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A study on reaction ability between the students belonging to above and below poverty line of Birbhum District

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Abstract

The purpose of the study was to investigate the difference on Reaction ability between the students belonging to above and below poverty line of Birbhum district. 1200 male students from different school of Birbhum District, West Bengal were selected randomly as the subjects for this study. The age of the subjects was range between 12-14 years. Reaction ability was considered as the variables for the present study. Student 't' test was applied to calculate the collected data at 0.05 level of significance. The result shows significant difference in Reaction ability between above and below poverty line students of Birbhum district. Further the result indicate that APL students possess higher Reaction Ability than BPL category students.

Keywords: Reaction ability. APL, BPL

Introduction

Historically, however, it is believed that the caste system began with the arrival of the Aryans in India around 1500 BC (Daniel). 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, language and economical. 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. After independence in India economical stratification system become the major stratification system. Economic stratification refers to the condition within a society where social classes are separated, or stratified, along economic lines. Various economic strata or levels are clearly manifest. While in any system individual members will have varying degrees of wealth, Economic stratification should not be confused with the related concept, economic inequality. This deals with the range of wealth, rather than the existence of distinct strata. Economic inequality and economic stratification can coincide. Internationally, an income of less than \$1.90 per day per head of purchasing power parity is defined as extreme poverty. By this estimate, about 32.7% percent of Indians are extremely poor. Income-based poverty lines consider the bare minimum income to provide basic food requirements; it does not account for other essentials such as health care and education. The number of people living on less than \$1.9 per day in 2011 was 259.5 million (21.3% of the total population). According to Indian constitution per-capita income of an BPL individual is not sufficient to maintain his daily requirement calorie. Because the NCP called for amending the poverty in the state in mind the increase in prices of commodities over the last decade. So researcher think that there might have any significant different on anthropometric variables and Physical Fitness on un-sufficient nutrition and income.

Reaction time is a measure of how quickly an organism can respond to a particular stimulus. Reaction time has been widely studied, as its practical implications may be of great consequence, e.g. a slower than normal reaction time while driving can have grave results.

Many factors have been shown to affect reaction times, including age, gender, physical fitness, fatigue, distraction, alcohol, personality type, and whether the stimulus is auditory or visual.

Stimulus - Sensory Neuron -Spinal Cord or Brain - Motor Neuron -Response

Sensory neurons convert a stimulus into an electro-chemical signal, which flows the length of the sensory neuron(s), then through a neuron or neurons of the central nervous system, and then through the length of the motor neuron(s). Generally, motor neurons will cause a muscle to contract or a gland to secrete a substance. Reactions that involve only the receptor, the spinal cord, and the effector, are faster than those which involve processing in the brain. Reactions which only travel to, though, and from the spinal cord are often called spinal reflexes or cord mediated reflexes; withdrawing one’s hand from a hot stove is an example of such a reflex.

Statement of the problem

The purpose of the study was to compare the differences on

Reaction Ability Between B.P.L and A.P.L Students.

Methodology

The objective of the study was to investigate the Reaction Ability between B.P.L And A.P.L Students. For the purpose of the study 600 APL and 600 BPL students were selected randomly from different school of Birbhum District. The age of the subjects was 12-14 year. To measure reaction time Nelson Jonson Hand reaction test were introduced. To compute all the results Students ‘T’ test was employed at 0.05 level of significant

Finding

Table 1: Mean and ‘t’ Ratio of Reaction Ability between B.P.L And A.P.L Students

variables	MEAN		‘t’ Ratio
	BPL	APL	
Reaction Ability	15.87	15.21	11.11

Significant at 0.05 level of confidence, $T_{0.05} (1198) = 1.960$

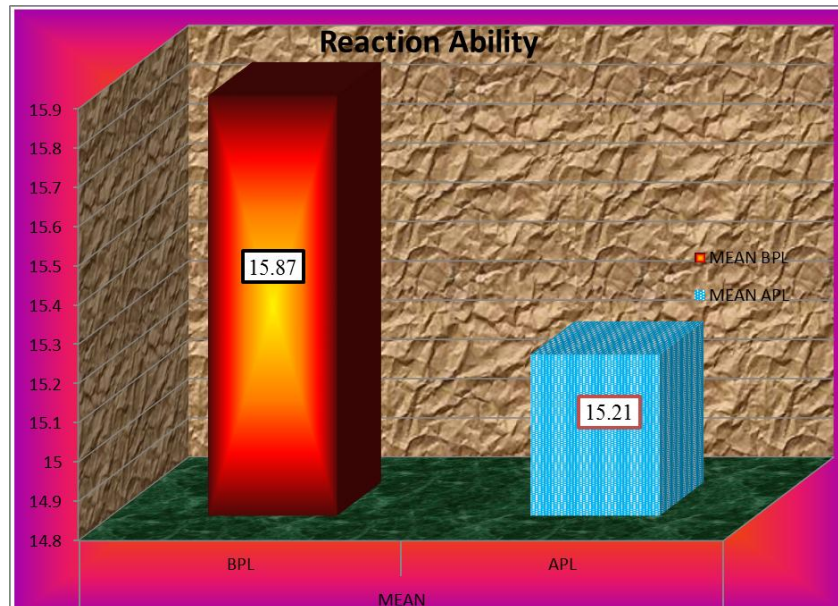


Fig 1: Graphical presentation of Mean of Reaction Ability on B.P.L And A.P.L Students

Discussion

It is evident from Table – 1 Shows that the mean and ‘ t’ test between B.P.L And A.P.L Students Reaction Ability. Mean of BPL students has been found 15.87 and APL has been found 15.21. The ‘ t’ value of Reaction Ability is 11.11, this is t significant and the APL students HAS higher Reaction Ability than BPL due to the fact that Physiological changes in the brain induced by regular popper nutrition and Aerobic exercise: Engaging in regular physical activity popper nutrition improves cardio-respiratory fitness (CRF); induces physiological changes in the brain to influence cognition and may interact with the cognitive components of the exercise to impact perceptual attention tasks. Previous studies suggest that popper nutrition regular aerobic exercises increase short-term and long-term potentiation and neurogenesis in the hippocampal circuitry.

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