ABSTRACT

INTRODUCTION

Child development refers to the biological, psychological and emotional changes that occur in human beings from birth and the end of adolescence, as the individual progresses from dependency to increasing autonomy. It is a continuous process, has a predictable sequence yet having a unique course for every child. Growth is not uniform in rate and timing across all body parts during growth phase. Physical growth in stature and weight occurs over the 18 to 20 years after birth, as the individual changes from the average weight of 3.5 kg and length of 50 cm at full term birth to grown up adult. After all, it is the world of adults that the environment imposes on the child, so that at each stage the structures and contents of the mind display certain uniformity. Children and their wellbeing are basic concerns of every nation. A healthy child is a cause of happiness to the parents, eternal joy to the mother, apple of eye of the family, leader of the community, thrill of the society and hope of the nation. Child development refers to the biological, psychological and emotional changes that occur in human beings between birth and the end of adolescence, as the individual progresses from dependency to increasing autonomy.

Early adolescence is a time of many physical, mental, emotional and social changes. Hormones change as puberty begins. Young teens might be concerned about these changes and how they are looked at by others. This will also be a time when your teenager might face peer pressure to use alcohol, tobacco products, and drugs, and to engage in sexual activities. Other challenges can be eating disorders, depression, learning disabilities, and family problems. At this age, teens make more of their own choices about friends, sports, studying, and school. They become more independent, with their own personality and interests. Although they may want to make more decisions on their own, early adolescents still need guidance and support in their choices.

Physical fitness is one’s richest possession; it cannot be purchased, it has to be earned through a daily routine of physical exercises. Regular participation in vigorous exercise increases physical fitness. A high level of physical fitness is desirable for a full, productive life. It is much easier to take life easy and more difficult to find the time and motivation for maintaining physical activity and fitness levels.

Previously fitness was considered to be the capacity to carry out the daily activities without undue fatigue. However, with automation and changes in
lifestyles physical fitness is now considered a measure of the body’s ability to function efficiently and effectively in work and leisure activities, to be healthy, to resist hypokinetic diseases and to meet emergency situations.

**Purpose of the Study**

1. To predict the physical fitness levels of early teen students of schools of three different categories.

2. To predict the psychological status of early teen students of schools of three different categories.

3. To predict the physical fitness levels of early teen students according to age.

4. To predict the psychological status of early teen students according to age.

5. To compare the physical fitness levels of early teen students according to age and school.

6. To compare the psychological characteristics of early teen students according to age and school.

**Significance of the Study**

1. The present study may give some more basic knowledge to the researcher to conduct further research in the similar field.

2. This study would act as guidance to the physical educationist, teachers and coaches to understand about the psychological status of teenage students.

3. The study findings could be a reference on the physical fitness trends of the teenage students of different category schools.

4. The study observations may bring new knowledge in the area of growth and development of the school children in relation to nature of school.

5. The study may provide a reference to the stakeholders like-parents, guardians, policy makers and education department of the state and country to think from a new perspective.

**Delimitation of the Study**

1. The study was delimited to the male students from seven Districts of West Bengal.

2. The subjects of the study were further delimited to three different age groups of thirteen year, fourteen year and fifteen year with similar height-weight.

3. The psychological status was also delimited to self-concept, adjustment ability, emotional intelligence and achievement motivation.

4. The study was restricted to measure only four HRPF components, viz., body composition (%BF), flexibility, muscular strength and muscular strength
endurance, and four SRPF components, viz., speed, agility, power and reaction ability. Other HRPF and SRPF variables were not measured.

Limitations of the Study

1. The hereditary and environmental factors, which would influence the criterion variables, were recognized as limitations.
2. The study was conducted on sample drawn from different populace of different places.
3. The motivation level of intrapersonal and interpersonal as well as environmental factors was beyond the control of researcher, in spite of researchers appeal to provide their best effort of the subjects.
4. The subjects for the study were not from the same socio-economic and cultural background.
5. Environmental variations such as air temperature, atmospheric pressures, relative humidity etc. during testing periods could not be controlled and these things could influence the result.
6. The tests applied on a subject and all the subjects could not be on the same day and same time in the year.
7. Day-to-day activities, rest period, food habits and life style beyond control of the researcher which could be a limiting factor of the study.
REVIEW OF LITERATURE

Physical Fitness

Zainalifikiri et al. (2013) defined physical fitness as body’s ability for efficient function, enjoying the time spent, combating diseases that related to health and coping with emergencies.

Whitehead (1993) proclaimed that children who were born intrinsically motivated to be physically active that motivation – if kept them alive by physical success, freedom, and fun which added years to life. It maintained the physical zest to add life to years.

Physical fitness had been deteriorated in adult across all genders, ages and racial/ethnic groups proclaimed Ichinohe et al. (2004).

Health-Related Physical Fitness

Adolescence is an important time period of physical development to a person because of hormonal changes, sexual maturation and linear growth, which potentially affect body composition observed Hills et al. (2010).

Moore (2003) revealed the results from a longitudinal study with eight years of activity monitoring and repeated anthropometric measurements of children aged 4–11 years observed that higher levels of physical activity during childhood lead to the acquisition of less body fat during early adolescence.

Martin et al. (1998) observed that maintaining a good level of flexibility is an important part of health-related fitness.

Bracko et al. (2001) found that increase in flexibility is seen from birth to adolescence.

Burke et al. (1953) reviewed in their study that grip strength increased rapidly up to the age of 20 years and reaches its maximum level at about the age of 30 years.

Mathiowetz et al. (1985) described highest grip strength scores vary with the ages between 25 to 39 year age groups.

Dutt (2005) reported a general trend of increase in sit-up score, though at varying rates from age 8 to 14 years. After the age of 14 years, a gradual decrease in sit-up score was seen with increase in age.

Gakhar and Malik (1999) pointed out that increase in sit-up score with increase in age among School Children of Delhi.
Skill-Related Physical Fitness

Skill related physical fitness is associated with performance of motor skills and depends on the components those include balance, speed, agility, coordination, reaction time and power (Corbin et al., 2000).

The speed of running in general exhibit a general trend of increase with age as well as with the course of running observed Kumar (2006).

Clarke (1971) concluded that shuttle run performance increased in a linear fashion of the participants of 8 to 14 years of age.

Harre (1979), Ludwig and Hirtz (1981) and Demeter (1981) had also reported that agility improved rapidly before puberty and after the period the improvement slowed down among the going ups.

Loko et al. (2000) reported that muscular power increased linearly between the age of 10 to 12 years and remained stable from the age of 13 to 17 Years.

Reaction time observed to differ from individual to individual and also in the same individual at different times and circumstances and this behavioural oscillation considered as an overall characteristic of the organism, not for any single factor (Hull, 1942).

Pierson and Montoye (1958) studied 400 male subjects and concluded that reaction time (RT) of the participants was significantly related to their chronological age.

Psychological Characteristics

Solomon (2006) defined an individual’s beliefs about his/her qualities and how those are judged by the person. A positive self-concept regarded as an important part of one’s happiness and success. Development of self-concept begins observed as a topic of controversy. Tiedemann (2000) asserted that gender stereotypes and expectations set by parents for their children impact children’s understanding of themselves by approximately at the age of three years.

Shafer (1961) emphasized that adjustment as the process by which a living organisms maintain a balance between its needs and the circumstances with satisfaction.

Pradhan (1992), Raju and Rahamtulla (2007) and Sharma and Gakkar (1991) proclaimed that the type of school and the medium of instruction had having influence on adjustment level of the adolescents.

Trivedi and Shakya (2014) observed emotional intelligence as the basis of all success in human life.

Shapiro (2000) stated that emotional intelligence starts to develop at birth. The first emotional attachment of the child appears when the mother provides for his/her needs. The quality of increasing interaction of the child with others in his/her intimate environment, such as parents, siblings, friends and teachers, may develop or weaken his/her emotional intelligence.

Slavin (2006) described achievement motivation as what gets one going, keeps one going and determines where one is to go.

Martin and Liem (2010) concluded the study that achievement motivation played an important role in predicting students’ future success or failure.
METHODOLOGY

Early-teen male students (N=343) were the subjects of the study. They were from three different type schools and age groups of them were thirteen-year, fourteen-year and fifteen-year. In School-A category the students were selected from non-residential schools. Physical education class allotted for them was one per week in their course curriculum. In second category, School-B, the students belonged to Navoday Schools where physical education is a daily compulsory programme of one hour duration in the morning and afternoon each for six days in a week. In the remaining category, School-C, the students belonged to residential school (Ramkrishna Mission School) where physical education class allotted one class per week. For bringing homogeneity among the subjects, ICMR (1990) height-weight standards for the respective age groups were followed for selection of the subjects.

Criterion measures for this study were physical fitness and psychological status. Physical fitness comprised of two major dimensions, namely- Health Related Physical Fitness (HRPF) and Skill Related Physical Fitness (SRPF). HRPF variables were body composition, flexibility, muscular strength and muscular strength-endurance. SRPF variables were speed, agility, power and reaction ability. The variables under psychological status were self-concept, adjustment ability, emotional intelligence and achievement motivation.

Mean, standard deviation (SD) and two-way ANOVA followed by Post-hoc LSD and independent t-test were the statistics used for interpretation and interpretation of data. Level of significant difference was set at 0.05 level of confidence. SPSS Version 20 was used for statistical calculation. Bibliography section was presented with the APA 6th edition style of referencing.
FINDINGS OF THE STUDY

On Health-Related Physical Fitness

1. Early teen students of three different type schools had difference in body composition. Early teen students of three different types of school had no difference in %BF according to their age.

2. Non-residential school students had higher muscular strength followed by Nvoday students and RKM students. Among the early-teen students higher was the age greater was the strength and vice-versa.

3. Non-residential school students had the highest level of flexibility followed by RKM students and Navoday students. Early teen students had no difference in flexibility according to age.

4. Navoday students were superior in muscular strength-endurance followed by non-residential students and RKM students. Students of fourteen and fifteen years had higher MSE than the thirteen year age group.

On Skill Related Physical Fitness

1. Non-residential students had better speed performance than the students of other two schools. In speed, higher was the age of the students the better was the speed performance.

2. Non-residential and Navoday students were at par in agility performance and they were better than the RKM students. According to age the higher was the age group the better was the agility performance, however, there was no difference between fourteen and fifteen years students.

3. According to school, power had no difference among the students. Fourteen and fifteen year age groups’ student had higher power than the thirteen year age group.

4. Navoday students had higher Reaction ability performance the students of other two types of schools. According to age the higher was the age group the better was the reaction ability and vice-versa.

On Psychological Status

1. Navoday students had higher self-concept followed by RKM and non-residential students. The higher was the age of the students, the higher was the self-concept.
2. Navoday students had higher adjustment ability followed by RKM students and non-residential students. Among the early teen students adjustment ability had no difference.

3. Navoday and RKM students had higher emotional intelligence than non-residential students. The higher was the age, the higher was the level of emotional intelligence among the students.

4. Navoday and RKM students had higher achievement motivation level than the non-residential students. Age was not a contributing factor for the level of achievement motivation level among the early teen students.
CONCLUSIONS

On Health-Related Physical Fitness
1. RKM students had more %BF than the students of other two types of schools.
2. Navoday students were better in muscular strength-endurance.
3. Non-residential students were better in strength and flexibility.
4. The higher was the age the better was the HRPF among the early teen students.

On Skill-related Physical Fitness
1. RKM students had better in reaction ability.
2. Navoday students were better in MSE.
3. Non-residential students were better in speed and agility.
4. The higher was the age the better was the HRPF among the early teen students.

On Psychological Status
1. Navoday students were better in self concept followed by RKM and non-residential students.
2. Non-residential students were better in adjustment ability.
3. The higher was the age the better was the psychological status among the early teen students.

RECOMMENDATIONS
1. Similar study may be conducted on female population.
2. Others age groups may be considered with similar study.
3. Social and economic status of the students considered with similar study.
4. Similar studies may be conducted comparing the urban and rural population.
5. Academic grade of the students and their parents’ academic level may be considered with similar studies.
6. All physical fitness variables may be considered in similar study.
7. Other psychological variables may be included in similar study.
8. A large number of subjects may be incorporated in similar study.
9. The study may be conducted including other classification basis of the schools with similar study.
10. Comparison on physical fitness and psychological status of male and female age groups may be taken into consideration.
REFERENCES


