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Influence of the Big Five personality traits on academic motivation among higher education students: Evidence from developing nation

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Influence of the Big Five Personality Traits on Academic Motivation among Higher Education Students: Evidence from Developing Nation

Abstract:

This study examines the association between the personality traits and academic motivation among higher education institution students of Pakistan. The data is collected from the survey-questionnaire using the convenience sampling technique. In total, 350 questionnaires are collected, however, the useful sample id 320. The technique through which the analysis was performed is PLS-SEM. The dependent variable of the study is academic motivation which was measured by using the LASSI scale. The independent variables of the study are personality traits i.e., Conscientiousness, agreeableness, neuroticism, extraversion, and openness which is measured by using NEO-FFI. The result shows that all the personality traits create a significant positive effect on academic motivation except for agreeableness which has an insignificant effect on academic motivation. This study highlights the importance of personality trait in forming academic motivation of the students and also help the educational institutions and teachers to develop strategies accordingly.

Keywords: Personality traits, Academic motivation, Higher Education Students, Pakistan

Introduction

Academic achievement has a prominent effect on the life of the students because it modifies the students' psychological feeling (Crystal *et al.,* 1994; Cole, Martin, Peeke, Seroczynski, & Fier, 1999) and acts as a mean to achieve satisfaction and rewards (Salmela-Aro & Tynkkynen, 2010). However, the academic achievements strongly depend on the individual motivation level (Komarraju, Karau & Schmeck, 2009). The characteristics which can affect the student academic motivation should be identified during their school life so that they should be modified time to time and helps to improve their academic progress (Zuffianò *et al.,* 2013).

Motivation is the process through which the goal-directed activity is initiated and continued Schunk, Pintrich, & Meece, 2008). It has been given an immense importance in previous researches because according to the studies the lack of motivation in individuals' makes them aimless and haphazard (Brown, 1961; Dickinson & Balleine, 1990, 2002). It acts as a positive contribute in the learning process (Pintrich, 2004; Coleman, Galaczi, & Astruc, 2007; Richardson, Abraham, & Bond, 2012) and the reciprocal relationship exists between motivation and learning, i.e., Motivation affects the learning process and, what individual's learn and do also affect motivation (Morris, Finnegan, & Wu, 2005; Pintrich, 2003; Schunk *et al.,* 2008).

Each student is different from one another (Corr, DeYoung & McNaughton, 2013) in terms of their educational preference, learning styles and motivation (Komarraju & Karau, 2005). Each student's process, organize and encode information differently, some take information rapidly whereas some are thoughtful learners (Komarraju, Karau, Schmeck & Avdic, 2011). The student's motivation towards learning is affected by the contextual and personality factors (Colquitt, LePine,

& Noe, 2000; Ariani, 2013). Among these factors, the personality traits are considered to be the most important one (Huang, & Tsai, 2007; Huang & Yang, 2010, Ariani, 2013) because they help in forming the human behavior and act as a source of motivation (Ariani, 2013).

Personality traits explain the differences in individual behaviors (Costa & McCrae, 1992). These differences are appropriate to use when exploring the individual performance in different areas. Among all traits, conscientiousness and neuroticism are considered the best, to predict work-related performance and motivation (Salgado, 1997). From an educational perspective, students that have high conscientiousness, openness and extraversion traits are more motivated to learn (Ross, Rausch, and Canada, 2003; Payne, Youngcourt, & Beaubien, 2007) whereas, the students with high neuroticism and low extraversion traits are less motivated (Komarraju *et al.,* 2009). Most scholars believe that neuroticism has a negative relationship with academic motivation and openness, conscientiousness, extraversion have a positive association with academic motivation (Komarraju & Karau, 2005).

The majority of the studies in the past explored personality trait with learning style (Elahi, *et al.,* 2013; Trompf, & Brown, 2014), technology usage (Skues *et al.,* 2014), academic performance (Feyter *et al.,* 2012; Neuenschwander *et al.,* 2013) and very sparsely discussed with academic motivation or used it as a mediator. These studies do not give clear or consistent evidence relating the extent to which the personality trait associated with academic motivation. Moreover, the personality traits and academic motivation association usually explored in the context of school or college students and very limitedly discussed in the context of higher education students especially in the context of developing i.e., Pakistan. Hence this study aims to address this gap in

the literature by examining the impact of personality traits on academic motivation among university students of Pakistan.

According to the Pakistan Education Statistics, 2014-15 (PES) it is estimated that around 47% of the 50.8 million youngsters do not complete their secondary education over the life and only 34.42% of the students opt for higher education. These statistics are alarming because these students are more likely to experience unemployment (Levin & Rumberger 1995), become addictive of unhealthy things e.g. drugs (Strom & Boster 2007) and have to adopt poor lifestyles (Rumberger, 1987). Motivation is identified as one of the significant factors that affect the individual intention to continue their studies (Vallerand *et al.,*. 1997; Ricard & Pelletier, 2016).

Therefore, the purpose of this study is to examine the impact of personality traits in forming academic motivation among university students of Pakistan. The reason for choosing Pakistan as a sample country is due to its cultural diversity. Pakistani culture diversifies in terms of values, languages, norms, and traditions (Sarki *et al.,* 2012). Within each sub-culture, they have their own norms and behavioral expectations which dictate which personality traits can be considered important. One trait which is considered positive in one culture might consider negative in the other. Thus, this diversity might affects the student's personality and some might have one type of personality trait stronger than the other and at the same time, the different cultural dispositions might also affect their motivation towards learning. Therefore, the purpose of this study is to analyze the association between the personality trait and academic motivation in the business university students of Pakistan.

This study contributes to the literature in a number of ways. Firstly, to the best of our knowledge, this is the first study in the context of Pakistan, which examines the personality traits

and academic motivation among university students. Secondly, this study also identifies the most influential personality trait which affects the student academic motivation. Thirdly, this study examined the association by using the new technique called PLS-SEM.

The rest of the paper is as follows. Section 2 explains the literature reviews, Section 3 discusses the methodology, findings are presented in Section 4, Section 5 presents the discussion and section 6 explains the conclusion and recommendations.

Literature Reviews

Big Five Personality Trait Model

In past literature, various personality models have been proposed (Eysenck & Eysenck, 1975) but the big five personality model acts as the most acceptable model in the fields of psychological and behavioral research (Hazrati-Viari *et al.,* 2012). The big five personality trait model was given by Costa & McCrae (1992) and considered as a strong framework for understanding the association between different types of personalities and academic behaviors (Poropat, 2009). The main variables of big five model are neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness.

Neuroticism indicates the individual tendency over emotional stability, including anxiety, jealousy, fear, insecurity etc. it also includes the level of difficulty an individual face while coping with threats and stress. Extraversion tells about how much the individual is social, enthusiastic and talkative while meeting with other people. Openness to experience refers to the individual degree of active imagination (fantasy), intellectual curiosity, preference for variety etc., Agreeableness tells about the individual behavior towards other whether he/she is helpful, friendly, cooperative, and tactful. Conscientiousness is the personality trait which tells about how much the individual is achievement oriented, careful and organized. Evidence shows that personality and motivation both

affect the learning styles of the individuals and it is recommended that these variables should be included to understand the academic behavior of the individuals (Miller, 1991).

Self-Determination Theory

Several theories have been given on the concept of motivation (Middleton & Toluk, 1999; Marsh, Craven, Hinkley, & Debus, 2003) but one of the best among all is the self-determination theory (SDT) given by Deci and Ryan's (1985). This theory conceptualizes self-motivation as an approach that focuses on the behavioral self-regulation and personality development (Ryan, Kuhl, & Deci, 1997; Ryan & Deci, 2000). The SDT theory considered as the useful theory in order to understand the individual's motivation levels and has grasped the attention of many researchers who applied this theory in multiple research contexts (Deci *et al.,* 1991; Gagne & Deci, 2005).

This theory explains motivation as a multidimensional variable and explains three different types of motivation intrinsic motivation (autonomous), extrinsic motivation (controlled) and amotivation (lack of motivation) (Deci & Ryan, 1985). The theory also suggests that the type of behavior is dependent on the underlying behavior and varies with the continuum of self-determination (Ryan & Deci, 2000; Deci & Ryan, 1985). Intrinsic motivation shows the highest level of self-determination and when the individual is intrinsically motivated, he/she acts with the full sense of autonomy and choice. On the contrary extrinsic motivation shows a low level of self-determination and individual in order to attain specific outcomes acts under external constraints. Amotivation takes place when the individual believes that his/her participation will not create any effect on the desired outcomes. Many studies in the past have validated this continuum in education domain as well (Ricard & Pelletier, 2016; Ross *et al.,* 2016).

Academic motivation refers to the student desire or willingness related to academic subjects (Wigfield & Eccles, 2002). Usher and Morris (2012) defined academic motivation is somehow related to the students' academic functioning and success. It can be defined as how much effort the student puts forward to regulate his/her work, which activities he/she want to pursue. Ricard and Pelletier (2016) defined academic motivation as a factor which influences the person's willingness to attend school and get a degree. If a student is intrinsically motivated, he/she will attend the school for the purpose of learning new ideas or things. However, if the student is extrinsically motivated, he/she perform an activity due to some reason for e.g. the student attends school because the position he/she wants to depend on this education. Amotivation occurs when the student does not know the reason why he/she is going to school.

Openness, Extraversion, Conscientiousness, Agreeableness and Academic Motivation

The relationship between the personality traits and academic motivation is discussed sparsely (Komarraju *et al.,* 2009). Judge and Illes' (2002) in their study identified big five personality trait as a prime source of motivation and reported conscientiousness as the strongest personality trait that affects the performance motivation. Colquitt et al., (2000) reported conscientiousness as the only factor that affects the individual motivation to learn. Ross, Rausch, and Canada (2003) reported that big five personality traits have a significant power to judge the motivational directions. They further concluded that individuals who are open, extrovert and high in conscientiousness show the strongest learning goal orientation. Payne, Komarraju, and Karau (2005) reported that conscientiousness, extraversion, and openness have a significant positive effect on academic motivation. The studies of Kanfer, Ackerman, and Heggestad (1996); De Guzman, Calderon, and Cassaretto, (2003) also reported the same results. Youngcourt and Beaubien (2007) reported that the individuals with high conscientiousness, extraversion, and

openness have high motivation towards learning. Hart *et al.,* (2007) examined the personality traits and achievement motivation and reported that conscientiousness has a positive association with both intrinsic as well as extrinsic motivation. Whereas, extraversion is positively associated with extrinsic achievement motivation and agreeableness has a negative association with extrinsic achievement motivation.

Komarraju *et al.,* (2009) reported that openness and extraversion have a positive effect on intrinsic motivation. Watanabe and Kanazawa (2009) reported that conscientiousness has a positive relationship with both intrinsic and extrinsic motivation whereas openness only has with intrinsic motivation and extroversion only has with extrinsic motivation.

Clark and Schroth (2010) studied the academic motivation and personality trait nexus in the college going students of the mid-western university and reported that the students who are motivated are more extrovert, agreeable, conscientious, and neurotic, and open, whereas if they are less motivated than they tend to be careless and disagreeable. Hazrati-Viari *et al.,* (2012) examined the personality trait and academic motivation nexus by using college students as a target audience. They concluded that conscientiousness affects both intrinsic and extrinsic motivation positively, whereas openness only affects intrinsic motivation positively. Ariani (2013) uses the data of 298 undergraduate students and reported that agreeableness, extraversion, openness, and conscientiousness have a positive effect on intrinsic motivation. McGeown et al (2014) collected the data from 455 secondary school students and reported that among all personality traits the conscientiousness has a significant positive effect on intrinsic motivation. Rahman (2014) studied the personality trait and achievement motivation in undergraduate and postgraduate students and reported that for women conscientiousness, extraversion and openness has a correlation with achievement motivation. Whereas, in man agreeableness and conscientiousness has a correlation

with achievement motivation. Bozanoğlu and Sapancı (2015) studied the personality trait and academic motivation association among university students in Turkey and reported that conscientiousness has a significant positive association with academic motivation. From, the above discussion, the hypotheses developed for the current study are:

H1: Agreeableness has a significant positive effect on academic motivation.

H2: Conscientiousness has a significant positive effect on academic motivation.

H3: Extraversion has a significant positive effect on academic motivation.

H4: openness has a significant positive effect on academic motivation.

Neuroticism and Academic Motivation

Both the positive and negative association is found between the neuroticism and academic motivation in the literature.

Several researchers reported the positive association between neuroticism and academic motivation. Paspalanov (1984) examined the personality and achievement nexus and reported that positive association exists between the neuroticism and achievement motivation. Based on self-determination theory (Ryan & Deci, 2000; Baker, 2004), Komarraju *et al.,* (2009) reported that neuroticism is positively related to extrinsic motivation. Bidjerano and Yun Dai (2007) also reported the positive association between the neuroticism and extrinsic motivation and concluded that neurotic students in order to cope up with their anxiety related to failure intensify their efforts to prevent it. The studies of Abraham and Bond, (2003), Clark and Schroth, (2010) also reported the positive association between neuroticism and extrinsic motivation. Hart et al (2007) reported that neuroticism has a positive association with extrinsic motivation, however, agreeableness has a negative association with extrinsic achievement motivation. Ariani (2013) reported that neuroticism has a positive effect on extrinsic motivation.

On the negative side, Heaven (1990) examined the personality traits and achievement motivation in high school students and reported that negative association exists between the neuroticism and achievement motivation. Colquitt *et al.,* (2000) reported that neuroticism trait affects the motivation to learn negatively. Youngcourt and Beaubien, (2007) reported the students with high neuroticism and low extraversion have low motivation and experience fear of failure. Komarraju and Karau (2005) reported that neuroticism has a negative effect on academic motivation. Bozanoğlu and Sapancı (2015) reported that neuroticism has a significant negative effect on academic motivation. From, the above discussion, the hypothesis developed is:

H5: Neuroticism has a significant positive effect on academic motivation.

Methodology

Research model

The proposed association in the hypotheses is explained in figure 1. In this figure, the academic motivation is the dependent variable, whereas the personality traits determinants i.e., Agreeableness, conscientiousness, extraversion, openness, and neuroticism are used as the independent variables.

-Insert Figure 1-

Sample and procedure

This study is based on primary data. The data are taken from the business universities students of Pakistan by using the convenience sample technique and the data collection procedure was survey questionnaire. The questionnaire was based on a 5-point Likert scale from strongly disagree (1) to strongly agree (5) and the content validity of the questionnaire was also validated by the field professionals. The pilot study was also done by distributing the questionnaire to the university students. The sample size collected for this study was 320 based on the guidelines given

by Ali and Raza (2017); Ali et al., (2017) Raza et al., (2017) who reported that the sample size of 50 for factor analysis is considered as poor, 300 as good, 500 as very good and 1000 is considered as excellent. The total items used in the questionnaire were 45 items which satisfy the minimum criteria given by Hair et al. (2006). Each respondent participated voluntary and also know about the objective of the study. Moreover, throughout the data collection process, the respondents were assured that the data will be kept confidential. The impact of personality traits on academic motivation is analyzed and the basic regression model of the study is:

$$yn = a + bxn + 1n, (1)$$

In equation (1) y represents a dependent variable (academic motivation) and a denotes the intercept term. X represents explanatory variables (Agreeableness, conscientiousness, extraversion, openness, and neuroticism) while b represents the regression coefficient.

The basic functional form of the above equations is:

Academic motivation f (Agreeableness, conscientiousness, extraversion, openness, and neuroticism) (2)

The following regression models are used for the purpose of the study:

$$AM = \alpha 0 + \beta 1A + \beta 2C + \beta 3\ E + \beta 4\ O + \beta 5\ N + \varepsilon t\ (3)$$

In equation (3) AM is the Academic motivation, A is the agreeableness, C is the conscientiousness, E is the extraversion, O is the openness, N is the neuroticism, and εt is the error term.

Measures

The questionnaire was adapted from past studies. The items of personality traits were adapted from the NEO Five Factor Inventory (NEO-FFI) (Costa & McCrae, 1992). The items of academic motivation were taken from the motivation scale of the Learning and Study Strategies

Inventory (LASSI) (Cano, 2006). Both the scales have been used previously by the researchers in the context of Pakistan (Iqbal *et al.,* 2010; Ahmad, 2010; Zaidi *et al.,* 2013).

Common Method Bias

The common method bias, according to Spector (2006) is one of the problems in quantitative studies and surveys. It affects the findings of social and behavioral science studies (Podsakoff *et al.,* 2003). It affects the results in the number of ways (i) it threatens the validity of the outcomes (Williams & Brown, 1994; Kline *et al.,* 2000; Reio, 2010). (ii) It may affect the reliability and the correlation between the variables (MacKenzie & Podsakoff, 2012). Reio (2010) gives two solutions to reduce the common method bias i.e., Procedural design and statistical control. This study controls the issue of bias by applying the statistical technique, i.e., Harman's one-factor test given by Podsakoff *et al.,* (2003). The result shows that individual factor does not show the majority of the variance (i.e., $< 50\%$) which confirms that common method biasness is not a problem in our study.

Demographics

In total, 355 business students from the different private universities of Pakistan was participated and filled the questionnaire. After deletion of outliers and erroneous responses, 320 responses were found usable. As seen from the demographic details presented in table 1, the male respondents were 55% of the sample, while 44% of the respondents were the female. The 65% of the respondents fall into the age bracket of 18-22 years and 64% of them were undergraduate students.

       -Insert table 1-

       Data Analysis

This study applies the Partial least square structural equation modeling (PLS-SEM) by using the Smart PLS 3.2.3 software (Ringle *et al.,* 2014) by applying a bootstrapping method with 5000 subsamples (Hair et.al, 2011). We choose PLS-SEM because it is variance based structure equation model which gives immense benefits in the studies related to individual behaviors (Henseler & Chin, 2010; Hair *et al.,* 2011; Raza et al., 2017). It is also helpful in analyzing the association among the observed variables (Rigdon *et al.,* 2010; Hair *et al.,* 2012; Qazi et al., 2018). According to Sarstedt *et al.,* (2014) PLS-SEM is based on the concept of the component construct and is suitable for complex models. Moreover, It does not require assumptions related to measurement scale, sample size and distribution (Vinzi *et al.,* 2010) and also controls the heterogeneity problem within the path modeling framework (Hair *et al.,* 2011).

According to Hair et.al, (2016; p.18) PLS-SEM is best suited in the case when there is little knowledge related to the measurement of the constructs or structural model relationships or the emphasis is more on exploration than confirmation. According to Hair *et al.,* (2011; p.144) select PLS-SEM if the goal is to predict identifying key 'driver' constructs or predicting key target constructs. Another reason for choosing PLS-SEM is its statistical power which is higher than covariance-based structural equation modeling (CB-SEM) (Reinartz *et al.,* 2009; Hair, Ringle, & Sarstedt, 2011).

PLS-SEM is a two-step method. In the first step, the measurement model is evaluated and in the second step the structural model is analyzed (Henseler & Chin, 2010; Raza et al., 2018). In measurement model, the construct validity and discriminant validity criteria are checked, whereas, in the structural model the R^2 and the significance of the path coefficients are measured.

Assessment of Measurement Model

In measurement model, the convergent validity is accessed by examining the individual item reliability, Cronbach's Alpha, composite reliability, and average variance extracted (AVE). The result of convergent reliability is depicted in table 2. As seen from the table 2, all the constructs have individual item reliability, Cronbach's Alpha and composite reliability, greater than 0.55 which is in accordance with the threshold given by Tabachnick and Fidell (2007); Raza et al., (2017). Moreover, the AVE is also greater than 0.5 which is in accordance with the cutoff point given by Fornell and Larcker (1981).

-Insert table 2-

The discriminant validity is accessed by examining the correlation matrix, cross-loading and heterotrait-monotrait ratio of correlations (HTMT) criteria. As seen from table 3, the square root of AVE (cross-diagonal values) is greater than the off-diagonal part which satisfies the criteria given by Fornell and Larcker (1981). According to Fornell and Larker (1981), Raza, Najmi and Shah (2018) the discriminant validity is measured by comparing the amount of the variance captured by the construct and the variance shared with the other constructs. Thus, the square root of AVE should be greater than the correlation values of the other constructs. By considering table 3, the above criteria are met.

The cross-loadings of the items are shown in table 4. The result shows that all the items are loaded higher in their relevant construct and the cross loading difference is also higher than the suggested threshold of 0.1 (Gefen & Straub, 2005). Furthermore, table 5 shows the heterotrait-monotrait ratio of correlations (HTMT) result. The result shows that all the constructs are below 0.85 which is in accordance with the cutoff of given by Henseler, Ringle, and Sarstedt (2015) that none of the HTMT value is higher than 0.85. Thus, explains the discriminant validity adequacy.

-Insert table 3-

-Insert table 4-

-Insert table 5-

Assessment of Structural Model

From the results of the measurement model, it was confirmed that the model is valid and reliable and can be used for further examination. We estimated the structural model by using the PLS–SEM algorithm and the result is depicted in table 6. Each path in a table represents a hypothesis which is tested on the basis of size, sign and statistical significance exist between the variables. SRW represents the (β or coefficient values) which demonstrate the intensity by which independent variables affect the dependent variable. The higher the coefficient value, the stronger is the impact of the independent variable on the dependent variable. The p-values determine the significance of the hypotheses which should be less than 0.1 for the hypotheses to be regarded as significant in the case of this study. The outcome shows that all the hypotheses are accepted and have significant effects on the dependent variable except for H1.

-Insert table 6-

Discussion

The result shows the good model fitness and structural model and from 5 hypotheses the 4 hypotheses were accepted. The outcomes support the strong association between the personality traits and academic motivation. The path coefficient between the agreeableness and academic motivation was found insignificant and negative (β = -0.016, P > 0.1). Thus the H1 was rejected.

The result is consistent with the studies of Komarraju *et al.,* (2009); Feyter *et al.,* (2012); and contrast with the studies of Poropat, (2009), Ariani (2013), Bozanoğlu & Sapancı, (2015). It is assumed that this personality trait doesn't seem relevant to gauge the academic motivation because as stated by Shiner (2000) agreeableness acts as an important predictor in relationship domains but not act as an important predictor of academic efforts.

The second hypothesis related to the impact of conscientiousness and academic motivation is accepted. The association among them was found significant and positive ($\beta = 0.117$, $P < 0.1$). The result is in accordance with the study of McAbee and Oswald (2013) and contrast with the studies of Poropat (2009) and Zuffianò *et al.,* (2013). The result implies that the student's that are more organized, disciplined and believe in their own are more motivated towards learning (Caprara *et al.,* 2011). Another explanation of this association is students those have high conscientiousness are able to better understand their learning material which ultimately increases their motivation.

The third hypothesis (H3) were also accepted, the association among extraversion and academic motivation was found significant and positive ($\beta = 0. 0.273$, $P < 0.1$).   The studies of Feyter *et al.,* (2012); Ariani, (2013) show the same result, whereas contrast to the studies of Rolfhus and Ackerman, (1999); Poropat, (2009). The extroverts' students are friendly in nature and they considered friendship an important element to remain happy in the learning environment, thus, the happy person has high motivation to learn (Robbins & Judge, 2011). Moreover, extraversion students display enthusiasm, have high energy level so they have more urge to learn (Poropat, 2009). This explains the positive association between the extraversion and academic motivation.

The fourth hypothesis (H4) related to openness and academic motivation is also accepted and the association between them is found significant and positive ($\beta = 0.331$, $P < 0.1$). The work

of Bauer and Liang (2003); Ariani (2013) also reported the same result, whereas the work of De Fruyt & Mervielde, 1996; De Feyter *et al.,* (2012) reported the contradictory results. The result concluded that people with high openness trait are more prone to acquire new knowledge and to experience stimulating sensations. Ariani, (2013) identified this trait as an important source of student learning motivation.

The fifth hypothesis (H5) related to neuroticism and academic motivation is also accepted and the association among them was found positive and significant ($\beta = 0.173$, $P < 0.1$). The result is consistent with the studies of Komarraju *et al.,* (2009); Clark and Schroth (2010) and contrast with the studies of Bauer and Liang (2003); Bozanoğlu and Sapancı (2015). The result implies that individual that has high neuroticism are motivated to acquire knowledge because as stated by Child (1969) neurotic individuals are usually self-centered and avoid social situations so they enjoy abstracts and bookish material. Another justification of this positive association is given by Bidjerano and Yun Dai (2007), they stated that neurotic students in order to cope up with their anxiety related to failure intensify their efforts to prevent it.

Conclusion and Managerial Implications

The current study explores the personality trait and academic motivation association in the context of Pakistan. This is according to our knowledge is the first study conducted in the Pakistan context.

The data were collected from the university students and the PLS-SEM technique was applied to study the linkage among the variables. The result concluded that all the variables create a significant effect on student academic motivation except for agreeableness which has an insignificant effect. The study gives new insights related to the role of a personality trait in developing academic motivation.

This study gives implications, especially to the teachers, parents, counselor and the student itself, they should develop their learning and teaching strategies keeping in mind the individual needs and personality. The educationist and the higher institutions should accept the role played by personality traits in students' success and should construct the learning environment that establishes the personality traits and motivation towards learning.

This study makes teacher aware that every student is different from one another due to different personality traits and should be treated accordingly (Komarraju & Karau, 2005). As from the study, it is concluded that personality traits help in constructing academic motivation among students so it is suggested to the teachers and the educational institutions to develop the curriculum activities that improvises the personality traits among students.

The teachers should continuously monitor the student personality traits by using the methods include feedback assessment and class observations. The teachers can develop the qualities of agreeableness in the students by giving them group assignments and encourages teamwork. The teacher should reward the students who are organized, hardworking and self-discipline. From the educational perspective, to enhance the conscientiousness among students the educational institution should reinforce self-discipline, persistence, and structure. In order to develop the openness trait in the students, the educational institutions and the teachers should indulge them in interactive activities. They should be provided with the platform where they can share their ideas and thoughts freely. The student with high neuroticism should be treated accordingly. The teachers should encourage them on every platform, boost their spirits and regard their shyness as a positive point.

As it is evident from the study, that the personality traits play an important role in shaping academic motivation, the instructor should design their class activities and assignments in such a way which increases them. Such as, to increase conscientiousness the assignments should be accepted in small parts, openness should be enhanced by giving students the platform to share their ideas. They should also know to what extent each personality trait should be encouraged to improve the academic motivation. All these measures result in increased motivation level and willingness to achieve academic performance.

The educational institutions should also provide training to the teachers on how to manage the different personality traits students. Also, organization should provide students with such a balanced platform where they could easily utilize their personality traits, stay motivated and ultimately enhance their academic motivation. The institutions and the teachers should make their environment in such a manner that matches with student's personality characteristics as it leads to academic motivation.

Limitations and Future Recommendations

This study still has some lacking which will need to be addressed in the future researchers. The data are taken from the university students so the result cannot be generalized to the college going students. The academic motivation is taken as a single variable, the future research can be done by taking intrinsic motivation and extrinsic motivation, or using the Academic Motivations Inventory given by Moen and Doyle (1977). This research only considers the student perspective, however, the teacher's perspective is ignored, so the future research can be conducted by taking

teachers perspective into account. The future research can also be conducted on the comparative basis between private and public university students, or on a gender comparison basis. The role of teachers, culture, the need for recognition, learning values and approaches should also be analyzed in the upcoming researchers as all these factors do affect the academic motivation and personality traits of the students.

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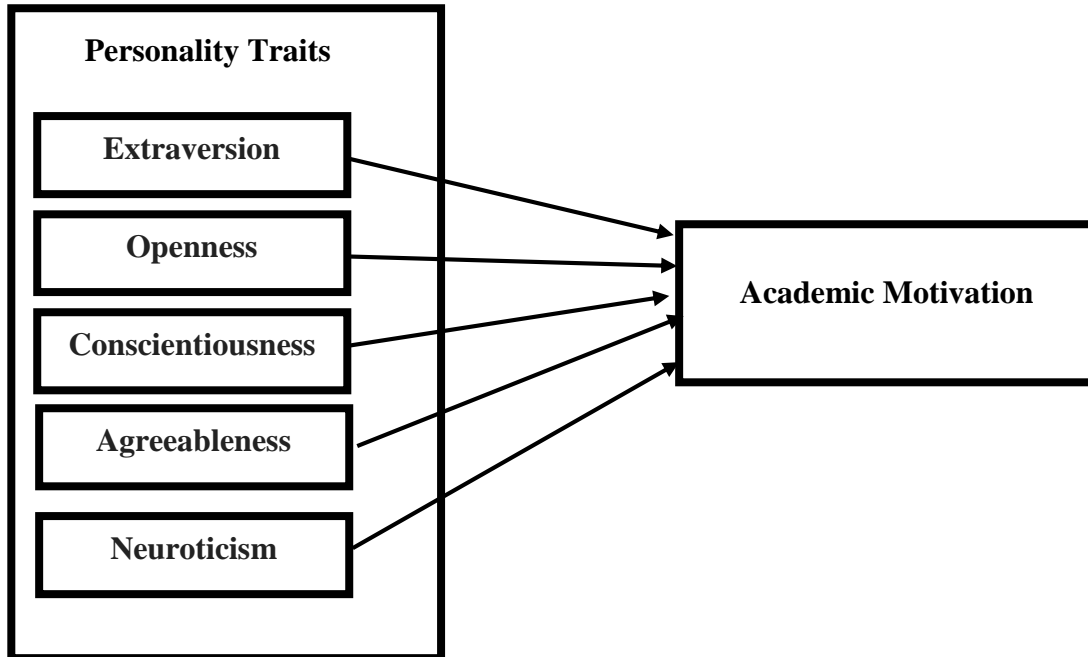
Figure 1: Conceptual framework of the study

Table 1: Respondents Profile (N=320)

Demographic Items	Frequency	Percentage
Gender		
Male	176	55.0
Female	144	44.0
Age		
18-22	208	65
23-26	90	28
27-30	16	5
Above 30	6	2
Education		
Under Graduate	204	64.0
Graduate	89	28.0
Post Graduate	27	8.0

Table 2: Measurement Model Results

Constructs	Items	Loadings	Cronbach's α	Composite reliability	Average Variance extracted
Agreeableness	A1	0.732	0.723	0.753	0.508
	A2	0.739			
	A3	0.673			
Conscientiousness	C1	0.827	0.824	0.88	0.651
	C2	0.871			
	C3	0.687			
	C4	0.828			
Extraversion	E1	0.652	0.712	0.801	0.51
	E2	0.828			
	E3	0.791			
	E4	0.561			
Openness	O1	0.854	0.763	0.835	0.512
	O2	0.796			
	O3	0.643			
	O4	0.805			
	O5	0.622			
Neuroticism	N1	0.83	0.782	0.787	0.553
	N2	0.864			
	N3	0.561			
Motivation	M1	0.695	0.73	0.798	0.571
	M2	0.835			
	M3	0.729			

Table 3: Correlation Matrix

	A	C	E	M	N	O
A	**0.715**					
C	0.468	**0.806**				
E	0.32	0.349	**0.716**			
M	0.326	0.436	0.494	**0.755**		
N	0.189	0.201	0.276	0.352	**0.755**	
O	0.526	0.616	0.431	0.552	0.265	**0.718**

Notes: A=Agreeableness, C=Conscientiousness, E= Extraversion, M=Motivation, N=Neuroticism, O=Openness. The diagonal elements (bold) represent the square root of AVE (average variance extracted)

Table 4: Loadings and Cross Loadings						
	A	**C**	**E**	**M**	**N**	**O**
A1	**0.732**	0.202	0.21	0.229	0.087	0.237
A2	**0.739**	0.375	0.172	0.242	0.171	0.405
A8	**0.673**	0.428	0.308	0.226	0.145	0.487
C3	0.336	**0.827**	0.232	0.379	0.158	0.453
C5	0.403	**0.871**	0.343	0.404	0.217	0.609
C7	0.32	**0.687**	0.234	0.19	0.117	0.385
C8	0.447	**0.828**	0.308	0.371	0.14	0.509
E1	0.24	0.232	**0.652**	0.258	0.195	0.27
E2	0.226	0.325	**0.828**	0.431	0.209	0.373
E3	0.218	0.239	**0.791**	0.377	0.243	0.313
E8	0.247	0.188	**0.561**	0.315	0.139	0.263
M3	0.175	0.282	0.266	**0.695**	0.206	0.329
M4	0.278	0.423	0.433	**0.835**	0.313	0.513
M5	0.271	0.258	0.396	**0.729**	0.263	0.382
N1	0.134	0.154	0.236	0.301	**0.83**	0.174
N2	0.156	0.128	0.213	0.319	**0.864**	0.22
N5	0.173	0.253	0.191	0.126	**0.561**	0.274
O1	0.473	0.576	0.387	0.53	0.286	**0.854**
O2	0.43	0.474	0.316	0.398	0.161	**0.796**
O4	0.308	0.353	0.253	0.223	0.047	**0.643**
O6	0.399	0.462	0.351	0.491	0.262	**0.805**
O7	0.22	0.278	0.197	0.171	0.059	**0.622**

Notes: A=Agreeableness, C=Conscientiousness, E= Extraversion, M=Motivation, N=Neuroticism, O=Openness.

Table 5: Heterotrait-Monotrait Ratio (HTMT) Results

	A	C	E	M	N	O
A						
C	0.711					
E	0.556	0.459				
M	0.558	0.564	0.729			
N	0.354	0.317	0.428	0.509		
O	0.808	0.74	0.583	0.712	0.386	

Notes: A=Agreeableness, C=Conscientiousness, E= Extraversion,
M=Motivation, N=Neuroticism, O=Openness.

Table-6: Standardized regression weights for the research model

Hypothesis	Regression Path	Effect type	SRW	Remarks
H1	A -> M	Direct effect	-0.016	Not Supported
H2	C -> M	Direct effect	0.117*	Supported
H3	E -> M	Direct effect	0.273***	Supported
H5	O -> M	Direct effect	0.331***	Supported
H5	N -> M	Direct effect	0.173***	Supported

Note: SRW = Standardized regression weight
 ***p < 0.01, **p<0.05, *p < 0.10