

## Relationship between Intelligence and Academic Achievement

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### ABSTRACT

400 male (N = 200) and female (N=200) High School students were investigated to know the relationship between academic achievement and intelligence by using Jalota General Intelligence test and obtained marks in the class IX. Findings reveal that high achievers of male as well as of female subjects are more intelligent than their respective counterparts.

Intelligence is the most valuable and important ability of an individual. It is necessary for all education, learning and teaching. Intelligence, not only consist single ability or capacity, it includes many abilities or capacities which are called General Abilities. "Intelligence has typically been defines as person's score on an intelligence test". (Mitzel-1982).

Intelligence develops the ability of abstract and logical thinking in a person i.e. the Person who is intelligent, develops the way of thinking in a logical, patience and rational way. The evil company of logic and behavior is found in less intelligent person.

Guilford has described 150 abilities in intelligence. It is a controversial subject to know how many abilities intelligence consists, but it is sure that intelligence is the centre of many abilities. The researches occurred through the Indian cultures reveal the positive correlation between intelligence and innovation (Pathak, 1962; Riana, 1968; Sharma, 1972; Passy, 1972; Usmani, 1981; and Reddy & Reddy 1983).

Is there any logical true relationship between intelligence and educational achievements of students? To know the answer of this question, in the present study a hypothesis that "The subject of higher and lower achievements, differs from one another on the basis of their Intelligence ability" was formulated. To examine this hypothesis, a comparative study of high and low achievers of male as well as female subjects was done by using t - test and findings were presented in table 1 and table 2, respectively

**Table: 1**

Comparison of High and Low Achievers of Female subjects in terms of their Intelligence scores.

Group	No.	Mean	S.D.	T-test Value
High	100	88.05	20.0	3.77
Low	100	77.06	21.3	

Findings as presented in table 1 reveal that the women with higher educational achievement got higher scores (mean =88.05) as compared to the women of lower educational achievement (Mean = 77.06) on Intelligence Test. It shows that intelligence and educational achievements are positively correlated with each other, i.e. highly intelligent women get higher educational achievement as compared to lower intelligent women and vice-versa. The comparison between two means has yielded a t-value of 3.77 which is significant beyond .01 level of Confidence. So we can say that the educational achievements of students are positively and truly influenced by their intelligence.

In the same way, it was tried to know in the male group also. In this regard it was hypothesized that "higher and lower educational achievements possessed male get difference in their intelligence ability." To examine this hypothesis, a comparative study between the groups of higher and lower male subjects is done and received results are presented in table 2.

**Table: 2**

Compassion between High and Low Achievers of Male Subjects in forms of their Intelligence scores.

Group	No.	Mean	S.D.	T-test
High	100	86.65	20.4	1.99
Low	100	81.00	19.5	

Finding as presented in table 2 reveal that the male with higher educational achievement got higher scores (mean = 86.65) as compared to the male of lower educational achievement (Mean = 81.00) on Intelligence and educational achievements are positively correlated with each other, i.e. highly intelligent men get higher educational achievement as compared to lower intelligent men and vice-versa. The comparison between two means has yielded a t – value of 1.99 which is

significant beyond chance ( $t = 1.99$ ,  $df = 198$ ,  $p < .05$ ). It indicates that intelligence contribute significantly to the educational achievement among the male respondents.

On the basis of above discussion, it can be opined that intelligence is a strong and significant contributor of educational achievement. It can also stated on the basis of present findings that male as well as female high achievers in educational field having more intelligence than the low achievers. Present findings support our hypothesis formulated in the present context. Findings of the present study are also supported by our day to day observation and matched with some previous empirical findings (Sharma, 1972; Usmani, 1981; Reddy and Reddy, 1983) conducted in the Indian cross-cultural society.

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