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Conceptual Framework on the Interplay Between Basic Psychology, Mental Health and Academic Performance

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Abstract: Academic performance is a multidimensional parameter that extends beyond cognitive ability and includes emotional, behavioural, and psychological aspects of students' learning. It is the product of the knowledge and skills students possess and is the basis for them to pursue a higher education and career as well as lifelong learning. While most of us think of cognitive capabilities as the main determinants of academic success, there is growing evidence that psychological characteristics and mental health are equally important as well. In this paper, we conceptualise the interplay of the basic psychological characteristics, such as cognitive skills, personality and motivation, and mental health factors (e.g., anxiety, depression and emotional well-being), and what influences students' academic achievement in school. By incorporating all of the psychological theories (i.e., Self-Determination Theory, Social Cognitive Theory and Broaden-and-Build Theory), we have developed an integrated theory to explain the interplay of psychological and mental health in academic achievement. This paper contributes to the literature through the application of these theoretical frameworks to show how self-efficacy, self-regulated learning, and affective states are the most important mediating factors in psychological attributes and mental health in academic achievement. It also challenges conventional educational paradigms in the sense that emotional well-being and psychological resilience are cognitive and academic success factors rather than just the outcome of an individual's achievement. This conceptual paper provides a powerful overview of psychological factors in academic performance and is very useful to students (and higher education institutions) and policymakers for improving student well-being and academic performance.

Keywords: *Academic Performance, Basic Psychology, Mental Health, Self-Determination Theory, Social Cognitive Theory*, *Broaden-and-Build Theory*

1. Introduction

Academic performance is a driver of future education, career opportunities, and mobility in general. Beyond its individual implications, it is a core driver of human capital development, economic competitiveness, and long-term sustainable growth in a nation. Academic achievement in higher education cannot be explained purely by cognitive ability, even though it is a meaningful predictor of performance. In modern educational systems, success relies much more on the ability to think. Students need more than intellectual ability to succeed in complex academic environments. A student needs to have the cognitive capacity to learn, the psychological organisation that guides the goals to be achieved and the mental health to have a functioning mind at all times (Alruthaya et al., 2025).

In addition to being able to understand abstract concepts, maintain focus on learning, solve problems, and retain information, successful students will also need a lot more psychological and behavioural skills. Academic achievement is a critical aspect of academic life as it develops knowledge and skills (Pham Thi et al., 2025). A good education in a university is good for the future and human capital, as well as the development of society. Mental health issues faced by university students are increasing globally (Arhin, 2024). Mental health problems lead to a student being unable to concentrate and learn well, and poor academic performance can also affect students' performance (Arhin, 2024). That is, poor mental health may make students feel they can't get to where they want to go as well.

In the Malaysian context, understanding the relationship between basic psychological traits, mental health, and academic performance is increasingly important as higher education institutions strive to develop graduates who are both academically competent and psychologically resilient. Malaysian university students face growing challenges, including academic pressure, financial stress, career uncertainty, and the demands of digital learning, all of which can negatively affect their well-being and academic success. However, existing local research has largely examined psychological factors and mental health separately, creating a gap in

understanding their combined influence on academic performance. Therefore, this conceptual paper proposes an integrated framework to provide a more holistic understanding of these relationships and to support the development of evidence-based interventions and educational policies that promote both student well-being and academic excellence.

For decades, researchers have been working on Grade Point Averages (GPA) by considering a wide range of factors (i.e., intellectual ability, personality traits, psychosocial factors, and motivational models) (Harris, 1940; Neisser et al., 1996). Now, academic performance is more than grades, and we have more than one metric that we know about (i.e., grades), but we have a better idea of what it is like to work hard, think critically, and be able to solve problems and cope with the challenges in life (Alruthaya et al., 2025; Sultanova et al., 2024). Due to these reasons, studying the psychological and mental health factors of academic achievement has been a major focus of educational research (Zhu et al., 2026). And so, in this perspective, we focus on two primary determinants of school performance: basic psychological factors (cognition, personality, motivation, and self-regulation) and mental health indicators (emotional well-being, anxiety, stress, and depression). With the view of the above, we need to find out if and how basic psychological factors and mental health affect students' academic performance. This connection is crucial in explaining the differences in how educational performance is affected and in providing an understanding of how to improve psychological well-being and academic performance.

The next few sections work out the progression of the study. The literature review first provides a synthesis of the literature on the topic and the theoretical and empirical basis, and in particular, the main gaps of the existing literature. Then the methodology section describes the qualitative approach of the study and the theoretical background (the data sources and the analytical approach) which has been used in the synthesis. Finally, the findings and discussion section summarizes the key points from the literature and the analysis based on the theoretical background and the previous literature to provide a comprehensive picture of the phenomena.

2. Literature Review

Basic Psychology and Academic Performance

Cognitive abilities and personal characteristics are widely regarded as important aspects of basic psychology that have an impact on academic performance. Academic achievement is directly related to general and specific cognitive abilities. Although general cognitive ability is the basis of all aspects of cognitive ability, specific areas such as fluid intelligence and working memory are necessary for complex problem solving, reading comprehension, and knowledge manipulation (Garner & Robison, 2026).

Apart from cognition, personality traits are key to educational outcomes. Conscientiousness is the most reliable predictor of academic performance among personality traits and is not related to intelligence (Garner & Robison, 2026). Students with high conscientiousness are disciplined, creative, and have good organizational skills, which makes them able to cope with study and academic pressure well (Garner & Robison, 2026). Neuroticism is negatively associated with academic performance because it is associated with emotional instability and higher vulnerability to stress and is a predictor of poorer academic performance (Aboushawareb et al., 2026). Students with high conscientiousness are more likely to have positive learning experiences, adaptable coping responses to situations, manage their emotions, and be more self-centered. Lower conscientiousness may further increase our susceptibility to stress, anxiety, and emotional exhaustion and thus hurt our mental health and academic performance.

Motivation is the psychological fuel that transforms cognitive ability into tangible achievement (Pham Thi et al., 2025). Ryan and Deci's Self-Determination Theory is a broad tool to understand the psychology of motivation in education (Murad & Alajmi, 2026). Informed by Self-Determination Theory, intrinsic motivation is high when the students' basic psychological needs for autonomy, competence, and relatedness are fulfilled (Murad & Alajmi, 2026). Inactive environments that lack these needs can sap motivation and lead to burnout, especially when the motivation is based on extrinsic rewards (Murad & Alajmi, 2026).

Self-efficacy, based on Social Cognitive Theory (SCT), is the belief that a student can do what they need to do to achieve certain goals (Arhin, 2024; Wang et al., 2025). High academic self-efficacy leads to a student's effort level that is high, so that students can continue to work hard in school and can use creative learning strategies.

Academic self-efficacy is a buffer to cope with mental health stressors and academic performance in a way that helps a resilient student to continue to succeed in the face of stress (Arhin, 2024; Wang et al., 2025). Self-Regulated Learning is a process where learners monitor, direct, and follow their thoughts, feelings, and behavior so that they are able to achieve their goals (Wang et al., 2025). SRL is a bridge, connecting positive emotions and affective learning methods to academic performance (Wang et al., 2025). Motivation plays a crucial role in the overall learning environment (Pham Thi et al., 2025).

Mental Health and Academic Performance

Anxiety, stress, and depression are common factors in academic performance (Arhin, 2024; Shillington et al., 2026). Negative emotional states are a drain on resources, which affect working memory, attention, and executive functioning and hence are critical to learning (Zhu et al., 2026). For example, high specific distress, such as math anxiety, can cause cognitive interference and reduce learning in STEM subjects (Hossain et al., 2025). But the relationship between distress and academic performance is nuanced. The Yerkes-Dodson Law indicates that mild stress or anxiety can work as an adaptive motivator for students to be more alert and not avoid issues (Arhin, 2024). But when stress crosses into chronic distress or depression, it is common to predict low engagement, low self-efficacy and poor academic performance (Aboushawareb et al., 2026; Arhin, 2024).

In contrast to the narrowing effect of psychological distress, positive emotional well-being improves a student's learning (Carmona-Halty et al., 2019). In line with the Broaden-and-Build Theory, positive emotions (e.g., joy, hope, pride) expand a student's thought-action repertoire, enhancing cognitive flexibility, creativity, and problem-solving abilities (Cherono et al., 2026). These positive emotions "build" lasting psychological resources, such as resilience, for future academic stressors (Cherono et al., 2026; Das et al., 2025). Positive emotions are associated with higher academic motivation, SRL and better grades (Cherono et al., 2026; Das et al., 2025). Positive emotions broaden the focus and attention and increase emotional well-being (Fredrickson & Joiner, 2002).

Mental health has a direct bearing on academic performance through real-life behaviour. Severe distress is often associated with maladaptive behaviours like sleep disturbance and digital addictions. Sleep disturbances such as insomnia and fragmented sleep significantly impair memory consolidation and learning efficiency, are a key factor contributing to cognitive fatigue, and can adversely affect performance (Fathima & Ahmed, 2025). Digital addictions are another major and prevalent issue. Social media addiction is problematic and is one of the most damaging variables for students' psychological well-being (Fadeyi et al., 2026). Addiction to digital platforms is a psychological stressor that leads to anxiety and emotional exhaustion, and this in turn undermines academic focus and performance (Garima et al., 2026).

Bridging the Gap: Protective Factors and Interventions

To foster both mental well-being and academic success, several psychological resources and interventions show promise. For instance, Psychological Capital and mindfulness are key personal resources that contribute to adaptive psychological functioning. Psychological Capital (PsyCap), encompassing hope, self-efficacy, optimism, and resilience, together with state mindfulness, promotes more positive evaluations of stressful experiences. Consequently, these resources reduce psychological distress and enhance academic engagement (Das et al., 2025).

Next, values affirmation (Borman, 2017), which applies to vulnerable individuals facing identity threats, involves interventions (such as reflecting on core personal values) that restore self-integrity. These interventions have been shown to buffer against social stressors, significantly decreasing anxiety and sustaining a sense of academic belonging (Shillington et al., 2026). One way to support students is by providing them with opportunities to flourish and provide social connectedness. This theoretical mechanism provides a basis for understanding how strengthening students' sense of self may mitigate the social and psychological stressors they disproportionately encounter (Shillington et al., 2026).

Cognitive rehabilitation is a type of mental training that helps improve brain function through regular practice. It is based on the idea that the brain can adapt and grow stronger over time (a phenomenon known as neural plasticity). By repeatedly practising tasks that require skills such as attention, memory, planning, and problem-solving (executive functions), the brain's prefrontal region becomes more efficient, which can lead to better thinking and overall cognitive performance (Bayrami & Dadashi Mazraeh, 2026; Karbach & Verhaeghen, 2014).

Targeted cognitive training can fortify executive functions, empowering students to manage cognitive loads more efficiently. This leads to simultaneous improvements in academic performance, emotional regulation, and creative thinking (Bayrami & Dadashi Mazraeh, 2026).

3. Methodology

This study employs a conceptual qualitative research design to examine the relationships among basic psychological factors, mental health, and academic performance among students by integrating the relevant theoretical frameworks. Rather than collecting primary empirical data, the study develops a conceptual understanding by critically synthesizing and integrating existing theoretical and empirical literature. Conceptual research is particularly valuable for advancing theory in emerging and multidisciplinary fields because it enables researchers to consolidate fragmented knowledge into coherent conceptual frameworks that can guide future empirical investigations (Meredith, 1993). Through this approach, the study identifies, analyzes and interprets the relationships among psychological factors, mental health outcomes, and academic achievement from multiple scholarly perspectives.

To promote this perspective, the study incorporates three theoretical frameworks: Self-Determination Theory, Stress and Coping Theory and Broaden-and-Build Theory. Self-Determination Theory (Deci & Ryan, 1985) is based on human motivation as it refers to the fulfilment of three fundamental psychological needs—autonomy, competence, and relatedness. When these psychological needs are met, we are more motivated, have better psychological well-being, and are more likely to remain interested in learning. In the educational context, Self-Determination Theory provides a useful behavioral perspective on the psychological needs of students that will influence motivation, emotional well-being, and academic performance (Howard et al., 2021; Guay, 2021).

Bandura and Bussey (2021) state that students develop academic competencies through self-regulatory processes, self-efficacy beliefs, and observation, which together lead to motivation, persistence, and academic performance. In line with Self-Determination Theory, Stress and Coping Theory (Lazarus & Folkman, 1984) explains how mental health is determined by one's cognitive perception of stressful situations and coping strategies to overcome them. It is believed that students' sense of stress and how they cope with it all have a significant effect on mental health (such as anxiety, depression, emotional fatigue, and psychological well-being). Good coping mechanisms can help students overcome the negative impact of academic stress, while worse coping strategies are associated with poor mental health and lower academic achievement.

In addition, the Broaden-and-Build Theory of Positive Emotions (Fredrickson, 2001) also contributes to the picture by showing that positive emotions expand people's short-term thought and action repertoire and build them up for long-term life support, social support, problem-solving and cognitive flexibility. As students feel positive emotions, they can learn other options, pursue new learning strategies, and develop stronger coping mechanisms in the event of stress (so they can cope better in the future). So these added psychological resources not only enhance psychological well-being but also academic achievement and performance. Together, Self-Determination Theory, Stress and Coping Theory, and Broaden-and-Build Theory are the foundation for understanding how supportive psychological resources help develop positive emotions, adaptability, and resilience, in the process improving students' mental health and psychological well-being. And so these positive psychological factors lead to better academic engagement and better academic achievement.

Secondary data is obtained from a wide range of publicly available and credible sources and is the focus of the study only. This research is based on peer-reviewed journal articles on educational psychology, mental health, student well-being, learning motivation, resilience, and academic performance, as well as psychological development and educational behavior books and theories on psychological development and educational behavior of students and the psychological status of children and students in education, as well as the issues of mental health, academic engagement, academic success, and outcomes. The study incorporates case studies and previous research of secondary school and university students to reveal the impact of psychological factors on academic performance. The empirical evidence is used to triangulate from various sources, using evidence from various sources to provide a more complete conceptual framework and a more detailed theoretical analysis of the research with a more complete approach and to make the theoretical framework credible and

well-founded (Bowen, 2009). We have developed a thematic approach to the literature and have identified the themes, patterns, and theoretical relationships that relate to the study, and these concepts are considered, organized in the literature, and then organized into four main themes:

- Basic Psychological Factors: This is a study of psychological aspects of students' development and their self-efficacy, self-esteem, resilience, emotional regulation, intrinsic motivation, and psychological need satisfaction.
- Mental Health and Psychological Well-being: This topic focuses on students' mental health outcomes (stress, anxiety, depression, emotional well-being, and psychological resilience) and how they are driven or inhibited by the environments that promote or hinder their happiness and well-being.
- Psychological mechanisms for the relationship between mental health and academic performance: These ideas are gathered together and relate psychological factors and academic performance, providing an account of how psychological factors (e.g., motivation, coping strategies, emotional regulation, and resilience) relate to mental health and academic outcomes in diverse educational and psychological environments. Academic performance refers to academic achievements, learning engagement, concentration, persistence, attendance, and overall educational success.

Each theme is examined by combining theoretical perspectives with empirical results from previous studies to develop a conceptual framework for the study. Not only are the results presented, but we also analyze the interplay between psychological factors, mental health, and academic performance, identifying areas of consensus and potential for future research. This conceptual approach deepens understanding of how psychological well-being supports academic success and provides a theoretical foundation for future empirical studies and evidence-based educational interventions to promote both student mental health and academic excellence. This approach offers both descriptive insights into how the domain operates in practice.

4. Findings and Discussion

This section provides the findings based on the conceptual analysis conducted to understand how the three main domains, namely basic psychology, mental health and well-being, and behavioral pathway, may have an impact on academic performance. We found that the interplay between psychology, mental health, and academic performance is highly interdependent. Basic psychological traits such as fluid intelligence, self-efficacy, and self-regulated learning provide the foundational "hardware" and strategic execution needed for academic achievement. Concurrently, a student's mental health acts as the operating environment. Psychological distress (anxiety, depression) and behavioral detriments (insomnia, excessive screen time) act as heavy cognitive loads that deplete working memory and lower grades. Conversely, positive emotional well-being, supported by psychological capital and mindfulness, broadens a student's learning capacity and fosters the academic engagement necessary to succeed despite challenges. Educational institutions are most effective when their interventions simultaneously bolster these internal psychological resources and mitigate mental health stressors. Table 1 below highlights the interplay among the elements discussed above.

Table 1: Interplay between basic psychology, mental health and academic performance

Domain	Specific Factor	Impact on Academic Performance	Findings
Basic Psychology	Cognitive Abilities	Positive predictor of GPA	Specific cognitive abilities, particularly fluid intelligence, predict unique variance in academic performance because they are crucial for complex problem-solving and abstract reasoning (Garner & Robison, 2026). General cognitive ability underlies task execution, but specific abilities drive targeted academic success (Garner & Robison, 2026).
	Personality Traits	Mixed / Context-dependent	Conscientiousness is often associated with better academic outcomes due to self-discipline, goal orientation, and persistence (Aboushawareb et al., 2026; Garner & Robison, 2026). Conversely, neuroticism predicts higher stress and vulnerability and negatively affects academic stability (Aboushawareb et al., 2026).

	Motivation and Self-Efficacy	Strong Positive driver of engagement	As a result, academic self-efficacy is a powerful predictor of college GPA and increases effort and resilience (Wang et al., 2025). Self-efficacy also serves as a buffer that partially mediates the negative impact of mental health problems (like depression) on academic performance (Arhin, 2024).
	Self-Regulated Learning (SRL) & Creativity	Positive bridge to achievement	SRL serves as a hub connecting affective strategies to academic performance (Miao et al., 2026). Creative learning strategies (which are characterized by fluency, flexibility, and usefulness) improve academic self-efficacy, which in turn enhances academic performance (Wang et al., 2025).
Mental Health & Well-being	Psychological Distress (Anxiety & Depression)	Negative detractor from performance	Anxiety is associated with low CGPAs in terms of cognitive and working memory (Hossain et al., 2025). Individuals with high emotional variability might also experience greater emotional reactivity to academic stress, in turn leading to disengagement from academic activities (Sun et al., 2026). Depression directly affects self-efficacy and performance (Arhin, 2024). Too much stress disrupts concentration and information retention (Xu et al., 2025).
	Emotional Well-being & Positive Emotions	Positive capacity builder	According to the Broaden-and-Build Theory, positive emotions (joy, hope, pride) broaden a student's cognitive flexibility, focus, and problem-solving abilities (Cherono et al., 2026). Positive emotional well-being significantly improves academic scores and motivation to learn (Cherono et al., 2026).
	Psychological Capital & Mindfulness	Protective buffer	Personal resources like psychological capital (hope, efficacy, resilience, optimism) and mindfulness reduce psychological distress by fostering positive appraisals (Das et al., 2025). They indirectly improve academic performance by sustaining high academic engagement over time (Das et al., 2025).
Behavioral Pathways	Sleep Quality & Insomnia	Negative when disrupted	Insomnia, sleep fragmentation, and night arousals are dominant predictors of academic performance decline (Fathima & Ahmed, 2025). Sleep deficits impair attention, memory consolidation, and learning efficiency, often compounding the effects of stress on performance (Fathima & Ahmed, 2025).
	Digital Addictions / Screen Time	Negative via cognitive overload	Excessive screen time and social media addiction deplete cognitive resources, trigger emotional exhaustion, and significantly increase anxiety and depression, ultimately hindering academic focus and performance (Fadeyi et al., 2026; Garima et al., 2026).

Framework Analysis and Supporting Mechanism

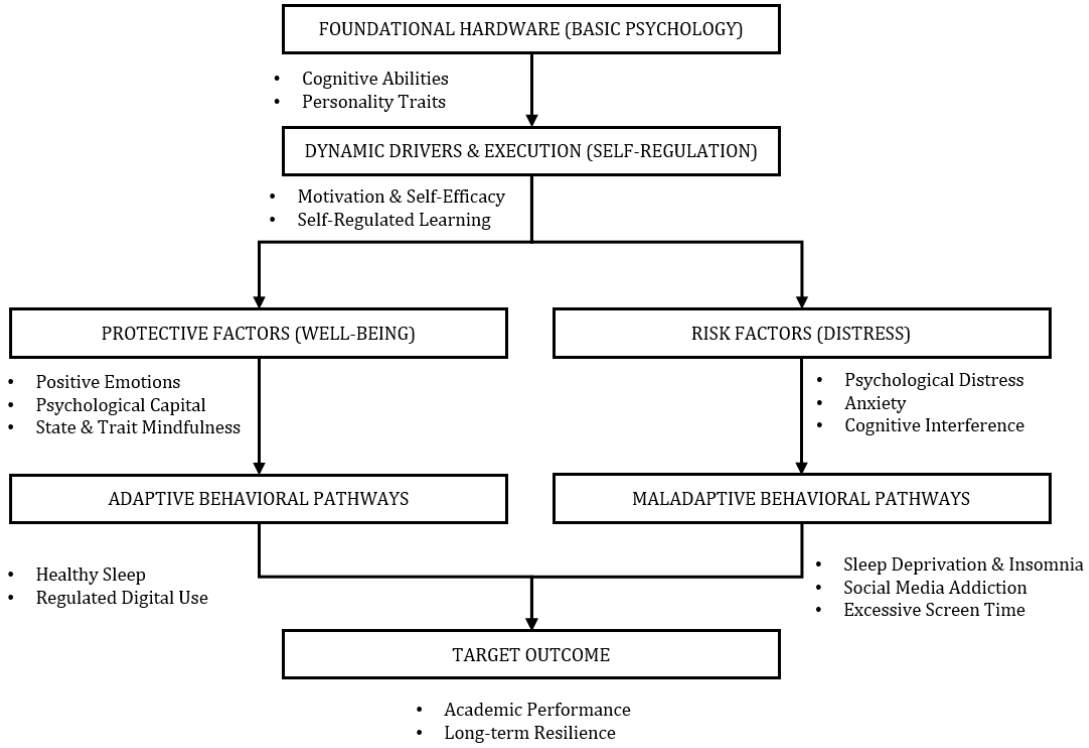
The analysis provided in the summary Table 1 above directly allows the categorization of distinct psychological and behavioral variables into a structured, sequential pathway that leads to academic performance and long-term resilience. The analysis can be divided into five main components, as shown in Figure 1 below: the foundational hardware, dynamic drivers and execution, operating environment, tangible mechanism, and target outcome. The foundational hardware captures the inherent traits analyzed in the table, such as specific cognitive abilities and personality factors that inherently shape a student's baseline capacity to learn. These foundational traits are then activated by dynamic drivers, which represent the table's analysis of motivation, self-efficacy, and self-regulated learning; this is the stage where students actively execute, monitor, adjust, and apply creative learning strategies to overcome complex academic challenges.

However, this cognitive execution is heavily moderated by the operating environment of a student's mental health. Protective factors such as psychological capital, mindfulness, and positive emotions expand cognitive

resources, enable flexible thinking, and buffer against stress, whereas risk factors such as psychological distress and anxiety consume working memory and hinder cognitive efficiency. Finally, the framework shows that these internal psychological states manifest in the physical world through tangible mechanisms or behavioral pathways, such as sleep quality and fragmentation, and the regulation of digital or social media use, which ultimately determine the target outcome of sustained academic performance.

From the perspective of foundational hardware (Basic Psychology), individual differences in academic performance are largely driven by cognitive and dispositional traits. Cognitive ability is required for solving complex situations and abstract reasoning and is a key factor in academic success (Garner & Robison, 2026). Personality traits, on the other hand, determine behavior; conscientiousness is a strong predictor of GPA because it promotes self-discipline, goal orientation, and persistence and is independent of intelligence.

Figure 1: Conceptual Framework proposed for the study



From the point of view of dynamic drivers & execution (Self-Regulation), inherent traits have to be activated by psychological drivers. Academic self-efficacy for students is students' belief in their ability to perform tasks are the driver of students' efforts to become more motivated, resilient, and persistent in the face of academic difficulties (Wang et al., 2025; Zhu, 2026). In addition, self-regulated learning is the cognitive process through which students plan, monitor, and adapt their strategies (Li et al., 2026; Miao et al., 2026). Self-regulated learning is the bridge of learning and the emotional advantage students have, and the affective strategies that can be leveraged in learning, not just how they can do well in school, and then translate that into academic achievement (Miao et al., 2026).

The Operating Environment (Mental Health & Well-being) suggests that a student's mental health is the psychological environment that either broadens or constricts their learning ability (Bayrami & Dadashi Mazraeh, 2026; Cherono et al., 2026). Protective factors (Well-being) increase the student's thought-action repertoire, cognitive flexibility, and focus (Cherono et al., 2026). Psychological Capital (hope, efficacy, resilience, and optimism) and mindfulness are internal resources that ensure positive feelings towards stressful events and help students to buffer psychological distress and remain academically engaged (Cherono et al., 2026). In addition, psychological distress, anxiety, and depression are a heavy cognitive load that reduces

working memory, attention, and executive functioning (Hossain et al., 2025; Xu et al., 2025). Chronic anxiety triggers avoidance behaviors and reduces a student's ability to engage with complex material, directly lowering cumulative GPAs (Hossain et al., 2025).

From the perspective of tangible mechanisms (Behavioral Pathways), mental health and psychological states are physically manifested through lifestyle and behavioral habits, which heavily moderate academic success (Fathima & Ahmed, 2025; Garner & Robison, 2026). Sleep deprivation, fragmentation, and insomnia are dominant predictors of cognitive fatigue and academic decline (Fathima & Ahmed, 2025). Additionally, social media addiction and excessive screen time deplete cognitive resources, trigger emotional exhaustion, and significantly increase psychological distress, which ultimately undermines academic focus (Fadeyi et al., 2026; Garima et al., 2026). Meanwhile, healthy physical habits, such as regulated sleep, proper nutrition, and physical activity, strengthen cognitive functioning and emotional regulation (Xu et al., 2025). Moderated, purpose-driven digital use can also be academically neutral or even beneficial by allowing for mental recovery and stress regulation (Fadeyi et al., 2026)

Ultimately, the target outcome (Academic Performance) is not solely the result of cognitive ability, but the culmination of a student's self-regulated efforts, supported by their mental well-being, and enacted through healthy behavioral pathways (Garner & Robison, 2026; Li et al., 2026; Zhu, 2026). Educational institutions will be most effective when they recognize this integrated framework and implement strategies to develop psychological resources, alleviate anxiety and support healthy behavior.

5. Conclusion and Recommendations

Academic performance is a complex outcome driven by an inseparable matrix of basic psychological traits and mental health states. Cognitive skills such as fluid intelligence and conscientiousness are the hardware for success; motivation, self-regulation, and strong emotional health are the operating system. Psychological distress, anxiety and behavioural harms such as insomnia sap cognitive resources and lower performance, whereas positive emotions and high self-efficacy increase learning capacity and resilience. Schools at every level need to consider these factors as part of a holistic approach that integrates mental health care, emotional regulation and psychological intervention to support students in both academic and social well-being.

The integration of basic psychology and mental health provides a holistic view of student achievement. The new evidence supports the development of the existing theoretical frameworks (e.g., Self-Determination Theory, Social Cognitive Theory, and Broaden-and-Build Theory) by showing that cognitive abilities alone do not determine academic success. The affective state, self-efficacy, and self-regulated learning act as critical mediators of learning. In addition, this integrative perspective challenges conventional thinking by showing that emotional well-being and psychological resilience are not just a product of academic success but rather are indispensable components of cognitive flexibility and problem-solving skills.

Although most existing studies provide important insights into the relationship between psychological factors, mental health, and academic performance, there are still several limitations. Most of the literature is cross-sectional, and this may limit causal interpretation (Hossain et al., 2025; Pham Thi et al., 2025; Xu et al., 2025). Also, self-report measures are frequently used, so there is a reporting bias in the way psychological states and academic performance are measured (Arhin, 2024; Bayrami & Dadashi Mazraeh, 2026). Furthermore, the findings can be based on a particular group of data that are not generalizable to the general population (Cherono et al., 2026; Das et al., 2025; Xu et al., 2025). Furthermore, the higher level of context of education (quality of education, economic status, and social class) is often not taken into account in the models.

All of these limitations underscore the need for a more holistic understanding of mental health and academic performance that considers psychological, emotional and contextual factors. Future research should be concerned with developing and testing integrated models that identify the impact of psychological, emotional and contextual factors on student mental health and academic performance. Furthermore, future research must include multiple source data (e.g., self-reports, academic records and behavioural measures) to reduce bias and improve measurement accuracy. Research in different cultural and educational contexts would be more generalizable. Finally, to understand why students' outcomes differ from those of adults in general, we need to pay more attention to the context of the students' socioeconomic status, peer impact of the school and

institutions to which they attend.

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