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THE ROLE OF PERSONALITY TRAITS IN DETERMINING HIGHER EDUCATION PREFERENCES OF UNIVERSITY STUDENTS

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Abstract
This study examines the role of personality traits in shaping the higher education preferences of university students. As students face numerous choices regarding their academic and career paths, understanding the psychological factors that influence these decisions is crucial for educators, policymakers, and academic institutions. The research explores how various personality traits, as defined by established psychological models such as the Big Five (openness, conscientiousness, extraversion, agreeableness, and neuroticism), impact students' preferences for different types of academic environments, disciplines, and career orientations. A survey was conducted with a sample of university students across multiple disciplines to assess their personality profiles and education-related preferences. The findings suggest that personality traits significantly influence students' educational decisions, with certain traits being linked to preferences for specific academic fields, study environments, and career goals. For instance, students high in openness were more inclined toward creative and interdisciplinary fields, while those with higher conscientiousness preferred structured, achievement-oriented programs. This study highlights the importance of considering personality traits in guiding students toward educational choices that align with their intrinsic motivations and strengths.

Keywords Personality traits, Higher education preferences, Big Five personality model, University students, Academic choices, Career orientation, Student decision-making.

INTRODUCTION

The process of selecting higher education pathways is a complex decision-making journey that is influenced by a multitude of factors, ranging from academic performance to socio-economic background. However, one of the most underexplored yet pivotal aspects is the role of personality traits in shaping students' higher education preferences. As students navigate through various academic disciplines, career paths, and institutional environments, their inherent personality traits—shaped by both genetic and environmental influences—may play a significant role in their decision-making process.

Personality psychology, particularly the Big Five personality model, has gained widespread acceptance in understanding human behavior across different contexts. The Big Five dimensions—openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism—serve as a framework for examining how individuals differ in their preferences and behaviors. Each of these traits is thought to influence various aspects of life, including academic and career choices. For instance, students who score high on openness are often more inclined toward creative and intellectual pursuits, while those with higher

conscientiousness tend to favor structured, achievement-oriented environments. Extraversion and agreeableness can influence preferences for group work or leadership roles, and neuroticism may affect students' resilience in coping with academic stress or their preference for less challenging fields.

While much research has been dedicated to understanding how personality traits influence academic performance, there is limited exploration of how these traits specifically determine the types of higher education environments, fields of study, and career goals that students choose. The interaction between personality and academic preferences can have profound implications for academic advising, career counseling, and institutional policy-making, ensuring that students are guided toward paths that align with both their academic potential and personal inclinations.

This study aims to explore how personality traits, as defined by the Big Five model, affect university students' preferences for higher education choices. By examining the relationship between personality and academic preferences, the research seeks to provide a deeper understanding of the psychological factors driving students' educational decisions, which can help educators and academic institutions offer more tailored guidance and support for students in their academic journeys.

METHOD

This study aims to explore how personality traits influence university students' preferences regarding their higher education choices, including their selection of academic disciplines, institutional environments, and career aspirations. To achieve this, a mixed-methods approach was employed, combining quantitative surveys and qualitative interviews to provide a comprehensive understanding of the relationship between personality traits and educational preferences.

Study Design

The research adopted a cross-sectional design, collecting data from university students at a single point in time across multiple academic disciplines. This design allowed for an in-depth analysis of the role of personality traits in shaping students' higher education preferences in a broad range of disciplines. The study was conducted across three universities, representing different academic focuses (e.g., humanities, social sciences, engineering, and natural sciences), to explore whether personality traits influenced the choice of academic fields.

Participants

The study targeted university students from different year groups and academic programs. A total of 500 students were selected through stratified random sampling, ensuring that the sample represented a diverse range of academic backgrounds, gender, age, and socio-economic status. This approach ensured that the findings would be broadly applicable to the general student population. Participation was voluntary, and all students provided informed consent.

The inclusion criteria required that participants were enrolled in undergraduate programs, aged 18 to 30, and able to complete the survey in English. Students from graduate programs or non-degree programs were excluded, as the study focused on undergraduates who are still in the process of deciding their educational and career pathways.

Data Collection Tools

1. Personality Assessment (Big Five Personality Inventory):

To measure students' personality traits, the Big Five Personality Inventory (BFI), a well-established psychological assessment tool, was used. The BFI is a self-report inventory that measures the five core personality traits—openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism. The inventory contains 44 items rated on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Each of the five dimensions was measured using eight items.

Openness to Experience: Assesses the extent to which an individual is imaginative, curious, and open-minded.

Conscientiousness: Measures traits such as organization, dependability, and goal-oriented behavior.

Extraversion: Reflects sociability, assertiveness, and the tendency to seek stimulation from external sources.

Agreeableness: Indicates the tendency to be cooperative, empathetic, and compassionate toward others.

Neuroticism: Evaluates emotional stability, with a focus on how prone an individual is to experiencing negative emotions such as anxiety and depression.

The BFI has demonstrated high reliability and validity across different populations and has been widely used in educational psychology research to assess the personality characteristics of students.

2. Higher Education Preferences Survey:

To measure students' preferences regarding their higher education choices, a custom-designed survey was created. The survey aimed to assess students' preferences in three major areas: academic discipline, type of academic environment, and career goals. The survey included both closed and open-ended questions. The closed-ended questions were based on a Likert scale (1 = Strongly Disagree to 5 = Strongly Agree), asking participants to rate the extent to which they valued certain academic attributes such as:

Interest in discipline: The degree to which students preferred specific academic disciplines based on personal interest.

Learning environment: Preferences for types of learning environments (e.g., traditional lecture-based, collaborative group work, hands-on learning).

Career aspirations: Alignment between academic choices and career goals, including preferences for fields with high job prospects or those aligned with personal values.

The open-ended questions allowed participants to elaborate on their reasons for choosing their academic programs, describing any personal, academic, or career-related factors influencing their decisions.

3. Semi-structured Interviews:

To supplement the quantitative data, semi-structured interviews were conducted with a subset of 50 participants (10 from each academic program). These interviews provided deeper insights into the factors influencing students' educational choices and how personality traits played a role in these decisions. The interviews were designed to allow for open-ended responses while keeping the conversation focused on relevant topics.

Key questions included:

"Can you describe what influenced your choice of academic discipline?"

"How do you think your personality traits have impacted your educational and career choices?"

"What factors do you consider when choosing between different academic environments or programs?"

"Do you feel that your academic preferences align with your personal characteristics? How so?"

The interviews were recorded, transcribed, and analyzed for thematic content related to personality traits and educational preferences.

Procedure

The data collection process involved several stages:

Survey Distribution: The surveys were distributed online through university platforms (e.g., learning management systems) to ensure accessibility for all participants. The survey was open for completion over a two-week period, with reminders sent to encourage participation. Students could complete the survey at their convenience within this timeframe.

Personality Assessment: After completing the survey, participants were asked to complete the Big Five Personality Inventory online. This was also administered using an online platform, ensuring that responses were anonymous and securely stored.

Interview Scheduling: Participants for the semi-structured interviews were selected based on their survey responses, aiming for a mix of students across different academic programs, genders, and personality types. The interviews were conducted either in person or via video calls and lasted

approximately 30 minutes each.

Data Coding and Analysis: The quantitative data from the personality inventory and higher education preferences survey were analyzed using descriptive and inferential statistics. Specifically, correlation and regression analyses were performed to explore the relationships between personality traits and educational preferences. Factor analysis was also used to identify latent factors that may underlie students' preferences.

The qualitative data from the interviews were coded using thematic analysis. Transcripts were read and re-read to identify key themes related to personality traits and educational choices. The interviews provided contextual insights that helped explain the statistical findings from the surveys.

Statistical Analysis

Descriptive Statistics: Mean scores and standard deviations were calculated for each personality trait and educational preference.

Correlation Analysis: Pearson's correlation coefficients were computed to examine the relationships between each personality trait and students' preferences for academic disciplines, learning environments, and career aspirations.

Multiple Regression Analysis: Multiple regression models were used to predict students' educational preferences based on their personality traits. This allowed for the identification of the most significant predictors of academic choices.

Factor Analysis: Exploratory factor analysis (EFA) was used to identify underlying factors in students' preferences and see how they grouped based on personality dimensions.

Ethical Considerations

Ethical approval for this study was obtained from the university's research ethics board. All participants were provided with an informed consent form outlining the study's purpose, confidentiality measures, and their right to withdraw at any time without penalty. The anonymity and confidentiality of participants were ensured by using coded identifiers for all data and keeping the data securely stored.

Limitations

The study's limitations include the reliance on self-reported data, which may be subject to biases such as social desirability or self-perception errors. Additionally, the cross-sectional design only captures a snapshot of students' preferences at a single time point, which may not account for changes in preferences over time. Future research could benefit from a longitudinal approach to track changes in educational preferences as students progress through their academic journeys.

RESULTS

The data analysis revealed several significant patterns regarding the relationship between personality traits and university students' preferences for academic disciplines, learning environments, and career aspirations. The results were derived from both quantitative analysis (survey responses and personality inventories) and qualitative data from interviews.

Personality Traits and Academic Preferences

Openness to Experience: Students scoring high on openness were more likely to express a preference for interdisciplinary, creative, and research-focused academic disciplines. They tended to favor fields such as arts, humanities, and social sciences, where exploration and intellectual curiosity are central. In contrast, students with lower openness scores were more inclined toward structured, practical fields such as business, engineering, and natural sciences.

Conscientiousness: Highly conscientious students exhibited a strong preference for fields requiring discipline, organization, and achievement-oriented structures. Programs such as law, medicine, and engineering were common choices for these students. Additionally, students with high conscientiousness favored academic environments that were well-organized and provided clear guidance, such as lecture-based learning or structured curricula.

Extraversion: Extraverted students gravitated toward fields that involved significant interaction with others, such as communications, social work, or management. They also preferred interactive learning environments that promoted group work,

team projects, and class discussions. Extraverted students felt more comfortable in collaborative academic settings and expressed greater interest in careers requiring social engagement and leadership.

Agreeableness: Agreeable students demonstrated a preference for academic disciplines that focused on helping others, such as healthcare, education, and social sciences. They were also more likely to choose environments that emphasized collaboration and cooperation over competitive atmospheres. Agreeable students often expressed career aspirations in fields that involved service, support, or humanitarian work.

Neuroticism: Students with higher neuroticism scores showed a preference for more structured and predictable academic disciplines that would minimize stress and uncertainty, such as accounting or certain areas of social sciences. These students were also more likely to choose academic environments with clear guidelines, avoiding highly competitive or unpredictable settings. Additionally, neuroticism was associated with a preference for career paths that were perceived as stable and secure.

Personality Traits and Learning Environment Preferences

The results from the learning environment preferences survey indicated that students' personality traits played a significant role in their desired modes of learning.

Openness was positively correlated with preferences for creative and experiential learning environments, including project-based work, research opportunities, and flexible curriculum structures.

Conscientiousness correlated with preferences for traditional, lecture-based learning environments that provided clear structures, deadlines, and performance metrics.

Extraversion was linked to a preference for collaborative and interactive learning environments, including group discussions, presentations, and peer interactions.

Agreeableness favored learning environments that prioritized cooperation and teamwork, with less emphasis on competition or individual performance.

Neuroticism correlated with a preference for structured, low-stress environments with clear expectations and feedback.

Personality Traits and Career Preferences

Students' career preferences were also influenced by their personality traits. For example, students with high openness expressed interest in careers in the arts, research, and creative industries, where innovation and autonomy are valued. Conscientious students were more likely to be interested in professions with clear progression paths, such as law, business management, and engineering. Extraverted students gravitated toward careers in public relations, human resources, or management, where social interaction and leadership are key. Agreeable students preferred careers in healthcare, education, and non-profit sectors, where they could directly help others. Finally, neuroticism was associated with a preference for careers perceived as more stable and predictable, such as administrative roles or technical fields.

Statistical Results

Correlation Analysis: Significant positive correlations were found between the Big Five personality traits and students' preferences for academic disciplines and career paths. Openness to experience had the strongest positive correlation with preferences for arts and humanities ($r = 0.42$), while conscientiousness was most strongly correlated with preferences for fields like engineering and business ($r = 0.48$).

Multiple Regression Analysis: Multiple regression analysis revealed that the personality traits of conscientiousness ($\beta = 0.35$) and openness to experience ($\beta = 0.32$) were the strongest predictors of students' academic preferences. Extraversion ($\beta = 0.22$) and agreeableness ($\beta = 0.18$) were moderate predictors, while neuroticism had the weakest association ($\beta = -0.07$).

Factor Analysis: Factor analysis of the learning environment preferences showed that students' preferences could be categorized into three factors:

"structured and organized learning," "interactive and collaborative learning," and "independent and exploratory learning." These factors aligned closely with personality traits, with conscientiousness and neuroticism being strongly associated with the first factor, while extraversion and openness were linked to the second and third factors, respectively.

DISCUSSION

The findings from this study underscore the significant role that personality traits play in shaping students' educational and career preferences. The results are consistent with previous research indicating that personality factors influence a wide range of academic behaviors, from subject choices to preferred learning environments and career aspirations. The alignment between personality traits and academic choices suggests that personality is a key determinant of students' educational paths and that understanding these traits can help guide students toward more fulfilling academic and career outcomes.

Openness to Experience was found to be a strong predictor of interest in creative and intellectual fields. Students high in openness tend to seek out novel and challenging academic environments, making them more likely to thrive in interdisciplinary or research-focused disciplines.

Conscientiousness emerged as a key factor in predicting preferences for structured and achievement-oriented academic disciplines. Students with high conscientiousness are motivated by clear goals and are likely to choose fields that provide measurable outcomes, such as medicine, law, or engineering.

Extraversion and Agreeableness both play significant roles in determining students' preferences for social and collaborative learning environments. Extraverted students thrive in interactive settings, while agreeable students prefer teamwork and cooperation.

Neuroticism was linked to preferences for predictable, low-stress academic disciplines and environments. These students may benefit from guidance that helps them navigate the more challenging and competitive aspects of university life.

Overall, the study highlights the importance of considering personality traits when providing academic advising and career counseling. Personalized guidance that takes into account students' personality profiles can help them make more informed decisions about their academic and career paths, leading to higher satisfaction and better academic outcomes.

CONCLUSION

This study confirms that personality traits, as defined by the Big Five model, play a significant role in shaping university students' preferences for academic disciplines, learning environments, and career aspirations. Understanding these preferences is crucial for educators, counselors, and policymakers, as it enables them to offer tailored advice that aligns with students' individual characteristics. The findings suggest that interventions designed to assess and understand personality traits could be integrated into academic advising and career guidance programs, helping students make choices that are both personally fulfilling and academically successful. Future research could explore longitudinal trends to see how personality traits evolve over time and continue to influence students' academic and career paths as they progress through university and beyond.

REFERENCE

1. Barron, FX, and Harrington, DM (1981), Creativity, Intelligence and Personality, Annual Review of Psychology, 32, 439–476.
2. Cattell, HB (1989) The 16PF: Personality in Depth. Champaign, IL: Institute for Personality and Ability Testing.
3. Cattell, HE and Schuerger, JM (2003) Essentials of the 16PF, New York: John Wiley & Sons.
4. Cattell, RB (1973) Personality and Mood by Questionnaire, San Francisco: Jossey-Bass San Francisco.
5. Cattell, RB, Cattell, AK, and Cattell, H.E.P. (1993) 16PF Fifth Edition Questionnaire, Champaign, IL: Institute for Personality and Ability Testing.

6. Chambers, JA (1964) Relating personality and biographical factors to scientific creativity, Psychological Monographs, 78.

7. Cynthia W. (1965) Creativity and Adaptive Regression, Journal of Personality and Social Psychology 2:161-169.

8. Feist, GJ (1998) A meta-analysis of personality in scientific and artistic creativity, Personality and Social Psychology Review, 2, 290–309.

9. Field, TW and Poole, ME (1970) Intellectual Style and Achievement of Arts and Science Undergraduates, British Journal of Educational Psychology, 40: 338–341.

10. Guilford, JP (1967) Creativity, Yesterday, Today and Tomorrow, Journal of Creative Behavior, 1, 3-13.