

## The Influence of Academic Stress and Motivation on the Development of Personality Traits in College Students

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### ABSTRACT

The purpose of this study is to look into how college student's motivation, personality development, and academic stress interact. The goal of the study is to comprehend the processes via which academic stress and motivation contribute to the development of student's personality traits of their college years by looking at how these elements interact. The knowledge gathered from this study may help build interventions and support networks that help college students develop good personalities and overall well-being, which will improve their academic performance and general sense of pleasure with life. A sample of 169 individuals, 81 females and 88 males aged between 18-25 years was taken for the study. Tools such as Academic Stress Scale, Academic Motivation Scale, and Big Five Personality Traits were used to obtain data from the individuals. Correlation analysis and regression analysis was used to analyze the data. The results of the study showed a positive relationship between motivation levels and personality factors, suggesting that students who were intrinsically motivated were more receptive to novel experiences. But there was no conclusive evidence linking neuroticism to academic stress. The lack of interaction effects raises the possibility that academic stress and motivation has separate effects on personality traits. Overall, research seems that academic stress has a bigger influence on college student's personality development. These results show the significance of intrinsic drive in forming particular personality traits, underscoring the need of motivation-focused interventions to promote positive personality traits in academic settings.

**Keywords:** *Academic Stress, Motivation, Personality Traits, College Students*

The college years are a transforming time of academic pursuits, self-discovery, and lifelong skill development. The experiences of academic stress and motivation are essential to this journey since they have a significant impact on college students' psychological health and ability to adjust. Higher education presents chances for personal development and self-discovery, but it also presents difficulties that may cause stress and affect students' motivational orientation. In order to fully address the needs and goals of college students, it is imperative to comprehend how these components interact to create personality development.

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Received: May 05, 2024; Revision Received: June 16, 2024; Accepted: June 21, 2024

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Personality traits which are included under the Big Five (Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism), are persistent thought, feeling, and behavior patterns that people exhibit in a variety of contexts. Examining how academic stress and motivation affect the development and presentation of these personality traits is made possible by the particular context of college life.

College students' personalities are shaped by a complicated and diverse phenomenon that has important ramifications for their academic performance and well-being: the relationship between academic stress and motivation. Academic stress, which results from the strains of homework, tests, and other requirements related to the classroom can affect students' emotional and psychological well-being and eventually shape their personalities. Elevated levels of stress can lead to pupils developing maladaptive personality traits, like less openness or increased neuroticism, as they become more reticent, apprehensive, or averse to novel situations. However, academic stress can also act as a stimulant for resilience and personal development, encouraging pupils to learn flexible coping mechanisms and persistence in the face of difficulties.

On the other hand, motivation is a critical factor in determining students' level of engagement, effort, and goal-directed conduct in the classroom. Positive personality qualities including conscientiousness, extraversion, and openness to new experiences are more prevalent in motivated students. In pursuing their academic objectives, they could exhibit greater degrees of tenacity, initiative, and excitement, which can help to shape a more proactive and adaptive personality profile. Furthermore, it has been shown that intrinsic motivation-which stems from a person's own interest and love of learning-is linked to higher psychological well-being and a more positive self-concept, which supports college students' development of resilient and growth-oriented personalities.

### REVIEW OF LITERATURE

- ❖ Apostolov N., Geldenhuys M., et al. (2022), conducted research on the role of neuroticism and conscientious facets in academic motivation. There were 285 undergraduate participants in the Australian study. Motivation and personality were assessed using the Motivated Strategies Learning Questionnaire and the International Personality Item Pool, respectively. The results of structural equation modelling showed that neuroticism had a negative link with academic motivation, while conscientiousness had the strongest relationship. Positive correlations were found between academic motivation and the conscientious aspects of self-efficacy and accomplishment seeking. The findings also showed that vulnerability and depression had a negative relationship with academic motivation, with the anxiety aspect of neuroticism being the sole significant positive predictor. This study shows that personality traits, rather than just grades and superior qualities, influence academic motivation. Academic motivation is strongly influenced by trait-level anxiety, which also helps to explain underlying processes like defensive pessimism, which raises motivation since it makes people dread the worst.
- ❖ Muntean L.M., Nirestean A., Sima-Comaniciu A., Marusteri M., Zagan C., Lukacs E., et al. (2022) conducted research on the relationship between Personality, Motivation and Academic Performance at Medical students from Romania. The needs of the educational and healthcare systems are expanding as a result of this industry's ongoing expansion. Consequently, its critical to look into the structural elements that enhance the functioning of the healthcare system. Our pilot study aims to investigate

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potential relationships or connections between personality and motivation and Romanian medical graduates National Residency Exam scores. Between February 2021 and December 2021, a pilot study was carried out on 179 medical students from George Emil Palade University of Medicine, Pharmacy, Science, and Technology in Targu Mures, Romania. The students were assessed using DECAS, IM, SPM scales. All of the Big Five Model's dimensions of personality, including extraversion, conscientiousness, agreeableness, emotional stability, and openness, were statically related to the outcome, according to these findings. Through motivational persistence and involvement, which correspond with the conscientiousness dimension and the outcome, motivation also plays a significant impact in academic successes. This study provides initial support for future research by confirming that personality structure and motivation are connected to medical students' academic performance.

- ❖ Gibbons C., et al. (2022) conducted research on understanding the role of stress, personality and coping on learning motivation and mental health in university students during a pandemic. The objectives examined defensive-pessimism and optimism as influences on learning motivation and investigated and relationships between stress, personality, and coping on students' mental health. The majority of research interprets "stress" as "distress," making no effort to quantify the kind of stress that improves wellbeing and motivation. A survey was conducted with 162 undergraduate psychology students regarding their learning motivation, personality, support system, control, mental health, and stressors associated to the pandemic and students. Overall, there was a severe loss of desire and a significant level of poor mental health. Context management was essential, even when positive evaluations of instruction and upbeat thinking were linked to excellent mental health. Learning motivation was reduced when teaching quality was rated poorly. Conscientiousness and support fought against the negative effects of stress on motivation, while support enhanced learning motivation. Stress related to learning has been linked to openness. Defensive pessimism was just as effective as optimism in boosting learning motivation in individuals who were prone to anxiety. Building context control, support, and personality-related methods could increase students' resilience both throughout and after covid-19.
- ❖ Fuertes A., Fernandez J., Mata M., Gomez A., Pascual R., et al. (2020) conducted research on relationship between personality and academic motivation in education degrees students. The purpose of this study is to investigate the connection between academic desire and the big five personality traits. The characteristics of age, gender, and kind of educational studies are also taken into account. Based on a correlational investigation that is not experimental, a quantitative methodology is applied. 514 students from Leon's University's Faculty of Education, spanning the three education degrees, make up the sample. The Learning and Motivation Strategies Questionnaire (CEAM) and the Personality Questionnaire Five Factor Inventory (NEO-FFI) were given to subjects to complete in order to collect data. The findings demonstrate the strong correlation between motivational factors and personality traits. It should be highlighted that while male findings were greater in self-efficacy, female results were higher in intrinsic motivation, incentive for teamwork, neuroticism, and friendliness. Furthermore, it was noted that openness to experience increases in the last year of the degree, the demand for recognition diminishes in the final two study years, and intrinsic motivation gradually declines first to the fourth year of degree. In summary, students in Social Education exhibit greater levels of intrinsic motivation, self-

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efficacy, total motivation, openness to experience, and neuroticism, whereas kids in Primary Education demonstrate a greater need for recognition.

### **METHODOLOGY**

#### *Aim*

The purpose of this study is to investigate the connection between college student's motivation, personality development and academic stress. For the purpose of creating interventions and support systems that will enhance student's academic performance and well-being, it is crucial to comprehend how academic pressures and motivational variables affect the development and expression of personality traits. The steps, measurements, and analysis that will be used in the research are described in this methodology.

#### *Objectives*

- **Examine the connection between Academic Stress and Personality Development:** The main goal is to find out how college students experiences with academic stress affect the emergence and development of their personalities.
- **Examine the function of Academic Motivation in the Development of Personality:** Examining the connection between academic motivation and personality development is another goal.
- **Determine Trends of Personality Change Over Time:** The goal of the study is to determine how motivational factors and academic pressures affect personality changes during the college years.
- **Investigate Mediating and Moderating Factors:** This study looks for variables that may have an impact on how academic stress, motivation, and personality development interact.
- **Investigate Strategies and Interventions to Promote Positive Personality Development:** Lastly, the study looks into methods and interventions to promote positive personality development in college students.

#### *Hypothesis*

- There will be significant relationship between motivation, academic stress and personality of college students.
- Higher levels of intrinsic motivation will be positively associated with openness to experience.
- There will be interaction effects between academic stress and motivation on personality traits.

#### *Tools Used*

- **Academic Stress Scale**  
Academic Stress Scale (ASS-40) is a self-report questionnaire used to gauge how stressed-out people are in academic environments. It consists of 40 measures measuring workload, time constraints, competition, and performance expectations, among other factors of academic stress. Each item is rated by the respondents on a scale of 1 to 5, representing the level of stress they experience.
- **Academic Motivation Scale**  
Academic Motivation Scale (AMS-28) is a self-report questionnaire created to gauge different facets of motivation in academic settings. Typically, it has 28 items that evaluate the following three main motivational types:

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1. Intrinsic Motivation: Internal motivation derived from a sense of personal fulfilment and satisfaction of the work at hand.
2. Extrinsic Motivation: Driven by things outside of oneself, including accolades, status, or social acceptance.
3. Amotivation: A lack of drive or a sense of powerlessness in relation to homework.

Each item is rated by respondents on a scale that shows how much they agree or disagree with statements about why they are motivated to participate in academic activities.

### ➤ **Big Five Factor Model**

It pinpoints five basic dimensions- that is personality characteristics among individuals- that account for most of the variations:

1. Openness to Experience: This dimension captures an individual's inventiveness, openness to trying new things, and enjoyment of art, adventure, and out-of-the-ordinary concepts.
2. Conscientiousness: People who exhibit conscientiousness are well organized, accountable, and trustworthy. They are typically meticulous, goal oriented, and cautious in all they do.
3. Extraversion: Extroverts are gregarious, vivacious, and enthusiastic. They prefer social interactions, being among people, and are often on the lookout for novelty and excitement.
4. Agreeableness: People who exhibit agreeableness are cooperative, sympathetic, and kind.
5. Neuroticism: Neuroticism is the propensity to feel unfavourable feelings like uneasiness, despair, and anxiety.

### **Research Design**

A quantitative approach is used in the research design to examine how academic stress and motivation affect college students' personalities. A sample of college students' motivation, degrees of academic stress, and various personality qualities will be evaluated using quantitative methods including questionnaires.

### **Description of Sample**

A sample size of N=169 individuals, 81 females and 88 males, aged between 18-25 years were taken for the study.

### **Variables:**

- **Independent Variables:** Academic Stress and Motivation
- **Dependent Variable:** Personality Traits

### **Inclusion Criteria:**

- Students aging from 18-25 years.
- College going students from various academic backgrounds.

### **Exclusion Criteria:**

- Students below the age of 18 years and above the age of 25 years were not included.
- Non college going students were not included.

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### Statistical Analysis:

#### ➤ Descriptive Statistics

As a fundamental tool for data analysis, descriptive statistics offer a succinct synopsis of a dataset's salient features. These statistics provide information about the distribution, variability, and central tendency of the data. They include measurements like mean, median, mode, standard deviation, and range.

#### ➤ Correlation Analysis

A statistical technique for determining the link between two or more variable is correlation analysis. It provides information on how changes in one variable relate to changes in another by calculating the degree and direction of association between variables.

## RESULT

### Statistics

		Stress	Motivation	Personality
N	Valid	169	169	169
	Missing	0	0	0
Mean		106.09	122.73	140.83
Median		109.00	124.00	141.00
Mode		120	99 <sup>a</sup>	148
Std. Deviation		27.128	27.643	15.442
Range		160	168	128

a. Multiple modes exist. The smallest value is shown

Table: 1 Descriptive Statistics for Academic Stress, Motivation, and Personality

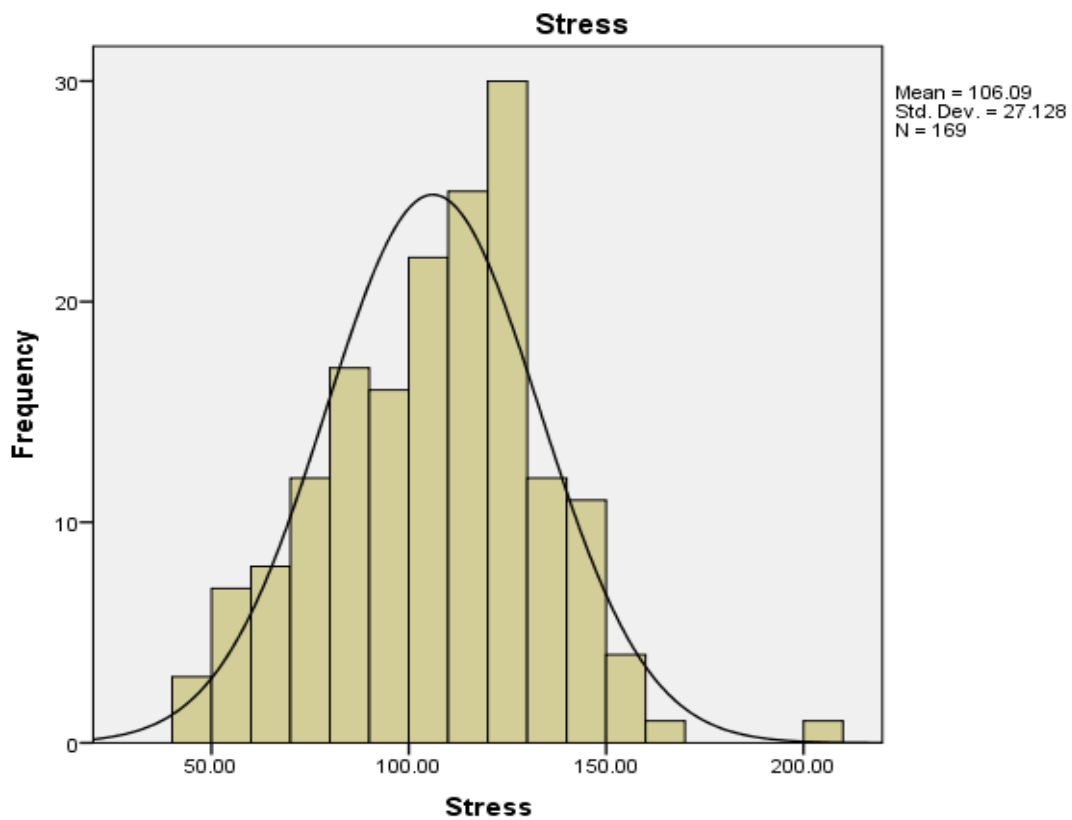
At a mean of 106.09 and a median of 109, the obtained results suggests that the typical level of stress is moderate.

On the other hand, the mean motivation score seems to be higher, at 122.73, while the median score is 124.

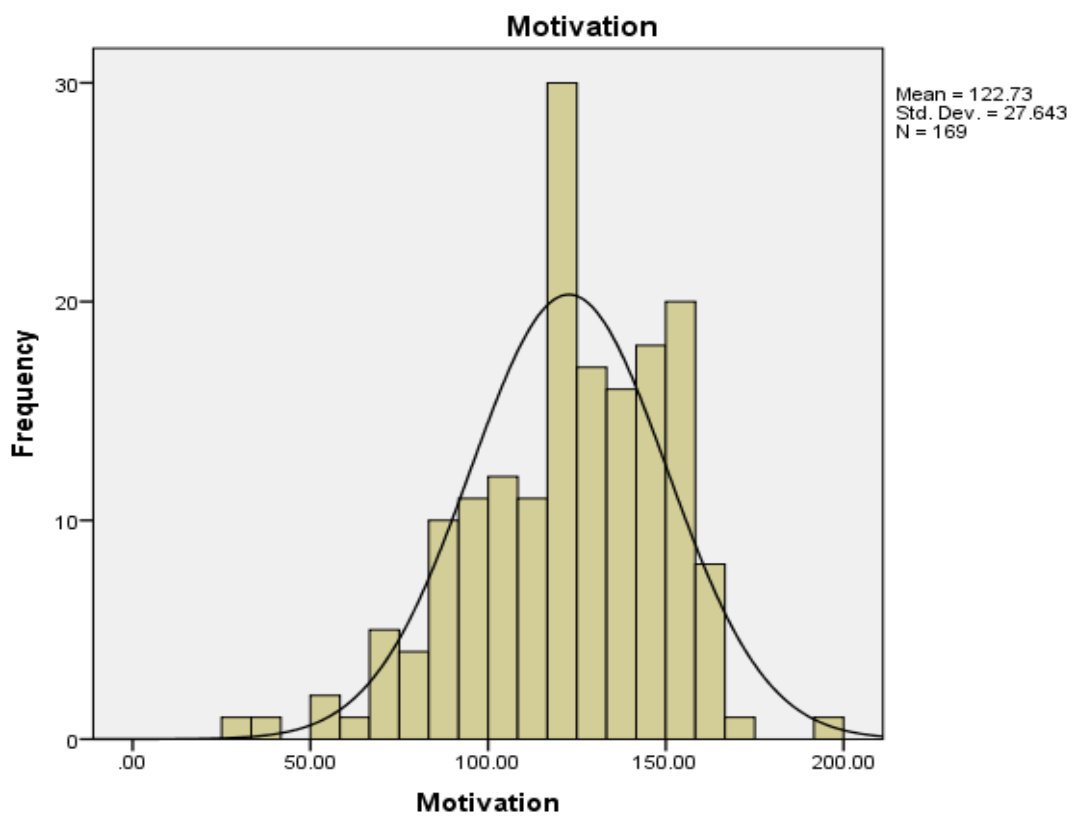
With a mean of 140.83 and a median of 141, personality appears to have the highest average level among the three components.

All things considered, the observed data point to moderate stress, moderate to high motivation, and generally stable personality features among the sample's members.

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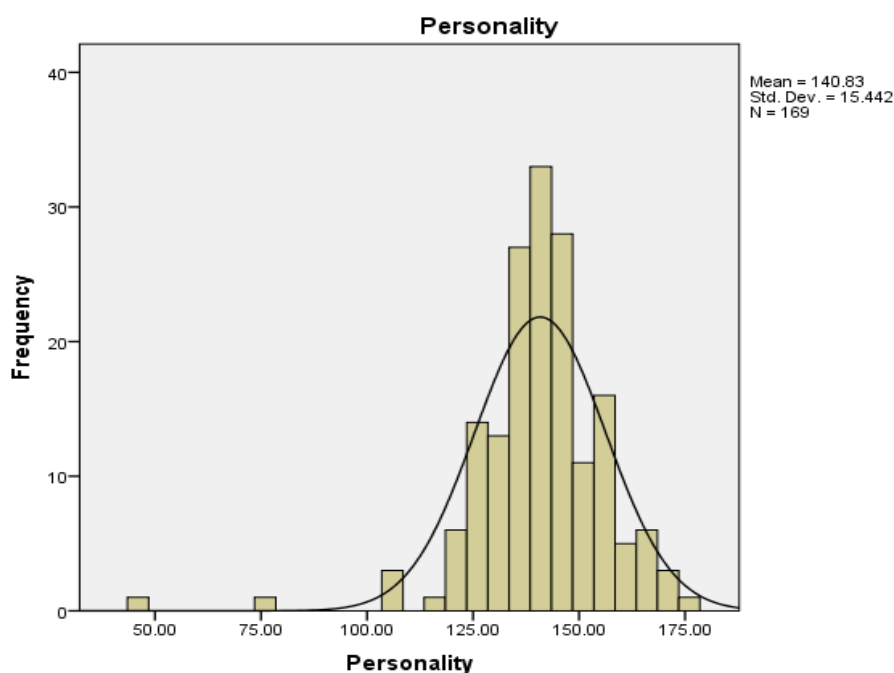


*Figure: 1 Shows Academic Stress Scale*



*Figure: 2 Shows Academic Motivation Scale*

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**Figure: 3 Shows Big Five Personality Scale**

**Table: 2 Correlation Analysis among Academic Stress, Motivation, and Personality**

### Correlations

		Stress	Motivation	Personality
Stress	Pearson Correlation	1	.183*	.102
	Sig. (2-tailed)		.017	.188
	N	169	169	169
Motivation	Pearson Correlation	.183*	1	.365**
	Sig. (2-tailed)	.017		.000
	N	169	169	169
Personality	Pearson Correlation	.102	.365**	1
	Sig. (2-tailed)	.188	.000	
	N	169	169	169

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

**Stress and Motivation:** A Pearson correlation coefficient of 0.183( $p=0.017$ ) indicates a positive relationship between stress and motivation. This implies that people with higher stress levels could potentially have marginally higher motivation levels.

**Motivation and Personality:** With a Pearson correlation coefficient of 0.365( $p=0.000$ ), motivation and personality show a moderately strong positive link. This suggests that certain personality qualities as judged by this study are more common in persons who are more motivated.

**Stress and Personality:** with a Pearson correlation coefficient of 0.102 ( $p=0.188$ ), there is a modest and non-statistically significant association between stress and personality. This shows that personality qualities in this group are not significantly predicted by stress levels.



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### DISCUSSION

The acquired data clarified the intricate relationship among college students between motivation, stress, and personality. Even while the research shows a positive correlation between stress and motivation, suggesting that these two constructs are somewhat related, it is important to emphasize that in this sample, motivation alone strongly predicts personality.

The implication that, in this case, motivation may have a stronger impact on personality traits than stress highlights the importance of motivational variables in forming students' personalities. It implies that, independent of stress levels, people with higher degrees of motivation might display particular personality traits more strongly. This realization may help educators, counsellors and legislators create interventions and support networks that increase kids' motivation to promote healthy personality development.

Overall, the research shows that the average number of students experienced moderate level of academic stress and high levels of motivation. This can influence different aspects of an individual's personality, including the big five personality traits:

- **Openness:** As a coping mechanism to moderate level of academic stress and high levels of motivation, students might potentially enhance their openness to new experiences.  
High motivation might even lead them to explore new ideas and concepts, further contributing to openness.
- **Conscientiousness:** In order to manage their academic obligations, people who experience moderate academic stress may become more goal-oriented, disciplined, and structured, which may increase their conscientiousness.  
High motivation is frequently linked to conscientiousness traits including goal-directed behaviour, perseverance, and striving for achievement.
- **Extraversion:** Students who experience moderate academic stress may turn to social engagement and support as a coping strategy, which may increase extraversion.  
High levels of motivation can also lead to an increase in social engagement and possibly reinforce extraverted behaviour.
- **Agreeableness:** As people manage interpersonal challenges, moderate academic stress may promote empathy and cooperation, which may enhance agreeableness.  
Additionally, people with high motivation may be more cooperative and courteous in social situations, which would further contribute to agreeable behaviour.
- **Neuroticism:** Neurotic tendencies may be exacerbated by moderate academic stress, which could result in heightened anxiety, worry, and emotional instability.  
Because it gives people a sense of purpose and mastery over obstacles, high motivation may protect against some forms of neuroticism.

### CONCLUSION

There is a complex relationship between the Big Five Personality traits, motivation, and academic stress that is influenced by individual differences, coping strategies, and environmental factors. Positive effects on personality traits including extraversion, conscientiousness, and openness can be obtained when strong motivation is combined with moderate stress. These characteristics may flourish in a moderately demanding environment, encouraging curiosity, hard work, and gregariousness. But in the absence of sensible coping mechanisms, this combination may also exacerbate neurotic tendencies, which are marked by

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elevated anxiety and unstable emotions. Therefore, motivation and academic stress may positively affect personality traits, but their influence depends on how people manage and overcome these obstacles.

Individual differences are important in figuring out how motivation and academic stress affect personality features. Certain people may demonstrate resilience when faced with stress, using their strong motivation to drive their own development and success. Others could find it difficult to handle, feeling more distressed and negatively affective. Furthermore, contextual elements including life circumstances, scholastic expectations, and social support systems can further influence how stress, motivation, and personality interact. Therefore, a thorough evaluation of these dynamics' influence on people's behaviour and psychological health requires a complex understanding of them.

In conclusion, there is a complex and variable association between the Big Five Personality traits, motivation, and academic stress. Clarifying the intricate interactions between stress, motivation, and personality requires an appreciation of individual characteristics as well as situational factors. This will lead to a more thorough understanding of human behaviour and adaptation.

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### Acknowledgment

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

### Conflict of Interest

The author(s) declared no conflict of interest.

**How to cite this article:** Mudgal, T. (2024). The Influence of Academic Stress and Motivation on the Development of Personality Traits in College Students. *International Journal of Indian Psychology, 12*(2), 3695-3704. DIP:18.01.324.20241202, DOI:10.25215/1202.324