EXAMINING PERSONALITY TRAITS AS PREDICTORS OF UNDERGRADUATE ACADEMIC PERFORMANCE (CGPA): A MULTIVARIATE ANALYSIS

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Abstract:
This study provides a critical review of empirical research on the Big Five personality traits and their connection to academic performance (CGPA), aiming to clarify how each trait influences achievement. The results consistently indicate that personality traits play a significant role in determining students' academic success. Focusing on Conscientiousness, Extraversion, and Neuroticism, this research also examines gender differences by including an equal number of male and female respondents. Since the other two traits (Agreeableness and Openness to Experience) didn't show much correlation hence they were not taken as variables for this study.

By correlating Big Five personality test scores with students' CGPA, the findings show that Neuroticism has a negative correlation (r = –0.50), Conscientiousness a positive correlation (r = 0.58), and Extraversion a negative correlation (r = –0.80) with academic performance among undergraduate students. These outcomes suggest that awareness of personality traits can enable educational institutions to design more effective learning strategies to improve student's performance.

Keywords: CGPA, Extraversion, Conscientiousness, Neuroticism, Academic Performance, Personality Traits

Introduction

Over the past few decades, extensive research has emphasized the critical role of personality traits in determining the academic performance of students in higher education. In today's rapidly evolving academic and professional landscape, continuous learning and adaptability have become indispensable for success. However, individuals differ significantly in their ability to respond effectively to changing academic demands and learning environments. Personality traits thus serve as both enablers and constraints to learning, influencing students' motivation, persistence, and preferred learning strategies (Heinstrom, 2000).

According to Alan and Stanley (2003),

> *"Personality is defined as a distinctive pattern of activities, emotions, and attributes that varies from one individual to another."*

Understanding how these traits influence learning strategies will not only improve the efficiency of learning but also enhance overall academic outcomes (Heinstrom, 2000). Personality theorists have long focused on the enduring and stable aspects of individual differences, referred to as traits—consistent ways of perceiving oneself and others, regulating emotions, and behaving

across contexts. The Big Five Personality Framework identifies five core dimensions of personality: Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness (Hughes et al, 2020).

A substantial body of empirical literature confirms that certain personality traits—particularly Conscientiousness, Extraversion, and Neuroticism—significantly predict students' academic success. Conscientiousness has consistently emerged as the strongest positive predictor of performance, associated with diligence, self-discipline, and goal orientation, whereas Neuroticism tends to correlate negatively due to its association with anxiety and emotional instability (Poropat, 2009; Komarraju et al., 2011). These findings have prompted educators and psychologists to explore how personality traits can reform curriculum design and instructional strategies to foster academic excellence.

Furthermore, personality traits extend their predictive validity beyond education into professional contexts. Recent research has further substantiated and nuanced these relationships. A large-scale meta-analysis encompassing 267 independent samples (N = 413,074) reported that personality traits collectively accounted for a significant proportion of the variance in academic performance, with Conscientiousness alone explaining approximately 28 % of the variance even after controlling for cognitive ability (Mammadov, 2021). Similarly, a study of German university students found that Conscientiousness was positively related to both study satisfaction and performance, whereas Neuroticism was negatively associated with academic mood and well-being (Rammstedt et al., 2024).

Another study by Hu et al. (2023) revealed that Extraversion and Openness to Experience indirectly contributed to improved collaboration and communication skills through the mediating role of psychological capital, while Neuroticism showed a negative indirect effect on critical thinking. Moreover, a 2025 longitudinal study conducted by Zhang and Li (2025) confirmed that both Conscientiousness and Extraversion exerted positive direct and indirect effects on academic achievement through enhanced self-efficacy and major identity, whereas Neuroticism displayed an inconsistent negative relationship.

In light of these empirical findings, the current study aims to examine the relationship between Neuroticism, Conscientiousness, and Extraversion and their impact on the academic performance reflected via CGPA of undergraduate students. Prior research indicates that Agreeableness and Openness to Experience generally exhibit weak or statistically insignificant associations with students' academic outcomes, hence they are not the focus of this study.

Objectives

The primary objective of this study is to examine how different personality traits influence the academic performance (CGPA) of undergraduate students. In addition, the research aims to:

1. Identify which of the Big Five personality traits (Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism) have the strongest and weakest correlation with students' CGPA
2. Explore how personality traits shape students' learning behaviors, study habits, and motivation toward academic success
3. Analyze variations in the impact of personality traits across gender, age, and academic disciplines
4. Evaluate whether certain combinations of traits contribute to consistent academic achievement or underperformance

5. Provide insights and recommendations for educators and academic counselors to better support students based on their personality profiles

Research Problem

Although personality traits play a crucial role in shaping individual behaviour and influencing academic outcomes, their specific dynamics and underlying dimensions remain insufficiently explored, particularly in the context of higher education in Pakistan. Despite global research highlighting the significance of traits such as conscientiousness, openness, and emotional stability in predicting academic success, there is limited empirical evidence examining these relationships among undergraduate students.

The variation in students' academic performance (CGPA) often reflects differences in motivation, learning strategies, and adaptability—factors strongly linked to personality traits. However, the extent to which each personality trait contributes to or hinders academic achievement has not been thoroughly investigated within this institutional and cultural setting. Therefore, this study seeks to address this gap by exploring how different personality traits influence the academic performance of undergraduate students, offering insights that may help educators and policymakers design more effective, personality-informed learning environments.

Hypotheses:

Below stated hypotheses will be tested through the statistical analysis:

Null Hypothesis:

Ho: Personality traits have an overall effect on academic performance (CGPA) of undergraduate students.

Alternative Hypotheses:

H1: Extraversion is negatively related to overall academic performance (CGPA) of undergraduate students.

H2: Neuroticism is negatively related to overall academic performance (CGPA) of undergraduate students.

H3: Conscientiousness is positively related to overall academic performance (CGPA) of undergraduate students.

H4: Gender has an impact on the overall academic performance (CGPA) of undergraduate students.

Research Questions

Some of the critical questions which would be answered through this research are:

1. Which personality traits do students perceive as most dominant in themselves?
2. How do these personality traits influence the overall academic performance of students?
3. Which personality traits have the most significant impact on the academic performance (CGPA) of undergraduate students?

4. To what extent do students' personality traits reflect in their overall academic achievement?
5. How does the duration of academic exposure or level of education affect the relationship between personality traits and academic performance?

Significance of the Research

Understanding the influence of personality traits on academic performance is essential in today's competitive and dynamic educational environment. At university level, students come from diverse backgrounds and exhibit varied learning behaviours, motivation levels, and coping mechanisms. Despite the growing awareness of individual differences, limited research has been conducted locally to examine how specific personality traits affect students' CGPA and overall academic outcomes.

This study is needed to bridge that gap by identifying which traits contribute positively or negatively to performance, enabling educators to design more personalized teaching strategies and support systems. Moreover, it will help academic advisors and policy makers develop interventions that foster traits linked to higher achievement, such as conscientiousness and openness to experience. Ultimately, the research will contribute to enhancing academic success and promoting a more holistic understanding of student development within higher education.

Literature Review

Over the past two decades, researchers have increasingly focused on the relationship between personality traits and academic performance. Numerous studies have established that personality traits, particularly those defined by the Big Five Model, significantly influence students' academic outcomes. A large-scale meta-analysis synthesizing data from 267 independent samples confirmed that conscientiousness is the most consistent and strongest predictor of academic performance, even after controlling for cognitive ability. Other traits such as openness, agreeableness, extraversion, and neuroticism, showed smaller or context-specific effects which varied from participant to participant and situation to situation (Poropat, 2009; Vedel, 2014).

Personality traits have been given a lot of importance because of its effects on the overall performance of a student, especially their CGPA's. For most academic institutes academic performance and its enhancement has been the utmost priority. With that, academic performance is not just considered important for academic setup but also hold its position in the corporate sector, where applicants are screened for jobs through set criteria of minimum grade point threshold (Ridgell & Lounsbury, 2004). According to one of the studies, it concluded that past academic performance in context to their GPA is closely related to an individual's intellectual potential; communication style and ability; research ability and consistency; and level of motivation. In contrast, it can't be said that gender as a variable does not affect the overall academic performance (Stake et al, 2011). However, it has also been concluded that racial differences might have a significant effect on an individual over personality; but it has minimal and insignificant difference in context to academic performance (Durham, 2004).

Other than the personality traits, research has also shown that educational stress within students also has a negative significant relationship with educational performance. Some researchers have also shown that student's age variance has very little impact on their academic performance reflected via their CGPA, further highlighting that academic performance basically relies on individual's personality traits (Laidra et al, 2006). In addition to personality, emotional

intelligence (EI**)** has been found to positively predict academic achievement. A meta-analysis by MacCann et al. (2020) reported a small to moderate positive correlation between EI and academic performance, indicating that socio-emotional competencies contribute unique variance to students' success beyond personality and intelligence. Similarly, research by Parker et al. (2023) supported that higher EI enhances motivation, engagement, and resilience, all of which are linked to higher GPA scores.

Cognitive ability remains one of the most reliable predictors of academic success. Studies have consistently shown a moderate to strong correlation between intelligence and GPA across different educational levels (Roth et al., 2015; Deary et al., 2007). However, non-cognitive factors such as conscientiousness and EI often add incremental validity, helping to explain additional variance in performance (Richardson, Abraham, & Bond, 2012). Recent findings emphasize interaction effects between cognitive and non-cognitive predictors. For instance, MacCann et al. (2023) noted that conscientiousness can partially compensate for lower cognitive ability in predicting academic performance, while the combination of cognitive ability, EI, and personality traits yields the strongest predictive model. The magnitude of these effects also differs by academic discipline**,** gender, and level of study (Borghans, Duckworth, Heckman, & ter Weel, 2008; Noftle & Robins, 2007).

For more than a century, many psychologists and educationalists in the field have shown keen interest in finding links between mental abilities and academic performance. Despite development of many researches on the given topic, personality traits cannot be characterized as the only predictors of academic performance; cognitive abilities with a mixture of enhanced of personalities traits have been found to be crucial in predicting individuals' academic performance (Peter; Joseph; Patrick C.L., 2008). While international studies have provided substantial insights, local evidence from South Asian contexts, particularly from Pakistan remains limited as not much research has been conducted on the given topic and parameters. However, few studies have systematically explored how personality traits relate to CGPA within Pakistani higher education institutions (Aslam & Shafique, 2023). Given that learning approaches, classroom dynamics, and social expectations differ across cultural and institutional settings, it is essential to examine these relationships within universities to ensure contextual validity and applicability.

Finally, research also indicates that factors such as academic stress, emotional stability, and motivation moderate the link between personality and academic performance (Furnham & Chamorro-Premuzic, 2003; Ahadi et al., 2010). Students with higher emotional stability and motivation tend to perform better academically, while those experiencing stress or negative emotionality often show reduced performance. These findings collectively suggest that academic success is shaped by a multifactorial model, where cognitive ability, personality traits, and emotional intelligence interact with environmental and motivational factors. Impact of personality traits either being negative or positive have also been related to the type of learning activities an individual engages into throughout his/her learning experience. However, there is a strong relationship between as individual's motivational level and interest which not only change the level of learning but also further enhance the learning experience (Edpalina & Bagongon, 2009).

Theoretical Framework

This research is grounded in several psychological theories that explain the relationship between personality traits and academic performance (CGPA) — primarily the Five-Factor Model (FFM) of personality, supported by Trait Theory, Cognitive-Motivational Theory, and the Emotional Intelligence (EI) framework. Together, these theoretical lenses provide a multidimensional understanding of how individual differences influence students' learning behaviours and overall CGPA.

1. The Five-Factor Model of Personality (Big Five Theory)

The Five-Factor Model (FFM) by Costa and McCrae (1992) serves as the foundational framework for this study. It identifies five core personality traits - Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism that shape human behaviour and performance.

Among these, Conscientiousness has consistently been shown to be the strongest predictor of academic success due to its association with self-discipline, organization, and persistence (Poropat, 2009; Vedel, 2014; Komarraju, Karau, & Schmeck, 2009). In contrast, high Neuroticism has been negatively associated with academic performance because of increased anxiety, stress, and emotional instability (Furnham & Chamorro-Premuzic, 2003; Sánchez-Álvarez et al, 2020).

More recent research continues to validate this theoretical assumption. Studies by Sorić et al. (2017) and Alarcon, Eschleman, & Bowling (2009) demonstrate that conscientious and emotionally stable students tend to exhibit stronger study habits, intrinsic motivation, and higher CGPAs. Therefore, the FFM provides a robust framework for understanding how stable personality dimensions predict learning behaviour and performance outcomes.

2. Trait Theory of Personality

The Trait Theory proposed by Allport (1937) and expanded by Eysenck (1967) asserts that personality is composed of stable, consistent characteristics that influence an individual's actions across time and contexts. In the educational setting, these enduring traits shape how students approach learning, manage stress, and respond to academic challenges.

Eysenck's dimensions of Extraversion, Neuroticism, and Psychoticism align closely with the Big Five traits and provide a biological and behavioural explanation for differences in learning outcomes. Modern evidence supports this continuity for instance research by Kappe and van der Flier (2012) found that extraverted students perform better in interactive environments, while introverted students excel in reflective and independent learning contexts.

Hence, Trait Theory supports this research by suggesting that personality differences are enduring psychological factors that influence students' adaptability and academic consistency.

3. Cognitive and Motivational Theories

Cognitive theories emphasize the role of self-regulation, goal orientation, and information processing in determining academic outcomes. Bandura's (1997) concept of self-efficacy explains that individuals with higher confidence in their learning abilities are more likely to persist and succeed. Personality traits such as Conscientiousness and Openness to Experience enhance intrinsic motivation and goal-directed behaviours (Komarraju & Karau, 2005).

Recent studies continue to show that these traits correlate strongly with academic self-efficacy, persistence, and resilience culminating into key mediators between personality and performance

(Mammadov, 2021; Chamorro-Premuzic & Furnham, 2023). Students with higher self-efficacy use effective learning strategies and time management, directly contributing to improved CGPA.

4. Emotional Intelligence (EI) Framework

The Emotional Intelligence (EI) framework, originally proposed by Mayer and Salovey (1997) and popularized by Goleman (1995), complements personality-based models by focusing on individuals' ability to perceive, regulate, and manage emotions in themselves and others. High EI helps students cope with academic pressure, maintain motivation and form positive social relationships (Petrides, Frederickson, & Furnham, 2004).

Empirical findings indicate that EI is significantly related to academic achievement (MacCann et al., 2020; Barchard, Brackett, & Mestre, 2016). Students who effectively regulate emotions and demonstrate empathy tend to perform better academically because of enhanced focus and stress management. Therefore, EI operates as a mediating mechanism between personality traits and academic performance, especially in emotionally demanding academic environments.

Conceptual Framework
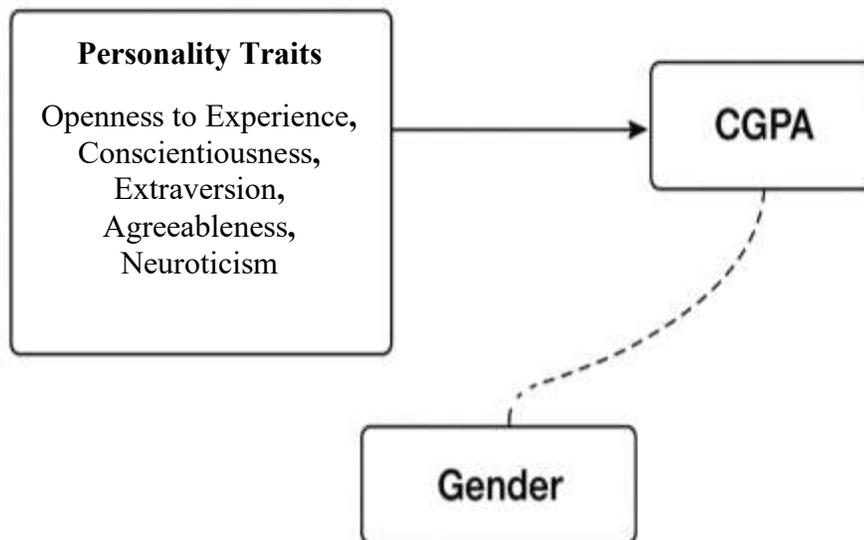
This research is going to show a relationship between the Big Five Personality Traits and their effect on the overall student's CGPA. The independent variables for this research are: Neuroticism, Conscientiousness and Extraversion; whereas, the dependent variable is the overall CGPA of the students. However, gender is the moderating variable which would also be used to show the variation within the results.

Research Methodology

Participants and Sampling:

The sample size taken for this research is of 1000 participants (500 females and 500 males) undergraduate students from a private university (name kept confidential, due to privacy concerns from the management). Initial age ranged from 19 to 23. Data for each participant was

collected through a questionnaire in which students were required to write their CGPA's. As far as the sampling is concerned Quota Sampling has been used as equal number of respondents i.e. males and females were taken from different undergraduate programs.

Measures:

I)   Academic Performance

Academic performance of the undergraduate students was measured through their GPA from 1ˢᵗ semester till present. Threshold of different course GPA's is counted as the overall students' grade point average (CGPA) such as A+ = 4 GPA, A=3.75 GPA, B+=3.5 GPA, B=3 GPA, C+=2.5 GPA, C=2 GPA, D= 1 GPA, E and F= 0 GPA. All courses contribute equally to the overall grade point average (CGPA) of a student at his/her undergraduate level. For example, a CGPA of 3.75 indicates that a student mostly received A grades in his/her entire bachelor education.

Students at least need to maintain 2.0 CGPA in order to graduate with a Bachelor's degree. Only final year's students were included as sample for this research to maintain reliability of the data. However, students' grade point average's (CGPA) were verified from the university's record to increase the validity of the data.

II)   Personality

The Big Five Personality Test which is one of the Objective Personality Tests was used for this research. Items proposed in the questionnaire involved questions about typical behaviors or reactions which student would answer on a five-point scale, ranging from 'strongly disagree' to 'strongly agree'. 1= Strongly Disagree, 2= Disagree, 3= Neither Agree nor Disagree, 4= Agree and 5= Strongly Agree. Students rated themselves on the basis of their own understanding and preferences. The Big Five Inventory questionnaire was taken from the Berkeley Personality Lab website: http://www.ocf.berkeley.edu/~johnlab/bfi.php, after filling an online form. The scale was accessible after providing details about the researcher and nature and level of research.

Data Analysis Technique

A quantitative approach was employed to analyze the data using SPSS, with the primary aim of testing the null hypothesis. Data collected from participants via questionnaire was first converted into numerical form for analysis in order to build the same framework for correlation with student's CGPAs. through tables, charts, graphs, and other statistical formats, providing a clear and comprehensive overview of the findings. This approach was used as it provides reliability and replicability in a structured manner which makes it easier to understand and provides a generalization of results for larger populations, further enhancing the overall validity of the study.

Findings

Ho: Personality traits have an overall effect on academic performance (CGPA) of undergraduate students.

Table 1: Average level Cross Tabulation between Grade (CGPA) and Personality Traits (Neuroticism, Extraversion and Conscientiousness)

		Average level of Neuroticism, Extraversion and Conscientiousness				
		1-2	2-3	3-4	4-5	Total
Grade (CGPA)	2-3	10	40	30	90	170
	3-3.5	0	110	460	10	580
	3.5-4	0	40	210	0	250
Total		10	190	700	100	1000

Graph 1: Between Grade Level (CGPA) and Personality Traits (Neuroticism, Extraversion and Conscientiousness)
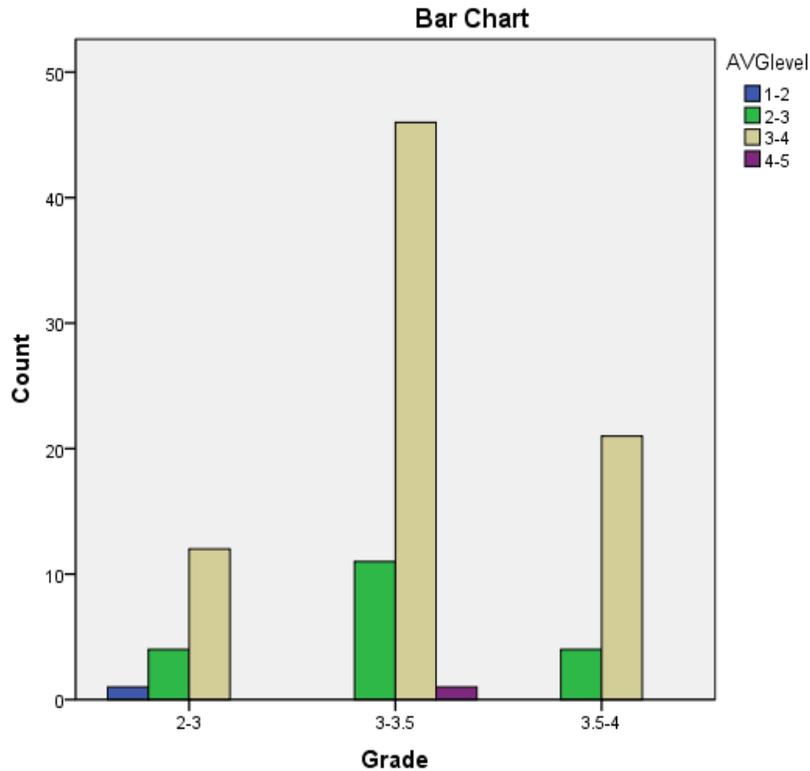
Note: <0.01 tailed)

*p (two-

H1:
Extraversion is negatively related to overall academic performance (CGPA) of undergraduate students.

Table 3: Grade * Extraversion- Cross Tabulation

		Extraversion Level				Total
		1-2	2-3	3-4	4-5	
Grade	2-3	0	50	30	90	170
	3-3.5	150	240	120	70	580
	3.5-4	150	80	10	10	250
Total		300	370	160	170	1000

Table 4: Correlation Between CGPA and Extraversion

		CGPA	Extraversion
CGPA	Pearson Correlation	1	-0.80*
	Sig. (2-tailed)		.430
	N	1000	1000
Extraversion	Pearson Correlation	-0.80*	1
	Sig. (2-tailed)	.430	
	N	1000	1000

Note: *****$p < 0.01$ (two-tailed)

H2: Neuroticism is negatively related to overall academic performance (CGPA) of undergraduate students.

Table 5: Grade * Neuroticism LEVEL Cross Tabulation

		NLEVEL				Total
		1-2	2.-3	3-4	4-5	
Grade	2-3	40	40	40	30	150
	3-3.5	40	340	170	50	600
	3.5-4	20	90	130	10	250
Total		100	470	340	90	1000

Table 6: Correlation Between CGPA and Neuroticism

		CGPA	Neuroticism
CGPA	Pearson Correlation	1	-0.50*
	Sig. (2-tailed)		.959
	N	1000	1000
Neuroticism	Pearson Correlation	-0.50*	1
	Sig. (2-tailed)	.959	
	N	1000	1000

Note: *$p < 0.05$ (two-tailed)

H3: Conscientiousness is positively related to overall academic performance (CGPA) of undergraduate students.

Table 7: Grade * Conscientiousness Level Cross Tabulation

		CLEVEL				Total
		1-2	2.-3	3-4	4-5	
Grade	2-3	10	80	70	10	170
	3-3.5	10	180	300	90	580
	3.5-4	10	40	130	70	250
Total		30	300	500	170	1000

Table8: Correlation Between Conscientiousness and CGPA

		GPA	Conscientiousness
GPA	Pearson Correlation	1	.58**
	Sig. (2-tailed)		0.36
	N	1000	1000
Conscientiousness	Pearson Correlation	.58**	1
	Sig. (2-tailed)	0.36	
	N	1000	1000

Note: **$p < 0.01$ (two-tailed)

Table8: Correlation Between Conscientiousness and CGPA

		GPA	Conscientiousness
GPA	Pearson Correlation	1	.58**
	Sig. (2-tailed)		0.36
	N	1000	1000
Conscientiousnes s	Pearson Correlation	.58**	1
	Sig. (2-tailed)	0.36	
	N	1000	1000

H4: Gender has an impact on the overall academic performance (CGPA) of undergraduate students.

Graph 2: CGPA and Gender
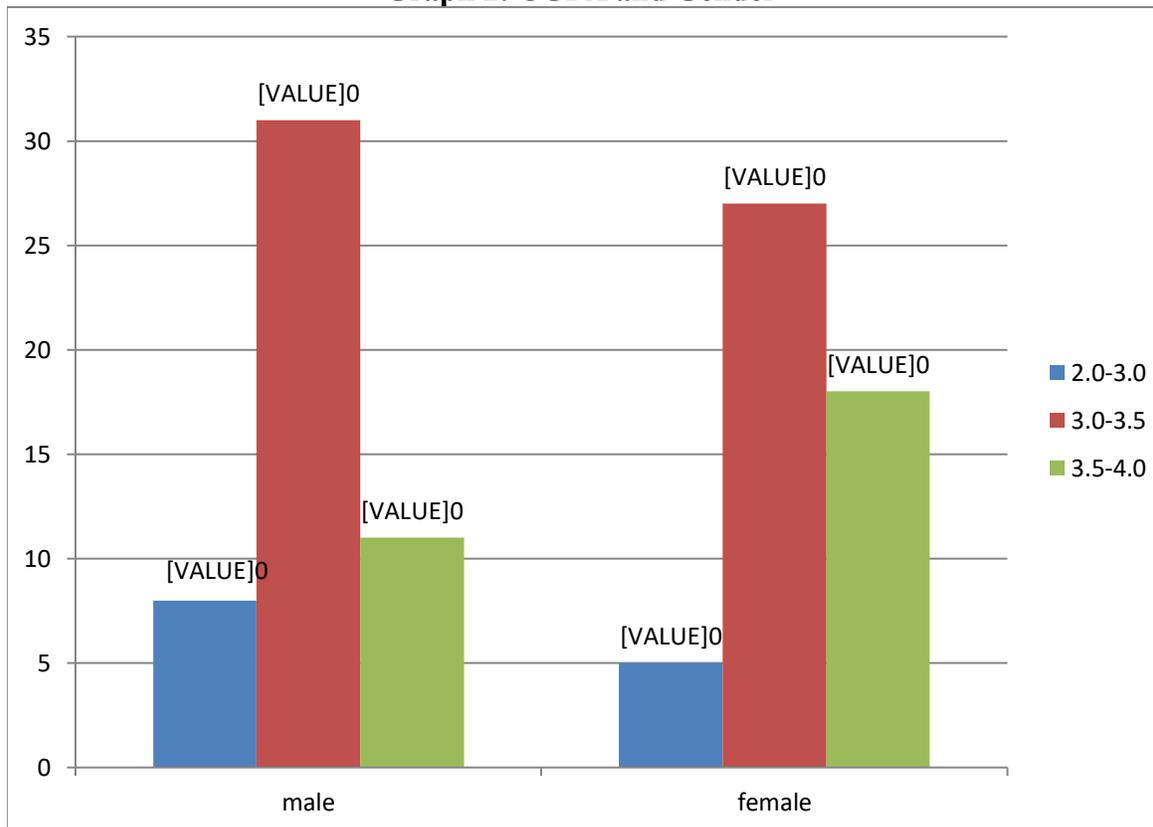
Discussion

In this research different personality traits and their impact on academic performance at undergraduate students have been analyzed and further elaborated upon. Hypotheses were formulated based on the key variables which were identified from the literature review. The hypotheses concerning these personality traits were formulated based on key variables identified in the literature review. By examining previous research, relevant patterns, relationships, and theoretical frameworks were extracted, providing a foundation for predicting how these traits may influence the outcomes under investigation. This approach ensured that the hypotheses were grounded in existing empirical evidence and aligned with the study's research objectives.

After developing the hypothesis, questionnaire was distributed for data collection among students. Once the data was collected from the targeted sample, it was analyzed using SPSS software to ensure precise and systematic evaluation. The analysis highlighted notable individual differences, with some participants exhibiting high levels of extraversion while others demonstrated greater conscientiousness. By examining these variations, the study was able to uncover patterns and relationships between personality traits and academic performance, providing meaningful insights into how specific traits may influence CGPA outcomes.

Statistical analysis shows correlations between personality traits (neuroticism, extraversions and conscientiousness) and academic performance (CGPA) of students at undergraduate level. However, due to different statistical analysis methods used in this research, therefore for this research Alpha levels were adjusted from $p<0.05$ to $p<0.01$. This was done to reduce type I error rate for this research. Results show neuroticism is negatively correlated ($p<-0.50$), conscientiousness positively ($p<0.58$) and extraversion is negatively correlated ($p<-0.80$) with academic performance (CGPA) at undergraduate level.

Table 1 and Graph 1 show cross tabulations between grade level (CGPA) and personality traits (neuroticism, extraversions and conscientiousness). The average levels describe four different levels of personality traits 1-2 being the very low effect; 2-3 being the low effect, 3-4 being the medium range and 4-5 showing highest effect.

Tabulations shows, that 90 students fall into the highest level effect i.e. 4-5 and have CGPA within the range of 2-3. Whereas, 450 students fall into the medium level effect and have CGPA within the range of 3-3.5. Thus, show that (Ho) personality traits do have an impact on student's academic performance at undergraduate level 0.

Table 2, shows a positive correlation ($p<0.67$) between CGPA and personality traits further showing significance to H1. Though the correlation falls into low level, thus it can't be said that personality traits do not have an impact on student's academic performance at undergraduate level. Rather it can be said that overall affect of all personality traits (neuroticism, extraversions and conscientiousness) is less in comparison to separate analysis of each trait when correlated with CGPA at undergraduate level.

Table 3 is a cross tabulation between the 3 levels of grade, with 2-3 being the lower grade, 3-3.5 being the medium range and 3.5-4 being the range of high CGPA. The result shows that those who scored high on extraversion had CGPA's from the range of 2-3, whereas around 150 students who scored low in extraversion level had their CGPA's under the range of 3.5-4. Thus, further signifying that level of extraversion in a student do have an impact on the academic performance (CGPA).

Table 4 shows a negative correlation ($p<-0.80$) between CGPA and extraversion (H1). Thus showing that the higher the level of extraversion, more are the chances of getting a lower CGPA. A correlation of -.80 has been found through statistical anaylysis using SPSS, which shows a moderate level of negative correlation between the two variables. Table 5 further elaborates the findings of the research. 530 students scored low on neuroticism and had their grades within the medium range. Only 20 students scored high in neuroticism level and had low CGPA's, the rest majority falling in the medium range of grade and neuroticism. Thus further strengthens the hypothesis that neuroticism has an extremely low level of impact on students CGPAs.

Table 6 negative correlation have been found between the neuroticism level ($p<-0.50$) and CGPA of 100 students, however the level of correlation is low, therefore stating a very minor impact of

neuroticism on CGPA (H2). Table 7 states that 50 respondents scored within the medium range of conscientiousness level and also had their CGPA's under the medium range of 3- 3.5. Thus also showing that conscientiousness despite being an important personality trait do not have a significant impact on academic performance at undergraduate level.

Table 8 shows a positive correlation ($p<0.58$) between Conscientiousness and CGPA (H3). However, the correlation is very low. Which shows that conscientiousness on academic performance (CGPA) do have an impact but not a very significant one. However, Graph 2 shows the distribution of 500 males and 500 female respondents and their variation in CGPA's. The CGPA of majority of students lie within the range from 3 to 3.5, stating that 580 students had CGPA's within the range of 3 and 3.5 which include 310 males and 270 females. Only 130 students which include 80 males and 50 females CGPA's lie within the range from 2.0-3.0. Moreover, from the above graph it can also stated that more females then male students had their CGPA from 3.5 and above (H4).

Conclusion

The findings of this study indicate that extraversion is negatively correlated with CGPA, suggesting that students who exhibit higher levels of extraversion tend to achieve low to medium academic performance (CGPA). This may be due to the tendency of highly extraverted students to engage more in social activities, which can sometimes divert attention from focused academic work. In contrast, conscientiousness showed a strong positive relationship with academic performance, with higher levels of conscientiousness associated with higher CGPAs. This aligns with previous research indicating that conscientious individuals are more organized, disciplined, and goal-oriented, which enhances their ability to manage academic tasks effectively. Neuroticism, on the other hand, was found to have minimal impact on CGPA, suggesting that emotional instability may not significantly hinder academic achievement, although it could affect other aspects of student's lives.

Although this study was conducted with a sample of 1,000 respondents from a private university, the results underscore the importance of considering personality traits alongside traditional academic assessments. Educational institutions are therefore encouraged to recognize the influence of personality on learning and performance, incorporating strategies that support the development of positive traits such as conscientiousness, time management, and self-discipline.

This research highlights that academic success is influenced by factors beyond intellectual ability, particularly personality characteristics. Understanding these traits can provide valuable insight into students' strengths and weaknesses, assist them in guiding career and program selection, and enable targeted interventions to improve learning outcomes. By integrating personality assessments into educational planning, educators can foster environments that maximize both personal and academic development. While the current study offers meaningful insights into the relationship between personality traits and CGPA, further research is recommended to examine these dynamics across diverse populations, different cultural contexts, and various educational settings, thereby enhancing the generalizability and applicability of the findings.

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