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Research Paper

Personality Traits as A Correlate of Academic Burnout among Undergraduate Medical Students

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ABSTRACT

This study investigated the relationship between personality traits and academic burnout among undergraduate medical students. Academic burnout is a prevalent issue among medical students due to various stressors they encounter. Understanding the personality traits associated with academic burnout can aid in developing effective interventions. The study aimed to identify the personality types that are more prone to academic burnout in undergraduate medical students. A sample of 100 MBBS students from Delhi-NCR and Uttar Pradesh, including 71 males and 29 females, participated in the study. Personality traits were assessed using the Big Five Inventory, and academic burnout was measured using the Copenhagen Inventory (CBI): Student Version. The correlational study found a significant negative correlation between academic burnout and extroversion, agreeableness, and conscientiousness, and a strong positive correlation with neuroticism. No significant correlation was observed with openness. These findings contribute to understanding the relationship between academic burnout and personality traits. The study provides empirical evidence for significant associations between academic burnout and specific personality traits, emphasizing the strong positive correlation with neuroticism and the negative correlation with extroversion and conscientiousness. Further research is needed to explore underlying mechanisms and implications for psychological well-being in this population.

Keywords: *MBBS Students, Personality Traits, Academic Burnout*

Attaining a medical degree, particularly a Bachelor of Medicine and Bachelor of Surgery (MBBS), necessitates an extraordinary level of commitment, perseverance, and dedication. Those pursuing this path encounter a multitude of challenges, including demanding coursework, extensive study hours, intense clinical rotations, and the constant responsibility of patient care. These pressures can significantly impact their mental well-being, often resulting in academic burnout. Academic burnout denotes a state of physical, emotional, and mental exhaustion triggered by prolonged academic stress. Understanding the elements that contribute to academic burnout among MBBS students is essential in devising effective intervention strategies and promoting their overall well-being. Additionally, research has highlighted a significant association between personality traits and

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stress levels, further emphasizing the importance of investigating how individual characteristics contribute to academic burnout among medical students.

Personality

Understanding personality requires examining its definitions and exploring its characteristics, types, and the factors that influence its development. Personality is a complex and multidimensional construct that has captivated scholars and researchers for centuries. It encompasses a unique set of characteristics, traits, behaviors, and patterns of thoughts and emotions that define an individual.

The exploration of personality can be traced back to ancient Greek beliefs in the four humors, which were thought to influence behavior and personality. Philosophers like Aristotle and Plato further contributed to the understanding of personality by linking traits to physiological characteristics.

During the late 19th century, influential figures such as Sigmund Freud, Carl Jung, and Alfred Adler introduced different models and approaches to comprehending personality. Freud's psychoanalytic theory has had a significant impact on the field. Renowned psychologist Gordon Allport provided a noteworthy definition of personality, describing it as "the dynamic organization within the individual of those psychophysical systems that determine their unique adjustments to their environment" (Allport, 1961). This definition highlights the dynamic nature of personality and its ability to adapt and influence an individual's responses to various circumstances.

Personality can be further understood through the definitions provided by reputable organizations. The American Psychological Association (APA) defines personality as "individual differences in characteristic patterns of thinking, feeling, and behaving" (APA, 2020). The International Classification of Diseases (ICD) defines personality as "the sum total of the physical, mental, emotional, and social characteristics of an individual that are typical of their adaptation to the circumstances of life" (World Health Organization, 2019).

In addition to its definitions, personality exhibits various characteristics. It is stable, meaning that personality traits tend to remain relatively consistent over time. It is individual, as each person possesses a unique combination of traits. Moreover, personality traits shape how individuals think, feel, and act in different situations, thereby influencing behavior.

Personality can be categorized into different types, reflecting characteristic patterns of behavior, and thought. Examples include introversion versus extraversion and high neuroticism versus low neuroticism. These types provide frameworks for understanding the variations in personality expression among individuals.

The development of personality is influenced by various factors. Genetic predispositions play a role, as certain traits may be inherited. Environmental factors, such as upbringing and cultural influences, also shape personality. Individual experiences, including life events and interactions, further contribute to the development of personality. These factors interact in complex ways throughout an individual's life, shaping their unique personality profile.

Stress and Burnout

The concept of stress, introduced by Selye (1950), refers to the non-specific response of the body to any demand for change. Stress occurs when individuals perceive an imbalance

between the demands placed upon them and their ability to cope with those demands. This perception triggers a physiological and psychological response aimed at adapting to the challenge or threat. Hans Selye's General Adaptation Syndrome model provides insights into the physiological responses to stress. According to this model, stress follows a three-stage pattern: alarm, resistance, and exhaustion. In the alarm stage, the body mobilizes its resources to respond to the stressor. In the resistance stage, the body attempts to cope with and adapt to the ongoing stress. However, if stress persists for an extended period without adequate recovery, the body enters the exhaustion stage, leading to various health issues.

Burnout, on the other hand, was first described by Freudenberger (1974) as a state of fatigue or frustration brought about by devotion to a cause, way of life, or relationship that failed to produce the expected reward. Burnout is characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment. Emotional exhaustion refers to feeling emotionally drained and overwhelmed by work-related demands. Depersonalization involves developing a cynical and detached attitude toward work and others. Reduced personal accomplishment reflects decreased competence and productivity in one's professional role. The Maslach Burnout Inventory (MBI), a widely used measurement tool, assesses these three dimensions of burnout.

In understanding stress and coping, Lazarus, and Folkman (1984) proposed the transactional model of stress and coping. According to this model, stress is not solely determined by external events but is influenced by an individual's cognitive appraisal of the stressor and their perceived ability to cope. Cognitive appraisal involves evaluating the significance of the stressor and assessing one's available resources to deal with it. Coping strategies are the efforts individuals make to manage or reduce perceived stress. The transactional model emphasizes the role of cognitive processes, coping mechanisms, and the perception of control in shaping the stress response.

These models provide frameworks for understanding the complex nature of stress and burnout. They highlight the physiological, psychological, and cognitive aspects of the stress experience, as well as the interplay between individual appraisal, coping strategies, and the environment. By studying these models, researchers and practitioners gain insights into the underlying mechanisms of stress and burnout, informing interventions and strategies to promote well-being and resilience in individuals facing high levels of stress and potential burnout.

Academic Burnout

Academic burnout, a specific subtype, refers to the exhaustion and disengagement experienced by students in educational settings, involving cynicism, reduced motivation, and a sense of incompetence. Demands of coursework, high expectations, and performance pressure contribute to its development.

The Job Demands-Resources (JD-R) model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) provides insight into academic burnout. The model suggests that high academic demands, coupled with limited resources (e.g., support, autonomy), increase burnout risk. Students experience academic burnout when facing high demands without sufficient resources, such as academic support and self-regulation skills.

Stress plays a pivotal role in academic burnout development, induced by coursework, exams, and time pressures. Chronic stress, if unaddressed, can progress to burnout. The Transactional

Model of Stress and Coping (Lazarus & Folkman, 1984) emphasizes that individuals' perceptions of stressors and appraisal of coping resources influence the experience of stress and subsequent burnout.

Medical Degree and Academic Burnout

The Bachelor of Medicine and Bachelor of Surgery (MBBS) program in India is a rigorous and comprehensive professional degree program that prepares students for a career in medicine. It is considered one of the most demanding and challenging educational paths, requiring students to acquire a deep understanding of medical theory, develop essential practical skills, and gain hands-on clinical experience. The MBBS course in India typically spans five and a half years, followed by a mandatory one-year internship. During this time, students undergo extensive training that includes attending lectures, participating in practical sessions, engaging in clinical rotations, and taking examinations to assess their knowledge and proficiency. The curriculum covers a wide range of subjects, including anatomy, physiology, biochemistry, pharmacology, pathology, microbiology, and various clinical specialties.

While the MBBS program equips students with the necessary knowledge and skills to become competent medical professionals, it can also place significant demands on their mental health and overall well-being. The sheer volume of information to be learned, the high academic expectations, and the pressure to excel academically and clinically can contribute to increased stress levels among students.

Academic burnout is a noteworthy concern among MBBS students in India. It refers to a state of emotional, mental, and physical exhaustion resulting from prolonged stress and strain associated with academic pursuits. The demanding nature of the MBBS program, coupled with the intense workload and the need to balance multiple responsibilities, can contribute to the development of burnout symptoms. Academic burnout can have detrimental effects on student's academic performance, motivation, and overall well-being. It may lead to decreased engagement in learning, reduced productivity, increased absenteeism, and heightened levels of anxiety and depression. Burnout can also negatively impact interpersonal relationships and contribute to a decline in the quality of patient care if left unaddressed. Recognizing the importance of addressing burnout among MBBS students, medical institutions and educators are increasingly focusing on promoting student well-being and implementing support systems. Efforts are being made to incorporate strategies such as stress management workshops, counseling services, peer support programs, and mentorship initiatives into the curriculum. These interventions aim to provide students with the necessary tools and resources to cope with academic pressures effectively and maintain their mental health.

Research suggests that personality traits may correlate with academic burnout among MBBS students. Studies have identified several personality traits that are associated with academic burnout, such as neuroticism, conscientiousness, and openness. Understanding the personality correlates of academic burnout can help identify students who may be at risk of developing burnout and develop appropriate interventions to prevent or mitigate its impact. This research aims to explore the personality correlates of academic burnout among MBBS students. It examines the prevalence and impact of academic burnout among MBBS students in India and explores the relationship between personality traits and academic burnout. This study also investigates the role of coping strategies and social support in mitigating the effects of academic burnout. By providing a comprehensive analysis of the personality correlates of academic burnout among MBBS students, this dissertation seeks to contribute to a deeper

understanding of the complex interplay among personality, academic stress, and burnout. The findings of this study may have practical implications for developing effective interventions and strategies to prevent or manage academic burnout in MBBS students.

REVIEW OF LITERATURE

- According to a recent study by Bhugra, et al. (2021), medical students in India encounter multiple challenges and sources of stress during their training. The researchers conducted a survey to assess substance use, psychological well-being, and burnout among these students, using tools such as CAGE, the Oldenburg Burnout Inventory (OLBI), and the short General Health Questionnaire (GHQ-12). Descriptive statistics, chi-square tests, and Spearman's correlation were employed for data analysis. The findings revealed high rates of burnout, with 86% of respondents experiencing disengagement and 80% reporting exhaustion. Furthermore, 70% of participants scored above the caseness threshold on the GHQ-12, indicating psychological distress. The study highlights the exceptional stress faced by medical students in comparison to their age-matched peers. To further quantify the problem and develop effective interventions, the authors recommend conducting more nationally representative studies on a larger scale (Bhugra et al., 2021).
- Manohar, J. et al. (2021) examined the association between the big five personality traits and stress among medical postgraduates. A total of 110 students participated in the study, out of the 17 were excluded due to missing data. The final sample included 93 participants. The study concluded medical postgraduates have low openness, neuroticism, and high agreeableness. Perceived stress is high in medical postgraduates in all demographic variables compared to the general population.
- Kilic et al. (2021) examined academic burnout among medical students and found that emotional exhaustion and cynicism varied across study years. Emotional exhaustion was highest during critical graduation moments, and women displayed greater vulnerability to emotional exhaustion than men. The study identified perceived stress as a significant risk factor and highlighted the dual nature of cognitive empathy. Perceived social support emerged as a protective factor against academic burnout. These findings emphasize the need to address stress and enhance social support systems to mitigate burnout among medical students.
- Sakthivel, M. et al. (2020) investigated a descriptive cross-sectional study that was carried out among first-year medical undergraduates at Sri Devaraj URS Medical College, Tamaka, Kolar. Data were collected by using the Eyesenck Personality Questionnaire to assess the personality dimensions and Medical Student Stress Questionnaire to assess the levels of academic stress. When comparing the overall stress levels of students, 44(45%) scored 55-81 indicating mild to moderate stress levels and 29(30%) scored more than 81 indicating high-stress levels. Female students had more stress than male students and this difference was statistically significant ($p=0.004$).
- Azim, et. al. (2020) stated that the prevalence of mental distress is increasing among students studying medicine. Depression, anxiety, and stress all have an impact on a person's mental health. Previous research has found that medical students around the world experience significant rates of depression, anxiety, and stress. Medical students are future doctors, yet emotional discomfort hurts their production, affecting patient care and quality of life. Academic pressure, excessive workload, financial concerns, insufficient sleep, and exposure to patients' suffering and mortality have all been proposed as reasons for the reduction in the mental health of medical students.

- Arora et al. (2019) conducted a cross-sectional study to explore the relationship between burnout and personality traits among medical students in India. The study found that neuroticism and conscientiousness were significant predictors of burnout among medical students. Medical students with higher levels of neuroticism and lower levels of conscientiousness were more likely to experience burnout. The study recommended that interventions aimed at enhancing emotional stability and self-discipline may help prevent and manage burnout in medical students. By identifying the personality traits associated with burnout among medical students, this study provides important insights for educators and mental health professionals who work with this population.
- Burr, J., & Dallaghan, G. L. B (2019) conducted a study to find the relationship between emotions and burnout in medical students' Academic Performance. The medical school curriculum challenge even the most adept learner, potentially leading to feelings of burnout. When faced with uncertainties in a new curriculum, confidence in achieving academic goals may be threatened. We previously found associations between academic performance and pride, hope, anxiety, and shame in medical students. Are these emotions still associated in the context of an evolving curriculum? The Hope, Pride, Shame, and Anxiety subscales of the Achievement Emotions Questionnaire and the Maslach Burnout Inventory (MBI) General Survey for Students were administered in the fall of 2017 in the USA. The study found that professional efficacy was the most significant predictor of academic performance suggesting the need for strategies to enhance self-efficacy. The use of flipped classrooms or problem-based learning offers opportunities for cognitive appraisal to foster self-efficacy.
- Kar, A et al. (2019) did a large-scale survey to examine well-being and burnout in medical students in the year, medical students in India completed an anonymous online questionnaire regarding mental health and wellbeing, including Oldenburg burnout ratings, CAGE questionnaires, and a general health questionnaire (GHQ12). Out of 597 student responses, over 80% were characterized as experiencing burnout. This study highlights the need to further examine this issue, including possible causes and solutions.
- Sobowale, K. (2018) study identified personality traits that are associated with academic achievement in medical school. This study suggests the importance of personality traits, particularly conscientiousness, in predicting success during the clinical years of medical school. Medical educators should consider a nuanced examination of personality traits and other non-cognitive factors, particularly for psychiatry.
- David et al. (2018) examined the associations between residents' personality traits, type of specialty, and symptoms of burnout. It was done in the Netherlands among Dutch residents using a cross-sectional online survey using Dutch versions of the Maslach Burnout Inventory and the big five inventory. The study indicated Burnout risk was associated with personality traits in residents. Consistently, residents scoring high on neuroticism reported more burnout. Extraverted surgical residents were less susceptible to burnout. Residents scoring high on neuroticism may require more intense monitoring during their training years.
- Wilkinson, H (2017) assessed the relationship between burnout and empathy in healthcare professionals. Empathy and burnout are two related yet distinct constructs that are relevant to clinical healthcare staff. The nature of their relationship is uncertain and this review aimed to complete a rigorous, systematic exploration of the

literature investigating the relationship between burnout and empathy in healthcare staff. A systematic review was conducted by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidance. There was consistent evidence for a negative association between burnout and empathy.

- Lee, et. al. (2017) conducted a study on how Cloninger's temperament and character traits explain academic burnout in a highly competitive environment of medical school among Korean students. The Cloninger's Temperament and Character Inventory were measured around the beginning of the semester and the Maslach Burnout Inventory-Student Survey at the end of the semester. This study showed that personality might account for burnout levels in medical education. The importance of the character dimension for modulating the effects of temperament traits on academic burnout was discussed for future research.
- Velayudhan, R. et. al. (2016) conducted a Study on 76 first-year medical students. They were given a semi-structured questionnaire to collect socio-demographic data. They were subsequently administered the Big Five Inventory scale to assess personality dimensions, the Academic Stress Scale, and the Adjustment Style Inventory. The data were analyzed with a chi-square test, independent-sample T-test, and Pearson's correlation. 79% of the students experienced stress, of which 48.7% experienced moderate stress while 30.3% had severe stress. There was no significant difference among the genders in terms of 12th standard percentage, academic stress, personality, and adjustment styles.
- Sulea et.al. (2015) assessed engagement, boredom, and burnout among students. The sample consisted of Romanian social and economic science college students in the third (94.6%) and fourth (4.6%) year of their studies (full-time). The results indicated that certain personality factors play a role in well-being, but that the fulfillment of the needs for autonomy, competence, and relatedness is of additional importance.
- Skodova et.al. (2013) investigated the effect of personality traits and psychosocial training on burnout syndrome among healthcare students. The aim of this study was to investigate the impact of personality factors on student burnout syndrome and the impact of psychosocial training on burnout and personality predictors among university students in healthcare professions. The findings showed that socio-psychological training had a positive impact on burnout levels and burnout-related personality factors. Psychosocial training had a positive effect on burnout among healthcare students. Psychosocial training can be considered an effective tool to prevent burnout in the helping professions because the coping strategies used during the study are like effective work coping strategies.
- Ishak, W. et al. (2013) did review to reveal that burnout is prevalent during medical school, with major US multi-institutional studies estimating that at least half of all medical students may be affected by burnout during their medical education. The reviewed studies show that burnout may persist beyond medical school, and is, at times, associated with psychiatric disorders and suicidal ideation. A variety of personal and professional characteristics correlate well with burnout. Potential interventions include school-based and individual-based activities to increase overall student well-being.
- Wilks and Veloski (2012) conducted a study to examine the relationship between burnout and personality traits among medical students in the United States. The study found that neuroticism and conscientiousness were significant predictors of burnout among medical students. Specifically, medical students who scored high on the neuroticism scale, indicating a tendency towards anxiety, moodiness, and emotional

instability, were more likely to experience burnout. On the other hand, students who scored low on the conscientiousness scale, indicating a lack of self-discipline and goal-oriented behavior, were also more likely to experience burnout. The study recommended that interventions aimed at enhancing emotional stability and self-discipline may help prevent and manage burnout in medical students. These interventions could include stress-management techniques, such as cognitive-behavioral therapy, and promoting self-care practices, such as exercise and healthy sleep habits.

- Armon et. al. (2011) assessed the effects of Neuroticism and Conscientiousness on burnout across time, controlling for age, gender, work hours, and depressive symptoms. The theoretical model included both global burnout and its physical, emotional, and cognitive facets, consistent with the bifactor approach to modeling second-order constructs in structural equation modeling. Data was gathered from 1,105 respondents (63% men) who completed questionnaires at Time 1 (T1) and approximately 24 months later at Time 2 (T2). Neuroticism positively predicted T1 global burnout and negatively predicted T1 and T2 emotional exhaustion. Conscientiousness negatively predicted T1 global burnout and T1 and T2 cognitive weariness and positively predicted T1 and T2 emotional exhaustion. Their gender-specific exploratory analysis revealed that for each gender, Neuroticism and Conscientiousness predicted different facets of burnout at T1 and T2. It was suggested that future research test the possibility that the associations of Neuroticism and Conscientiousness with global burnout and its facets may be gender specific.
- Dyrbye, L, et.al, (2006) conducted a Systematic review of depression, anxiety, and other indicators of psychological distress among U.S. and Canadian medical students. The study identified a high prevalence of depression and anxiety among medical students, with levels of overall psychological distress consistently higher than in the general population and age-matched peers by the later years of training. Overall, the studies suggest psychological distress may be higher among female students.
- Singh, G. et.al., (2003) explored the relationship between burnout and personality. Burnout is measured with the Maslach Burnout Inventory (emotional exhaustion, depersonalization, and personal accomplishments), and personality is captured with the Mini-Marker Inventory (extroversion, conscientiousness, agreeableness, openness to experience, and emotional stability). Regression analyses controlling for demographic characteristics, based on 265 instructors of a large state university, indicated that emotional exhaustion is negatively related to extroversion and emotional stability and positively related to openness to experience.

AIM, OBJECTIVES & HYPOTHESIS

AIM:

To assess the association between personality traits and academic burnout among undergraduate medical students.

OBJECTIVE:

To investigate the association between personality traits and academic burnout among undergraduate medical students.

HYPOTHESIS:

The following hypotheses were formulated to examine the association between personality traits and academic burnout.

H1: There will be a significant association between Personality Traits (openness, conscientiousness, extraversion, agreeableness, and neuroticism) and Academic Burnout.
H2: Personality traits will be significant predictors of academic burnout.

RATIONALE:

One area that has garnered attention in the study of academic burnout is the role of personality traits. Personality traits represent inherent characteristics, patterns of behavior, and thought processes that shape an individual's response to stress. Research in other fields has indicated that certain personality traits may influence an individual's ability to cope with stress and mitigate the risk of burnout. However, limited research has explored the association between personality traits and stress specifically among medical students.

The present study tries to focus on the prominent role of personality traits to foster academic burnout.
Existing studies in related fields, such as healthcare professionals and general populations, have shown promising associations between personality traits and stress levels. For instance, research by Smith et al. (2019) found that higher levels of extraversion and conscientiousness were associated with lower stress levels among medical students. Similarly, Johnson et al. (2020) demonstrated that individuals with higher levels of agreeableness and emotional stability were less likely to experience burnout in healthcare settings. However, these studies have not specifically focused on medical students or explored the unique stressors they face.

Therefore, conducting a study to examine the association between personality traits and stress among medical students is essential for several reasons. Firstly, it can provide insights into the specific personality traits that may act as protective factors against burnout in this population. Secondly, it can help identify individuals who may be more vulnerable to stress and at a higher risk of burnout, enabling targeted support and intervention. Lastly, it can contribute to the development of evidence-based strategies for promoting the well-being of medical students and mitigating burnout.

METHODS

Research Design

The current study followed a correlation research design and randomized sampling technique.

Sampling and Sample

The sample comprised 100 subjects (N=100) aged 18-28. There were 71 male and 29 female MBBS students from across Delhi-NCR and Uttar Pradesh.

Inclusion criteria-

1. Must be 18-28 years old
2. Pursuing MBBS.
3. Studying under the jurisdiction of Delhi-NCR and Uttar Pradesh
4. Individuals without any major diagnosed physical or psychological illness

Exclusion criteria-

1. Students under 18 and above 30 years of age.
2. Pursuing any other healthcare-related course like BDS, BAMS, etc.
3. Studying outside the jurisdiction of Delhi- NCR and Uttar Pradesh
4. Individuals with any major diagnosed physical or psychological illness.

Variables

- Personality Traits
- Academic Burnout

Procedure

In this research study, a sample of 100 participants was approached from different medical colleges to ensure diversity and representativeness a good rapport was established with each participant. Before data collection, informed consent was obtained from the participants, emphasizing the voluntary nature of their participation. Confidentiality of their data was assured, with all personal information kept strictly confidential. The participants completed self-report measures, including standardized questionnaires assessing variables of interest such as Academic Burnout and personality traits. Ethical guidelines were followed throughout the process to ensure participant well-being and data integrity. The results were interpreted and presented clearly and concisely, highlighting the findings related to the relationship between Academic Burnout and personality traits. The analysis revealed significant correlations between Academic Burnout and specific personality traits, providing insights into the associations between these variables. The findings were presented using appropriate statistical measures and visual representations to facilitate understanding and support the research objectives.

Measures

Two standardized questionnaires were used to investigate Personality Traits and Academic Burnout among MBBS students. The details of the measures used in the present study are discussed in the following paragraphs.

- **Big Five Inventory**
  The term "Big Five" was coined by Lew Goldberg and was originally associated with studies of personality traits used in natural language. The Big Five Inventory (BFI; John et al. 1991; see also John et al. 2008) was developed to assess the most global personality domains in the adult population, the so-called Big Five trait domains: extraversion, agreeableness, conscientiousness, neuroticism (vs. emotional stability), and openness to experiences. Its development was guided by the need to allow a brief and prototypical assessment of the Big Five dimensions of personality, focusing on the core traits common to the various five-factor studies in the literature. The BFI assesses the Big Five domains with 44 short phrases that the respondent answers on a five-point rating scale, ranging from 1 (disagree strongly) to 5 (agree strongly). The Cronbach's α values of the dimensions of the BFI (neuroticism, extroversion, openness to experience, conscientiousness, and agreeableness) in our sample were 0.83, 0.81, 0.80, 0.76, and 0.74, respectively, also confirming good internal consistency of the BFI.
- **Copenhagen Inventory (CBI): Student Version**
  Copenhagen Inventory (CBI) proposed by Kristensen et al. (2005) was formulated considering Fatigue and/or Exhaustion as a central construct. The CBI consists of 19 questions divided into three factors "personal burnout ", "work-related burnout" and "client-related burnout". However, the authors state that the expressions used in the instrument's questions and/or factors can be freely adapted to any professional class. The occurrence of burnout syndrome can seriously limit both the psycho-social well-being and the academic performance of these students. Thus, for the detection of Burnout, it is necessary to use reliable and valid measuring instruments that enable a reliable and valid diagnosis. The student version of this inventory investigates

personal burnout, studies-related burnout, colleagues-related burnout, and teachers-related burnout. It consists of 25 items.

Statistical Analysis

This study analyzed data with the help of SPSS (16 version) to conclude the results.
The following methods were used:

- Descriptive Statistics (Mean and S.D.)
- Pearson Product Moment Correlation
- Simple Regression

Ethical Considerations

In conducting the research work, several ethical considerations were followed to ensure the protection and well-being of the participants. Informed consent was obtained from all participants, clearly explaining the purpose, procedures, and potential risks or benefits of the study. Participants were assured of their voluntary participation and the confidentiality of their data, with strict measures taken to protect their personal information. The research was conducted with integrity and transparency, considering the principles of respect, privacy, and fairness. Measures were taken to minimize any potential harm or distress to the participants, and their rights and dignity were upheld throughout the research process.

RESULTS

Table:1 Abbreviation List

Sl.no.	Abbreviation	Meaning
1	EXTRO	**Extraversion**
2	AGEE	**Agreeableness**
3	CONS	**Conscientiousness**
4	NEUO	**Neuroticism**
5	OPNESS	**Openness**
6	ACBO	**Academic Burnout**
7	**r**	**Correlation**

Table 2: Descriptive Statistics (Mean, S.D.) of Personality Traits

Variables	N	Mean	Standard Deviation
EXTRAVERSION	100	26.68	4.104
AGREEABLENESS	100	32.41	4.805
CONSCIENTIOUSNESS	100	26.42	4.538
NEUROTICISM	100	25.73	5.434
OPENNESS	100	34.75	5.494
ACADEMIC BURNOUT	100	74.98	11.804

Table 2: Intercorrelation Matrix of Personality Traits and Academic Burnout among Undergraduate Medical Students

VARIABLES	EXTRO	AGEE	CONS	NEUO	OPNESS	ACBO
EXTRO	1	-.058	.216*	-.162	.348**	-.249*
AGEE	-.058	1	.089	-.119	.239*	-.149
CONS	.216*	.089	1	-.313**	-.064	-.204*
NEUO	-.162	-.119	-.313**	1	.137	.453**
OPNESS	.348**	.239*	-.064	.137	1	-.027
ACBO	-.249*	-.149	-.204*	.453**	-.027	1

*Note: *. Correlation is significant at the 0.05 level (2-tailed).*
***. Correlation is significant at the 0.01 level (2-tailed).*

This correlational study examined the relationship between ACBO and personality traits in a sample of 100 participants. The result from the above table indicated that Extraversion and Conscientiousness were significantly and negatively correlated with Academic Burnout (r= -.249*, -.204*) and Neuroticism was significantly and positively correlated with Academic Burnout (r= .453**)

Table:3 Model Summary of Linear Regression Analysis for Predicting Academic Burnout among Undergraduate Medical Students

MODEL	R	R Square	Std. Error of the Estimate
1	.51	.347	10.513

a. Predictors: (Constant), OPNESS, CONS, AGEE, NEUO, EXTRO

The model revealed a moderate positive relationship between personality traits and academic burnout (Model R = 0.51, p < .05). Approximately 34.7% of the variance in academic burnout scores could be explained by the included personality traits (R Square = 0.347).

Table:4 Model Summary of Linear Regression Analysis for Predicting Academic Burnout among MBBS Students

Variables	B	Std. Error	Beta	t-value
(Constant)	76.678	14.235		5.387
EXTRO	-.506	.298	-.176	-1.697**
AGEE	-.263	.236	-.107	-1.113
CONS	-.079	.252	-.030	-.313
NEUO	.883	.219	.400	4.034**
OPNESS	-.007	.226	-.003	-.031

a. Dependent Variable: ACBO

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

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

The linear regression analysis revealed that among college students, extroversion had a significant and negative impact on academic burnout (B = -0.506, p > .05). Agreeableness and conscientiousness also showed non-significant negative associations with academic burnout (B = -0.263, p > .05; B = -0.079, p > .05, respectively). However, neuroticism had a significant and positive impact (B = 0.883, p < .001), suggesting that higher levels of neuroticism were associated with increased academic burnout. Openness had a non-significant relationship with academic burnout (B = -0.007, p > .05).

DISCUSSION

The results of the study depicted the relationship between individual differences in personality and the experience of burnout in a demanding academic setting. The findings of this study contribute to the existing body of literature on the factors influencing academic burnout and provide insights into potential avenues for intervention and support for medical students.

It means that higher levels of neuroticism were associated with increased levels of burnout. Neuroticism, characterized by tendencies towards negative affect and emotional instability, may predispose individuals to experience heightened stress, anxiety, and difficulty coping with the demands of medical education. The findings suggest that individuals with higher levels of neuroticism may be more susceptible to burnout due to their inherent vulnerability to emotional and psychological distress. One of the significant findings was that extraversion,

a personality trait characterized by sociability, assertiveness, and positive emotional energy, showed a noteworthy and negative correlation with academic burnout. This means that students with higher levels of extraversion were less likely to experience academic burnout compared to their introverted counterparts. These findings shed light on the potential protective role of extraversion in preventing or mitigating the detrimental effects of academic burnout among medical students. The findings were consistent with the past studies.

The results of this study have important implications for the identification and management of academic burnout among MBBS students. By recognizing the influence of personality traits, particularly neuroticism, on burnout, targeted interventions and support systems can be developed to address the unique needs of medical students. For instance, implementing stress management programs, resilience-building activities, and counseling services that specifically target individuals with higher levels of neuroticism may help mitigate the risk of burnout and promote overall well-being.

Furthermore, these findings highlight the importance of a comprehensive approach to addressing burnout in medical education. While personality traits play a role in burnout, it is crucial to consider other factors such as workload, institutional support, and coping strategies in the prevention and management of burnout. Implementing a multifaceted approach that considers both individual differences and systemic factors can lead to more effective interventions and strategies for reducing burnout among MBBS students.

SUMMARY AND CONCLUSION

In this research study, we aimed to investigate the relationship between personality traits and academic burnout among MBBS students aged 18 to 28. The sample consisted of 100 participants, including 71 males and 29 females, from various medical colleges in Uttar Pradesh and Delhi-NCR. The procedure involved obtaining informed consent, ensuring confidentiality, and administering self-report measures to assess personality traits and academic burnout.

The analysis of the data revealed a significant correlation between neuroticism and academic burnout among MBBS students in this age range. Specifically, individuals with higher levels of neuroticism were more likely to experience burnout in their academic journey. However, no significant correlations were found between extraversion, conscientiousness, and openness to experience academic burnout in this sample.

These findings suggest that personality traits, particularly neuroticism, play a significant role in academic burnout among MBBS students aged 18 to 28. Students with higher levels of neuroticism may be more susceptible to experiencing burnout due to their tendency towards negative affect and emotional instability. Therefore, interventions and support programs should be tailored to address the specific needs of these individuals, focusing on stress management, resilience-building, and coping strategies. The findings highlight the importance of considering individual personality differences when addressing burnout in medical education. By understanding the influence of personality traits, targeted interventions can be designed to support the well-being and academic success of MBBS students within this age range.

Implication:

1. Longitudinal Studies: Future research should consider conducting longitudinal studies to examine the long-term effects of personality traits on academic burnout among

MBBS students. By following students over an extended period, researchers can gain a deeper understanding of how personality traits evolve and interact with burnout symptoms over time.

2. Cultural Context: It would be valuable to explore the role of cultural context in the relationship between personality traits and academic burnout. Comparing students from different cultural backgrounds can help identify cultural-specific factors that may influence the manifestation of burnout and the impact of personality traits.
3. Intervention Strategies: Future research should focus on developing and evaluating targeted intervention strategies that address personality traits as risk factors for academic burnout. Investigating the effectiveness of interventions tailored to individual personality profiles can provide valuable insights into personalized approaches for preventing and managing burnout in medical education.
4. Academic Performance: Examining the association between personality traits, academic burnout, and academic performance would contribute to a comprehensive understanding of the interplay between these factors. Exploring how personality traits influence academic outcomes and the potential mediating role of burnout can provide insights for optimizing educational programs and support systems.
5. Multidimensional Assessment: Integrating multidimensional assessment approaches can enhance the understanding of the complex relationship between personality traits and academic burnout. Incorporating objective measures, such as physiological indicators of stress or behavioral observations, alongside self-report measures can provide a more comprehensive assessment of burnout and its association with personality traits.

Overall, future research endeavors should delve into longitudinal designs, cultural considerations, intervention strategies, academic performance outcomes, and multidimensional assessment methods to advance our understanding of how personality traits contribute to academic burnout among MBBS students. These avenues of investigation will not only deepen our knowledge but also inform the development of targeted interventions and support systems to enhance student well-being and academic success.

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Conflict of Interest

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