

Available online at www.starresearchjournal.com (Star International Journal)

# PHYSICAL EDUCATION

Star. Phy. Edn 1(2016)



ISSN: 2321-676X

# RELATIONSHIP BETWEEN INTELLIGENCE QUOTIENT AND SOCIAL QUOTIENT AND DETERMINE THE INTER-RELATIONSHIP OF SOCIAL QUOTIENT AMONG PROFESSIONAL STUDENTS FROM DIFFERENT STREAMS

# Dr. Vikram Singh

Assistant Professor, Department of Physical Education, BHU, Varanasi, India.

#### **Abstract**

The purpose of the study was to find out the relationship between Intelligence Quotient and Social Quotient and to determine the inter-relationship of Social Quotient among professional students from different streams. The study was confined to Banaras Hindu University. Subjects were selected on the basis of random sampling method. A total of 200 male professional students from different streams i.e. Engineering, Medical, Physical Education and Social Science (50 from each stream) were selected for the study. Observations were made on the contents related to General Intelligence and Social Intelligence. To find out the relationship between Intelligence Quotient and Social Quotient Product Moment method of Correlation was applied. Further, in order to determine the inter relationship of Social intelligence among professional students from different streams Product Moment method of Correlation was applied. The value of Pearson's Product Moment Correlation between Intelligence Quotient and Social Quotient, showed existence of significant relationship between Intelligence Quotient & Social Quotient. Pearson's Product Moment Correlation for Social Quotient between Engineering and Social Science Student; Medical and Social Science Student showed existence of significant relationship for Social Quotient.

Keywords: Intelligence Quotient, Social Quotient and Professional Students.

## INTRODUCTION

the layman, the Intelligence Quotient is not identified with a particular type of score on a particular test, but is often a shorthand designation for intelligence. However, a more precise approach to the context yields a number of definitions for the term. One group of definitions places the emphasis upon adjustment or adaptation of the individual to his total environment, or to limited aspects of it. According to definitions of this type, intelligence is general mental adaptability to new problems and situations of life or in other words, it is the capacity to reorganize one's behaviour patterns so as to act more effectively and more appropriately in novel situations. Thus, the more intelligent person is one who can more easily and more extensively very his behaviour as changing conditions demand; he has numerous possible responses and is capable of greater creative reorganization of behaviour. A second type of definition states that - intelligence is the ability to learn. According to this definition, a person's intelligence is a matter of the extent to which he is educable, in the broadest sense. The more intelligent the individual is, the more readily and extensively is he able to learn, hence, also, the greater is his possible range of experience and activity. Still others have defined intelligence as the ability to carry on abstract thinking. This means the effective use of concepts and symbols in dealing with situations, especially those presenting a problem to be solved through the use of verbal and numerical symbols. It is apparent that these definitions are not mutually exclusive.

Social intelligence according to the original definition of Edward Thorndike is "the ability to understand and manage men and women, boys and girls, to act wisely in human relations" It is equivalent to interpersonal intelligence, one of the types of intelligences identified in Howard Gardner's Theory of multiple intelligences, and closely related to theory of mind. Some authors have restricted the definition to deal only with knowledge of social situations, perhaps more properly called social cognition or social marketing intelligence, as it pertains to trending sociopsychological advertising and marketing strategies and tactics.

**E.L. Thorndike** has divided intelligent activity into three types:

- (1) Social Intelligence, or the ability to understand and deal with persons
- (2) Concrete intelligence, or ability to understand and deal with things as in skilled trades and scientific appliances;
- (3) Abstract intelligence, or ability to understand and deal with verbal and mathematical symbols.

ISSN: 2321-676X

The merit of this classification of types of intelligent activity, for psychological testing, is that it indicates several realms in which persons might be functioning and implies that separate and sufficiently specialized tests might be devised to measure how effectively persons are functioning in each.

#### Statement of the Problem

The statement of the problem was stated as to find out the relationship between Intelligence Quotient and Social Quotient and to determine the interrelationship of Social Quotient among professional students from different streams.

## Aims & Objectives of the Study

- ➤ To find out the relationship between Intelligence Quotient and Social Quotient.
- ➤ To determine the inter-relationship of Social Quotient among professional students from different streams.

# **Research Questions or Hypothesis**

It was hypothesized that there would be insignificant inter-relationship between intelligence quotient and social quotient of professional students.

## PROCEDURE AND METHODOLOGY

#### Coverage:

**Universe of the Study:** The study was confined to Banaras Hindu University.

**Sampling Frame:** Subjects were selected as a sampling frame from different professional streams i.e. Engineering, Medical, Physical Education and Social Science.

**Sampling Method:** Subjects were selected on the basis of random sampling method.

**Sampling Size:** A total of 200 male professional students from different streams i.e. Engineering, Medical, Physical Education and Social Science (50 from each stream) were selected for the study.

Units of Observation: Observations were made on the

following contents related to General Intelligence:

- a) Word Meaning
- b) Analogy
- c) Classification
- d) Number Series
- e) Coding Decoding
- f) Syllogism

Observations were also made on the following contents related to Social Intelligence:

- a) Patience
- b) Cooperativeness
- c) Confidence level
- d) Sensitivity
- e) Recognition of social environment
- f) Tactfulness
- g) Sense of humor
- h) Memory

#### **Criterion Measures**

The criterion measures adopted for the study were as follows:

- ➤ Assessment of Intelligence was done by using a Test of General Intelligence for College Students developed by S. K. Pal and K. S. Misra.
- Assessment of Social Quotient (S.Q.) was done by using Social Intelligence Scale developed by N. K. Chadha and Usha Ganesan..

## **Statistical Techniques**

- > To find out the relationship between Intelligence Quotient and Social Quotient Product Moment method of Correlation was applied.
- Further, in order to determine the inter relationship of Social intelligence among professional students from different streams Product Moment method of Correlation was applied.

## RESULTS AND DISCUSSIONS OF THE FINDINGS

Table-I: Relationship between Intelligence Quotient and Social Quotient

Variables	N	Mean	SD	Pearson correlation	Sig. 2-tailed
IQ	200	30.86	8.12	176*	.013
SQ		92.13	23.47		

<sup>\*</sup> Correlation is significant at 0.05 level (2- tailed)

Table- 1 indicates the value of Pearson's Product Moment Correlation between Intelligence Quotient and Social Quotient, which showed existence of significant relationship between Intelligence Quotient & Social Quotient as the calculated r- value .176 was greater than the required value at 0.05 level of significance. Correlation coefficients having p-value less than 0.05 are significant at 5% level. This is shown by asterisk (\*) mark by the side of the correlation coefficients.

Table-II: Correlation Matrix for the Data on Social Quotient along with p-Values

SIS		SIS Physical	SIS
Engineering	SIS Medical	Education	Social Science
Students	Students	Students	Students

ISSN:	2321-676X
10011.	4J41-0/0A

SIS	Pearson Correlation				
Engineering		1	069	.118	.321*
Students					
	Sig. (2-tailed)		.634	.415	.023
	N	50	50	50	50
SIS Medical Students	Pearson Correlation	069	1	.190	291*
	Sig. (2-tailed)	.634		.186	.040
	N	50	50	50	50
SIS Physical Education Students	Pearson Correlation	.118	.190	1	.077
	Sig. (2-tailed)	.415	.186		.594
	N	50	50	50	50
SIS Social Science Students	Pearson Correlation	.321*	291*	.077	1
	Sig. (2-tailed)	.023	.040	.594	
	N	50	50	50	50

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

Table-2 indicates the value of Pearson's Product Moment Correlation for Social Quotient between Engineering and Social Science Student; Medical and Social Science Student which showed existence of significant relationship for Social Quotient as the calculated r- values .321 and .291 were greater than the required value at 0.05 levels of significance. All those correlation coefficients having p-value less than 0.05 are significant at 5% level. This is shown by asterisk (\*) mark by the side of the correlation coefficients.

## Discussion

The scholar examined the relationship between Intelligence Quotient and Social Quotient. The objective of the study was to find out the relationship between Intelligence Quotient and Social Quotient, so to test the hypothesis Pearson's Product Moment Correlation was computed. Results showed significant relationship between Intelligence Quotient and Social Quotient at 0.05 level of significance. This may be attributed to the fact that Intelligence is the capacity for relational, constructive thinking directed to attainment of some end. Modern definitions of intelligence refer to it as a property of the mind encompassing a variety of related mental capabilities, including the ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly and learn from experience, as well as the potential to do these things. It is usually through of as deriving from a combination of inherited characteristics an environmental (developmental and social) factors.

Social intelligence according to the original definition of Edward Thorndike is "the ability to understand and manage men and women, boys and girls, to act wisely in human relations" It is equivalent to *interpersonal intelligence*, one of the types of intelligences identified in Howard Gardner's Theory of multiple intelligences, and closely related to theory of mind. Some authors have restricted the definition to deal only with knowledge of social situations, perhaps more properly called social cognition or social marketing intelligence, as it pertains to trending socio-psychological advertising and marketing strategies and tactics. Relationship between Intelligence Quotient and Social Quotient also studied by Snyder & Cantor (1998) stated that social behavior is intelligent because it is mediated by cognitive process, perception memory, reasoning and problem solving rather than being mediated by innate reflexes, conditioned responses, evolved genetic programs, and the like. Intelligence Quotient develops up to certain age specifically cognitive intelligence which comprises of perception, memory, decision making and anticipation. Wechsler (1958) reported cognitive intelligence develops until late adolescence and begin to mildly decline in the second and third decade which ultimately suggests that as you grow older one becomes socially more mature.

Gardener (1983) has proposed that intelligence is not a unitary cognitive ability but there are seven and perhaps more quiet different kind of intelligence, each hypothetically dissociable from the others and each hypothetically associated with brain system. While, most of these proposed intelligence, linguistics, logical, mathematical, spatial, musical and body kinesthetic are cognitive abilities. Literature supports that cognitive aspects is a part of intelligence (Taylor & Cadet 1989) suggested that three brain systems provide the neurological substrate of social intelligence: a balanced or integrated cortical sub system which relies on long term memory to make complex social judgments; a frontal dominant subsystem which organizes and generates social behaviors; and limbic dominant subsystem which rapidly produces emotional responses to events. According to Wechsler intelligence is the global capacity to act purposefully, to think rationally and to deal effectively with the environment. Further, correlation technique was also applied between inter group (i.e. Engineering, Medical, Physical Education and Social Sciences) for SQ. Finally, the value of Pearson's Product Moment Correlation for Social Quotient between Engineering and Social Science Student; Medical and Social Science Student were found

significant.

# **Discussion of Hypotheses**

The hypothesis that there would be insignificant inter-relationship between intelligence quotient and social quotient is rejected as significant inter-co relationship was found between social quotient and intelligence quotient.

#### **Conclusions**

- 1. The value of Pearson's Product Moment Correlation between Intelligence Quotient and Social Quotient, showed existence of significant relationship between Intelligence Quotient & Social Quotient.
- 2. Pearson's Product Moment Correlation for Social Quotient between Engineering and Social Science Student; Medical and Social Science Student showed existence of significant relationship for Social Quotient.

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ISSN: 2321-676X