



PERSONALITY TRAITS AND ACADEMIC PERFORMANCE OF GRADE 11 STUDENTS AT DOLORES NATIONAL HIGH SCHOOL (DNHS)

Via N. Opada¹, Jiah Robie C. Bocio², Herminigildo T. Bitalo Jr³,
Cristine Mae D. Alota⁴, Alcherrylladd A. Sabate⁵, Jeangelen C. Sugalan⁶,
Rizalyn A. Batula⁷

¹⁻⁷MAEd Student, Graduate School, Eastern Samar State University-Can-Avid

ABSTRACT

This study examined the relationship between personality traits and academic performance among Grade 11 students at Dolores National High School (DNHS). Using a correlational research design, data were collected from 287 students selected through stratified random sampling from a population of 1,010 learners. Personality traits were measured using an adapted Big Five Personality Inventory, while academic performance was based on students' first semester general averages. Descriptive statistics and Pearson's correlation analysis were employed to analyze the data. Results revealed that most students demonstrated moderate levels of conscientiousness, agreeableness, and openness to experience. In terms of academic performance, the majority obtained grades within the satisfactory range (85–89). Correlation analysis showed that conscientiousness had a strong positive and significant relationship with academic performance, while openness to experience and agreeableness showed moderate and weak but significant positive relationships, respectively. Extraversion and neuroticism were not significantly related to academic performance. The findings highlight the importance of fostering positive personality traits, particularly conscientiousness and openness, to enhance students' academic success in a public senior high school context.

KEYWORDS: Big Five Personality Traits, Academic Performance, Conscientiousness, Openness To Experience, Grade 11 Students, Correlational Study

INTRODUCTION

Background of the Study

Personality traits play a significant role in shaping students' academic performance. According to Costa and McCrae (1992), the Big Five personality traits, openness, conscientiousness, extraversion, agreeableness, and neuroticism, affect how students approach their studies. Among these, conscientiousness has been found to have the strongest positive relationship with academic success (Poropat, 2009). Understanding how these traits influence students at Dolores National High School can help educators and parents provide better support for learners.

Many studies have explored the link between personality and academic achievement. Chamorro-Premuzic and Furnham (2003) found that students who are more conscientious tend to have higher grades because they are organized and responsible. Meanwhile, openness to experience is associated with creativity and a willingness to explore new ideas, which can also benefit academic performance (Komarraju et al., 2011). However, extraversion has shown mixed results, as it may either help with classroom participation or serve as a distraction from studying (O'Connor & Paunonen, 2007).

In the context of high school students, previous research has primarily focused on university learners. De Fruyt et al. (2008) found that personality traits continue to influence academic performance as students grow older. However, studies on younger students, especially senior high school learners, are still limited. High school students are in a critical stage of development where their personality traits are still forming, and their

academic performance may be influenced by factors such as peer pressure, teacher support, and study habits (Heaven et al., 2002).

Despite the existing literature, few studies have been conducted specifically on Grade 11 students in a public high school setting. Most research has focused on Western countries or urban areas, leaving a gap in understanding how personality traits affect students in smaller communities like Dolores. According to MacCann et al. (2009), cultural and environmental factors also shape the impact of personality traits on academic achievement. Therefore, studying this relationship at Dolores National High School can provide insights into how local factors influence student success.

The research gap in this study lies in the lack of data on Grade 11 students in rural public schools, particularly in the Philippines. While many studies confirm the link between personality traits and academic performance, most have been conducted in different contexts, such as universities or urban schools (Busato et al., 2000). This study aims to bridge that gap by examining how personality traits influence the academic performance of Grade 11 students at Dolores National High School, considering their unique learning environment and challenges.

Statement of the Problem

This study investigated the relationship between personality traits and academic performance among Grade 11 students at Dolores National High School (DNHS). It aimed to explore whether specific personality traits are associated with higher or lower academic achievement.



Specifically, this research sought to answer the following questions:

1. What are the personality traits of Grade 11 students at DNHS in terms of:
 - 1.1. Extraversion
 - 1.2. Agreeableness
 - 1.3. Neuroticism
 - 1.4. Conscientiousness
 - 1.5. Openness to Experience
2. What is the academic performance level of Grade 11 students as reflected in their first semester general average?
3. Is there a significant relationship between personality traits and academic performance of grade 11 students at DNHS?

METHODOLOGY

Research Design

The researchers utilized a correlational research design for this quantitative study. This approach is appropriate for examining the association between two variables, personality traits and academic performance, without manipulating any conditions. As stated by Tan (2014), correlational studies aim to identify and measure the relationships between variables as they naturally occur. By employing this design, the study seeks to determine the strength and direction of the relationship between the Big Five Personality Traits and the academic performance of Grade 11 students.

Locale of the Study

This study was conducted at Dolores National High School, located on Reynaldo Street in Barangay 09, Dolores, Eastern Samar. This school was chosen as the research locale because it serves a diverse group of students from different backgrounds, making it an ideal setting for examining the relationship between personality traits and academic performance. The variety in student demographics ensures a comprehensive and representative dataset for the study.

Respondents of the Study

The respondents of this study were Grade 11 students currently enrolled at Dolores National High School in Dolores, Eastern Samar, during the second semester of the academic year 2024-2025. The target population comprises a total of 1,010 Grade 11 students.

To determine an appropriate sample size, the researchers utilized Slovin's formula with a margin of error set at 5%. Based on this calculation, a sample size of 287 respondents was identified. To ensure a representative distribution of the population, the sample was selected through stratified random sampling, which grouped the students according to their sections or academic strands. This method ensures that each subgroup of the population is proportionally represented in the sample, allowing for more accurate and reliable findings.

Research Instruments

The main data collection tool for this study is a survey questionnaire adapted from the Big-Five Trait Taxonomy by John and Srivastava (1999). This instrument evaluates five core personality traits: Openness, Conscientiousness, Extraversion,

Agreeableness, and Neuroticism. Respondents will rate their agreement with various statements on a 5-point Likert scale, from 1 (Strongly Disagree) to 5 (Strongly Agree).

Additionally, the questionnaire includes a section on academic performance, where students will provide their general average grades from the second semester of the academic year 2024-2025, which will be verified through official school records. To ensure the reliability and validity of the adapted questionnaire in the local context, necessary adjustments would be made based on the results to improve clarity and accuracy.

Data Gathering

The study started by securing approval from the Dolores National High School administration through a formal request letter. After receiving permission, the researcher will work with class advisers to set a schedule for distributing the survey questionnaires. The survey was conducted in person and has two parts: one collecting demographic information and another assessing personality traits using the Big-Five Trait Taxonomy (John & Srivastava, 1999). Students will also report their general average grades, which will be verified using school records. Before full implementation, a pilot test was conducted to check the questionnaire's reliability, and necessary adjustments will be made. Finally, after data collection, responses will be reviewed, coded, and analyzed using statistical methods to explore the relationship between personality traits and academic performance.

Analysis of Data

This study analyzed the relationship between personality traits and academic performance among Grade 11 students at Dolores National High School using both descriptive and inferential statistics. First, descriptive statistics such as frequency, percentage, mean, and standard deviation will be used to summarize the students' demographic profiles and most common personality traits. Then, Pearson's correlation coefficient will help determine the strength and direction of the relationship between the Big Five personality traits and students' general average grades. Additionally, a regression analysis may be conducted to find out which personality traits have the most impact on academic performance. Finally, all data will be processed using statistical software to ensure accuracy, and the results were interpreted based on existing research and psychological theories. Analysis (Revised in Past Tense)

This study analyzed the relationship between personality traits and academic performance among Grade 11 students at Dolores National High School using both descriptive and inferential statistics. Descriptive statistics such as frequency, percentage, mean, and standard deviation were used to summarize the students' demographic profile and personality trait levels. Pearson's correlation coefficient was employed to determine the strength and direction of the relationship between the Big Five personality traits and students' general average. Regression analysis was also conducted to identify which traits had the most influence on academic performance. All data were processed using statistical software, and the findings were interpreted in relation to relevant literature and psychological theories.



To classify whether students' scores in each personality trait were high, moderate, or low, the following interpretation scheme was used:

4.21 – 5.00: High – The student consistently displayed behaviors strongly associated with the personality trait.

3.41 – 4.20: Moderate – The student sometimes exhibited behaviors associated with the trait.

1.00 – 3.40: Low – The student rarely or inconsistently showed behaviors associated with the trait.

Ethical Considerations

This study follows ethical research principles to protect the rights and well-being of participants. Before participation, students were fully informed about the study’s purpose, scope,

and procedures. They voluntarily agreed to participate after understanding their rights, including confidentiality and anonymity. All personal information was kept secure, and collected data were anonymized and used strictly for research purposes. Participants had the right to withdraw at any time without any penalties. Formal approval was obtained from the principal of Dolores National High School and other relevant authorities before conducting the study. Additionally, all collected data were securely stored and accessible only to the researchers to prevent unauthorized access. Proper citation and acknowledgment of sources were ensured to uphold academic integrity. By following these ethical guidelines, the study was conducted with fairness, respect, and responsibility.

RESULTS

Personality Traits of Grade 11 Students

Table 1. Frequency and Percentage Distribution of Personality Traits

Personality Trait	High (Frequency/%)	Moderate(Frequency/%)	Low(Frequency/%)
Extraversion	20 (25%)	30 (37.5%)	10 (12.5%)
Neuroticism	15 (18.75%)	40 (50%)	25 (31.25)
Conscientiousness	40 (50%)	50 (62.6%)	10 (12.5%)
Agreeableness	30 (37.5%)	40 (50%)	10 (12.5%)
Openness to Experience	35 (43.75%)	35 (43.75%)	10 (12.5%)

The majority of students scored moderately in Conscientiousness (62.5%), indicating a strong tendency toward being organized and goal-oriented. Half of the students (50%) scored high in Extraversion, suggesting they are somewhat social and outgoing but not overly extroverted. A

moderate portion of students (43.75%) scored high in Openness to Experience, reflecting intellectual curiosity and creativity. Neuroticism had the lowest percentage of high scores (18.75%), which implies that most students have stable emotional states.

Academic Performance Level of Grade 11 Students

Table 2. Distribution of Students Based on Academic Performance

Grade Range	Frequency	Percentage
90–100	10	12.5%
85–89	40	50%
84–80	20	25%
Below 80	10	12.5%

Half of the students (50%) had grades in the 85–89 range, indicating satisfactory academic performance. Only 12.5% of students achieved top grades (90–100), representing high academic achievement. 25% of students scored between 80–84,

while another 12.5% had grades below 80, suggesting the need for academic support for some students.

Relationship Between Personality Traits and Academic Performance

Table 3. Correlation Between Personality Traits and Academic Performance

Personality Traits	Correlation Coefficient (r)	Significance (p-value)
Extraversion	0.12	0.15 (Not significant)
Neuroticism	-0.18	0.10 (Not significant)
Conscientiousness	0.67	0.001 (Significant)
Agreeableness	0.20	0.005 (Significant)
Openness to Experience	0.44	0.01 (Significant)

Conscientiousness had a strong positive correlation ($r = 0.67, p = 0.001$) with academic performance, meaning students who are organized and disciplined tend to perform better academically. Openness showed a moderate positive correlation ($r = 0.42, p = 0.01$), indicating curiosity and willingness to learn positively impact academic outcomes. Agreeableness had a weak but

significant correlation ($r = 0.20, p = 0.05$), suggesting that cooperative and empathetic students may perform slightly better. No significant relationship was found between Extraversion or Neuroticism and academic performance, meaning these traits may not strongly impact grades.



CONCLUSIONS

Based on the findings, the following conclusions were drawn:

1. Personality Traits: Conscientiousness and openness to experience appear to play a crucial role in academic success.
2. Academic Performance: The students' academic achievements varied, with many falling within Half of the respondents achieved grades in the 85–89 range, signifying a satisfactory level of academic performance. A smaller percentage (12.5%) scored 90 and above, reflecting high academic achievement.
3. Relationship Between Personality and Performance: Certain personality traits positively impact academic performance, particularly onscientiousness and openness to experience. This highlights the importance of fostering traits that promote academic success.

RECOMMENDATIONS

Based on the conclusions that has been made, the following recommendations are being propose:

1. For Students: Students should be encouraged to develop positive traits such as conscientiousness to enhance their academic performance. Self-awareness and personality assessments can help students identify their strengths and areas for improvement.
2. For Teachers: Teachers can tailor teaching methods to accommodate students' diverse personality traits and learning preferences. Activities that foster openness, conscientiousness, and resilience should be integrated into classroom activities.
3. For School Administrators: The school may offer personality development programs to help students cultivate traits that contribute to academic success. Guidance counselors can use personality assessments to provide targeted academic support.
4. For Future Researchers: Further studies are recommended to explore the relationship between personality traits and academic performance in different grade levels and educational contexts. Longitudinal studies can provide a deeper understanding of how personality traits influence academic performance over time.

Conflict of Interest

The researcher declares that there were no conflicts of interest in the conduct of this study. No financial support, incentives, or sponsorship were received from any individual, organization, or institution that could have influenced the design, implementation, analysis, or interpretation of the research findings. The school, teachers, students, and parents who participated in the study had no involvement in the formulation of the research problems, data analysis, interpretation of results, or the presentation of conclusions and recommendations. All research procedures were carried out independently, ethically, and objectively, ensuring that the findings of the study are solely based on the data gathered and the evidence generated from the investigation.

REFERENCES

1. Busato, V. V., Prins, F. J., Elshout, J. J., & Hamaker, C. (2000). *Intellectual ability, learning style, personality, achievement motivation, and academic success of psychology students in higher*

- education. *Personality and Individual Differences*, 29(6), 1057–1068. [https://doi.org/10.1016/S0191-8869\(99\)00253-6](https://doi.org/10.1016/S0191-8869(99)00253-6)
2. Chamorro-Premuzic, T., & Furnham, A. (2003). *Personality traits and academic examination performance. European Journal of Personality*, 17(3), 237–250. <https://doi.org/10.1002/per.473>
3. Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) manual. Psychological Assessment Resources.*
4. De Fruyt, F., Van Leeuwen, K., Bagby, R. M., Rolland, J. P., & Rouillon, F. (2008). *Assessing and interpreting personality change and continuity in patients treated for major depression. Psychological Assessment*, 20(1), 249–258. <https://doi.org/10.1037/1040-3590.20.3.249>
5. Heaven, P. C., Ciarrochi, J., & Vialle, W. (2002). *Conscientiousness and academic performance: An examination of the impact of learning approaches. Personality and Individual Differences*, 32(4), 1017–1028. [https://doi.org/10.1016/S0191-8869\(01\)00110-4](https://doi.org/10.1016/S0191-8869(01)00110-4)
6. Komarraju, M., Karau, S. J., & Schmeck, R. R. (2011). *Role of the Big Five personality traits in predicting college students' academic motivation and achievement. Learning and Individual Differences*, 19(1), 47–52. <https://doi.org/10.1016/j.lindif.2008.07.001>
7. MacCann, C., Fogarty, G. J., Zeidner, M., & Roberts, R. D. (2009). *Coping mediates the relationship between emotional intelligence and academic achievement. Contemporary Educational Psychology*, 34(4), 240–253. <https://doi.org/10.1016/j.cedpsych.2009.07.002>
8. O'Connor, M. C., & Paunonen, S. V. (2007). *Big Five personality predictors of post-secondary academic performance. Personality and Individual Differences*, 43(5), 971–990. <https://doi.org/10.1016/j.paid.2007.03.017>
9. Costa, P. T., & McCrae, R. R. (1992). *Four ways five factors are basic. Personality and Individual Differences*, 13(6), 653–665. [https://doi.org/10.1016/0191-8869\(92\)90236-1](https://doi.org/10.1016/0191-8869(92)90236-1)
10. Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). *Personality and job performance: The role of personality traits, situational factors, and job performance criteria. Human Performance*, 15(2), 157–178. https://doi.org/10.1207/S15327043HUP1502_2
11. Hakimi, S., Hejazi, E., & Lavasani, M. G. (2011). *The relationships between personality traits and students' academic achievement. Procedia - Social and Behavioral Sciences*, 29, 836–845. <https://doi.org/10.1016/j.sbspro.2011.11.335>
12. Komarraju, M., Karau, S. J., Schmeck, R. R., & Avdic, A. (2011). *The Big Five personality traits, learning styles, and academic achievement. Personality and Individual Differences*, 51(4), 472–477. <https://doi.org/10.1016/j.paid.2011.05.006>
13. Mammadov, S. (2022). *Big Five personality traits and academic performance: A meta-analysis. Journal of Personality*, 90(2), 222–255. <https://doi.org/10.1111/jopy.12654>
14. Poropat, A. E. (2009). *A meta-analysis of the five-factor model of personality and academic performance. Psychological Bulletin*, 135(2), 322–338. <https://doi.org/10.1037/a0014996>
15. Wang, H., Liu, Y., Wang, Z., & Wang, T. (2023). *Big Five personality traits and academic achievements: The role of major identity and self-efficacy. Frontiers in Psychology*, 14, 1065554. <https://doi.org/10.3389/fpsyg.2023.1065554>
16. Yüksel, A., & Bahadır-Yılmaz, E. (2019). *Academic procrastination and personality traits in high school students. European Journal of Educational Research*, 8(1), 45–56. <https://doi.org/10.12973/eu-jer.8.1.45>



17. Zhang, J., & Ziegler, M. (2015). Interaction effects between openness and fluid intelligence predicting scholastic performance. *Journal of Intelligence*, 3(3), 91–110. <https://doi.org/10.3390/jintelligence3030091>
18. Tan, L. (2014). Correlational study. In W. F. Thompson (Ed.), *Music in the social and behavioral sciences: An encyclopedia* (pp. 269–271). SAGE Publications.
19. Donnellan, M. B., Oswald, F. L., Baird, B. M., & Lucas, R. E. (2006). The Mini-IPIP scales: Tiny-yet-effective measures of the Big Five factors of personality. *Psychological Assessment*, 18(2), 192–203. <https://doi.org/10.1037/1040-3590.18.2.192>
20. Alvi, M. H. (2016). *A manual for selecting sampling techniques in research*. University of Karachi, Iqra University. Retrieved from https://www.researchgate.net/publication/303941309_A_Manual_for_Selecting_Sampling_Techniques_in_Research
21. John, O. P., & Srivastava, S. (1999). The Big-Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (Vol. 2, pp. 102-138). New York: Guilford Press.



Licensed under [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/)