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GENERAL INTRODUCTION

“Every nation that permits people to remain under the fetters of preventable disease, and permits social conditions to exist that make it impossible for them to be properly fed, clothed and housed, so as to maintain a high degree of resistance and physical fitness, and that endorses a wage that does not afford sufficient revenue for the home, a revenue that will make possible the development of a sound mind and body, is trampling a primary principle of democracy.” – Dr Charles Hastings, Medical Officer of Health, City of Toronto (1910–1929), Speech to the American Public Health Association, 1918. (Gupta, 2007)

According to National Research Council and Institute of Medicine (2000) the first few years of life are marked by development at a scale and pace that is unsurpassed later in childhood and sets the foundation for subsequent growth and development. Hertzman (2006) stated that by six years of age, significant preventable inequalities in development have also emerged. While according to Canadian Council on Social Development (2006) many factors influence the healthy development of children, family income is recognized as a key determinant. The age at which normal children acquire developmental milestones is affected by environmental factors, including place of residence (Ansari, 1998). Children in families
with greater material resources enjoy more secure living conditions and attachments, as well as greater access to a range of opportunities often unavailable to children from low income families. Given the importance of the early years, young children must be provided with the best possible start in life to maximize their potential (Gupta, 2007).

One of the paradoxes of our times is the co-existence of extreme economic affluence amidst enormous pockets of poverty. This holds across countries and even more so within countries, and across regions. Cross country and cross regional distributions of per capita incomes seem quite volatile. The extremes seem to be diverging away from each other – with the poor becoming poorer and the rich richer. Understanding different patterns of cross county or cross regional growth is important - persistent disparities in income across countries and across regions lead to wide disparities in welfare and is often a source of social and political tension, particularly so within national boundaries.

That regional inequalities of incomes across the Indian states exist has been well documented and studied by many. It is almost common knowledge that the western states are the industrially advanced, while the north-west is agriculturally prosperous. There exist pockets of relative
success in agriculture and industry in the south and in the north, while the north eastern states are yet to excel in either. (Bandyopadhyay, 2002).

Historically, it is believed that the caste system began with the arrival of the Aryans in India around 1500 BC (Daniel, 2010). Of the many cultures that flourished in India, the literary records of the Indo-Aryan culture are not the earliest. They do, however, contain the first mention and a continuous history of the factors that make up the caste system. The Indian Caste System is historically one of the main dimensions where people in India are socially differentiated through class, religion, region, tribe, gender, and language. Although this or other forms of differentiation exist in all human societies, it becomes a problem when one or more of these dimensions overlap each other and become the sole basis of systematic ranking and unequal access to valued resources like wealth, income, power and prestige (Sekhon, 2000).

One of the important, remarkable, beautiful, valuable and priceless things that God has created particularly on the earth is human life. Therefore, it is necessary to protect and maintain human life in order to achieve higher goals and objectives and also to live a happy and meaningful life. To develop health and fitness and to lengthen life, the scientist and researchers have devoted their lives to invention of medicines that protect
life from various diseases; and health-related equipments that measure the physical, physiological and psychological parameters of individuals. Their dedication, determination and will to discover new things in these fields are highly remarkable and admirable.

Anderson (1968) said, “To live an effective and enjoyable life has been the central dominant purpose of mankind from the beginning of recorded history. To attain this goal, mankind has studied the phenomena of the universe, controlled the force of nature, developed languages, invented various devices, instituted new practices, written laws and regulations, established institutions and even sought to improve man’s basic endowment.” Evolution of human life started with movement. The movement of the first human was random and completely spontaneous. Then they developed with time, they learned to stand on their feet and learned various grips and ensured first step that continues the curve of growth of mankind. So, if we think deeply, we see the evolution of mankind stated with trained movement. As human progresses more and more movement was invented and the development appended.

Physical structure of a person shows the degree of work efficiency and work ability of that person. A healthy person will have more ability to work and perform other activities than a person who is of weak physical
structure. Healthy body is not only thing that is important; training is also required to enhance the skills. The trained heart beats slower than the untrained heart and pumps more blood per stroke which results more food is delivered to the cells and the unwanted stuffs removes more effectively.

World Health Organization define health as “Health is a physical, mental, and social well being, not merely an absence of disease and infirmity and attainment of a level of health that will be enable every individual to lead a socially and economically productive life.” These four aspects of health may be achieved through physical education, because the main objective of physical education is to make an individual physically fit, mentally alert, emotionally balanced and socially adjusted within the society. (Singh, 2004)

Physical Education is a part of Education. It is the combination of two separate words, “Physical” and “Education”. Physical means “relating to body”; it may be physical strength, physical endurance, physical fitness, physical appearance or physical health. The word “Education” means systematic instructions or training or preparation for life or for some particular task. So Physical Education is that education which starts with physical development and advances towards perfect development of human being, the ultimate result being vigorous and strong body, acquisition of
sound health, mental alertness, and social and emotional balance (Singh, 2004).

To develop health and fitness through the medium of exercise, recreation, games and sports is one of the prime sources of physical education. Today, a large number of people from childhood to old age are performing regular physical activity for the sake of improving health and physical well being. People are engaged in jogging, playing games and sports, practicing yoga asana, cycling, joining swimming clubs, attending health clubs and doing other things to protect the body from diseases and various postural deformities. No doubt, physical fitness is an important part of the normal growth and development of an individual to lead an active lifestyle. Although the popularity of games and sports, mass development of sophisticated equipment, interest and attitude of the people about physical education changing rapidly, yet the health and fitness of the people are very deplorable, because large number of people all over the world are still victim of obesity, inappropriate heart functioning, low back pain, inadequate muscular strength and endurance. Moreover, majority of people are suffering from mental tension and stress as a result of sedentary lifestyle and poor physical fitness (Mukherjee, 2009).
Physical fitness is the ability to perform daily tasks vigorously and alertly, with energy leftover for enjoying leisure-time activities and meeting emergency demands. It is the ability to endure, to bear up, to withstand stress, to carry on in circumstances where an unfit person could not continue, and is major basis for good health and well-being. Kirchner defines physical fitness as “Fitness is that state which characterize the degree to which the person is able to function. Fitness is an individual matter. It implies the ability of each person to live most effectively with his potential. Ability to function depends upon physical, mental, emotional and social components of fitness, all of which are related to each other and mutually interdependent” (Singh, 2004).

The expert committee of the World Health Organization (1981) described physical fitness as “the ability to undertake muscular work satisfactorily.” Physical fitness is the capacity to carry out, reasonably well, various forms of physical activities, without being unduly tired and includes qualities important to the individual’s health and well-being.

Physical fitness has an important role in the live of people when people were living in communion with nature. Their efforts to earn the livelihood and to save themselves from adverse conditions and other animals that co-existed with them required a lot of natural physical activity.
The primitive people never heard about the term physical fitness. They obtained a great deal of it from their day to day life (Mukherjee, 2009).

Health and physical fitness have a vital role in the life of a man from time in memorial. The marked deterioration in the physical fitness of the people is due to the present automation and a sort of mechanized day-to-day life. Promotion of physical fitness in children has long been accepted as a worthy goal. Throughout the 20th century physician, educators and political leaders have expressed support for fitness programme for children (Mukherjee, 2009).

Achievement of fitness requires personal commitment. The individual must take responsibility by himself to stay fit. Fitness is very important in games and sports. Modern age is an age of competition, where lots of technology is used in both grooming the athletes and selecting the best performance. So, accuracy is very essential to be a successful sports person. It can be imagined how much it is important to stay fit to give standard performance. If we look at the qualifying units in order to get selected to participate in Rio Olympics 2016, we can get an idea of the international standard and fitness level an athlete should have. Now what are the ways fitness is achieved? There may be many ways, but only two of them are basic and very important: proper diet and proper training. The
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economy of our country is very much imbalanced and lots of people don’t get healthy food and suffer in malnutrition. Because of this most of the people belonging to lower economically backward sections can’t stay fit.

If we view in the field of physical education, physical fitness plays a major role. The sportsman who does not have optimum level of physical fitness cannot face the competition successfully. Different philosopher and sports scientists have expressed their views regarding the importance of physical fitness in human life. The Greek philosopher and thinker, Aristotle stated, “Body is the temple of the soul, and to reach harmony of body, mind and spirit, the body must be physically fit” (Singh, 1989). Williams (1962) said, “Physical fitness is essential not only in terms of general health but also for the special physical requirement for competitive sports and certain highly specialized and demanding occupation”. Uppal (1992) had given importance of physical fitness to the citizens of the nation. He stated, “It is self-evident that the fit citizens are nation’s best assets and weak ones its liabilities. It is therefore, the responsibility of every country to promote physical fitness of its citizens because physical fitness is the basic requirement for most of the tasks to be undertaken by an individual in his daily life.”
Sports and physical education play an important role in human resource development. Games and other outdoor activities, properly planned and executed, promote social harmony, discipline and increased productivity. These activities develop right attitudes and values among the students and help them grow into balanced, integrated and healthy citizens. Participation in physical activities and sports is a fundamental right of every citizen. Physical education and sports are essential elements of educational processes which promote among the participants health, physical fitness and quality of life (UGC report, 1987).

Physical fitness is a crucial pillar contributing a lot for the health of an individual so that it affects our ability to function and be physically active and, at poor levels, is associated with such health outcomes as diabetes and cardiovascular diseases (Institute of Medicine, 2012).

Human learned to run, swim, jumping, riding various animals (like horse, elephant and many more), art of throwing various weapons for self defense was invented and the curve of development crosses new slabs in the positive side and continues. Then with time passes and human become civilized these running, swimming, jumping and riding animals and art of weapon throwing becomes games.
Now the performance of these depends on a few parameters which ensure the ability to perform during games and sports. That is called motor fitness. Motor fitness is a term that describes an athlete’s ability to perform effectively during sports or other physical activity. An athlete’s motor fitness is a combination of five different components, each of which is essential for high levels of performance. Improving fitness involves a training regimen in all five. In other words motor fitness, or motor physical fitness, refers to how an athlete can perform at his or her sport, and involves a mixture of agility, coordination, balance, power, and reaction time. Improving this form of fitness is an indirect result of training in any of these attributes. All five components of fitness are essential for competing at high levels, which is why the concept is seen as an essential part of any athlete’s training regime (Kuriakose, 2015).

Concept of physical fitness is as old as humankind. Throughout the history of mankind physical fitness has been considered an essential of daily life having two components like health related fitness and motor or skill related fitness (Corbin & Lindsey, 1994). The ancient people were mainly dependent upon their individual strength, vigor and vitality for physical survival. This involved some basic skill like strength, speed, endurance, agility for running, jumping, climbing and other skills employed
in hunting for their livings. Study of skill related or motor fitness gathered lots of interest from earlier. The athletic traits and characteristics of an individual can be explored depending upon physical fitness having different components (Chatterjee, 1993) and various factors like race, ethnicity, habitual physical activity and environment may have reflection on these parameters.

Although there are different manifestation of fitness and they are defined depended on the parameters like strength, stamina, speed and flexibility. Here we discuss about only motor fitness which involves parameters like speed, agility, coordination, balance, power, and reaction time. All components are very important in order to focus an athlete’s weak or strong points and then they are given training accordingly.

Children are the future of a nation. For an emerging and developing country like India, development of underprivileged children holds the key to the progress of the nation itself. Education for underprivileged children is the key whether we are addressing healthcare, poverty, population control, unemployment or human rights issues. Youth is an integral part of democratic society and future asset of mankind. It is universally recognized that Sport is an effective way for channelizing the energies of Youth for productive & meaningful purposes. Fitness has proved as a powerful but
highly undervalued and under exploited tool for promoting solidarity and in contributing to an atmosphere of tolerance and understanding to the special population as an undefined part of the society (Faldu, 2016).

India is a country believes in the philosophy “Unity in diversity“. There are lots of variations in the livelihood of Indian people even in a narrow area. There are many religion, cast, culture and socio-economic setbacks. The economic deference is the most important deference that is found clearly in the Indian people. Some work toil and moil to earn their bread and butter, and some don’t work much and earn lots of money. As our economy is based on agriculture, the farmers and the labor class are used as manpower and sadistically they belong to the most uncertain income group and as a result they suffer in malnutrition which causes less muscular strength that keeps a permanent effect in the performance in the field of games and sports.

The food habit, culture and mode of work depend on religion and cast maximum times in India. It is often found that a specific sect of people belonging to a particular socio-economic background is tending to a fixed food habit and work pattern which keeps a good impact in their physical performance.
Difference among the Indian people are based on their various aspects, one and major of them is financial status. In our agriculture based economy most of us are dependent on agriculture and they are fallen prey to uncertain income. Except some rich and affluent families most people try their hard to make both ends meet. To ameliorate this situation the government introduced some social welfare schemes for the poor. In view of ascertaining the economically backward section, our government divided the whole population into Above Poverty Level (A.P.L) and Below Poverty Level (B.P.L).

According to merriam-webster dictionary (2013) poverty is general scarcity or the state of one who lacks a certain amount of material possessions or money. UNESCO (2014) mentioned poverty as a multifaceted concept, which includes social, economic, and political elements. Absolute poverty or destitution refers to the lack of means necessary to meet basic needs such as food, clothing and shelter. Ricardo (2008) said absolute poverty is meant to be about the same independent of location. Relative poverty occurs when people in a country do not enjoy a certain minimum level of living standards as compared to the rest of the population and so would vary from country to country, sometimes within the same country (en.wikipedia.org/wiki/Poverty).
Poverty is an important issue in India, despite having one of the fastest growing economies in the world, clocked at a growth rate of 7.6% in 2015, and a sizable consumer economy: Deutsche Bank Research (2010) estimated that there are nearly 300 million people who are middle class.

Inside India, both income-based poverty definition and consumption-based poverty statistics are in use (Krishna & Shariff, 2011). Outside India, the World Bank (2009) and institutions of the United Nations use a broader definition to compare poverty among nations, including India, based on purchasing power parity (PPP), as well as nominal relative basis (Chandy & Gertz, 2011). Each state in India has its own poverty threshold to determine how many people are below its poverty line and to reflect regional economic conditions. These differences in definition yield a complex and conflicting picture about poverty in India, both internally and when compared to other developing countries of the world (Donnan, 2014).
Poverty in India is a historical reality. From late 19th century through early 20th century, under British colonial rule, poverty in India intensified, peaking in 1920s (Maddison, 1970; Roy, 2007). Famines and diseases killed millions each time (Sen, 1983; Brian, 2000). After India gained its independence in 1947, mass deaths from famines were prevented. Rapid economic growth since 1991, has led to sharp reductions in extreme poverty in India (Swaminathan, 2011; Bhagwati 2013). However, those above poverty line live a fragile economic life (Burn-Murdoch, 2014, en.wikipedia.org/wiki/Poverty_in_India).
The poverty threshold, poverty limit or poverty line is the minimum level of income deemed adequate in a particular country (Martin, 1992). In practice, like the definition of poverty, the official or common understanding of the poverty line is significantly higher in developed countries (with HDI of under than 0.700 score) than in developing countries (Aldi et. al. 1985; 1988). In 2008, the World Bank came out with a figure (revised largely due to inflation) of $1.25 at 2005 purchasing-power parity (PPP) (Martin, 2009). In October 2015, the World Bank updated the international poverty line to $1.90 a day. (en.wikipedia.org/wiki/Poverty_threshold)

Income based poverty line in India: The poverty line was originally fixed in terms of income/food requirements in 1978. It was stipulated that the calorie standard for a typical individual in rural areas was 2400 calorie and was 2100 calorie in urban areas. Then the cost of the grains (about 650 gms) that fulfill this normative standard was calculated. This cost was the poverty line. In 1978, it was Rs.61.80 per person per month for rural areas and Rs.71.30 for urban areas. Since then the Planning Commission calculates the poverty line every year adjusting for inflation. (en.wikipedia.org/wiki/Below_Poverty_Line_(India)).
From the times immemorial society has been divided as rich and poor or powerful and weak. Some have dominant access to resources while some are deprived of resources. Situation is no different now. In democracy, government attempts to narrow this gap by taking up task of redistribution of resources. But resources at disposal of any society are limited and challenges are many. For effective redistribution and bringing lasting change, it is essential that deserving beneficiaries of government’s help are identified. To identify poor we need some benchmarks and person falling below this benchmark will be regarded as poor. In India, initially most of the government support (mainly public distribution system) was universal, but in latter periods (from 1990’s) they adopted targeted support which was meant only for deserving poor. This was due to fiscal constraints and a move from socialism to market based economy as result of LPG reforms. Major landmark in this was adoption of ‘Targeted Public distribution System’ in 1990’s in which subsidized food was only meant for Below Poverty Line people and determination of Poverty line became a big issue since then.

It should be noted that ‘determination of poverty line’ and ‘identifications of poor/beneficiary’ are almost different things. Poverty line is (was) determined by Planning Commission on the basis of data provided
by ‘National Sample Statistical Organization’ (NSSO). NSSO conducts a survey at 5 year interval of a mere sample to capture consumption patterns of various sections of society. It is taken care that sample size represents character of the Nation (or a state) as a whole. This gives us data about various classes of consumption in the sample size.

Planning Commission quantifies (in terms of money) Calorific/Nutritional needs for a basic minimum living by taking an ideal ‘poverty line basket’. This ideal basket includes food and nonfood items which are recommended by expert groups (among other things) which are constituted from time to time (NSSO job is only to collect data and patterns). So we’ll have a monetary figure (Rs16/25/32 etc.) which that expert panel considers benchmark ‘poverty line’. Then this poverty line is adopted by Planning Commission. For determination of this figure, reliance is obviously placed on data provided by NSSO.

Now we have, poverty line figure based on a minor sample and we need to determine number of poor in the country i.e. people whose consumption expenditure is below this poverty line. For this ratio of ‘poor to the total sample size’ is replicated on total population of the country. For e.g. If Survey Sample Size was of 200000 households and 50000
households are found to be consuming below the poverty line figure, then 25% of total population of country will be considered below poverty line.

As we can see in given course of ‘determination of poverty line’ and estimation of ‘number of poor’ there is no identification of particular households. ‘Number of poor below poverty line’ in this sense is just a tool to measure effectiveness of government policies and make interstate, International or temporal comparisons. Other product of this exercise is ‘poverty line’ and it might be (or not) be used for actual identification of poor/beneficiaries.

Ministry of Rural Development is conducting BPL census for ‘Rural poor’ since 1992 on the basis on which rural poor are actually identified. In case of urban poor there no uniform mechanism in place and State governments/ UT administration adopts their own methodology for identification. Having said this, relevance of identification on basis of poverty line is doubtful these days. It is widely accepted that poverty is multidimensional and different schemes of government should either be universal, or their beneficiaries should differ as per matter of scheme. For example MGNREGA is universal (now focus is on 250 backward districts). Food Security Act covers two-third population which is far more than BPL population. Indira Awas Yojna is for homeless (not for BPL), Sarva
Shiksha Abhiyan or RTE are universal. However, many benefits from the government are still exclusively for BPL card holder such as free gas connection or kerosene oil.

Notwithstanding all this, poverty line and estimate of population will still be needed to measure and compare effect of policies of various national and state governments. Presumptions on which this line can be made are many and it is herculean task in continent type country like India. There is always fear of exclusion of deserving ones and inclusion of undeserving ones.

Poverty is a state of deprivation of people or society, in which they are not able to meet their basic needs such as food, clothing and shelter. In all this they have low capacity to deal with Socio-economic and environmental exigencies. This definition however can be contested for it doesn’t include education, healthcare and decent standard of living or dignified life. But it could be agreed upon that former are immediate needs and will be preferred by any deprived person. For e.g., India in initial decades after independence was severely short of food grains and that prompted government to invest in agriculture which resulted in green revolution. At that time investment in social infrastructure was negligible.
and now that India has achieved self-sufficiency, focus has shifted to Health and education.

There are many challenges in marking a poverty line, such as determining components of poverty line basket. There are price differentials (of constituents of basket) which vary from state to state and period to period. Further, consumption patterns, nutritional needs and prices of components keep on changing as per dynamics of macro economy and demography.

**Absolute poverty v/s Relative poverty:** Almost all underdeveloped and developing countries prefer targeting Absolute poverty. Under absolute poverty certain minimum basic standards of living are defined and people living below these standards are termed in policy as poor or below poverty line. This is done by determining a poverty line basket and calculating monetary figure of that basket (as in India), which varies across countries.

In contrast relative poverty is measured in relation to rich people of the country. In this method certain percentage of economically bottom population is always considered below poverty line. In these countries BPL people may have all basic amenities and reasonable standard of living, but as their incomes are far below national per capita income they get support of government.
Argument that India should focus on absolute poverty need no further elaboration, given such low consumption of vast part of population which NSSO and various other studies reveal.

**Poverty line basket:** Determining composition of the basket is among most debated part of the issue. To make a living people consume innumerable items. Apart from food; housing, fuel, health, education, communication, conveyance, entertainment or recreations are the things which are important. But whether they should be included or not, if so their weights in basket, whether health should get preference over housing, or whether reasonable expenditure on recreation is included in basket etc. are toughest questions to be answered. Problem is that these are qualitative aspects, which are needed to be quantified.

Further, consumption varies as per age groups, occupation, regions, cultures and gender. This variation is hard to capture.

Over the last decade consumption by Indians has risen constantly and share of food in total consumption has fallen. Also, within food share of calorie rich cereals have fallen and Share of proteins, fat, nutrient rich items like pulses, milk, fruit has risen.

Historically focus of India’s poverty like basket policy has been on consumption of calories which was first adopted in 1970’s on
recommendation of Alagh committee. It was believed that 2400 kcal in rural areas and 2100 Kcal in urban areas was sufficient to give good nutritious health to citizens. In this sense, number or percentage of people below poverty line and those who are under malnutrition people, should be roughly same. But it is known that under nutrition is more rampant and widespread than poverty and outscores ratio of BPL people by huge margin. This forced our policy makers to look for other determinants of nutritional status and they found that pre natal/birth health of mother, post natal care of babies, Sanitation, open defecation, health and educational infrastructure has decisive impact on nutritional status of people. Lack (or presence) of many these things has pushed significant number of people towards under nutrition, even when they consumed more than needed calories. These issues were taken into account by Tendulkar committee to some extent.

**Evolution of poverty line in India:** A working/expert group recommends a particular poverty line which attracts intense debate and criticism. After this new Expert group is appointed. This group has to convert results of past years by the previous methodologies into those by new methodologies, sometimes using old base year, as per data available with NSSO. This is essential so as to make poverty line and population BPL comparable. This is a bit confusing as there is no consistency and new data
keep coming. We just need to have basic idea of evolution and most of the figures or data can be ignored. It is given just for an idea of patterns.

One of the earliest estimations of poverty was done by Dadabhai Naoroji in his book, ‘Poverty and the Un-British Rule in India’. He formulated a poverty line ranging from Rs 16 to Rs 35 per capita per year, based on 1867-68 prices. The poverty line proposed by him was based on the cost of a ‘subsistence diet’ consisting of ‘rice or flour, dhal, mutton, vegetables, ghee, vegetable oil and salt’.

Next, in 1938, the National Planning Committee (NPC) estimated a poverty line ranging from Rs 15 to Rs 20 per capita per month. Like the earlier method, the NPC also formulated its poverty line based on ‘a minimum standard of living perspective in which nutritional requirements are implicit’. In 1944, the authors of the ‘Bombay Plan’ suggested a poverty line of Rs 75 per capita per year.

➢ Working Group of planning commission, 1962:

This was first created by planning commission to determine desirable minimum level of expenditure required to make a living.

1. Recommended ‘national minimum consumption expenditure’ for a household of 05

   • Rural – Rs 100/ month (Rs 20/ Person)
• Urban – Rs 125/ month (Rs 25/ Person)

2. It excluded Health and educational expenditure on assuming that it is provided by state.

3. Used recommendation on ‘Balanced diet’ by Indian council of Medical Research.

➢ Task force of 1979, under Algah:

Poverty line of 1962 was used during 1960’s and 1970’s at both National and state level. But it attracted intense debate for its low figures. In response taskforce under Dr. Y.K. Algah was created to revisit poverty line.

1. ‘Average calorie requirements’were estimated, separately for the all -India rural and urban areas on the recommendation of Nutrition Expert Group. This resulted in different ‘Poverty line basket’ for urban and rural areas. The estimated calorie norm was 2400 kcal per capita per day in rural areas and 2100 kcal per capita per day in urban areas.

2. Now these calorie requirements needs some ‘monetary value’ which can be determined by ascertaining ‘quantity’ of consumption and ‘prices/value’ of that quantity. Data relating to quantity and value was provided by NSSO survey.

3. It was estimated that, on an average, consumer expenditure (food and non-food) of Rs.49.09 per capita per month was associated with a calorie
intake of 2400 per capita per day in rural areas and Rs.56.64 per capita per month with a calorie intake of 2100 per day in urban areas. This ‘Monthly Per Capita Expenditure’ was termed as poverty line. This poverty line was used for upcoming years after adjusting for rise in prices.

> **Expert group 1993 (Lakdawala)**

This panel didn’t redefine poverty line and retained mechanism defined by Algah expert group.
1. Instead it **disaggregated** ‘All India poverty line’ to ‘State specific Poverty Line’ (using Fisher index) for base year 1973-74.

2. For latter periods these ‘Rural and Urban Poverty lines of states’ were updated by taking into account
   - ‘Consumer Price Index- Agricultural Labor’ for ‘Rural state specific poverty line’ and
   - ‘CPI- Industrial workers’ for ‘Urban state specific poverty line’.

3. Then All India poverty **Ratio** (rural and urban) was derived through ‘population based weighted average’ of poverty **ratios** of various states.

   Hence ‘poverty line’ of India is converted in to ‘state poverty lines’ while ‘poverty ratios’ of states were aggregated to ‘All India poverty ratio’

   Group was able to give State Specific poverty lines of only 18 states as in other states adequate data was not available. For these (remaining) states poverty line was determined by equating them with one of the 18 states on basis of Physical Contiguity and similarity of economic profile of those states.

   This Mechanism was adopted by planning commission and was used till 2011, when recommendations of Tendulkar expert group were adopted.


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- **Expert Group 2005 (Tendulkar)**

  Largely it adopted same poverty line (Lakdawala) and major departures were –

1. It adopted ‘Mixed Reference Period‘ in place of ‘Uniform reference period’:

   During previous methodologies, a ‘uniform reference period’ was used that included 30 days just before the survey for all food and nonfood items. But Tendulkar group changed ‘reference period’ to past one year for 5 nonfood items viz., clothing, footwear, durable goods, education and institutional medical expenses. For other items 30 days reference period was retained. This is called ‘Mixed reference period’

![Fig – 3: Expert Group Lakdawala Committee (1993) In India](image)

*Source: Report of the Expert Group to recommend the detailed methodology for identification of families living below poverty line in Urban Areas, Planning Commission, Government of India, December 2012*
2. Further, it recommended a shift away from basing the Poverty Line basket (PLB) in caloric intake and towards target nutritional outcomes.

3. It called for an explicit provision in the Poverty Line Basket to account for private expenditure in health and education.

4. 1st point under Algah committee mentions that it adopted separate PLB for Urban and rural areas. But Tendulkar committee ended this practice by using a uniform basket (for both rural and urban) based on previous urban poverty line basket.

These changes were made for base year 2004-05 and ahead. These rendered past poverty lines incomparable with new ones as they were based on URP and Separate baskets for rural and urban India.

5. Poverty line was in form of ‘Rs per capita per month’

**Table 1: National poverty lines (in Rs per capita per month) for the years 2004-05, 2009-10 and 2011-12**

<table>
<thead>
<tr>
<th>Year</th>
<th>Rural (Rs.)</th>
<th>Urban (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>446.7</td>
<td>578.8</td>
</tr>
<tr>
<td>2009-10</td>
<td>672.8</td>
<td>859.6</td>
</tr>
<tr>
<td>2011-12</td>
<td>816.0</td>
<td>1000.0</td>
</tr>
</tbody>
</table>

These expenditure as per expert group was sufficient to cover food and nonfood expenditure, including that on health and education. This
created furor in public and government was forced to appoint a new expert group under Dr. Rangarajan.

It is often said that Tendulkar Poverty line is equivalent to World Bank’s $1 or $1.25 in PPP terms. This purely incidental and poverty line calculated by Tendulkar had nothing to do with World Bank methodologies. But government often defended poverty line claiming that it is as per global standards.

**Fig – 4:Tendulkar Committee (2009) In India**

![Poverty Ratio (%)](image)

*Source: Report of the Expert Group to recommend the detailed methodology for identification of families living below poverty line in Urban Areas, Planning Commission, Government of India, December 2012*

➢ **Expert group, 2012 (Rangarajan)**

Expert group submitted its report in 2014 giving ‘per capita monthly expenditure’ as Rs. 972 in rural areas and Rs. 1407 in urban areas as
poverty line. It preferred to use ‘Monthly expenditure of Household of five’ for the poverty line purpose which came out to be Rs 4860 in rural areas and Rs. 7035 in urban areas. It argued that considering expenditure of household is more appropriate than that of individuals. Living together brings down expenditure and as expenses such as house rent, electricity etc. gets divided into 5 members.

Other major recommendations were –

1. It reverted to old system of separate poverty line baskets for Rural and urban areas, which was unified by Tendulkar group.

2. Instead of ‘Mixed reference Period’ it recommended ‘Modified Mixed reference period’ in which reference periods for different items were taken as –

   • 365-days for clothing, footwear, education, institutional medical care, and durable goods,
   • 7-days for edible oil, egg, fish and meat, vegetables, fruits, spices, beverages, refreshments, processed food, pan, tobacco and intoxicants, and
   • 30-days for the remaining food items, fuel and light, miscellaneous goods and services including non-institutional medical; rents and taxes.
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3. Report says that poverty line should be based on

- Certain normative levels of ‘adequate nourishment’ plus clothing, house rent, conveyance, education and
- A behaviorally determined level of other non-food expenses.

  ❖ Normative means – what is ideal and desirable?
  ❖ Behavioral Means – What people use or consume as per general behavior

4. For normative levels of adequate nutrition – average requirements of calories, proteins and fats based on ICMR norms, differentiated by age, gender and activity for all-India rural and urban regions is considered.

- Calories requirement – 2090 kcal in urban areas and 2155 Kcal in rural areas
- Proteins – for rural areas 48 gm and for urban areas 50 gm
- Fat – for urban areas 28 gm and for rural areas 26 gm

Normative levels for fat and protein have been introduced for the first time and those for calories are reduces from earlier standards of 2100 kcal and 2400 kcal for urban and rural areas respectively. This was in lines with recommendations of Indian Council of medical research. It was found by council that due to change in lifestyle, more automation
in industries, growing use of automobiles etc. minimum calorific 
consumptions required has fallen.

5. Poverty line by the group is also based on Independent survey 
conducted by ‘Center for monitoring Indian Economy’ (CMIE). The 
results under this survey are remarkably close to those we get through 
NSSO survey. Confirming adequacy of NSSO data and group’s 
methodologies. CMIE considers maximum income required to meet 
consumption expenses of a household. If Income is above consumption 
expenses then household is above poverty line otherwise (if not able to 
save anything) it is below poverty line. CMIE conducted survey on 
150000 households.

6. Again National Urban and Rural poverty lines were converted to State 
specific poverty lines by using Fisher Index. This gave us poverty 
‘ratios’ in states and state’s poverty ratios was weighted average of 
rural and urban state poverty ratios.

As per these estimates the 30.9% of the rural population and 26.4% 
of the urban population was below the poverty line in 2011-12. The all-
India ratio was 29.5%. In rural India, 260.5 million individuals were below 
poverty and in urban India 102.5 million were under poverty. Totally, 363
million were below poverty in 2011-12. It also noted that there was substantial drop in poverty ratio from 2009 levels.

➤ **World Bank’s Poverty line**

The approach of poverty estimation by the World Bank is similar to that employed in India and in most of the developing countries. The World Bank estimates of poverty are based on the poverty line of US $1.25 per person per day measured at 2005 international price and adjusted to local currency using PPP (Purchasing Power Parity).

The international poverty line is worked out as the average of national poverty lines in poorest fifteen countries (in terms of consumption per capita). For this world bank runs as ‘International Comparison Program’.

All this is essential for making International comparisons. Further, performance of a country on this front is major criteria for eligibility or other terms and condition for loans. But it is not of much relevance for domestic policy making as it fails to provide variation within a country, region, society etc. Domestic poverty line in contrast tries to capture all local variations such as Inter-state or Rural-urban.

**Asian Development Bank** too has its own poverty line which is currently at $ 1.51 per person per day.
Identification of Poor/Beneficiaries

The Ministry of Rural Development has conducted a BPL Census in 1992, 1997, 2002, and 2011 to identify poor households. The BPL Census is used to target families for assistance through various schemes of the central government. The 2011 BPL Census is being conducted along with a caste census, and is dubbed the Socio-Economic & Caste Census (SECC) 2011. It is being conducted by Ministry of Rural Development with partnership of states. As it has been mentioned earlier that previous census were only for rural poor, but this is first time that a comprehensive census will include both urban and rural poor. As the name suggest it will be surveying households to collect a number of socio-economic indicators such as literacy, housing, assets and caste. (en.wikipedia.org, www.insightsonindia.com, Planning Commission reports)

Now we are drawing the line of poverty in a different way which is called Socio Economic Cast Census. Now, we have omitted all the previous concepts like Caloric Consumption, Per capita income and nutrition demands. Here we have adopted a scale which emphasis on each and every thing that a modern man consume, use and enjoy. Socio Economic Cast Census survey includes work hour a person is engaged in duty, how many times in a day food taken, quality of the food, knowledge
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and skills of individual, income profile, technical literacy and knowledge, access to automobiles and electronic appliances and many more. The Socio Economic Cast Census has two segments:

1. Rural Survey
2. Urban Survey

Rural and Urban survey are completely different in nature. The scales, criteria and parameters are different in Rural and urban areas as livelihood and culture no way match in rural and urban places. (http://secc.gov.in)

Poverty is often defined in absolute terms of low income – less than US$2 a day, for example. But in reality, the consequences of poverty exist on a relative scale. The poorest of the poor, around the world, have the worst health. Within countries, the evidence shows that in general the lower an individual’s socioeconomic position the worse their health. There is a social gradient in health that runs from top to bottom of the socioeconomic spectrum. This is a global phenomenon, seen in low, middle and high income countries.

Poverty and poor health worldwide are inextricably linked. The causes of poor health for millions globally are rooted in political, social and economic injustices. Poverty is both a cause and a consequence of poor
health. Poverty increases the chances of poor health. Poor health in turn traps communities in poverty. Infectious and neglected tropical diseases kill and weaken millions of the poorest and most vulnerable people each year. (healthpovertyaction.org).

According to World Health Organization (2003) Poverty is associated with the undermining of a range of key human attributes, including health. The poor are exposed to greater personal and environmental health risks, are less well nourished, have less information and are less able to access health care; they thus have a higher risk of illness and disability. Conversely, illness can reduce household savings, lower learning ability, reduce productivity, and lead to a diminished quality of life, thereby perpetuating or even increasing poverty.

The poor suffer worse health and die younger. They have higher than average child and maternal mortality, higher levels of disease, more limited access to health care and social protection, and gender inequality disadvantages further the health of poor women and girls. For poor people especially, health is also a crucially important economic asset. Their livelihoods depend on it. When a poor or socially vulnerable person becomes ill or injured, the entire household can become trapped in a downward spiral of lost income and high health care costs. The cascading
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effects may include diverting time from generating an income or from schooling to care for the sick; they may also force the sale of assets required for livelihoods. Poor people are more vulnerable to this downward spiral as they are more prone to disease and have more limited access to health care and social insurance.

The DAC Guidelines on Poverty Reduction presented a practical definition of poverty, placing it in a broader framework of causes and appropriate policy actions. The five core dimensions of poverty reflect the deprivation of human capabilities: economic (income, livelihoods, decent work), human (health, education), political (empowerment, rights, voice), socio-cultural (status, dignity) and protective (insecurity, risk, vulnerability). Measures to promote gender equality and to protect the environment are essential for reducing poverty in all these dimensions. The DAC Guidelines emphasized that some social categories are particularly affected by severe poverty, among them indigenous populations, minority and socially excluded groups, refugees or displaced persons, the mentally or physically disabled and people living with HIV/AIDS. These groups are among the poorest of the poor in many societies and require special attention in policy action for poverty reduction.
According to The World Bank (2014) poverty is a major cause of ill health and a barrier to accessing health care when needed. This relationship is financial: the poor cannot afford to purchase those things that are needed for good health, including sufficient quantities of quality food and health care. But, the relationship is also related to other factors related to poverty, such as lack of information on appropriate health-promoting practices or lack of voice needed to make social services work for them.

Strength, agility, coordination, endurance, speed and level of performance are all powered by the foods you eat. What you eat determines how you tackle your daily physical activities, including housework, your job, school, homework, shopping, caring for a family and exercise. Eating healthy enables body movements to be executed with ease. A poor diet with unhealthy food choices can make each movement a major effort filled with stress, strain and pain. If you prefer sugar-laden simple carbohydrates to healthier whole grains, fruits and vegetables, you alternate between energy spikes and crashes. A diet filled with fried foods soaked in unhealthy saturated fats and trans fats and high-fat meats increases your risk for major diseases that impair your physical well being, fitness and threaten your life.

Physical Fitness and health depends upon not only physical activities but also on nutrition. If the proper balanced diet is not providing to the
children, it is difficult to improve health and fitness. There are many socio-economic factors affect to support the development of child’s physical fitness. One of the poverty level of the family is very important factor which affect on the physical fitness of the child.

Researchers at Johns Hopkins University noted a link between poverty and poor fitness and obesity in children. Their findings indicated that children who came from low-income homes were at higher risk for obesity and did poorly, compared to their peers, on a physical fitness test. The study leads researchers to believe that children from those homes may find it more difficult to adhere to healthy eating or engage in outdoor play or organized sports. (Milman, 2015)

QMI Agency (2009) reported that poorer kids are often unhealthy kids, and unhealthy kids often stay that way their whole lives, according to a new study. Research from Montreal's McGill University shows that the lifelong health gap between the rich and poor is pretty much set by age 20. They found, basically, are that people who are more educated and with higher incomes have a better health-related quality of life over their whole lifespan, and that these health tracks stay pretty parallel over time.

Shulz (2016) in his article reported that in a study published in August 2016 in the *British Journal of Sports Medicine*, researchers
combined data from 177 previous studies conducted around the world to better understand the link between a country’s income inequality and youth fitness.

Justin Lang, the first author on the new paper and a PhD student studying population health at the University of Ottawa said “We know that when there’s a large gap between rich and poor in a country, there tend to be large subpopulations of poor people within that country,” further “Poverty, we know, is linked with a whole bunch of poor health outcomes. One of those outcomes is poor aerobic fitness in children.” The link between obesity and cardio respiratory fitness lies at the heart of this discussion, and while it’s perhaps unsurprising that being overweight has a negative impact on fitness, the real question at the center of the matter might be, “What does income inequality have to do with obesity?”

The answers to this question are simultaneously complex and intuitive. “The most obvious and commonly put forward suggestion is that when you’ve got a group of people with low income, then they’re more likely to be in an obesogenic environment—one where they don’t have access to healthy food, for instance,” says Timothy Olds, a researcher the University of South Australia who has been studying the link between income inequality and fitness for more than a decade. “They have access to
cheap but very high-calorie, energy-dense food, and they don’t have access to things like parks or walk able neighborhoods.”

The distinction between the developed and developing world seems central to explaining the fitness trends that the new study reveals. While in developed countries the poorer people tend to be less fit, the opposite is often true in undeveloped ones. “There’s a thing called the physical activity transition,” says Olds. “In poorer countries, it’s the richer people who tend to be fatter, and the poorer people tend to be leaner and fitter. Then, in the middle, you get countries that are in a certain point on their developmental trajectory—we found this with Colombia and with India, for example—where it’s basically dead even; the level of fatness is the same in the poorer and richer people.”

Shulz (2016) concluded that poverty tends to make people less fit primarily when they live in a relatively rich country. Being poor but surrounded by fast food, automobiles, and television is more detrimental than being poor in a rural environment where physical activity is a necessary part of daily life.

A child with good or high socio-economic status will have assessed to better education, food and nutrition health care environment, physical education facilities and opportunities which will affect their physical
fitness, motor ability, health status and academic achievements. Education and socio-economic status are closely related, secondary educational is very important stage of education in the education system of any country. Majority of people will have either lower secondary stages or higher secondary stages their final educational career. Hence it is a stage, which is concerned with the majority of population. (Murthy, 1982)

Frost (1971) explained that, “An individual socio-economic status may influence their opportunity for participation, his desire to excel, his choice of activity and his success”.

Socio-economic status (SES) may play a role in both childhood obesity prevalence and children’s physical fitness levels. Low SES can be a barrier to physical activity and healthful eating, and children who regularly perform high-intensity activity tend to be more physically fit. (Jin, 2015)

Socio-economic factors play a vital role in an individual’s performance in sports. The socio-economic status make-up of an individual plays an important role in their achievements in every field of life. Socio-economic status also Influence on habitual physical activity (Drenowatz, 2010).

Socio-economic status is an individual’s or group’s position within a hierarchical social structure. Socio-economic status depends on a
combination of variables, including occupation, education, income, wealth and place of residence. Sociologists often use socio-economic status as a means of predicting behavior (Hirsch, 2002).

Index of socio-economic status comprises of occupational status, area of residence, monthly income, type of housing, condition of house, house ownership or rental status, level of living and formal social participation (Nair, 1978).

Socio-economic status of an individual may influence his opportunity, his desire to excel, his choice of activity and his success. The home environment often influences his motivation to succeed in sports and the degree to which success in this endeavor leads to inner satisfaction. Many psychological factors like socio-economic status, attitudes, motives, spectators, self concept, motivation, adjustment etc., which influence the participation and performance of sportsmen in games and sports (Sharma, 2015).

Socio-economic-status and psychological factors plays a vital role in football players to enhances the performances to achieve the player’s goal (Chandrasekaran et. al, 2010) Socio economic status did not have any effect on the performance of badminton players (Attri, 2013). Webb (1969) reported the socio-economic status effects the team games more than
individual games and Stone (1957) reported that the players of high socioeconomic status did not like to play Ice-Hockey, Golf and Tennis games (Sharma, 2015). Socioeconomic status is a strong determining factor in both satisfaction with life domains and satisfaction of needs (Ali, 2000). Dissimilarity was observed between team and individual game players in their high, middle and low SES.

Sharma (2010) reported that income reflects the living of a family. There is no doubt that type; amount and timing of food can dramatically affect sport performance. Lee (2002) also reported that low SES teens were less physically active than high socio economic teens.

From a public or population health perspective it is important to note that socioeconomic status has consistently been documented as having an inverse relationship with physical activity (Strauss & Pollack 2001). Sociological theorists such as Coleman (1988) and Bourdieu (1984) also articulate a contingent relationship amongst different forms of capital for child well-being. According to Haveman and Wolfe (1994) family structure can be considered a parental investment in children that could modify the influence of other, complimentary investments, like family SES (Martin, 2011)
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The researcher tried to concentrate on the parameters of motor fitness verses economic status and to analysis how economic status is affecting motor ability.

By keeping in mind the effect of poverty on health and fitness especially on motor fitness the researcher has selected an investigation entitled, “A Study on Motor Fitness Components between Children Belonging to Above and Below Poverty Line.”

Statement of the Problem

The study was conceptualized with a noble purpose to identify and understand distinctive features among the children of Birbhum District of West Bengal, India belonging to above and below the poverty line.

The lifestyle, habit, culture, bodily structure, health status and motor ability etc is likely to differ among the belonging to above and below the poverty line. Through this study it was intended that precisely such differences are to be investigated.

Primary Purpose of this study was to identify difference of motor fitness components among the children of Birbhum District of West Bengal, India belonging to above and below the poverty line.

After thoroughly reviewing the available authenticated literature, the internet sources, journals, the Researcher came to the conclusion that there
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were many researches on people or children belonging to below and above the poverty line but could not find any study on motor fitness components among the children belonging to below and above poverty line.

Hence considering all these present study was stated as “A Study on Motor Fitness Components between Children Belonging to Above and Below Poverty Line.”

Delimitations

It would not be out place to define here the term delimitation. As a general rule the delimitations set the frame of reference for the research, draw the borders nearer to the specific problem under consideration and define its scope for the present study.

In the light of the aforesaid definition and the meaning of the term ‘Delimitation’ this study will have boundaries like: -

1. The study was delimited to the 2400 male students (1200 in each category) aged 09 to 14 years belonging to the above and below the poverty line (APL & BPL) category from Govt. aided schools of Birbhum district, West Bengal, India only.

2. The study was further delimited to the following motor fitness components and tests:

➢ Agility – Semo Agility Test
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- Balance - Stork Stand Balance Test
- Coordination - Eye-Foot Coordination Test
- Speed - 50 Yard dash
- Power - Standing Broad Jump
- Reaction time - Nelson Hand Reaction Test

Limitations

The following can be considered as limitations of the study: -

1. The tests were conducted during morning and evening as per the feasibility which can be considered as the limitation of the study.

2. Climatic conditions, Topography and Geographical locations of different parts of the district which might have affected the performance in the motor fitness test were considered as limitation of this study.

3. During the test the mental state, food habits, and motivational factors of the subject might have affected the result of the study, which was considered as limitations of the study.

4. Rituals, customs and culture of different religious groups might be considered as further limitation of this study.
Hypothesis

From the Scholar’s own understanding of the problem, on the basis of the knowledge reflected by the available literatures and based on research findings after the discussion with the Supervisor, it was hypothesized that:

There will be significant differences in Motor Fitness Components between children belonging to above and below the poverty line of the Birbhum District, West Bengal, India.

Definition and Explanation of the Terms

➢ Poverty:

Poverty is general scarcity or the state of one who lacks a certain amount of material possessions or money. (merriam-webster dictionary, 2013)

UNESCO (Nov’2014) mentioned poverty as a multifaceted concept, which includes social, economic, and political elements.

➢ Poverty Line:
The estimated minimum level of income needed to secure the necessities of life. (google.com)

A level of personal or family income below which one is classified as poor according to governmental standards — called also poverty level (merriam-webster dictionary)

A minimum income level used as an official standard for determining the proportion of a population living in poverty. (dictionary.com)

➤ **Below Poverty Line:**

Below Poverty Line is an economic benchmark used by the government of India to indicate economic disadvantage and to identify individuals and households in need of government assistance and aid. It is determined using various parameters which vary from state to state and within states. The present criteria are based on a survey conducted in 2002. Going into a survey due for a decade, India's central government is undecided on criteria to identify families below poverty line. (Moyna, 2011)

➤ **Above Poverty Line:**

In India, a measure of persons who live above its nationally designated poverty threshold. People in urban areas must meet higher monthly income minimums to be considered above the poverty line. The
World Bank uses a more stringent poverty threshold than the Indian government. (Farlex Financial Dictionary, 2012)

➢ Physical:

Pertaining to body in contrast to mind. (The New Lexicon Webster’s Dictionary of the English Language).

As per scholar’s view, physical means “relating to body”; it may relate to any one or all the bodily characteristics.

➢ Education:

According to Prof. Drever, “Education is a process in which and by which knowledge, character and behaviour of the young are shaped and mounded”. (Singh, 2003)

➢ Physical Education:

According H.C.Buck, “Physical Education that part of the general education programme which is concerned with the growth, development and education of children through the medium of big-muscle activities. It is education of the whole child by means of physical activities. Physical activities are the tools. They are so selected and conducted as to influence every aspect of child life, physically, mentally, emotionally, and morally. (Singh, 2003)
➢ **Health:**

According to World Health Organization, “Health is a state of complete physical, mental, and social well being and not merely an absence of diseases or infirmity.” Recently this definition has been amplified and it has been added, “attainment of a level of health that will enable every individual to lead a socially and economically productive life”. (Singh, 2003)

➢ **Fitness:**

“Fitness is a physical state of art, being that allows people to perform by activities with vigor, reduce their risk of heart problems related to lack of exercises, and establish a base of fitness for participation in a variety of physical activities”. (Ratliffe & Ratliffe, 1994)

➢ **Physical Fitness:**

According to Nixon, “Physical Fitness refers to the organic capacity of the individual to perform the normal task of daily living without undue tiredness or fatigue having reserves of strength and energy available to meet satisfactorily any emergency demands suddenly placed upon him”.

The American College of Sports Medicine has proposed, “fitness is the ability to perform moderate to vigorous levels of physical
activity without undue fatigue and the capacity of maintaining such ability throughout life”. (Singh, 2003)

➢ **Motor fitness:**

Motor fitness has been defined as the readiness or preparedness for performance with special regular for big muscle activity without undue fatigue. (Singh, 1984) Motor fitness variables refer to the player’s status on those components which are essential for efficient functioning in the psychomotor domain. These components are performance oriented and are dependent upon functioning of different systems of the body in an integral manner.

➢ **Agility:**

“The ability to change the position of the body quickly and accurately”. (Kansal, 2000)

➢ **Balance:**

“Balance may be defined as one’s ability to maintain the body’s center of gravity over the center of supporting base of the body” (Kansal, 2000).

➢ **Co-ordination:**
“Coordination may be defined as the ability of the performer to integrate types of body movements into specific patterns” (Kansal, 2000).

➢ **Speed:**

“Speed may also be defined as rapidity with which a movement or successive movements of the same kind may be performed by an individual” (Kansal, 2000).

➢ **Power:**

“Muscular power is one’s ability to produce maximum muscular force in shortest time” (Kansal, 2000).

➢ **Reaction Ability:**

“The ability to respond or react quickly to a stimulus” (Kansal, 2000).

**Significance of the Study**

The present study, “A STUDY ON MOTOR FITNESS COMPONENTS BETWEEN CHILDREN BELONGING TO ABOVE AND BELOW POVERTY LINE.” might be a step towards important contribution to the field of Physical Education, Sports Science, Health
Science, and Social Science. The present researcher expecting this would throw some light on the children belonging to above and below the poverty line regarding their motor fitness and participation in the field of games and sports. Further the study may be helpful to know the health status, health policy, life style, socio-economic status etc. of the people of this region.

The study might have certain other significances, such as:

1. The motor fitness status might help to find out the actual capacity and potentialities of an individual that is very important for sports scientist, health scientist and coaches.

2. The result of this study might help to know the motor fitness status of various children belonging to the above and below the poverty line of Birbhum district, West Bengal, India.

3. The study might help the individuals belonging to the above and below the poverty line of Birbhum district, West Bengal, India to select their sports according to their physical features.

4. The study might help in preparation of diet schedule, lifestyle habits, customs and cultural aspects for achieving desirable improvement of the sportsman.

5. The study might help the coaches and physical education teachers of this region to select the suitable individual for suitable events.
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6. The study might help the various talent search scheme for games and sports of Govt. of India.

7. The study might help Govt. of India in various poverty related survey projects.

8. The study would arouse interest of various individuals belonging to the above and below the poverty line to participate in various games and sports and to maintain a healthy lifestyle.

9. The result of this study might help in planning the physical education and sports training programmes systematically and successfully.

10. The study might be useful to the health scientist, physical educationists, coaches, trainers, social scientists and those who want to use it as per their need and necessity in their respective areas.

11. The study would add to existing literature and research in the field of Physical Education, Sports Science, and Health Science etc.