

Impact of Personality Traits on Achievement Motivation Among Undergraduate Students


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Abstract

The present study examines the impact of personality traits on achievement motivation among undergraduate students. Using the Five-Factor Model, the study explores how traits like conscientiousness, neuroticism, extraversion, openness, and agreeableness influence students' drive to succeed academically. A sample of 560 undergraduate students from colleges affiliated to Guru Nanak Dev University, Amritsar, was selected through a random sampling method. Data were collected using the Achievement Motivation Scale and the Big Five Personality Inventory. The findings reveal that conscientiousness and agreeableness significantly enhance achievement motivation, with conscientious students demonstrating strong goal-setting and perseverance. Conversely, neuroticism negatively impacts motivation due to emotional instability and fear of failure. Extraversion and openness show no significant effects, suggesting that their influence may be context-dependent. The results underscore the importance of personality-based interventions in academic settings. Strategies such as emotional regulation training and structured goal-setting programs can help students, particularly those with high neuroticism or low conscientiousness, improve their academic performance. The study highlights the need for educators and policymakers to consider personality traits when designing instructional methods to foster student success.

Keywords: Personality, Motivation, Students

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Introduction

Personality traits play a fundamental role in shaping an individual's cognitive processes, emotional responses, and behavioral patterns, all of which significantly influence academic and professional outcomes. Achievement motivation, broadly defined as the drive to attain success and fulfill personal or societal standards of excellence, is one such outcome that is intricately linked to personality (Roberts et al., 2015). In the context of undergraduate students, understanding this relationship is particularly vital, as their academic performance not only affects their immediate educational achievements but also shapes their long-term career prospects and overall life trajectory (Judge & Zapata, 2015).

A well-established framework for assessing personality traits is the Five-Factor Model (FFM), which comprises openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism (McCrae & Costa, 2008). Research has consistently shown that conscientiousness is the strongest predictor of academic success due to its association with self-discipline, goal-setting, and perseverance (Komarraju, Karau, & Schmeck, 2009). In contrast, neuroticism has been linked to anxiety, fear of failure, and emotional instability, which can negatively affect motivation and academic performance (Poropat, 2009).

However, recent studies suggest that the relationship between personality traits and achievement motivation is more complex than previously assumed. For instance, conscientious individuals not only demonstrate diligence but also exhibit adaptive coping strategies that enhance resilience in academic settings (Bleidorn et al., 2019). Additionally, extraversion and openness to experience play significant roles in fostering motivation. Extraverted students tend to thrive in interactive and collaborative learning environments, displaying increased engagement and participation (Komarraju et al., 2014), while those high in openness exhibit intellectual curiosity, deep learning strategies, and creative problem-solving abilities, which contribute to higher intrinsic motivation (Kaufman et al., 2016; Anglim et al., 2020).

Moreover, the role of agreeableness in academic motivation is increasingly being recognized. While traditionally viewed as less relevant

In predicting individual academic success, recent research suggests that students with high agreeableness excel in group-based learning environments due to their cooperative and empathetic nature, which enhances team-based academic performance (Bipp et al., 2019; Smillie et al., 2021). Additionally, studies indicate that agreeableness can have indirect positive effects on academic achievement by fostering supportive peer networks and positive student-instructor relationships (DeYoung, 2015).

Another emerging perspective is the interplay between personality traits and self-regulation strategies. Mammadov (2022) highlights that students with high conscientiousness not only exhibit persistence but also employ effective self-regulation strategies such as time management and structured learning approaches, further reinforcing their achievement motivation. Similarly, recent findings indicate that emotional regulation skills can mitigate the negative effects of neuroticism, helping students manage academic stress more effectively (Besser & Shackelford, 2021).

Given the increasing academic demands placed on undergraduate students in today's highly competitive educational landscape, gaining a deeper understanding of how personality traits influence achievement motivation can offer valuable insights for educators, academic advisors, and policymakers. Tailoring instructional strategies and support systems based on students' personality profiles could enhance their motivation and academic performance, ultimately helping them reach their full potential. This study aims to investigate these dynamics in greater depth, contributing to the growing body of literature on the psychological determinants of academic success.

Objectives of the study

01. To examine achievement motivation of undergraduate students having different personality traits.

Sample

There are 165 affiliated colleges under the Guru Nanak Dev University, Amritsar. Out of these 165 affiliated colleges, 114 are degree colleges having physical education as one of the subjects in undergraduate classes. These colleges are spread in 7 districts. 560 students were taken from undergraduate classes from all the districts

Under Guru Nanak Dev University Amritsar. At least 2 colleges were selected from each district. The colleges from each district were selected on a random basis. The students from the classes were selected on a random basis. Approximately 40 students were selected from each college.

Method

Descriptive survey was used in the present study.

Data Collection

The data was collected by giving personal visits to institutes. The head of the institute were be contacted to explain the purpose of the visit and get formal permission to collect the data. After formal permission, the students were asked to give complete information. Approximately 40 students of physical education were taken randomly from the Bachelor of Arts course. The students were given the scales and the motive of the research were explained to them. Instructions were given to the students before they start to fill up the responses. The students were asked to respond to the scales one by one in the sequence achievement motivation scale, Big Five Factor personality inventory and attitude towards physical education scale respectively. They were asked to clear their doubts, if any, before starting the procedure of answering. Normally it takes 20 to 25 minutes to fill one scale. A refreshing time of 5 to 10 minutes can be given to the students before starting the next tool. The filled tools were collected from the students immediately.

Tools Used

In order to study the variables Career Maturity, self-concept and Educational Aspirations following tools were used:

01. Achievement Motivation Scale (2011) developed by Prof. Pratibha Deo and Dr. Asha Mohan
02. Big Five Personality Inventory (1991) developed by John, Donahue, and Kentle

Results and Discussion

Table

Achievement Motivation at different level of Personality traits

| Personality trait | F | Sig. |
|-------------------|-------|------|
| Extraversion | .007 | .993 |
| Agreeableness | 4.413 | .013 |
| Conscientiousness | 8.727 | .000 |

| | | |
|-------------|--------|------|
| Neuroticism | 13.624 | .000 |
| Openness | 2.021 | .133 |

The analysis reveals varying impacts of personality traits on achievement motivation. A one-way ANOVA on extraversion shows no significant differences in achievement motivation across its levels ($F(2, 557) = 0.007$, $p = 0.993$). In contrast, agreeableness significantly affects achievement motivation ($F(2, 557) = 4.413$, $p = 0.013$). Post hoc analysis reveals that individuals with high agreeableness score significantly higher than those with low agreeableness, while no significant difference is observed between average and high agreeableness.

Conscientiousness also significantly influences achievement motivation ($F(2, 557) = 8.727$, $p < 0.001$). Post hoc results show significant differences between low and average as well as low and high conscientiousness levels, but no significant difference between average and high conscientiousness.

Neuroticism has a significant effect on achievement motivation ($F(2, 557) = 13.624$, $p < 0.001$), with post hoc results indicating substantial differences between low, average, and high neuroticism levels.

Lastly, openness shows no significant effect on achievement motivation ($F(2, 557) = 2.021$, $p = 0.133$), indicating that openness does not significantly impact achievement motivation in this sample.

Discussion

The findings of this study add to the literature on personality traits and achievement motivation, revealing that not all traits equally influence motivation. Extraversion and openness showed no significant effects, consistent with studies suggesting their influence depends on context (Soto et al., 2020; Wilt & Revelle, 2021). However, agreeableness, conscientiousness, and neuroticism significantly impacted achievement motivation, aligning with previous research (Costa et al., 2023; Kandler et al., 2021).

Higher agreeableness was linked to greater achievement motivation, as cooperative individuals often pursue goals to maintain social harmony (Roberts et al., 2022; Denissen et al., 2023). Similarly, conscientiousness had a strong positive effect, reflecting its association with goal-directed

Behavior and persistence (McCabe & Fleeson, 2021; Judge et al., 2021). In contrast, neuroticism negatively impacted motivation, likely due to anxiety and emotional instability hindering goal pursuit (Soto & Jackson, 2022; Hirsh et al., 2023).

These results have practical implications, suggesting that tailored interventions, such as emotional regulation strategies and goal-setting programs, could enhance motivation, especially for individuals with low conscientiousness or high neuroticism (Park et al., 2022). In conclusion, while extraversion and openness showed no effect, agreeableness, conscientiousness, and neuroticism play significant roles in shaping achievement motivation, offering key insights for personal development and organizational settings.

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