

# High School Students' Academic Achievement in Relation to Their Achievement Motivation and Intelligence

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**Abstract – The basic of achievement so achievement motive i.e., motive to achieve**

**The present study assumes greater significance in case of high school students as they are at their adolescent period. The majority of psychologists are agreed on that it is a time of stress and strain. So we must give individual attention to hired need achievement which is greatly affected by variables like achievement motivation and intelligent. So there is dine need to explore the relationship of educational world and finding can reveal worthy facts and enrich our intellectual horizons.**

**Key words: - High School Students, Academic Achievement, Achievement Motivation, Intelligence**

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## INTRODUCTION

Happiness depends upon the harmonious development of child personality which is greatly influenced by achievement; the families which are socially and economically stable usually take care of educational prospect of their children. The attributional approach to achievement is based upon the assumption of people's beliefs about the outcomes. The experience guide their behaviour in that and similar situation. The focus here is on specific cognition's about success and failure that mediate persistence on achievement tasks. Different casual attributions are viewed as implying different probabilities of further success. One such prediction is that when a person attributes failure to a lack of ability achievement expectancies and task persistence will decrease more quickly then when failure is attributed to a more controllable factor such as effort.

Motivation has comes to be regarded as one of the major domains of psychology and education. It constitutes an integral part of scientific endeavor to interpret human and intra-human behaviour. As motivation regulates and directs behaviour psychologists working in learning and perceptual processes have strongly felt that differences in behaviour of different persons can be best understand in the light of their motivation. It is assumed that each and every behaviour is motivated and directed towards some goals. It attempts to explain and predict some aspect of an individual's behaviour or attempts to account for behaviours of

groups. A motivation is an attempt to explain why certain behaviours occur and become predominant.

The achievement motivation is pattern of planning of action and of feeling connected with striving to achieve some of internalized standards of excellence. Achievement motivation is not necessarily the same this as the search for observable accomplishment. It applies only when an individual knows that his performance will be evaluated (by himself or by other) in terms of some standard of excellence and that the consequences of his action will be either a favourable evaluation (success) on an unfavourable evaluation (failure) achievement motivation is markedly goal directed.

## NEED & IMPORTANCE OF THE STUDY

This problem of motivation is the central problem is psychology which had been the subject of interest and enquiry for all those who dealt with human relations since the man on earth. Being most effective force in learning, motivational may be activate, speed up, hamper or sustain learning. In the area of motivation achievement motivation is relatively new concept. It is a pattern or planning of action and of felling connected with string to achieve some internalised standard of excellence. The basic of achievement so achievement motive i.e., motive to achieve.

In an achievement process an organism whole satisfying his motives adopts or adjusts to situation and tries to modify its behavior in order to

overcome the obstacles or barriers. Thus activity is basic to achievement and motivation is basic to activity. In other words, motivation is the heart of achievement, without motivation, it may not be possible.

While describing the role of education, education Commission (1966) recommended that, education should be made a powerful instrument of social, economic and cultural transposition, necessary for the realization of national goals. For this reason education be supposed to be developed to increase efficiency, attain social and national integration, speed up the process of modernization and develop social, moral and spiritual values. Thus education must come up to the expectations of the society in bringing about necessary revolution. In this perspective, the role of achievement motivation cannot be deprived of as it has a great effect on the personality learning and improvement of individual. Achievement motivation is affected by the prospective or the environment around him. Some factors such as personality make up of individual and his achievement motivation and intelligence has also been found to be associated with academic achievement.

The present study assumes greater significance in case of high school students as they are at their adolescent period. Most of psychologists are agreed on that it is a time of stress and strain. So we must pay special attention to need achievement which is greatly affected by variables like achievement motivation and intelligence. So there is a need to explore the relationship of educational world and finding can reveal worthy facts and enrich our intellectual horizons.

## REVIEW OF RELATED LITERATURE

Zargar (1980) studied need achievement in relation to intelligence creativity and scholastic achievement. In this study, it is revealed that there was need-achievement had a affirmative relationship with non-verbal creativity.

Saxena (1981) conducted a study on need achievement in relation to creativity, values, level of aspiration and anxiety. He found that there was relationship between need achievement and the level of aspiration. Sex differences were significant as far as the level of aspiration were concerned.

Reddy (1983) studied need achievement and intellectual capacity of high school students. The findings of study indicated that (i) class X mean scores on need achievement were significantly higher than class VIII and Class VI mean score. But boys and girls studying in the same class showed no significant difference in their need achievement scores. (ii) Scores on need achievement of high academic level students were

significantly higher whereas need achievement scores of low academic level students were significantly lower.

Singh (1986) A study was conducted on the relationship between achievement motivation, intelligence (general mental efficiency), extroversion, introversion and achievement in mathematics and a comparison there of between Haryana and Delhi students belonging to various socio cultural strata. It was found that there was no significant difference between the need-achievement scores of students of Haryana and Delhi schools. (ii) Correlation between achievement and intellectual efficiency (b) introversion extroversion (c) There was a significant difference between Social-cultural status and mathematics achievement.

Krishna (1990) a study was conducted on effect of socio cultural deprivation on some cognitive and on-cognitive abilities of tribal adolescents. It was found that tribal students possessed higher intelligence level, ability, better reasoning and higher achievement motivation than non-Christian tribal students.

Naik (1991) reported that intelligence has a significant effect on academic achievement.

Padhan Gangadhar (1994,) studied a significant and positive correlation between academic achievement and intelligence of high school students.

Chandra, R. and Azimmudin, (2013) was conducted a study on "influence of intelligence and gender on academic achievement of secondary school students of Lucknow city" depicted that there was no influence of masculinity on academic achievement but intelligence influenced the academic achievement of the students.

Parveen, Danista (2014) conducted a study on the topic of "relationship between intelligence and academic achievement of secondary level students" revealed that (1) significant and positive correlation was found between intelligence and academic achievement of secondary level students. It was found that students from low intelligence have lower academic achievement as compared to the academic achievement of students from higher intelligence level. (2) It was found the significant and positive correlation between intelligence and academic achievement of secondary school students on gender based.

Pranab, Soni and Jadab (2014), was found in his study on "A Comparative Study of Delinquency Prone and Non-Delinquency Prone Adolescents with regards to Self-Concept, Emotional Maturity and Academic Achievement in Assam". The study was conducted on the sample of 500 delinquent adolescents. It was reported that delinquent

adolescents have low self-concept, low emotional maturity and poor academic achievement than the non-delinquent adolescents.

Dutta.Jadab, Chetia, Pranab and Soni, (2015) was conducted the study on the topic of "A Comparative Study on Intelligence of Secondary School Students in Lakhimpur District of Assam". It was conducted on a sample of 500 Students, 250 boys and 250 girls were randomly selected from 16 schools of Lakhimpur district of Assam from Government and Private secondary level. It was found that there was no difference in intelligence of male and females private secondary school students. But it was found that there was a difference between urban private secondary school students and government school students.

Dutta. Jadab, Rajknower, Suresh and Soni, (2016) was conducted a study on "A Comparative Study on Intelligence of Secondary School Students in Sonitpur District of Assam". It was conducted on five hundred Students in which 250 girls and 250 boys randomly selected from the Government and Private secondary schools of Sonitpur district of Assam. It was clearly revealed in this study that there was a significant difference in respect to intelligence of government and private secondary school students.

## RESEARCH METHODOLOGY

The presented study was descriptive in nature thus, the survey. This method investigates phenomena in their natural settings. A study of academic achievement of High School students in relation to achievement motivation and intelligence cannot be attempted in a laboratory situation. So survey method is adopted as the present study as it is most appropriate method for such type of studies.

## OBJECTIVES OF THE STUDY

The following objectives were framed in the light of the need of present study.

- To study the academic achievement differentials among different achievement motivation groups of high school students.
- To study the academic achievements differentials among different intelligence groups of high school students.

## HYPOTHESES OF THE STUDY

In the light of the above mentioned objectives of the present study. The following hypotheses were formulated.

- High school students with relatively higher intelligence will have higher achievement

motivation in comparison to students with relatively lower intelligence.

- High school students with relatively higher academic achievement will have higher achievement motivation in comparison to students with relatively lower achievement motivation.

## RESEARCH METHODOLOGY

The present study was descriptive in nature & survey method was used in the study. Survey studies are conducted to collect data of the existing phenomena.

## POPULATION & SAMPLING

All the class X students of Bhiwani district constituted the population for the purpose of present study. For the purpose of study 150 students were taken from Bhiwani district of Haryana. The investigator selected the schools and student on the basis of simple random sampling.

## TOOLS USED

For the present investigation the investigator used the following tools:

- Achievement Motivation Test by Bhargava.
- A Group Intelligence Test by Mehta.

## PROCEDURE OF DATA COLLECTION

The investigator collected data from class X students of high schools of Bhiwani districts, the test were administered according to the manual of achievement motivation test and group intelligence test, all the necessary instruction and directions.

## Statistical Techniques Used

The data collected from 150 high school students of class X form 5 schools of Bhiwani District was analyzed with the help of 't' test or were find about the significance difference between mean achievement motivation scores of high school students in relation to their intelligence level and academic achievement. After making necessary calculating the data was summarized and interpreted.

## Analysis and Interpretation of Data

### Categorization

First of all, from the collected data categorization of the students was done for intelligence there are three sub groups of intelligence such as High, middle and low. The categorization was done for intelligence on the basis of percentile rank. Below

P27 (22.6) is considered as low intelligent and above P63 (32.78) is considered as high intelligible group and the score lie between P27 and P63 is considered as middle intelligence group.

The achievement motivation differentials among high, middle and low intelligence group of high school students are provided in table 1, 2, & 3 it follow as under.

**Table1:- Significance of Difference between Mean Achievement Motivation Scores of High and Low Intelligence Students of Class X**

| Intelligence | N  | M     | S.D. | S <sub>ED</sub> | CR   | Significance |
|--------------|----|-------|------|-----------------|------|--------------|
| High         | 51 | 24.39 | 7.16 | 1.11            | 9.87 | S*           |
| Low          | 47 | 13.47 | 3.21 |                 |      |              |

S\* significant at .01 level.

It is observed from table1 that mean and S.D value for achievement motivation of high intelligent group found to be 24.39 and 7.16 respectively and that of low intelligence group are found to be 13.43 and 3.21 respectively. The 't' ratio between the two groups is 9.87 which is significant at .01 level. It suggests that there is significance difference between achievement motivation of high intelligent and low intelligent students of class X. it can be interpreted that students belonging to high intelligence group have better achievement motivation there two intelligence group.

**Table- 2:- Significance of Difference between Mean Achievement Motivation Scores of High & Middle Intelligence Students of Class X**

| Intelligence | N  | M     | S.D. | S <sub>ED</sub> | CR   | Significance |
|--------------|----|-------|------|-----------------|------|--------------|
| High         | 51 | 24.39 | 7.16 | 1.11            | 4.35 | S*           |
| Middle       | 52 | 19.56 | 3.29 |                 |      |              |

It is observed from table 2 that mean and S.D value for achievement motivation of high intelligent group found to be 24.39 and 7.16 respectively and that of middle intelligence group one found to be 19.56 and 3.39 respectively. The 't' ratio between the two groups is 4.35 which is significant at .01 level. It suggests that there is significance difference between achievement motivation of high intelligent and middle intelligent students of class X. It can be interpreted that students belonging to high intelligence group have better achievement motivation then middle intelligence group.

**TABLE- 3:- Significance of Difference between Mean Achievement Motivation Scores of Middle and Low Intelligent Students of Class X**

| Intelligence | N  | M     | S.D. | S <sub>ED</sub> | CR   | Significance |
|--------------|----|-------|------|-----------------|------|--------------|
| Middle       | 52 | 19.56 | 3.39 | .66             | 9.28 | S*           |
| Low          | 47 | 13.43 | 3.21 |                 |      |              |

It is depicted from table 3 that mean and S.D value for achievement motivation of middle intelligent group found to be 19.56 and 3.39 respectively and that of low intelligence group one found to be 13.43 and 3.21 respectively. The 't' ratio between the two groups is 9.28 which is significant at .01 level (i.e \*). It suggests that there is significance difference between achievement motivation of middle intelligent and low intelligent students of class X. It can be interpreted that students belonging to middle intelligence group have better achievement motivation then low intelligence group.

On the basis of above result it can be concluded that class X students belongs to different level of intelligence are found to differ significantly with respect to achievement motivation.

Hence hypothesis no.1 High School students with relatively higher intelligence will have higher achievement motivation in comparison to students with relatively lower intelligence is retained. With respect to, higher intelligence group verses low intelligence group and higher intelligence group verses middle intelligence group and middle intelligence group verses low intelligence group.

**(Section – II) Categorization**

Categorization was done for academic achievement. There are two sub group of academic achievement such as High and low academic achiever. The categorization was done for the academic achievement on the basis of medium. The medium scores come out to be 309.5 for academic achievement. The students having the score above 309.5 are constructed s high academic achievement groups and the student having the score below 309.5 is considered as low academic achievement group.

**Table-4:- Significance of Difference between Mean achievement Motivation Scores of High and Low Academic Achievement Group Students of Class X.**

| Academic Achievement Group | N  | M     | S.D. | S <sub>ED</sub> | CR   | Significance |
|----------------------------|----|-------|------|-----------------|------|--------------|
| High                       | 76 | 20.33 | 7.25 | 1.07            | 1.27 | *            |
| Low                        | 74 | 18.22 | 5.79 |                 |      |              |

It is observed from table 4, that mean and S.D value for achievement motivation of high academic achievement group found to be 20.33 and 7.25 respectively and that of low academic achievement group one found to be 18.22 and 5.79 respectively. The 't' ratio between the two groups is 1.7 which is significant at .05 level. It suggests that there is significance difference between achievement motivation of high academic achievement group and low academic achievement group students of class X. It can be interpreted that students belonging to high academic achievement group have better achievement motivation then low academic achievement group students.

On the basis of above result it can be concluded that class X students belongs to different level of academic achievement are found to differ significantly with respect to their achievement motivation.

Hence hypothesis no.2 High School students with relatively higher academic achievement will have higher achievement motivation in comparison to students with relatively lower academic achievement is retained.

**MAIN FINDINGS OF THE STUDY**

- The high school students of class X belonging to high intelligence group were found to have higher achievement motivation in comparison to low intelligence group students.
- The high school students of class X belonging to high intelligence group were found to have higher achievement motivation in comparison to middle intelligence group students.
- The high school students of class X belonging to middle intelligence group were found to be have higher achievement motivation in comparison to low intelligence group students.
- The high school students of class X belonging to high academic achievement

group were found to have higher achievement motivation in comparison to low academic achievement group students.

**CONCLUSION & EDUCATIONAL IMPLICATIONS**

- The findings of the study that intelligence indicates that there is a significant difference between high and low intelligence groups and high or middle intelligence group and middle and low intelligence group. It shows that intelligence play vital role in achievement motivation of students in order to improve the achievement motivation due importance should be given to each and every child and their intellectual development.
- The study reveals that academic achievement of high school students was closely associated with achievement motivation. Therefore the teacher in class room should have into consideration what methods in suitable for children. He also must acquired with the need, interest of student so that they many show better performance which in turn may influence the achievement motivation of these students.
- The achievement motivation can be developed in the school by designing special curricula and this deserves attention in view of the educational needs of the students in the country. In this way the pupils will gain in their achievement motivation score.
- The counselor or the teacher should devote much attention towards assisting the individual to feel secure within his environment. He should help the students accurately, asses their areas of personal strength and weakness and make logical decisions based upon this assessment. The teacher need to understand nature and content of motivational behavior as he plans the teaching and learning situation in the classroom.

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