

A Study of Relationship between Personality and Academic Achievement of XI Grade Students

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Abstract

The purpose of the research was to study the relation of personality and academic achievement in commerce of XI grade students. The present study attempts to deal with two variables namely personality and achievement in commerce. Personality includes ten major dimensions of personality -Decisiveness, Responsibility, Emotional, Stability, Masculinity, Friendliness, Hetero Sexuality, Ego-Strength, Curiosity, Dominance and Self – concept. Personality of students was measured by Singh's Differential Personality Inventory (SDPI) constructed by prof. Arun Ku. Singh and prof, Ashish Ku.Singh and commerce achievement Test was developed by the investigator will be beneficial for Higher Secondary Students of C.G. Board in Commerce stream. To fulfill the objectives of the present study, 600 higher secondary school students comprising of 300 boys and 300 girls from commerce stream of class XIth were from commerce stream of class XIth were Selected by purposive Random Sampling Technique from different School located in urban and rural areas of Durg District of Chhattisgarh State.

Keywords: Personality, Commerce achievement, Standard IX level.

Introduction

'Personality is that pattern of characteristic thoughts, feelings and behaviors that distinguishes one person from another and that persists over time and situation.' (Phares, 1991). It is the sum of biologically based and learnt behaviour which forms the person's unique responses to environmental stimuli (Ryckman, 1982).

The concept of personality must be hypothetically understood (Ryckman, 1982). No clear neurological ground can be found for it, although attempts have been made to describe the basis of personality in terms of neurophysiology (Rowe, 1989) or cortical dopamine activity (Pickering & Gray, 2001).

The personality structure is fairly stable and predictable throughout different situations and time (Phares, 1991). There are personality traits of different depth and significance. The innermost layer is the basis, while the outermost layer is situation – bound and influenced by, for example, tiredness. A tired person might accordingly behave in a way that is not like his/her true self (Cattell, 1950). Dependent on the situation, personality traits may be more or less visible and personality may also develop over time (Phares, 1991). The changes which reflect events and feeling during the lifespan only affect the surface and not the core character. Profound changes in personality are usually consequences of major life changes or deliberate effort (Costa & McCrae, 1980).

Personality Traits

Traits theory has in recent years become more and more popular. The base of personality in this tradition is related to genetics and neurological processes. Research based on studies of twins raised apart has shown that 50% of the central personality traits can be related to genes. Experiences in childhood are another ground for the formation of personality. As experiences are self-selected to a large degree, they can also be guided by genetic disposition. Although genetics seem to influence personality, neither genetic disposition nor environmental influences are deterministic. The individual is unique in his/her character and part of a complex system which makes it impossible to predict reactions with certainty (Bouchard, 1997).

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After 50 years of personality research there is a common agreement in the field that there are five basic dimensions that can be used to describe differences in cognitive, affective and social behaviour. This is the base for the five-factor model of personality (Revelle & Loftus, 1992). The five dimensions are usually described in the following order of decreasing robustness based on previous personality scales: neuroticism, extraversion, openness to experience, agreeableness and conscientiousness (Costa & McCrae, 1992). The dimensions are stable across a lifespan and seem to have a physiological base (Revelle & Loftus, 1992).

Personality And Academic Achievement

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). The educational status of an individual is highly depicted through the academic achievement. 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). Strikingly, academic achievement has become a detrimental index in determining a child's future.

Going higher up in the social status of means of academic achievement is universally accepted and the most important determinant of a person's adult status is his career (Eshel & Kohani, 2003). Academic achievement individual learns to utilize his energies with the given innate potentials and particular patterns 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. Innate potentials in terms of academic achievement are exhibited mainly through the intellectual functions, and of course there is a positive correlation between intellectual functions and academic achievement (Best & Khan, 1999).

Personality traits play important roles in academic achievement. Johnson (1997) reported a study where they examined the relationship between personality traits and academic achievement in gifted students. Results showed that there significant correlation between ten personality traits and academic achievement. According to Panda and Samal (1995) comparative study of personality and academic achievement of adolescent daughters of working and non-working mothers, it was found that working mothers daughters were more extroverted, independent, aggressive and confident.

Personality traits influence academic achievement for instance; conscientiousness has a consistently positive association with high school GPA (Conard, 2006; Noffle and Robins, 2007). Both openness and agreeableness are positively related to academic performance (Lounsborg et al., 2003; Farsides and Woodfield, 2003), and neuroticism is associated with impaired academic performance (Furnham & Mitchell, 1991; Heaven et al., 2002).

Noffle and Robins (2007) also reported that conscientiousness is the strongest predictor of academic performance, and the other four traits have weak or mixed relationship with GPA. Although these findings confirm the significance of personality traits, there remains a need to examine other individual level factors such as students' motivation.

There are several personality traits that have been shown to relate to academic performance. Openness to Experience (also known as intellect) has been associated with academic success in school (Shuerger & Kuma, 1987) and university, both at an undergraduate (Dc Frueft & Merniedle, 1996) and postgraduate (Hirschberg & Itkin, 1978) level. Some have argued that his association can be explained in terms of typical rather than maximal performance (Goff & Ackerman, 1992; Hofstee, 2001). Since openness has also been shown to be highly correlated with typical intellectual engagement (Goff & Ackerman, 1992). A trait that refers to one's typical efforts to in test in intellectual activities. However both openness to experience and typical intellectual engagement have not always demonstrated predictive validity with regard to academic achievement (Goff & Ackerman, 1992; Wolfe & Johnson, 1995; Busato et al., 2000; Chamorro-premuzic and Furnham).

The more traditional orthogonal trait variables of extraversion and neuroticism have also been associated with academic performance after nearly 40 years of investigation (Child, 1964). Early studies have attributed the relationship extraversion and academic performance to introverts' greater ability to consolidate learning (Entwistle & Entwistle, 1970). Recent studies (Notably Sanchez – Marin, Rejano – Infante and Rodriguez – Troyano, 2001) have also suggested that extraverts under perform in academic settings because of their distractibility, sociability and impulsiveness.

The negative relation between academic achievement and neuroticism (Chamorro-premuzic and Furnham, Submitted; Furnham and Medhurst, 1995) has usually been explained in terms of stress and anxiety under test (i.e. examination) conditions (Zeidner & Matthews, 2000), although such traits may affect academic performance in a more general way, i.e. not just through exam performance (Chamorro – Premuzic & Furnham, Submitted; Halamandaris and Power, 1999).

Furthermore, earlier research suggested a possible ambiguity in the relation between neuroticism (Particularly anxiety) and academic achievement. Specifically, Eysenck and Eysenck (1985) have suggested that the motivational effect of anxiety may be greater in highly intelligent students because they encounter little difficulty in their studying. In this sense neuroticism is a positive predictor in bright participants but a negative predictor in less talented participant perhaps the personality factor more consistently associated with academic performance is conscientiousness (Costa & McCrae, 1992; De Raad & Schouwenbarg, 1996; Blickle, 1996; Busato et al., 2000). Studies have replicated this association in school (Wolfe & Johnson, 1995) as well as undergraduate (Chamarro – Premuzic & Furnham,

Submitted; Goff & Ackerman, 1992) and postgraduate (Hirschberg & Etkin, 1978) education. Some authors have argued that conscientiousness may affect academic performance beyond (and even compensate for poor) intellectual ability (See e.g. Furnham, Chamorro – Premuzic & Moutafi, submitted). This would explain why females usually obtain higher grades albeit scoring lower on IQ tests than males (Kling, 2001).

Although research seems to be approaching a consensus on the identification of the personality factors that may account for a significant proportion of variance in academic performance, such identification has focused on super – traits (e.g. neuroticism and extraversion) rather than primary traits (e.g. anxiety, activity and dutifulness). However, an examination of the primary traits would provide important information about the specific non-cognitive variable that may affect an individual's academic performance, as people with identical super factor scores may have very different primary trait factor scores. Identification of the specific personality traits associated with academic performance would therefore reduce speculative interpretations about the predictive nature of super-traits, that is which aspects of neuroticism, extraversion, openness and conscientiousness are actually related to academic performance.

Further, it is important to examine whether the use of primary traits may improve the prediction of academic performance by super traits. As Hough (1992) noted, it is still necessary to clarify whether broad personality dimensions (such as conscientiousness) are to be preferred to more specific and narrow dimensions (such as achievement straining). The question brings up the well known debate on band with fidelity, i.e. whether specific or general personality characteristics have more predictive validity with regard to human performance (Barrick & Mount, 1994; Ones & Viswesvaran, 1996). Although recent reviews on this subject seem to suggest that broad traits are better predictors of performance than primary traits, it has also been argued that examining specific personality traits has important exploratory advantages for the understanding of the processes underlying the relation between personality and performance (Ones and Viswesvaran, 1996). Furthermore, since most of the bandwidth – fidelity debate has focused on job performance (with very few published papers, notably De Fruyt & Mervielde, (1996) reporting correlations between academic performance and personality at the primary trait level), it would be interesting to compare general and specific personality traits in relation to academic performance.

Studies Related To Personality and Achievement

Nagarjuna and Mamidenna (2008) conducted a study entitled on “Personality characteristics of commerce and engineering graduates – A comparative study.” Results showed that there were no significant differences among students in the personality profiles based on academic background except for measures of sensitivity and perfectionism. Another findings also indicated that there were significant gender based

differences in some measures of personality like warmth, sensitivity, vigilance, abstractedness and openness to change.

Chamorro – Premuzic and Farnham (2008) used the NEO – PI – R in their study in order to investigate on 158 university students (both female and male, with age range of 18 to 21 and on average age 19.2 years old) in London. They found that academic performance was correlated with openness to experiences and conscientiousness.

Oyesaji (2009) used the NEO big five factor inventory in order to investigate on 450 students (both female and male with age range 17 to 21) in Nigeria. It was found that the big five factors of personality were positively associated with academic self efficacy of educationally distressed adolescents.

Raveendran, et.al. (2011) investigated relationships between numerous predictors and academic abilities. Result revealed that extrovertedness, conscientiousness and openness were positively associated with students' academic performance while neuroticism and agreeableness were negatively associated with academic performance. In addition, in this study, researchers could not identify a significant relationship between big five traits and academic abilities. The findings reported from this study bring a considerable understanding of the relationship between personality traits and academic performance (GPA).

Kumar & Dixit (2011) examined the difference between the over under achievers students of English and Hindi medium schools of Kanpur region on the basis of the study habits and personality. The result indicate that the over achievers are those, whose achievements are higher than the level of their abilities. These over achievers of English and Hindi medium have better study habit and they are properted by positive personality traits. Under achievers have faulty study habits also they lack enthusiasm and are emotionally instable.

Kumar (2012) examined the relationship between academic achievement, sociability, self confidence and ambitious of high school students. The result showed that the personality traits sociability, self confidence and ambitious is significantly and positively correlated with significantly and positively correlated with academic achievement of high school students.

Binukumari and Kavitha (2013) conducted a study entitled on “Trait complex and academic achievement: Old and New ways of examining personality in education.” The study investigated the influence of personality and related traits on academic achievement have focused on grades (often with very skewed distributions or restricted ranges) or level of highest educational attainment. Personality and other traits associated with typical behavior as opposed to maximal performance are expected to have their greatest influence when the situational press is low. Therefore the most promising avenues for future research in this area will be for investigators to take a broader view of educationally relevant behavior when the behavior of the

Suvarna,V.D.and Ganasha Bhata (2015) this study is concerned with the Academic Achievement and Personality of 300 students of secondary schools of Mandya city. The Raven's Standard Progress Matrices was used to obtain the Academic Scores and Eysenk Personality Inventory was used to collect data regarding their Personality. Result reflects that there is negligible positive relationship between Academic Achievement and Personality of Secondary School Students.

Siddiquei, N. and Khalid, R. (2018) The results of the present study revealed that neuroticism was negatively correlated with all the learning styles. It is interesting that GPA was positively correlated with openness, agreeableness, and conscientiousness personality traits and was negatively correlated with neuroticism personality trait.

Objectives of the Study

1. To develop and validate the achievement test in commerce for class-XI.
2. To find out the relationship between personality and academic achievement among commerce students.

Hypotheses

H_{01} No significant relationship will be observed between scores on academic achievement in commerce and differential personality characteristics in a group of selected students.

H_{02} No Significant relationship will be observed between scores on academic achievement in commerce and personality of student of XI grade.

Delimitation

The present study has been delimited by the following considerations:-

1. It is the study of personality and academic achievement in commerce.
2. The study is concentrated to the students studying in class XI. Both boys and girls would be taken for the study.
3. The study would be conducted in Durg district only.
4. Students with age group 16.5 to 17.5 Studying in class XI will be taken to measure their achievement of commerce.
5. Both Government and private school were taken for the present study.

Sample

To fulfill the objectives of the present study, 600 higher secondary school students comprising of 300 boys and 300 girls from commerce stream of class XIth were from commerce stream of class XIth were Selected by purposive Random Sampling Technique from different School located in urban and rural areas of Durg District of Chhattisgarh State.

Every 5th School was selected squintly from list of Schools Published by District Education office. Thus total 20 Schools were selected for the present Study.

Data Analysis

H_{01} No significant relationship will be observed between scores on academic achievement in commerce and differential personality characteristics in a group of selected students.

In order to verify this hypothesis, correlation between scores on achievement in commerce and differential personality dimensions were calculated. The data obtained was computed and result was depicted in table 1.

Table No. - 1

Value of Correlation (r) between Personality Characteristics and Achievement in Commerce of Selected Higher Secondary Students

| Personality Characteristics | N | Achievement in Commerce |
|-----------------------------|-----|-------------------------|
| | | 'r' |
| Decisiveness | 600 | .3943** |
| Responsibility | 600 | .3575** |
| Emotional Stability | 600 | .3430** |
| Masculinity | 600 | .3683** |
| Friendliness | 600 | .3632** |
| Heterosexuality | 600 | .4269** |
| Ego-strength | 600 | .3660** |
| Curiosity | 600 | .3907** |
| Dominance | 600 | .3736** |
| Self-concept | 600 | .4179** |

** Significant at .01 level

From the above table it could be seen that all the ten major dimensions of Singh's Differential Personality Scale i.e. decisiveness, responsibility, emotional stability, masculinity, friendliness, heterosexuality, ego-strength, curiosity, dominance and self concept showed significant positive relationship with academic achievement in commerce in a group of selected Class XI students. It means that as scores on personality characteristics increases, the academic achievement also increases at .01 level of statistical significance.

Since significant and positive correlation was found between the personality dimensions and academic achievement in commerce, H_{01} stating that no significant relationship will be observed between scores on academic achievements in commerce and differential personality characteristics in a group of selected students, stands rejected.

H_{02} No significant relationship will be observed between scores on academic achievements in commerce and personality of XI students.

In order to verify this hypothesis, correlation between scores on academic achievement in commerce and personality were calculated. The overall personality of a particular student was assessed by summing the scores obtained on ten personality dimensions. The data obtained was computed and result was depicted in table 2.

Table No. - 2
Value of Correlation (r) between Personality and Achievement in Commerce of Higher Secondary Students

| Variables | N | 'r' |
|-------------------------|-----|---------|
| Personality | 600 | .6882** |
| Achievement in Commerce | 600 | |

** **Significant at .01 level**

From the analysis of entries reported in table no. -2 it could be seen that personality exhibiting significant and positive correlation with scores on achievement in commerce among selected XI students. The calculated $r=0.6882$, which is statistically significant at .01 level also confirms the findings shown in table no. 2.

Since positive relation was found between the personality and academic achievement of class XI students in commerce, $H_0 r_2$ stating that no significant relationship will be observed between scores on academic achievements in commerce and personality of XI students, stands rejected.

Findings

The following conclusions were drawn from the different hypothesis –

1. Personality dimensions i.e. decisiveness, responsibility, emotional stability, masculinity, friendliness, heterosexuality, ego-strength, curiosity, dominance and self- concept exhibited a statistically significant positive relationship with class XI students scores on academic achievement in commerce.
2. Personality and academic achievement in commerce of students were found to be positively and significantly associated with each other.

Conclusion

On the basis of results it may be concluded that personality positively associated with academic achievement and emerged as strong enough variables to predict academic achievement in commerce.

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