

## Personality Traits and Academic Achievement among College Students

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### ABSTRACT

This study aims to determine the significant difference between high and low achievers on 16 personality traits factors. Among a sample of 200 adolescents (100 high achiever and 100 low achiever) studying in B.A part-I were selected by stratified random technique from different colleges located in Ranchi. 16 personality factor questionnaires were administered to measure the dimensions of personality traits of both the groups. Data was analyzed by using means, standard deviations and t test. Result revealed that high achievers had unique personality profile than low achievers.

**Keywords:** *High and Low Achievers, Personality Traits*

### INTRODUCTION

Academic achievement has always been considered to be a very important factor in the educational life of an individual, because good academic record over years predicts future success of a person. Education is unique investment and academic achievement is a vital aspect of it. In this world of industrialization and globalization, education has become highly commercial and academic excellence has gained through tough competitions (Woolfolk, 2001). Academic achievement of students has been a great concern to educationist since time immemorial. Now a day, this trend has been intensively felt by the academicians, parents and students (Anzi, 2005). The educational status of an individual is highly depicted through the academic achievement. In our society academic achievement is considered as a key criterion to judge one's total potentialities and capacities. Hence academic achievement occupies a very important place in education as well as in the learning process. Academic achievement is defined by Crow and Crow (1969) as the extent to which a learner is profiting from instruction in a given area of learning i.e. achievement is reflected by the extent to which skill and knowledge has been imparted to him.

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## **Personality Traits and Academic Achievement among College Students**

Education plays a vital role in building a society. Modern society cannot achieve its aims of economic growth, technical development and cultural advancement without fully harnessing the talents of its citizens. The word academic here, stands for those aspects of school that involve the study of books. The achievement of students in the course syllabi, and books studied by them and expressed in the forms of grade, percentage or on any other point of scale can broadly be termed as academic achievement. The importance of prediction of academic achievement has increased during recent years because of various reasons. One of the reasons is the mushroom growth in student population which has created manifold problems. The second is that child education has not been found to be commensurable with the efforts and huge expenditure made in this field. The third is concerned with the wastage of great human potentials because it is often found that student perform much below their capacities. Academic achievement individual learns to utilize his energies with the given innate potentials and a particular pattern of socializing pressure. Considering the fact that both innate potentials and environmental factors play equally important roles in academic achievement, it is imperative to look into the interplay of both these factors. In this study, it was decided to use examination marks as criterion measure of academic achievement. Personality is the ability to get along in adult situation; it is the person's type of action, reaction, opinion and mood, a set of physical and social traits (Mullanattom, 1993). Personality plays very important role in academic achievement. Some researchers have classified the students as high-achiever and low-achiever according to their performance. In the present investigation students who have scored 65% and above marks in the academic achievement have been taken to be high achiever and students who have scored 45% and less than that have been taken to be low achiever. Investigating the relationship of academic achievement with various personality characteristics indicates that through the findings with respect to most of the personality factors are conflicting, some factors, at least, seem to be important in this connection. Several personality characteristics also have been investigated using different tests. Though the findings of the studies are not very consistent, they provide further evidence regarding the importance of personality factors in academic achievement. Students differ in their personal values; they receive and process information differently; their personality trait is different and hence, so also is their understanding. It is often argued that a blend of personality characteristics is necessary for people to be successful in their career. Educators, researchers, and psychologists have been constantly searching for parsimonious set of variables that predicts patterns of students' behaviors and their relationship to academic achievement.

### **REVIEW OF LITERATURE**

A vast number of studies have sought to determine the predictability of academic performance by personality traits. Personality has been recognized as a determining factor on how people learn (Lawrence, 1997; Myer et al, 1998). College students tend to prefer learning environments consistent with their own personality type preference. Many scholars have accepted five-factor model of personality as a replicable and unifying taxonomy of personality (Digman, 1990; Goldberg, 1992; Witt et al, 2002) and have found personality traits to be significantly related to

## Personality Traits and Academic Achievement among College Students

successful job and school performance, both logically and statistically (Hogan & Hogan, 1989; Day & Silverman, 1989). Traits like stinginess, curiosity, assertiveness or laziness are virtually perfect examples of personality and traits of psychological properties are sociability, loyalty, humor, musical ability and respects for his parents (Robins, & Trzesniewski, 2005). Need for achievement and manifest anxiety can also be considered as trait (Wolters, 2004). Intelligence, interest and aptitude are regarded as traits (Rindermann & Neubauer, 2001). In terms of academic success, personality would appear to play a greater role than intelligence (Cattell, 1978; Eysenck, 1992). Mouw and Khanna (1993) showed the impossibility of predicting successful performance based on personality variables. At a higher level of education, Nofle & Robins (2007) studied the relationship between personality and academic aptitude and achievement. Blechner and Carter, 1956; Osborne and Sanders, 1949; Shoemaker and Rothrer, 1948; Sopchak, 1958; Thompson, 1947, 1948a, 1948b, 1951) made an attempt to relate personality characteristics as measured by projective tests, with academic achievement. Conscientiousness and openness were the most important personality correlates of academic achievement across different informants (self, teacher, and parent) also in a study conducted by Barbaranelli, Caprara, Rabasca, and Pastorelli (2003).

### HYPOTHESES

There will be significant difference between high and low achiever college student on various personality profiles.

### SAMPLE

A sample of 200 adolescents studying in B.A part I of different colleges of Ranchi town were selected on stratified random basis for the present study. The stratification was based on high achievers, who obtained marks above 65% and low achievers who obtained marks below 50% in their 12<sup>th</sup> class examination. One hundred students were high achievers and one hundred low achievers.

### INSTRUMENT

1. **Academic Achievement:** - In the present investigation academic achievement constitutes the aggregate marks obtained by the subjects in their 12<sup>th</sup> class examination.
2. **16 Personality Factor Questionnaire (16 PF):**-In an effort to understand differing personalities in human being Raymond Bernard Cattell maintained a belief that a common taxonomy could be developed to explain such differences. This inventory has been developed on the basis of factor analysis. This inventory measures the personality on the basis of 16 independent factors. Three types of traits are included – Temperament trait, Ability trait and Dynamic trait. It has 187 items. Every question has 3 options. All the 16 factors give different information about the person. Data is analyzed on the basis of Norm chart. The sixteen personality factor questionnaire has been developed by Cattell (1946), adopted in Hindi by S. D. Kapoor (1970). This is one objectively scorable test devised by basic research in psychology to give the complete coverage of personality in brief time.

## Personality Traits and Academic Achievement among College Students

The primary source by the 16 PF test. Traits covered

| Factor         | Low Sten Score Description (1-3)                   | High Sten Score Description (8-10)                  |
|----------------|--|---|
| A              | Cool (Sizothymia)                                  | Warm (Affectothymia)                                |
| B              | Concrete thinking (Low scholastic mental capacity) | Abstract thinking (High scholastic mental capacity) |
| C              | Affected by feelings (Low ego strength)            | Emotional stable (Higher ego strength)              |
| E              | Submissive (Submissiveness)                        | Dominant (Dominance)                                |
| F              | Sober (Desurgency)                                 | Enthusiastic (Surgency)                             |
| G              | Expedient (Weaker superego strength)               | Conscientious (stronger superego strength)          |
| H              | Shy (Threctia)                                     | Bold (Parmia)                                       |
| I              | Tough Minded (Harra)                               | Tender Minded (Premcia)                             |
| L              | Trusting (Alexia)                                  | Suspicious (Protension)                             |
| M              | Practical (Praxernia)                              | Imaginative (Autia)                                 |
| N              | Forthright (Artlessness)                           | Shrewd (Shrewdness)                                 |
| O              | Self-assured (Untroubled adequacy)                 | Apprehensive (Guilt proneness)                      |
| Q <sub>1</sub> | Conservative (Conservatism)                        | Experimenting (Radicalism)                          |
| Q <sub>2</sub> | Group oriented (Group adherence)                   | Self-sufficient (Self –sufficiency)                 |
| Q <sub>3</sub> | Undisciplined self-conflict low integration        | Following self – image (High self-concept control)  |
| Q <sub>4</sub> | Released (Low ergic tension)                       | Tense (High ergic tension)                          |

### PROCEDURE

16 Personality Factor Questionnaire test was administered to the students with proper instruction. Data was collected and scoring was done with the help of scoring keys. The data obtained was tabulated and analyzed with the help of mean, S.D and t-ratio.

### RESULT AND DISCUSSION

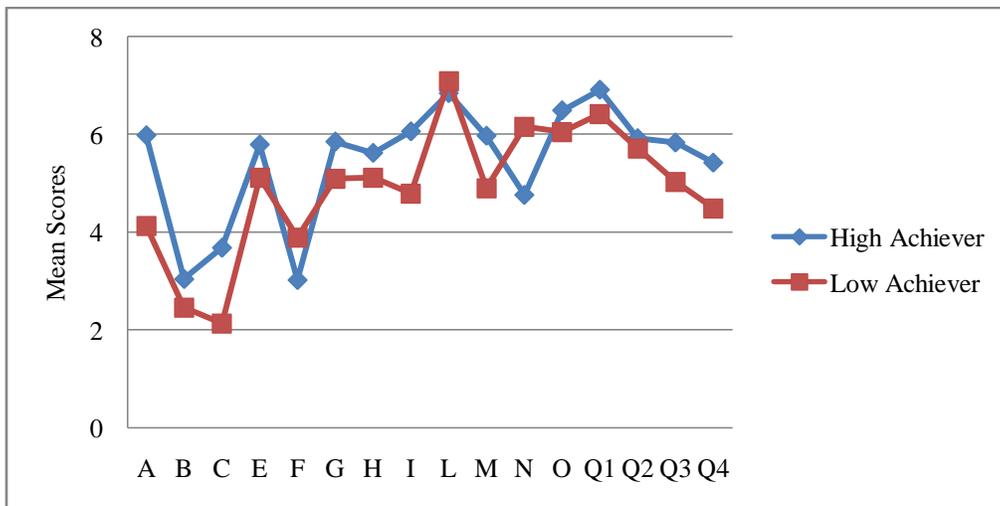
Table-1, Mean scores, SD and t values of high and low achiever college students on 16 personality factor questionnaire.

| 16 PF | Groups        | N   | Mean | SD   | t    | Level of significance |
|-------|---------------|-----|------|------|------|-----------------------|
| A     | High Achiever | 100 | 5.98 | 1.98 | 9.25 | 0.01                  |
|       | Low Achiever  | 100 | 4.13 | 1.27 |      |                       |
| B     | High Achiever | 100 | 3.04 | 1.69 | 3.41 | 0.01                  |
|       | Low Achiever  | 100 | 2.46 | 1.51 |      |                       |

### Personality Traits and Academic Achievement among College Students

|                |               |     |      |      |      |                 |
|----------------|---------------|-----|------|------|------|-----------------|
| C              | High Achiever | 100 | 3.68 | 1.89 | 7.04 | 0.01            |
|                | Low Achiever  | 100 | 2.13 | 1.58 |      |                 |
| E              | High Achiever | 100 | 5.79 | 1.49 | 4    | 0.01            |
|                | Low Achiever  | 100 | 5.11 | 1.09 |      |                 |
| F              | High Achiever | 100 | 3.02 | 1.35 | 4.35 | 0.01            |
|                | Low Achiever  | 100 | 3.89 | 1.89 |      |                 |
| G              | High Achiever | 100 | 5.85 | 1.79 | 3.45 | 0.01            |
|                | Low Achiever  | 100 | 5.09 | 1.51 |      |                 |
| H              | High Achiever | 100 | 5.62 | 1.71 | 2.10 | 0.05            |
|                | Low Achiever  | 100 | 5.12 | 1.69 |      |                 |
| I              | High Achiever | 100 | 6.06 | 1.59 | 1.67 | Not significant |
|                | Low Achiever  | 100 | 4.79 | 1.31 |      |                 |
| L              | High Achiever | 100 | 6.84 | 1.58 | 1.25 | Not significant |
|                | Low Achiever  | 100 | 7.09 | 1.60 |      |                 |
| M              | High Achiever | 100 | 5.97 | 1.97 | 4.45 | 0.01            |
|                | Low Achiever  | 100 | 4.90 | 1.77 |      |                 |
| N              | High Achiever | 100 | 4.76 | 2.03 | 5.38 | 0.01            |
|                | Low Achiever  | 100 | 6.16 | 1.78 |      |                 |
| O              | High Achiever | 100 | 6.49 | 1.87 | 2    | 0.05            |
|                | Low Achiever  | 100 | 6.05 | 1.72 |      |                 |
| Q <sub>1</sub> | High Achiever | 100 | 6.91 | 1.75 | 2.04 | 0.05            |
|                | Low Achiever  | 100 | 6.42 | 1.81 |      |                 |
| Q <sub>2</sub> | High Achiever | 100 | 5.92 | 1.56 | 1.05 | Not significant |
|                | Low Achiever  | 100 | 5.71 | 1.61 |      |                 |
| Q <sub>3</sub> | High Achiever | 100 | 5.83 | 1.91 | 3.63 | 0.01            |
|                | Low Achiever  | 100 | 5.03 | 1.65 |      |                 |
| Q <sub>4</sub> | High Achiever | 100 | 5.42 | 1.51 | 5.47 | 0.01            |
|                | Low Achiever  | 100 | 4.49 | 1.03 |      |                 |

Figure-1, Mean scores of high and low achiever college students on 16 personality factor



The above table indicated that high and low achiever groups differ significantly on thirteen factors (A,B,C,E,F,G,H,M,N,O,Q<sub>1</sub>,Q<sub>3</sub> and Q<sub>4</sub>)out of sixteen personality factors. High and low

## Personality Traits and Academic Achievement among College Students

achiever groups did not differ significantly in respect to various personality traits like factors- I, L and Q<sub>2</sub>. Factor A showed reserved versus outgoing traits. In this factor high achiever groups had got high score. On factor B, high achievers group scored higher, they fall in the more intelligent category. High achiever groups scored higher on factor C, which indicates that they were emotionally more mature, realistic and adjustable than low achiever groups. Factor E showed humble versus assertive traits, in this factor high achiever groups scored high. It showed their dominant personality. On factor F, low achiever groups scored higher as compared high achievers. It indicated that low achiever groups were found to have sober, prudent, taciturn and serious than high achiever groups. On factor G, the high achievers group scored higher, it meant high achievers were found to have stronger super ego strength. On factor H, high achievers were found to be bold and uninhibited. Regarding factor M, high achiever group scored higher, it indicated that high achiever were more absent minded and careless. Factor N, low achievers group scored higher, they were found to be experienced and shrewd. On factor O, high achievers were scored higher, they having guilt proneness and depressed. Factor Q<sub>1</sub>, high achievers group scored higher, having critical and liberal traits. On factor Q<sub>3</sub>, high achievers were highly self-concept control than low achievers group. On factor Q<sub>4</sub>, high achievers group scored higher, they were found to be tense and restless.

## CONCLUSION

High achiever group was found to be reserved, detached, more intelligent, emotionally more mature, dominant in nature, stronger super ego strength, bold, careless, depressed, liberal in nature, higher self-concept and they were found to be tense and restless. Whereas low achiever group was sober, prudent, having doubtful personality and experienced.

## REFERENCES

1. Anzi, F.O. (2005). Academic achievement and its relationship with anxiety, self-esteem, optimism, and pessimism in Kuwaiti students. *School Behavior and Personality*, 33, 95-104.
2. Barbaranelli, C., Caprara, G. V., Rabasca, A., & Pastorelli, C. (2003). A questionnaire for measuring the Big Five in late childhood. *Personality and Individual Differences*, 34, 645-664.
3. Blechner, Janet E. & Carter, Harold D. (1956) Rorschach personality factor and college achievement, *Calif. J. Educ. Res.*, 7, 72-75.
4. Cattell, R.B. (1978). Matched determiners vs. factor invariance: A reply to Korth. *Multivariate Behavioral Research*. 13(4): 431-448.
5. Crow, L. D. & Crow (1969). *Adolescent development and adjustment*, McGraw-Hill Book Company, United States. 45-49.
6. Day, D. and Silverman, S. (1989). Personality and Job performance: Evidence of Incremental Validity: *Personnel Psychology*, 42(1), 25-36.

## Personality Traits and Academic Achievement among College Students

7. Digman, J.M. (1990). Personality structure: Emergence of the Five-factor model. *Annual Review of Psychology*, 41, 417-440
8. Eysenck, H.J. (1992). Personality and education: The influence of extraversion, neuroticism and psychoticism. *Zeitschrift fur Padagogische Psychologie*, 2, 133-144.
9. Goldberg, L.R. (1992). The Development of makers for the big five-factor structure, *Psychological Assessment*, 4, 26-42.
10. Hogan, J. & Hogan, R (1989).How to measure employee reliability.*Journal of Applied Psychology*, 74(2), 273-279.
11. Lawrence, G. (1997). *Looking at type and learning styles*. Gainesville, FL: Center for Application of Psychological Type.
12. Mouw, J.T. &Khana, R.K. (1993). Prediction of academic success: a review of the literature and some recommendations. *College Student Journal*, 3, 328-336.
13. Mullanattom, M. (1993).Personality.Bharananganam: Jeevan Books-80-83.
14. Myers, I.B., McCauley, M.H., Quenk, N.L & Hammer, A.L (1998).*MBTI manual: A guide to the development and use of Myers-Briggs Type Indicator* (3rd Ed.). Palo Alto, CA: Consulting psychologists Press.
15. Noffle, E. E., & Robins, R. W. (2007). Personality predictors of academic outcomes: Big five correlates of GPA and SAT scores. *Journal of Personality and Social Psychology*, 93, 116–130.
16. Osborve R.T. and Sanders, W.B. (1949).Multiple choice Rorschach responses of college achievers ad non-achievers.*Educhol.Measmt*.9, 685-691.
17. Shoemaker, H.A. and Rohrer, J.H. (1948) Relationship between success the study of medicine and certain psychological and personal data. *J. Ass. Amer. Med. Coll.*, 23, 1-12.
18. Sopachak, Andrew L. (1958). Predication of college performance by commonly used test. *J. Clinc. Psychd*.14, 194-197.
19. Thompson, Grace M. (1947). Non-intellective factors and grades: the group Rorschach. *Amer. Psychologist* 2, 415.
20. Thompson, Grace M. (1948a). Non-intellective personality factors related to academic achievement in college. Doctor's thesis; University of California cited by Jonet E. Blechner and Harold D. Carter, Rorschach personality factor and college achievement. *Calif. J. Educ. Res.*, 1956, 7, 72-75.
21. Thompson, Grace M. (1948b). College grades and the group Rorschach.*J. Appl. Psychol.*, 32 398-407.
22. Thompson, Grace M. (1951). College grades and the group Rorschach: a follow-up study. *J. Genet. Psychol.*, 78, 39-46.
23. Witt, L.A &Barrick, M, Burke, L., & Mount, M. (2002).The interactive effects of conscientiousness and agreeableness on job performance.*Journal of Applied Psychology*, 87(1) 164-169
24. Woolfolk, A. (2001). *Educational psychology* (8th Ed.). Needham Heights, MA: Allyn& Bacon.