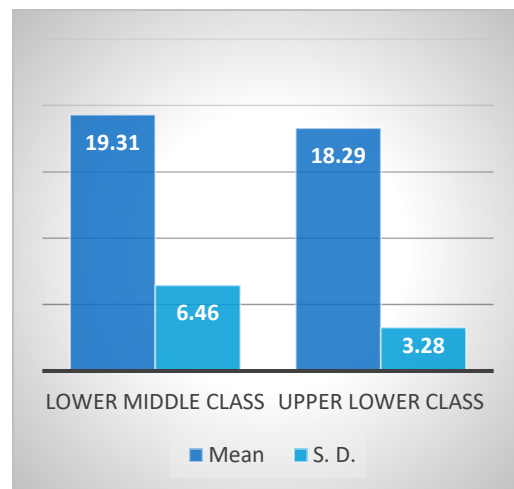


Figure No 12: BMI of the Girls

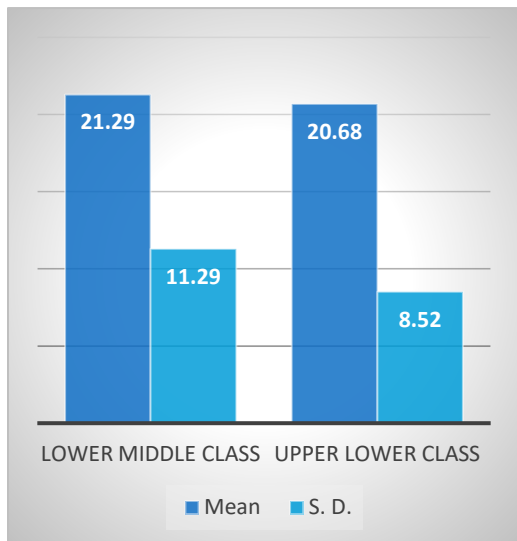


Figure No 13: UBSE of the Boys

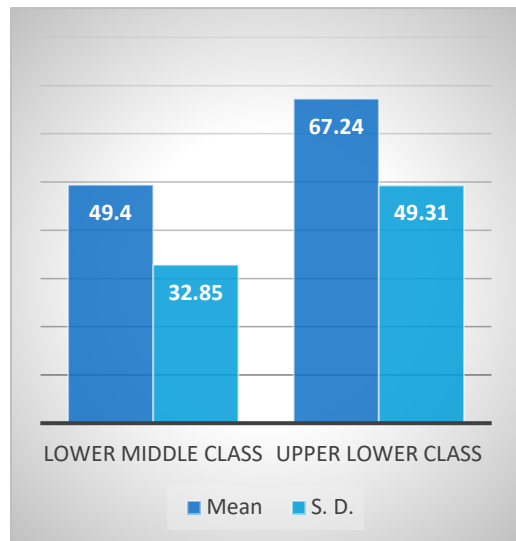


Figure No 14: UBSE of the Girls



Figure No 15: ASE of the Boys

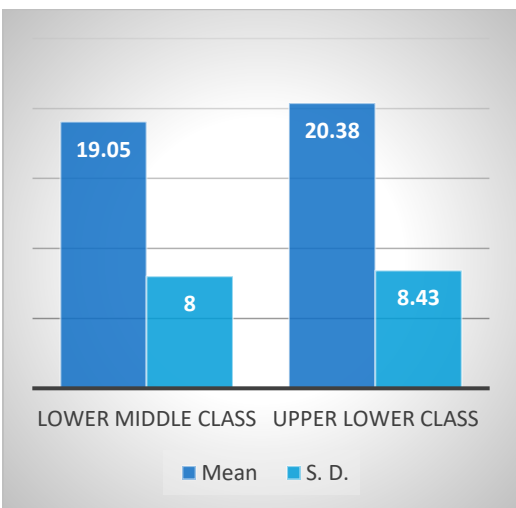


Figure No 16: ASE of the Girls

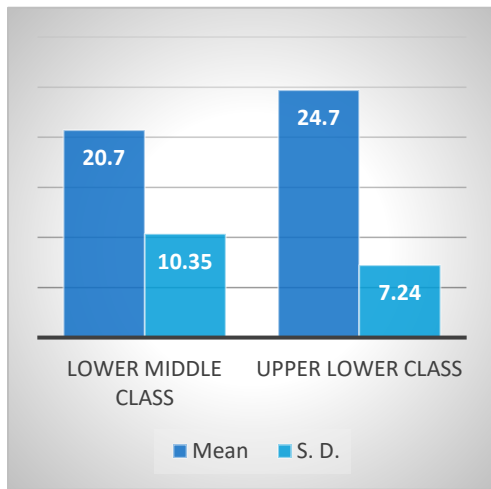


Figure No 17: Flexibility of the Boys



Figure No 18: Flexibility of the Girls

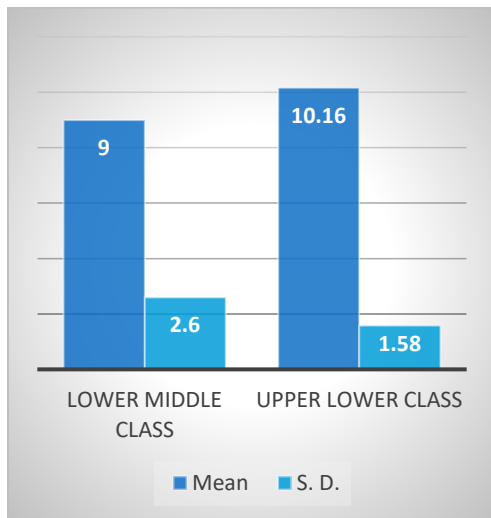


Figure No 19: CRE of the Boys

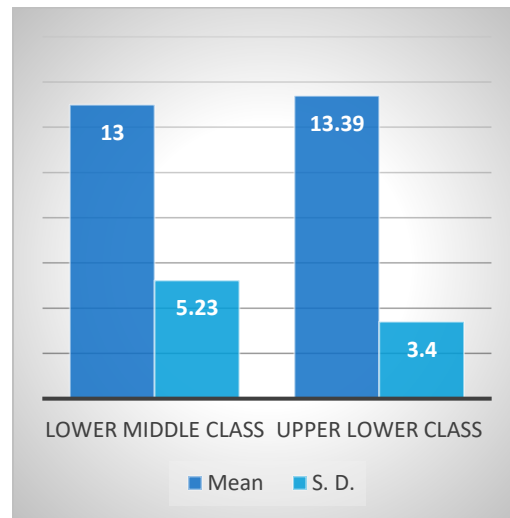


Figure No 20: CRE of the Girls

From the above table no. 5, the mean and S.D. of BMI of lower middle class was 17.78 kg. /mtr².and 5.78 kg./mtr². 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. The mean BMI of upper lower class of boys was 18.09 kg. /mtr² and standard deviation was 3.28 kg. /mtr². 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 Cardio Respiratory Endurance was 24.70 cm. and 10.16 min. respectively and corresponding standard deviation were 7.24 cm. and 1.58 min. respectively.

From the above table we see that, the mean and S.D. of BMI of lower middle class girls was 19.31kg. / mtr². And 6.46 kg. /mtr². The mean and S.D. of Upper Body Strength Endurance of lower middle class of girls was 49.4 sec. and 32.85 sec. The mean Abdominal Strength Endurance of lower middle class of girls was 19.05 and standard deviation was 8.00 and mean of Flexibility and Cardio Respiratory Endurance were 28.45cm.and13.00 min. and corresponding S. D. were 9.70cm.and5.23 min. respectively.

The mean and S.D. of BMI of upper lower class was 18.29kg. /mtr².and3.82 kg. /mtr². The mean and S.D. of Upper Body Strength Endurance of upper lower class of girls was 67.24 sec. and 49.31 sec. The mean Abdominal Strength Endurance of upper lower class of girls was 20.38 and standard deviation was 8.43 and mean of Flexibility and Cardio Respiratory Endurance were 27.83cm.and13.39 min. and corresponding S. D. were 6.87cm.and3.40 min. respectively.

Table-6: Correlation of Adjustment Level with different socio economics status groups

SES Category			Adjustment Level
			'r' value
GIRLS	LOWER MIDDLE	Socio-economic Status	0.066
	UPPER LOWER		-0.119
BOYS	LOWER MIDDLE		0.068
	UPPERLOWER		-0.113

0.05% level of significant

From the above table no. 6, it is clear that for the lower middle class, the Socio economics status has a very weak positive correlation($r = 0.066$ and 0.068) with Adjustment level both for the girls and boys students. The Socio economics status of upper lower class also has a very weak negative correlation($r = -0.119$ and -0.113) with Adjustment level both for the girls and boys students.

Table-7: Correlation of Adjustment Level of different socio economics status groups with Health-Related Physical Fitness

SES		Health Related Physical Fitness					
Category		Adjustment Level	CRE	FLX	UBSE	ASE	BMI
Girls	LOWER MIDDLE			-0.055	-0.776*	0.209	0.325
	UPPER LOWER		-0.046	-0.165	-0.165	-0.038	0.318*
Boys	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

The above table no.7 shows that Adjustment level of lower middle class has a very weak negative correlation with Cardio Respiratory Endurance ($r = -0.055$) of girls students and significantly negative correlation found with flexibility ($r = -0.776$). But in case of the other health related fitness variables i.e. Upper Body Strength Endurance ($r = 0.209$), Abdominal Strength Endurance($r = 0.325$), and Body Mass Index ($r = 0.023$) no significant but positive correlations were found respectively. On the other hand the co-efficient of co-rrelation of Adjustment level of upper lower class girls with Cardio Respiratory Endurance ($r = -0.046$), Flexibility ($r = -0.165$),Upper Body Strength Endurance ($r = -0.165$) and Abdominal Strength Endurance ($r = -0.038$) negative correlation were found respectively. But in case of BMI it has significant positive relation ($r = 0.318$).

From the above result it revealed that in both classes Cardio-Respiratory Endurance (CRE) does not have any influence on adjustment level of the girl students. With flexibility

significant negative correction found in lower middle group indicates that adjustment level influenced negatively by flexibility. Upper body strength endurance and Abdominal Strength Endurance have no influence on adjustment level in both the class. BMI influence the adjustment level positively and significantly in upper lower group of girls.

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-rrrelation 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.

4.2 Discussion

It is established that socio-economic factor influence one's lifestyle and also fitness level. Present study the investigator found that weaker relationship between socio-economic status and health related fitness. The weaker relation because might be the time of data collection, motivation of children etc. affect the results. Socio-Economic Status was significantly associated with physical fitness. At some age levels, boys from the low SES group performed better for muscular and aerobic endurance whereas girls from the high SES group performed better for power (**Freitas D. et al. 2010**). Although Higher poverty, land inequality and low caste composition of the poor was associated with negligible adverse effects on targeting of private goods to the poor within villages, but with lower employment generation out of allotted funds, and significantly lower allocation of resources to the village as a whole. 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 the beneficial role of coping flexibility on health-related quality of life among individuals low in SES. The findings suggested that the potential importance of psychological interventions that strengthen the flexible coping skills of socioeconomically disadvantaged groups (**Atal S & Cheng 2016**).

4.3 Testing of Hypothesis

The researcher was hypothesized that there would be no significant different relation between the adjustment level and health related physical fitness in different socio-economic status of school going children. From the result the researcher found that significant relation exists between adjustment level with flexibility of girls in lower middle socio-economic group and also with BMI of girls in upper lower socio-economic group and thus in case these two health related physical fitness variables the null hypothesis are rejected. In case of other variables the adjustment level is not related both in case of boys and girls and hence the null hypothesis can't be rejected.

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CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

In this chapter the summary of all the previous chapters have been presented. The conclusions drawn and the recommendations proposed have also been included here.

In the present study, an attempt has been made to find out relationship between adjustment level and Health related physical fitness in different socio-economic status of secondary students. There were 75 girls and 83 boys. Among them the no. girls in Lower middle and upper lower class were 21 and 54 respectively and in boys there were 18 and 65 in Lower middle and upper lower class respectively. From the two higher secondary schools of South 24 Paraganas district in West Bengal, the subjects were selected for the study. In this study we considered adjustment level as dependent variable and Health Related Physical Fitness (HRPF) was considered as dependent variable. The data was collected by use adjustment level questionnaires by Sinha & Singh and Socio economic status was measured by the kuppuswamy questionnaire of 2018 version. Health Related Physical Fitness components were BMI- measured by Weight /Height^2 , Upper Body Strength Endurance (UBSE) measured by no. of push-ups for boys and duration of flex arm hang for girls, Abdominal Strength Endurance (ASE) measured by Number of curl ups, Flexibility (FLX) measured by V-sit and reach test and Cardio Respiratory Endurance (CRE) measured by 1500 Meters run/walk tests. The data were analyzed with the help of statistical procedures. Mean, standard deviation (S.D.), and correlation coefficient were employed.

In respect of results of the study adjustment level of girls lower middle class has a very weak negative correlation with CRE ($r = -0.055$), significantly negative correlation found with flexibility ($r = -0.776$). But in case of other health related fitness variables i.e. UBSE, ASE, BMI not significant but positive correlations were found $r = 0.209$, 0.325 and 0.023 respectively. On the other hand adjustment level of upper lower class with CRE, FLX, UBSE and ASE of girls students negative correlation were found $r = -0.046$, -0.165 , -0.165 and -0.038 respectively. But

in case of BMI it has significant positive relation ($r = 0.318$). In this study we concluded that adjustment level with flexibility and BMI were significant in case of girl students.

In respect of the results of the study the adjustment level of boys of lower middle class had a positive not significant correlation with CRE ($r = 0.355$), not significant negative correlation found with flexibility, UBSE, ASE, BMI having $r = -0.306, -0.306, -0.205$ and -0.368 respectively. Adjustment level of upper lower class with CRE and ASE has very weak positive correlation were found $r = 0.020$ and 0.047 and Negative relation were found in case of flexibility, USBE and BMI, $r = -0.030, -0.033$ and -0.216 respectively. In this study we concluded that adjustment level and HRPF components were not significant correlated each other's.

5.2 Conclusions

Within the limitations of the present investigation following conclusions were drawn on the basis of the obtained results and discussions:

In girls

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

In Boys

- 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.

5.3 Recommendations

On the basis of conclusions the following recommendations were proposed for future investigation:

- i. This similar study may be undertaken with a large number of subjects.

- ii. A study may be conducted in future to compare health related fitness of tribal and non-tribal school going children.
- iii. A study may be conducted in future to assess motor fitness of ethnic tribal school going children.
- iv. A study may be conducted in future to assess health related fitness of ethnic tribal children with geographical area of study extended to all over India.

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APPENDICES

1. Adjustment Questionnaire



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Prof. A. K. P. Sinha (Patna)
Prof. R. P. Singh (Patna)

Consumable Booklet
of
AISS-SS
(English Version)

Please fill up the following informations : Dated

Name

Age Gender : Boy Girl

Name of the School

Class District

INSTRUCTIONS

On the next pages, there are some statements covering your school problems, which have two responses alternatives 'YES' and 'NO'. Read every statements carefully and decide whether you want to answer it with Yes or No. If your answer is in "Yes", then tick the right mark under "Yes" and if in "No", tick the right mark under "No". Remember your answer will be told to any person, so please give the correct answer without hesitation. You may take your own time, but try to finish it as soon as possible.

Now work is start.

Scoring Key

Area	Emotional (I)	Social (II)	Educational (III)	Total	Overall Interpretation
Raw Score					
Total					
Interpretation					

Estd. 1971 www.npcindia.com ☎: (0562) 2464926

NATIONAL PSYCHOLOGICAL CORPORATION

4/230, KACHERI GHAT, AGRA-282 004 (INDIA)

Statements

Sr. No.		Yes	No
1	তুমি কি কোন কিছুর জন্য তোমার স্কুলে সর্বদা ভয় পাও?		
2	তুমি কি তোমার সহপাঠীদের সাফাৎ এড়িয়ে যাও?		
3	তুমি কি কোন কিছু পড়ার সঙ্গে সঙ্গে ভুলে যাও?		
4	ধরো তোমার সহপাঠীরা অজ্ঞাত ভাবে যদি কিছু অযৌক্তিক কাজ করে, তুমি কি তার জন্য হঠাৎ করে তাদের উপর রেগে যাও?		
5	তুমি কি একটু লাজুক প্রকৃতির?		
6	তুমি কি পরীক্ষাকে ভয় পাও?		
7	তোমার ভুলের জন্য তোমার শিক্ষক তোমাকে বকবে তার জন্য ভয় পাও?		
8	তুমি যখন কোন কিছু বুঝতে পারো না, তখন কি তুমি প্রশ্ন করতে ইতস্তত বোধ কর?		
9	তোমার ক্লাসে যা কিছু পড়ানো হয় তা বুঝতে খুব অসুবিধা হয়?		
10	তুমি কি তোমার সেই সব বন্ধুদের প্রতি ঈর্ষান্বিত হও, যাদের কে শিক্ষকরা খুব প্রশংসা করেন?		
11	যখন তোমার কিছু শিক্ষক একসঙ্গে থাকে, কোনো সংকোচ ছাড়া সেখানে যেতে পারো?		
12	তোমার শ্রেণিতে যা কিছু পড়ানো হয় তা সঠিকভাবে লিখতে পারো?		
13	তুমি কি তোমার সেই সকল সহপাঠীদের প্রতি ঈর্ষা কর, যারা তোমার থেকে ভালো বলে মনে হয়?		
14	তোমার কি কখনও কখনও মনে হয়, যে তোমার স্কুলে তোমার কোনো বন্ধু নেই?		
15	তোমার ক্লাসে পড়ানোর সময় তুমি কি সব সময় সজাগ থাকো?		
16	তুমি যখন দেখো যে, কিছু ছাত্র একসাথে কথা বলছে তখন তুমি কি মনে কর যে তারা তোমাকে নিয়ে আলোচনা করছে?		
17	তুমি সহজে সবার সঙ্গে বন্ধুত্ব স্থাপন করতে পারো?		
18	তোমার স্কুলে শিক্ষকরা যে শিক্ষাদান পদ্ধতি অবলম্বন করে তোমাদের শিক্ষাদান করেন, তাতে তুমি সন্তুষ্ট?		
19	তোমার স্কুলে কোনো অনুরূপে তোমাকে যদি কোনো দায়িত্ব দেওয়া না হয়, তুমি কি অন্যদের প্রতি রাগান্বিত হও?		
20	যখন কিছু ছাত্র একসাথে থাকে, তুমি কি তাদের সাথে অবাধে যোগদান করতে পারো?		
21	তুমি কি মনে কর যে, তোমার স্কুলের শিক্ষকরা তোমার সমস্যার প্রতি মনোযোগ দান করেন না?		
22	তুমি কি প্রায়ই তোমার স্কুলে দুঃখ এবং বেদনাতে থাকো?		
23	তুমি কি তোমার সহপাঠীদের সাথে একত্রে কাজ করতে পছন্দ কর?		
24	তুমি কি তোমার পড়াশোনার অগ্রগতি নিয়ে সন্তুষ্ট?		
25	তুমি কি অনুভব কর যে তোমার শিক্ষকরা তোমাকে অবহেলা করেন?		
26	তুমি কি ক্লাসে শিক্ষকদের মনোযোগ আকর্ষণের জন্য চেষ্টা করেন?		
27	কোনো কিছু পড়াটা তোমার কাছে বোঝা মনে হয়?		
28	তুমি কি সজাগ হও যখন কেউ তোমার বিরুদ্ধে অভিযোগ করে এবং তুমি তাদেরকে ক্ষতি করার চেষ্টা কর?		
29	তুমি কি একা একা থাকতে পছন্দ কর?		
30	তোমার পড়াশোনা সংক্রান্ত সমস্যা সমাধানের জন্য তোমার শিক্ষকরা কি সব সময় প্রস্তুত থাকেন?		

Statements

Sr. No.		Yes	No
31	তুমি প্রায়ই তোমার স্কুলের সম্পর্কে অসন্তুষ্ট হও?		
32	তুমি তোমার স্কুলের ছাত্র-ছাত্রীদের সাথে বন্ধুত্বপূর্ণ সম্পর্ক স্থাপন কর?		
33	তোমার স্কুলের শিক্ষকগণ তোমাকে প্রশংসা করেন?		
34	তুমি কি তোমার ডুলকে যুক্তিযুক্ত করার চেষ্টা কর?		
35	তুমি কি ক্লাসের সামনের আসনে বসতে পছন্দ কর?		
36	তুমি কি প্রায়ই পরীক্ষায় কম নম্বর পাও?		
37	যখন শ্রেণিকক্ষে শিক্ষক তোমাকে কোনো প্রশ্ন জিজ্ঞাসা করে, তখন বিরক্ত বোধ কর?		
38	তোমার স্কুলের সহপাঠীদের সঙ্গে তোমার বন্ধুত্বপূর্ণ সম্পর্ক আছে?		
39	তুমি কি স্কুলে আরো বেশিদিন ছুটির আশা কর?		
40	যখন তোমার স্কুলের সহপাঠীরা তোমাকে নিয়ে কৌতুক করে তখন কি তুমি তাদের উপর রেগে যাও?		
41	তুমি কি স্কুলের সমাবেশে সরাসরি অংশগ্রহণ কর?		
42	তুমি তোমার সহপাঠীদের সঙ্গে প্রায়ই ঝগড়া কর?		
43	তুমি কি কখনও কখনও স্কুল ছুটি হওয়ার পূর্বে বাড়ী যাও?		
44	তুমি কি স্কুলের খেলাধুলায় অংশগ্রহণ কর?		
45	তোমার কিছু শিক্ষক প্রায়ই তোমার পড়াশোনার জন্য তোমাকে ধমক দিয়ে থাকেন?		
46	তুমি কি স্কুলে অন্যদের উপর সন্দেহ কর?		
47	তুমি কি স্কুলের প্রবীন বা সিনিয়র ছাত্রদের সাথে কথা বলতে লজ্জা বোধ কর?		
48	তুমি কি তোমার স্কুলের শিক্ষকদের প্রতি সম্মান প্রদর্শন কর?		
49	যার সঙ্গ তুমি পছন্দ কর না, সে ভালো কিছু পাঠালেও তুমি কি তার প্রতি রাগান্বিত হও?		
50	তোমার কি এই স্কুলে কিছু ঘনিষ্ঠ বন্ধু আছে?		
51	তোমার সহপাঠীরা যখন তোমার বই ও খাতা চায় তখন তাদের খুশি মনে দাও?		
52	তুমি কি পরীক্ষায় কম নম্বর পাওয়ার জন্য শিক্ষকদের প্রতি ক্ষুব্ধ হও?		
53	তুমি কি তোমার বন্ধুদের যেকোনো বিষয়ে সাহায্য করতে প্রস্তুত?		
54	তুমি কি স্কুলের লাইব্রেরি থেকে বই এবং ম্যাগাজিন তোলো এবং সেগুলি পড়াশোনা কর?		
55	তুমি কি প্রবীন বা সিনিয়র ছাত্রদের সাথে দেখা করতে ভয় পাও?		
56	তুমি কি স্কুলে অন্যছাত্রদের রাগাতে মজা পাও?		
57	তুমি কি বিতর্কে অংশগ্রহণ কর?		
58	তুমি যখন স্কুলের প্রবীন বা সিনিয়র ছাত্রদের সাথে দেখা কর তখন মানসিক চাপ অনুভব কর?		
59	তুমি তোমার সহপাঠীদেরকে খুশির সাথে বই এবং খাতা ধার দিয়ে থাকো যখন তারা এগুলি চায়?		
60	তুমি কি শিক্ষা বিষয়ক কোন জিনিসের প্রতি আগ্রহ প্রকাশ করে থাকো?		

2. Socio economic Status Questionnaire

Kuppuswamy Socio-Economic Scale

কুপ্পুস্বামী আর্থ-সামাজিক সূচক (2018)

Name :

Age : Gender : Boy Girl

Name of the School

Class District

- : নির্দেশাবলী : -

নিম্নলিখিত A, B এবং C বিভাগ থেকে তুমি যে শ্রেণির অন্তর্ভুক্ত সেই শ্রেণিটি চিহ্নিত কর।

A. তোমার পরিবারের প্রধানের পেশা

- ১ আইনজ্ঞ, বরিষ্ঠ কর্মচারী ও ম্যানেজার
- ২ পেশাদার (Professional)
- ৩ প্রযুক্তিবিদ এবং সহযোগী পেশাদার
- ৪ কেরানী (clerks)
- ৫ দক্ষ শ্রমিক এবং দোকানদার এবং বাজারে বিতরনকারী (Market Sales Works)
- ৬ দক্ষ কৃষক এবং মৎসজীবী
- ৭ হস্তশিল্পী এবং হস্তশিল্প ব্যবসায়ী
- ৮ শিল্প এবং যন্ত্র পরিচালন ও যন্ত্র মিলিত কারী
- ৯ প্রাথমিক পেশা (দিন মজুর, ঝাড়ুদার, হকার ইত্যাদি)
- ১০ বেকার

B. তোমার পরিবারের প্রধানের শিক্ষাগত যোগ্যতা :

- ১ সাম্মানিক স্নাতক
- ২ স্নাতক
- ৩ ইন্টার মিডিয়েট বা ডিপ্লোমা
- ৪ উচ্চমাধ্যমিক
- ৫ মাধ্যমিক
- ৬ প্রাথমিক
- ৭ নিরক্ষর

C. তোমার পরিবারের মাসিক আয় :

SI No.	2012	2016	2018
1	30375 এর বেশি	40430 এর বেশি বা সমান	126360 এর বেশি
2	15188 – 30374	20210 – 40429	63182 – 126356
3	11362 – 15187	15160 – 20209	47266 – 63178
4	7594 – 11361	10110 – 15159	31591 – 47262
5	4556 – 7593	6060 – 10109	18953 – 31589
6	1521 – 4555	2021 – 6059	6327 – 18949
7	1520 এর নীচে বা সমান	2020 এর নীচে বা সমান	6223 এর নীচে বা সমান

3. School Certificates- 1

FAX/PHONE
☎: 03218 - 224536

MATHURAPUR ARYA VIDYAPITH (H.S.)
(Recognised and Govt. Sponsored)
(Co-Educational), Hostel facility available

P.O.- Mathurapur, R.S., P.S. Mathurapur, Dist.- South 24 Parganas, Pin - 743354
Index No. - C2-125, H.S. Code No. - 02126 (Science, Arts, Commerce)

Ref. No..... Date. 25/2/2019

Subject :

This is to certify that Ali Hosen Molla,
the second year student of M.Phil
in Education bearing roll no.
001701503017 of Jadavpur University
had come to our school on 22.02.2019
to collect data.
I wish him every success in life.

A. Kumar
25/2/19
Headmaster
Mathurapur Arya Vidya Pith (H.S.)
P.G. Mathurapur, P.S.
South 24 Parganas

3. School Certificates- 2

INDEX No.: C1-086

FUTIGODA HIGH SCHOOL
ESTD. - 1934
(Recognised up to Class X by the West Bengal Board of Secondary Education)
Vill. & P.O.- Futigoda * P.S.- Joynagar
Dist.- South 24 Parganas * Pin - 743337

From President/Secretary/Headmaster/TIC *Dated 11.03.2019.....*

To Whom It May Concern



Re:- Acceptance for M.Phil. Research scholar for
conducting research survey.

This is to certify that ALI HOSEN MOLLA is
a registered M. Phil. research scholar in the Department
of Education, Jadavpur University, bearing Roll
No - 001701503017.

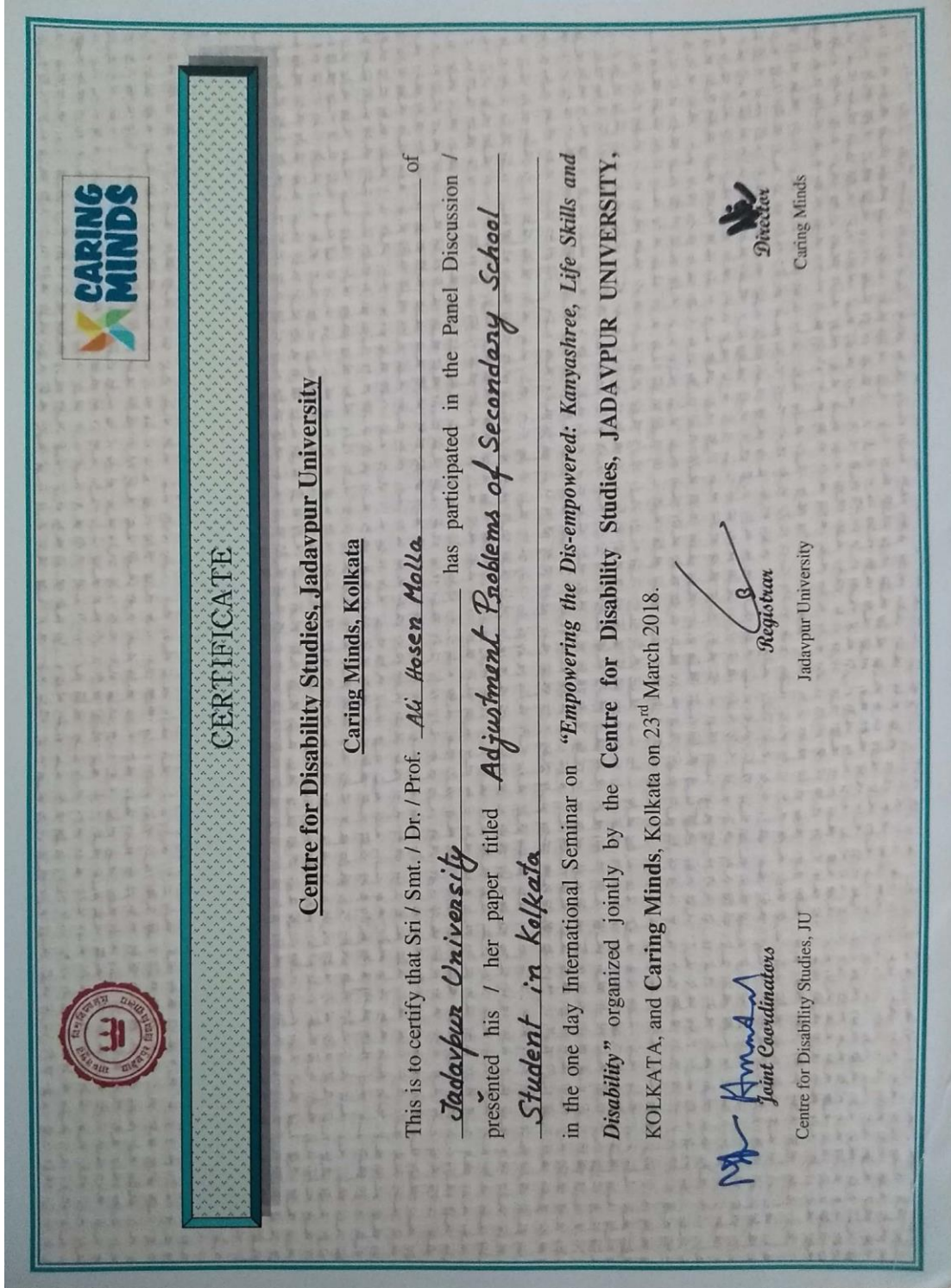
In order to successfully completed his
recherch, Ali Hosen Molla has conduct his
recherch survey and collected relevant data
from our school. dated on 07.03.2019 and
08.03.2019.

I wish every success in his
recherch work and life.

Atas
11/03/19
Teacher-in-charge
Futigoda High School
P.O.-Futigoda, P.S.-Jaynagar
South 24 Parganas



4. Seminar Presentation Certificate



5. Journal Acceptance Letter -1

(66 unread) - asp_f2000@yahoo.com - Yahoo Mail

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E EDITORIAL OFFICE IJCR <jou... May 28 at 7:26 PM
To: asp_f2000@yahoo.com

Respected Author,


Greetings!

Thanks for the article submission. Your Article has been accepted for publication in Volume 11, Issue 05 in May issue.

Find the attachment for account payable details.

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Asish Paul <asp_f2000@yahoo.com> May 29 at 6:48 AM
To: EDITORIAL OFFICE IJCR

Very Good morning Sir. Thank you for supporting this.

Regards with

Asish Paul

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Acceptance Letter

International Journal of Social Science and Economic Research (ISSN: 2455-8834)

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Dear Authors,

Ali Hosen Molla , Arumay Jana and Dr. Asish Paul

Congratulations! As a result of reviews and revisions, we are pleased to inform you that your following paper has been formally accepted for publication in International Journal of Social Science and Economic Research.

**Titles : "A STUDY ON ADJUSTMENT OF SECONDARY SCHOOL BOYS
WITHHEALTH RELATED PHYSICAL FITNESS IN RELATION TO
THEIR SOCIO ECONOMIC STATUS."**

Volume 4 No. 5 (Issue May 2019)

Paper ID- SSE0725

Dr. Gautam Singh Rathore

Editor-In-Chief

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