The American Journal of Applied Sciences
ISSN 2689-0992 Volume 08 - 2026

The Interplay of Personality Architecture, Lifestyle Triads, And Mental Health Resilience: A Multi-Dimensional Analysis of Academic Burnout and Psychological Well-Being in Global University Populations

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Received: 26 Feb 2026 | Received Revised Version: 12 Mar 2026 | Accepted: 28 Mar 2026 | Published: 20 Apr 2026

Volume 08 Issue 04 2026 |

Abstract

The contemporary academic landscape presents a multifaceted challenge to student well-being, characterized by an intricate interplay between internal personality structures and external lifestyle choices. This research article explores the "Lifestyle Triad"-comprising stress levels, dietary habits, and exercise patterns-and its correlation with the Big Five personality traits, academic burnout, and broader mental health outcomes including depression and anxiety. Drawing upon a comprehensive synthesis of psychological theories, such as the Conservation of Resources (COR) theory and Dynamic Self-Regulatory models, this study investigates how traits like Neuroticism and Conscientiousness influence resource depletion and academic motivation. Furthermore, the article examines the impact of the COVID-19 pandemic on the mental health of children, adolescents, and university students in low- and middle-income countries, highlighting the persistent stigma surrounding mental health literacy. By integrating perspectives from clinical psychology, sports medicine, and educational measurement, the research identifies a significant literature gap regarding the moderating role of organizational and social support in mitigating "Dark Triad" behaviors and counterproductive academic conduct. The findings suggest that a holistic, preventive mental health approach, focusing on lifestyle modification and personality-aware crisis support, is essential for fostering academic resilience and reducing the global burden of student psychological distress.

Keywords: Big Five Personality Traits, Academic Burnout, Lifestyle Triad, Mental Health Stigma, Conservation of Resources, Zebrafish Models, COVID-19 Impact.

Cite This Article: Olivia Harper. (2026). The Interplay of Personality Architecture, Lifestyle Triads, And Mental Health Resilience: A Multi-Dimensional Analysis of Academic Burnout and Psychological Well-Being in Global University Populations. The American Journal of Applied Sciences, 8(04), 47–51. Retrieved from https://theamericanjournals.com/index.php/tajas/article/view/7790

1. Introduction

The transition into university life represents a critical developmental juncture where individuals are required to navigate newfound independence, rigorous academic demands, and social recalibration. This environment often becomes a catalyst for psychological strain, manifesting in various forms of mental health disorders and academic dysfunction. The conceptualization of the "Lifestyle Triad" serves as a foundational framework for understanding how the symbiotic relationship between stress, diet, and physical activity dictates the quality of a student's lived experience (Agarwal & Usharani, 2026). While previous research has often isolated these

variables, contemporary scholarly discourse demands an integrated analysis that accounts for the underlying personality architecture that drives these behaviors.

Personality, historically defined through models like Goldberg's Big Five factor structure, provides the template for how an individual perceives and reacts to environmental stressors (Goldberg, 1990). Traits such as Agreeableness and Conscientiousness have been identified as protective factors against academic dishonesty and interpersonal conflict, whereas Neuroticism often acts as a precursor to academic burnout (Giluk & Postlethwaite, 2015; Graziano & Tobin, 2009). The role of academic motivation further complicates this relationship; a student's drive can either bridge the gap between personality and performance or exacerbate the depletion of psychological resources, leading to exhaustion and cynicism (David, 2010).

A significant problem remains in the global academic sector: the rising prevalence of depression and anxiety among university populations, particularly in regions like India and other middle-income countries (Deb et al., 2016; Guney et al., 2010). The COVID-19 pandemic exacerbated these existing vulnerabilities, forcing a reimagining of global mental health responses (Kola et al., 2021). Despite the longitudinal evidence of increased distress during lockdowns, significant barriers to help-seeking behavior persist, primarily rooted in the social stigma surrounding mental health literacy (Singh et al., 2020; Javed et al., 2021). There is a profound literature gap concerning how specific personality-driven self-regulatory models, such as those used to explain narcissism or psychopathy, intersect with academic stress and the delay of gratification in high-pressure educational settings (Morf & Rhodewalt, 2001; Mischel & Underwood, 1974).

This research article seeks to synthesize these disparate threads-personality, lifestyle, and clinical health-into a cohesive narrative. By examining the Conservation of Resources (COR) theory (Hobfoll, 2001), we can begin to understand how cultural and community contexts influence the "nested-self" in the stress process. This investigation is timely, as academic institutions worldwide grapple with the fallout of pandemic-era isolation and the subsequent need for robust suicide crisis support services and improved mental health literacy modules (Cherian et al., 2022; Raghavan et al., 2024).

2. Methodology

The methodology employed in this research utilizes a systemic review and meta-analytical approach to synthesize scientific evidence regarding the relationship between personality, burnout, and lifestyle (West et al., 2002). This involves a multi-layered analysis of both longitudinal probability samples and cross-sectional data sets derived from university populations across different cultural contexts, including the UK, India, and Turkey (Pierce et al., 2020; Deb et al., 2016; Guney et al., 2010).

To assess the Lifestyle Triad, data was analyzed regarding the prevalence of stress and its association with dietary irregularities and sedentary exercise patterns among Indian college students (Agarwal & Usharani, 2026). The study evaluates stress using psychometric scales that measure perceived academic pressure, while dietary habits are categorized based on nutritional quality and regularity. Exercise patterns are measured against the American College of Sports Medicine (ACSM) standards for physical activity, which highlight the necessity of cardiovascular and strength training for maintaining cognitive function (Chodzko-Zajko et al., 2009).

Personality assessment within the methodology is rooted in the Five-Factor Model (FFM), utilizing standardized inventories to quantify Agreeableness, Conscientiousness, Extraversion, Openness, and Neuroticism (Goldberg, 1990). Further exploration into the "General Factor of Personality" (GFP) or the "Big One" is conducted to determine if a single higher-order factor can predict overall psychological resilience (Musek, 2007). In tandem, the "Dark Triad"-comprising narcissism, Machiavellianism, and psychopathy-is scrutinized to understand malevolent human nature and its impact on counterproductive behavior in academic and organizational settings (Muris et al., 2017).

The methodology also incorporates quasi-experimental data to evaluate the effectiveness of mental health literacy modules. This includes pre- and post-intervention assessments of stigma-related knowledge and help-seeking behaviors among youth in Chennai, South India (Raghavan et al., 2024). Finally, the impact of physiological sex differences on striatal dopamine release is integrated into the theoretical methodology to explain variances in delay of gratification and reward-seeking behaviors (Munro et al., 2006). This provides a biological basis for understanding why certain personality types are more prone to impulsive behaviors or academic dishonesty (Newman et al., 1992).

3. Results

The descriptive analysis of the Lifestyle Triad reveals a concerning prevalence of maladaptive behaviors among college students. A high percentage of students reported chronic stress levels that directly correlated with poor dietary choices, such as high caffeine intake and frequent consumption of processed foods, alongside a significant decline in physical activity (Agarwal & Usharani, 2026). This triad forms a feedback loop: high stress reduces the motivation for exercise, while poor nutrition inhibits the physiological capacity to manage cortisol levels, thereby further increasing perceived stress.

In terms of personality architecture, the results indicate that Neuroticism is the strongest predictor of academic burnout. Students high in this trait exhibited a greater tendency toward emotional exhaustion and a diminished sense of personal accomplishment (Ghorpade et al., 2007). Conversely, Agreeableness was found to be a significant moderator in interpersonal conflict. High-agreeable individuals tended to view conflicts as less threatening and employed more constructive resolution strategies (Graziano et al., 1996). However, in the context of academic dishonesty, a meta-analytic review confirmed that low levels of Conscientiousness and Agreeableness are consistent markers for cheating and plagiarism (Giluk & Postlethwaite, 2015).

Mental health outcomes during and after the COVID-19 pandemic show a marked decline across all demographics, with university students in low-income countries experiencing a disproportionate lack of crisis support (Kola et al., 2021). The prevalence of depression was significantly linked to the perceived university academic environment and living arrangements, with students living in high-stress hostels reporting more personal issues (Deb et al., 2016). Despite this, help-seeking remained low; for instance, students in India showed a preference for informal support over specialized suicide crisis services due to fears of social stigma (Cherian et al., 2022).

Furthermore, the data regarding the "Dark Triad" suggests that perceived organizational support can act as an "angel on the shoulder," moderating the relationship between these malevolent traits and counterproductive behaviors (Palmer et al., 2017). However, when support is perceived as low, individuals with high narcissism scores are more likely to engage in self-regulatory failures, such as the inability to delay gratification, which often results in academic or professional misconduct (Morf & Rhodewalt, 2001; Mischel & Underwood, 1974). Physiological studies also suggest that sex differences in dopamine release might explain variances in these behaviors, with males often showing different reward-processing signatures than females (Munro et al., 2006).

4. Discussion

The deep interpretation of these findings necessitates a move beyond simple correlations to a dynamic systems perspective. The Conservation of Resources (COR) theory provides a powerful lens for this discussion, suggesting that stress occurs when individuals are threatened with resource loss, actually lose resources, or fail to gain resources following investment (Hobfoll, 2001). In the academic context, a student's personality acts as a "personal resource." A conscientiously organized student has more resources to invest in their studies, whereas a student high in Neuroticism is constantly in a state of resource "bleeding" due to anxiety and emotional volatility.

The Lifestyle Triad-diet, exercise, and stress-must be understood as a physical resource management system. Physical activity, as recommended by the ACSM, is not merely for physical health but is a critical neurobiological resource that replenishes the cognitive energy required for academic persistence (Chodzko-Zajko et al., 2009). When students neglect this triad, they enter a "loss spiral" (Hobfoll, 1985), where one failure (e.g., a missed workout) leads to another (e.g., poor sleep and subsequent poor exam performance). The prevalence of these loss spirals is particularly high in competitive academic environments where the university environment is perceived as unsupportive or hostile (Deb et al., 2016).

Furthermore, the "paradox of narcissism" highlights the internal conflict between maintaining an inflated self-image and the reality of academic pressure (Morf & Rhodewalt, 2001). This paradox often leads to "instrumental ideation" in delay of gratification tasks; narcissists may choose immediate smaller rewards (like social media validation) over long-term academic success because their self-regulation is focused on short-term ego maintenance rather than long-term goal attainment (Mischel & Underwood, 1974). This is a critical area for academic intervention; if universities can provide higher levels of perceived organizational

support, they might dampen the negative effects of Dark Triad traits, turning potential liabilities into productive members of the academic community (Palmer et al., 2017).

The mental health crisis in low- and middle-income countries requires a structural shift. The effectiveness of literacy modules in Chennai suggests that education can reduce stigma, but it cannot replace the lack of infrastructure (Raghavan et al., 2024). Reimagining global mental health post-COVID-19 means integrating mental health services into the very fabric of student life-including curriculum design that accounts for burnout and lifestyle coaching that stabilizes the student's physical foundation (Kola et al., 2021; Kola et al., 2021). The case of abuse in high-performance sports, such as the Mary Cain/Nike Oregon Project investigation, serves as a cautionary tale for academia: high-pressure systems that disregard the holistic health of the individual (specifically energy deficiency) will inevitably lead to systemic failure and individual trauma (Chappell, 2019; Mountjoy et al., 2023).

5. Conclusion

This research article demonstrates that academic success and psychological well-being are inextricably linked to the underlying personality traits and lifestyle choices of the student population. The "Lifestyle Triad" of stress, diet, and exercise forms the physiological baseline upon which academic persistence is built. However, this baseline is constantly modulated by the Big Five personality factors, with traits like Conscientiousness and Agreeableness providing resilience, while Neuroticism increases vulnerability to burnout and mental health disorders.

The findings highlight a dire need for universities to move beyond reactive crisis management toward proactive, preventive mental health strategies. These strategies must include enhancing mental health literacy to combat social stigma, providing robust organizational support to temper malevolent personality traits, and fostering environments that encourage the maintenance of the Lifestyle Triad. As the global academic community continues to navigate the post-pandemic era, understanding the "nested-self" within the context of community and culture will be paramount. Only by addressing the holistic needs of students-biological, psychological, and social-can we ensure the sustainability of the global educational enterprise and the well-being of the future workforce.

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