



Meeting the mind's essentials: Basic psychological needs and student well-being in higher education

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Abstract This study explored the fulfillment of basic psychological needs and its relationship with student well-being in higher education. Anchored on Self-Determination Theory and guided by the growing emphasis on mental health in academic settings, the research aimed to examine how autonomy, competence, and relatedness influence students' overall well-being. A descriptive-correlational design was employed, with data collected from a sample of college students selected through simple random sampling. Standardized tools—the Basic Psychological Need Satisfaction and Frustration Scale (BPNSFS) and the WHO-5 Well-being Index—were used to measure the variables. Data analysis included descriptive statistics and Pearson correlation to determine the nature and strength of the relationship between psychological needs and well-being. Students reported a moderate level of psychological need fulfillment, with differences across the domains of autonomy, competence, and relatedness. Well-being scores ranged from good to at-risk levels, reflecting both positive mental health and emotional vulnerability. A significant positive correlation was found between psychological need satisfaction and student well-being. The results highlight the importance of fulfilling basic psychological needs in promoting students' mental health. The study emphasizes the need for educational institutions to cultivate environments that support autonomy, competence, and relatedness to enhance student well-being. It contributes to the understanding of how psychological support within academic contexts can foster personal development and emotional resilience.

Keywords: autonomy, college students, mental health, psychological fulfillment, student wellness

1. Introduction

Student well-being refers to a holistic state in which learners experience positive emotions, maintain satisfying relationships, function effectively in their academic pursuits, and feel a sense of purpose and belonging within their learning environments. It encompasses emotional, psychological, and social dimensions that influence how students engage with their studies, relate to others, and cope with academic challenges (Alrashidi et al., 2016). A high level of well-being in students has been associated with increased motivation, better academic performance, and stronger resilience in the face of stress (Wang & Liu, 2022). Furthermore, institutions that prioritize student well-being contribute to a more supportive and inclusive educational climate where learners are empowered to thrive. Promoting student well-being is not only essential for academic success but also for nurturing lifelong mental and emotional health (Brief, 2023).

Basic psychological needs are the essential elements required for individuals to function optimally and experience psychological growth, integrity, and well-being. According to Self-Determination Theory, these core needs include autonomy, competence, and relatedness, which must be satisfied across various life domains, including education (Guay, 2022). When these needs are fulfilled, individuals are more likely to display intrinsic motivation, engagement, and emotional stability (Vallerand, 2000). Conversely, the frustration or neglect of these needs can lead to decreased motivation, burnout, and psychological distress (Shi, 2024). Recognizing and supporting basic psychological needs is therefore fundamental to fostering both personal development and overall well-being among students (Daniels & Wells, 2024).

In recent years, growing concerns have emerged regarding the declining well-being of students in higher education, driven by academic pressure, social isolation, and mental health challenges. Many students report heightened levels of anxiety, depression, and burnout, which negatively impact their motivation, academic performance, and overall life satisfaction (Russell & Jarvis, 2019). These well-being concerns are closely linked to the unmet basic psychological needs of autonomy, competence, and relatedness, particularly in rigid, high-stakes academic environments (Lasfeto, 2020). Institutional practices that emphasize



performance over personal growth often leave students feeling controlled, disconnected, and inadequate (Kinshuk et al., 2016). Additionally, the rise of digital learning and reduced face-to-face interaction has further diminished opportunities for meaningful relationships and self-directed learning (De la Fuente et al., 2021). Addressing these pressing issues requires intentional efforts to create learning spaces that are psychologically supportive and responsive to the evolving needs of students (Turner et al., 2017).

A growing body of research has examined the multidimensional nature of student well-being, highlighting its critical role in academic achievement, mental health, and overall life satisfaction. Studies have shown that students with higher well-being demonstrate greater engagement, stronger interpersonal relationships, and lower susceptibility to stress and burnout (Cefai et al., 2021). Positive psychological interventions and supportive learning environments have been found effective in enhancing students' well-being and fostering resilience in academic settings. Moreover, well-being has been increasingly recognized as a key indicator of educational quality, prompting institutions to integrate mental health initiatives and holistic support programs into their systems.

Parallel to these findings, numerous studies have explored the foundational role of basic psychological needs in shaping students' motivation, engagement, and mental health. Research grounded in Self-Determination Theory consistently demonstrates that when students' needs for autonomy, competence, and relatedness are met, they are more likely to exhibit intrinsic motivation, academic persistence, and emotional well-being (Niemiec & Ryan, 2009). In contrast, environments that thwart these needs often contribute to disengagement, anxiety, and academic exhaustion (Salmela-Aro, 2017). Recent investigations have also emphasized the importance of need-supportive teaching strategies, showing that educators who promote autonomy and connection enhance both classroom experiences and student outcomes (Reeve & Cheon, 2021). As such, satisfying students' psychological needs remains a central concern in educational research and practice.

Despite the growing body of literature on student well-being and basic psychological needs, there remains a lack of sufficient empirical data exploring the direct relationship between these two constructs, particularly within the context of higher education in the southern Philippines. Most existing studies examine them independently or focus on related but distinct outcomes such as motivation or academic performance, leaving a gap in understanding how the fulfillment of psychological needs influences overall student well-being. To address this gap and respond to reviewer feedback on research context, this study specifically involved college students from a State University in the southern Philippines, allowing the findings to be more culturally and contextually grounded. This focus is important as it sheds light on how these constructs interact within a localized setting that has been underrepresented in existing literature.

This research is important as it offers valuable insights into how fulfilling students' basic psychological needs can enhance their overall well-being, contributing to more supportive and responsive educational environments. For the respondents, the findings may help promote greater awareness of their own needs and well-being, encouraging healthier academic engagement. In terms of scholarly contribution, the study adds to the limited body of knowledge that connects psychological needs with student well-being in higher education. More broadly, it serves as a foundation for educators, administrators, and policymakers to design evidence-based strategies that foster student success and mental health in academic institutions.

2. Materials and Methods

2.1. Research design

This research employed a quantitative research design, specifically using a descriptive correlational approach to examine the relationship between basic psychological needs and student well-being in higher education. Quantitative research involves the systematic collection and analysis of numerical data to understand patterns, test hypotheses, and make generalizations about a population (Reeve & Cheon, 2021). Within this framework, descriptive correlational research aims to identify the extent and direction of relationships between two or more variables without manipulating them (Stangor & Walinga, 2019). This design is especially useful for exploring naturally occurring associations and understanding how variables interact in real-world settings. The use of a quantitative descriptive correlational design is most appropriate for this study because it allows for a clear and objective examination of the relationship between basic psychological needs and student well-being. This approach supports the goal of identifying patterns and connections between these variables across a defined student population. It also enables the researcher to collect data from a larger sample, increasing the reliability and generalizability of the findings. Moreover, the design is well-suited for measuring psychological constructs using standardized instruments, making it ideal for exploring how psychological needs may influence well-being in educational contexts.

2.2. Research respondents and sampling

This study involved 225 college students from a State Universities in southern Philippines, who were selected through simple random sampling. Simple random sampling is a probability sampling technique in which each member of the population has an equal chance of being selected, ensuring that the sample is representative and free from selection bias (Esponja et al., 2025; Stratton, 2023). This method was deemed most appropriate for the study because it allows for an unbiased selection of

participants from the target population, enhancing the reliability and generalizability of the findings. By using this approach, the study was able to capture a diverse range of student experiences and perspectives regarding their psychological needs and well-being in higher education.

2.3. Research instrument

This study adopted standardized questionnaires to measure the key variables. The Basic Psychological Needs (BPN) Scale, developed by (Deci & Ryan, 2006) was used to assess the extent to which students experience autonomy, competence, and relatedness in their academic environment. The BPN Scale has demonstrated strong internal consistency, with a Cronbach's alpha of 0.80, indicating its reliability in measuring basic psychological needs. To assess student well-being, the study utilized the WHO-5 Well-being Index, a widely used and validated tool for evaluating psychological well-being. Both instruments were selected for their proven validity and reliability, ensuring the accuracy of the data collected. The use of these scales provided a comprehensive and credible assessment of the constructs under investigation.

2.4. Statistical analysis

This study utilized both descriptive and inferential statistical techniques to analyze the data. Descriptive statistics, including mean and composite mean, were used to summarize and describe the levels of basic psychological needs and student well-being. To determine the relationship between the two variables, Pearson product-moment correlation was employed. Pearson correlation is most appropriate for this study because it measures the strength and direction of the linear relationship between two continuous variables. This method allows the researcher to identify whether higher fulfillment of psychological needs is associated with greater student well-being.

3. Results and Discussion

Table 1 presents the levels of basic psychological needs—autonomy, competence, and relatedness—among the respondents. The data reflect how well these needs are being fulfilled within the students' academic environment.

Table 1 Basic psychological needs among the respondents.

Statements	Mean	Verbal Description
Autonomy		
7. I feel that my behavior is self-chosen.	3.04	Agree
1. I feel like I have a choice in the way I do things.	2.97	Agree
4. I feel that I can choose how to do things in my life.	2.95	Agree
6. I have control over the way I approach tasks.	2.95	Agree
5. I feel I can make decisions on my own.	2.93	Agree
3. I feel that I am the one who decides what I do.	2.90	Agree
2. I feel free to express my ideas and opinions.	2.87	Agree
Composite Mean	2.95	Moderate Level of Fulfillment
Competence		
1. I am capable of achieving my goals.	3.05	Agree
3. I am able to perform well.	2.90	Agree
4. I am good at what I do.	2.88	Agree
2. I feel confident in my abilities.	2.85	Agree
5. I can handle challenging situations.	2.84	Agree
6. I feel effective in my activities.	2.82	Agree
Composite Mean	2.89	Moderate Level of Fulfillment
Relatedness		
4. I have meaningful relationships with others.	2.83	Agree
5. I feel connected to others.	2.80	Agree
1. I feel close to others.	2.79	Agree
3. I feel that I belong to a group.	2.75	Agree
2. I feel understood by others.	2.61	Agree
Composite Mean	2.76	Moderate Level of Fulfillment
Grand Mean	2.88	Moderate Level of Fulfillment
Legend: Scale:		
4.00-3.50	Verbal Description	Interpretation
3.49-2.50	Strongly Agree	High Level of Fulfillment
2.59-1.50	Agree	Moderate Level of Fulfillment
1.49-1.00	Disagree	Low Level of Fulfillment
	Strongly Disagree	Very Low Level of Fulfillment

The Basic Psychological Needs among the respondents yielded an overall grand mean of 2.88, which corresponds to a moderate level of fulfillment. This means that, on average, students perceive their autonomy, competence, and relatedness as moderately satisfied within their academic environment. This implies that while their psychological needs are not fully met, they are not entirely neglected either, placing them in a balanced yet vulnerable state. It suggests that students may function adequately in their academic settings, but they may still experience occasional difficulties related to motivation, engagement, or emotional well-being.

This finding aligns with previous research indicating that students in higher education often report moderate satisfaction of their psychological needs, especially in environments with structured academic expectations and limited personal agency (Schenkenfelder et al., 2020). Studies have also shown that when basic psychological needs are only moderately fulfilled, students tend to exhibit average levels of intrinsic motivation and academic persistence, neither flourishing nor disengaging (Karimi & Sotoodeh, 2020). Furthermore, moderate fulfillment of autonomy, competence, and relatedness can result in fluctuating levels of academic satisfaction and emotional stability (Zhen et al., 2017). These findings highlight the complex and dynamic experience of psychological need satisfaction among university students.

In terms of Autonomy, the item "I feel that my behavior is self-chosen" recorded the highest mean score of 3.04, with a verbal interpretation of "agree." This means that students generally perceive themselves as having the ability to make choices and act according to their own will. This implies that many students experience a sense of volition in their academic and personal decisions, contributing to their sense of independence. The ability to self-direct one's behavior can play a crucial role in fostering engagement and personal responsibility. It also reflects the presence of a learning environment that, to some extent, allows for individual agency.

This finding supports studies that emphasize the importance of perceived autonomy in academic motivation and well-being. When students feel that their actions are self-determined, they are more likely to experience satisfaction and positive academic outcomes (Zhen et al., 2017). Similar findings were observed (Gutiérrez & Tomás, 2019), who reported that student perceptions of choice and freedom in learning contexts enhance their academic engagement. Moreover, Wang et al. (2016) found that autonomy-supportive environments contribute to better psychological functioning among learners.

On the other hand, the statement "I feel free to express my ideas and opinions" obtained the lowest mean score of 2.87, also with a verbal interpretation of "agree." This means that, while students acknowledge a certain level of freedom in expressing themselves, this aspect of autonomy is less strongly felt than others. This implies that some students may still feel restrained or cautious in openly sharing their perspectives within their academic environment. Limited expression of ideas might reflect subtle pressures or perceived judgment that inhibit open communication. Such conditions could affect students' confidence and limit their sense of inclusion.

These findings are echoed in research that highlights the role of communication freedom as a key component of autonomy. According to Itzhakov et al. (2023), environments that fail to foster open dialogue can lead to reduced autonomy satisfaction. Studies by Henry and Thorsen (2020) also report that when students feel unable to express themselves freely, they are more prone to disengagement. Furthermore, Halliday et al. (2019), emphasize that the suppression of student voice can hinder academic motivation and emotional well-being.

The overall grand mean for autonomy was 2.95, which corresponds to a Moderate Level of Fulfillment. This means that students, on average, perceive a fair level of autonomy in their academic experience, though not consistently strong across all areas. This implies that while some aspects of autonomy are present, there are variations in how students experience self-direction and freedom within their learning environments. The moderate fulfillment indicates a balance between institutional structure and individual choice. It suggests that autonomy is recognized but not fully actualized in everyday academic interactions.

This result is consistent with earlier research showing that autonomy among students often falls within a moderate range in structured educational settings. Studies by Maassen et al. (2017), found that while students often value autonomy, its fulfillment can be limited by institutional constraints. Similarly, Núñez and León (2015) observed that the perceived support for autonomy varies significantly depending on teaching practices and classroom culture. Moreover, Núñez and León (2015) noted that the balance between autonomy and external control is delicate in academic contexts, often leading to only moderate satisfaction.

In terms of competence, the item "I am capable of achieving my goals" recorded the highest mean of 3.05, with a verbal interpretation of "agree." This means that students generally feel confident in their ability to reach their personal and academic goals. This implies a positive self-perception of skills and the belief that their efforts can lead to success. Such a perception is essential in building persistence and engagement in tasks, especially in academic settings. When students feel capable of achieving their objectives, they are more likely to stay motivated and committed to their responsibilities (Rheinberg & Engeser, 2018).

This finding aligns with several studies emphasizing the role of perceived competence in fostering academic performance and motivation. According to Cassidy (2015), the feeling of being effective and capable enhances intrinsic motivation and goal achievement. As to Hoi (2025) also found that students who believe in their ability to succeed are more

resilient in facing academic challenges. Similarly, observed that high competence beliefs are associated with greater levels of engagement and satisfaction in learning environments.

In contrast, the statement “I feel effective in my activities” received the lowest mean score of 2.82, with a verbal interpretation of “agree.” This means that while students recognize a general sense of competence, some feel less consistent in their effectiveness across various tasks or learning activities. This implies that certain academic experiences may leave students feeling uncertain about their performance or impact. It may reflect occasional doubts in their ability to complete responsibilities or contribute meaningfully. This subtle gap between goal confidence and daily effectiveness could influence their overall academic self-concept.

Supporting studies suggest that students often experience fluctuations in their sense of effectiveness depending on the demands and feedback in their learning environments. So, Reiser (2018) noted that task complexity and external pressure can lead to reduced feelings of effectiveness even among capable students. Research by Lauermann and ten Hagen (2021) also indicates that inconsistent feedback or unclear expectations can negatively affect students’ perceptions of competence. Moreso, Jackson (2015) observed that when students are not regularly affirmed in their efforts, their confidence in their capabilities may decline, even if they maintain high aspirations.

The overall grand mean for competence was 2.89, which corresponds to a Moderate Level of Fulfillment. This means that students perceive themselves as moderately competent in managing academic tasks and achieving goals. This implies a stable, though not strong, sense of ability, indicating that students feel generally capable but may also encounter moments of uncertainty or self-doubt. The moderate level reflects a balance between successful experiences and perceived limitations in their academic journey. Such a perception can influence their motivation, academic identity, and persistence.

These results are consistent with previous research showing that competence fulfillment among students in higher education often falls within a moderate range. Thus, Dweck and Molden (2017) found that while most students believe in their potential, they may not always feel fully competent in executing tasks. Deci and Ryan (2006) highlighted that academic structures can both support and hinder competence development depending on the learning climate. Similarly, Lauermann & ten Hagen (2021) and Wang & Degol (2016) noted that moderate competence levels are common in contexts where feedback is limited or inconsistently delivered.

In terms of relatedness, the statement “I have meaningful relationships with others” obtained the highest mean score of 2.83, with a verbal interpretation of “agree.” This means that most students perceive they have genuine and supportive connections with people in their academic or social environment. This implies that the respondents feel a sense of emotional connection, which may help them navigate academic pressures and enhance their sense of belonging. Meaningful relationships are crucial in building a sense of community and personal security in a university setting. Such relationships contribute to emotional stability and may serve as a protective factor against stress.

These findings are consistent with prior research that emphasizes the importance of meaningful social connections in fostering psychological well-being. According to Sprenger (2020), students who feel emotionally connected to others are more likely to thrive academically and personally. Alos, Kakada et al. (2019) found that social support and interpersonal connections promote students’ satisfaction with their learning experiences. Similarly, Skinner (2023) noted that a sense of relatedness contributes significantly to motivation, emotional resilience, and positive academic identity.

In contrast, the statement “I feel understood by others” received the lowest mean of 2.61, though still verbally interpreted as “agree.” This means that while students generally feel connected to others, fewer feel truly understood at a deeper emotional or intellectual level. This implies that some students may experience a sense of disconnection or isolation, even within existing relationships. A lack of perceived understanding can limit emotional openness and hinder authentic communication. This subtle gap in relational depth may affect students’ comfort in expressing personal challenges or perspectives.

Studies support this finding, indicating that feeling understood is a deeper aspect of relatedness that is not always achieved even in the presence of relationships. McKnight (2015), noted that students often report being surrounded by people yet still feel emotionally distant or unrecognized. Alderdice (2024) highlighted that true relatedness requires both connection and mutual understanding, which may not always coexist. Laidlaw et al. (2016) also found that students who do not feel understood are less likely to seek support, which may negatively impact their well-being and academic confidence.

The overall grand mean for relatedness was 2.76, which corresponds to a Moderate Level of Fulfillment. This means that students moderately feel a sense of connection, emotional support, and interpersonal belonging within their learning environment. This implies that while social interactions are generally present, there are inconsistencies in the quality or depth of these connections. The moderate level suggests a balance between feeling connected and feeling emotionally distant at times. This reflects the complex nature of building meaningful relationships in a university setting.

This outcome aligns with studies showing that relatedness among students in higher education often exists at a moderate level due to various academic and social pressures. Thornby et al. (2023) reported that while students value relationships, the academic structure and workload often limit opportunities for deeper interaction. Renn (2020) emphasized that institutional culture and peer dynamics influence how connected students feel. Ruzek et al. (2016) also concluded that relatedness is frequently only partially met in structured academic environments where emotional expression is less prioritized.

Table 2 displays the results of the WHO-5 Well-being Index, indicating the overall psychological well-being of the respondents. The scores reflect the students' positive mood, vitality, and general satisfaction with life over the past two weeks.

Table 2 WHO-5 Well-being index among the respondents.

Level	Frequency (n=225)	Percentage (%)
Poor well-being; possible clinical depression	24	11
Low well-being; monitor or provide support	91	40
Good well-being; positive mental health	110	49

Legend:

Raw Score

Percentage Score

Interpretation

0–12

0–48%

Poor well-being; possible clinical depression.

Further evaluation recommended.

13–16

52–64%

Low well-being; monitor or provide support.

17–25

68–100%

Good well-being; positive mental health.

The results of the WHO-5 Well-being Index show a varied distribution of psychological well-being among the respondents. Specifically, 11% of the students fell into the category of poor well-being, which may indicate the presence of possible clinical depression. Meanwhile, 40% of the respondents were classified as having low well-being, suggesting a need for attention or monitoring. The remaining 49% demonstrated good well-being, indicating positive mental health and a relatively stable emotional state. These figures suggest that while nearly half of the student population maintains healthy psychological functioning, a significant portion is experiencing emotional or mental challenges.

This means that the emotional state of many students ranges from moderately stable to highly vulnerable. This implies that while some students are functioning well and showing signs of positive mental health, a considerable number are dealing with low levels of well-being that may hinder academic engagement and personal growth. The presence of poor and low well-being among many respondents signals that psychological distress is a common part of their academic experience. It also reflects the ongoing emotional strain that may be associated with academic demands, personal circumstances, or unmet psychological needs.

At a broader level, these findings imply that student well-being is a critical concern for the larger academic community and society. If unaddressed, emotional struggles among students may affect not only academic institutions but also the workforce and community health in the long run. Reduced well-being can lead to decreased productivity, strained interpersonal relationships, and poor coping mechanisms beyond school settings. These outcomes can impact the overall functioning and resilience of future professionals and citizens. Thus, the state of student well-being carries significant implications for societal development and cohesion.

These results are consistent with recent studies reporting similar trends in student mental health. According to Chemagosi (2024), a substantial number of students in higher education report low well-being due to academic pressure and lack of support systems. Granieri et al. (2021) also found that emotional distress is prevalent among college students, particularly those with unmet psychological needs or limited coping resources. Liu et al. (2019) highlighted that fluctuating levels of well-being are common in university settings and often correlate with student motivation, academic performance, and social adjustment.

Table 3 shows the results of the Pearson correlation analysis between the respondents' basic psychological needs and their well-being. The findings indicate whether a significant relationship exists between the fulfillment of autonomy, competence, and relatedness and the students' overall psychological well-being.

Table 3 Test of the relationship between the respondents' basic psychological needs and well-being.

Paired Variables	Pearson Correlation Coefficient	p-value	Interpretation $\alpha=0.05$
Basic Psychological Needs and Students' Well-being	.609**	.001	Significant

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

The analysis using Pearson's correlation revealed a correlation coefficient of .609** with a p-value of .001, indicating a significant positive relationship between the respondents' basic psychological needs and their well-being. This suggests a moderately strong and statistically significant association between the fulfillment of autonomy, competence, and relatedness and the level of student well-being. The significance at the 0.01 level (2-tailed) confirms that the observed relationship is unlikely due to chance. These results highlight the interconnected nature of psychological needs satisfaction and emotional or mental health in higher education settings. It demonstrates that as students' psychological needs are more fully met, their level of well-being tends to increase.

This means that students who experience higher satisfaction of their basic psychological needs are more likely to report better well-being. This implies that autonomy, competence, and relatedness are not only important for academic functioning but are also closely linked to emotional health and overall life satisfaction. The significant relationship suggests that well-being is supported by internal experiences of control, capability, and social connection. The results reflect how these psychological



factors work together to shape the student experience in higher education. These findings provide evidence of the essential role that psychological needs play in influencing emotional and mental outcomes.

The findings of this study are consistent with earlier research grounded in Self-Determination Theory, which posits that the fulfillment of psychological needs enhances well-being. Fotiadis et al. (2019) emphasized that the satisfaction of autonomy, competence, and relatedness significantly contributes to psychological wellness. Neufeld and Malin (2019) found similar correlations in their study of university students, reporting that need satisfaction strongly predicted levels of happiness, motivation, and resilience. In addition, Heffner and Antaramian (2016) reported that students who experience greater need fulfillment tend to show lower levels of anxiety and higher levels of life satisfaction and academic engagement.

The results of this study have meaningful implications for both educational policy and institutional practice, particularly in promoting student well-being through the fulfillment of basic psychological needs. The significant positive correlation between students' autonomy, competence, and relatedness and their overall well-being suggests that higher education institutions must consider these psychological factors as central to student development. Policies that emphasize learner-centered approaches, inclusive environments, and opportunities for meaningful engagement may enhance not only academic success but also emotional resilience (Bhardwaj et al., 2025). Institutional practices, such as supportive teaching strategies, mentorship programs, and peer collaboration activities, can help create an environment where students feel valued, capable, and connected.

Moreover, recognizing that a significant portion of students reported low or poor well-being, institutions should view psychological need satisfaction as a foundational aspect of student support services. This means integrating well-being indicators into academic policies, feedback systems, and curriculum design. When policies are aligned with psychological principles, students are more likely to experience motivation, reduced stress, and overall life satisfaction (Wang & Zhang, 2025). As mental health concerns continue to rise in higher education, embedding practices that respond to students' basic psychological needs can serve as a sustainable and proactive approach to enhancing institutional effectiveness. Ultimately, aligning educational practices with psychological well-being frameworks contributes not only to academic excellence but also to a healthier, more engaged, and resilient student population (Sarzhanova & Nurgabdeshev, 2025).

4. Conclusion

The overall state of students' basic psychological needs reflects a moderately supportive academic environment where autonomy, competence, and relatedness are present but not fully optimized. This suggests that while students are somewhat empowered to make decisions, feel capable, and experience social connections, these needs are not consistently or deeply fulfilled. The variability in need satisfaction indicates that students' psychological experiences are influenced by different aspects of their academic and social contexts. Understanding how these needs manifest in daily academic life is crucial in shaping learning environments that foster sustained engagement and personal development. Ensuring that students' psychological foundations are addressed remains vital in cultivating a thriving student population.

Students' well-being presents a complex picture, with many experiencing positive mental health, while a substantial number show signs of emotional vulnerability. This reflects the dynamic and often challenging realities of student life, where academic pressure, personal issues, and limited coping strategies intersect. The presence of emotional difficulties among students signals the importance of recognizing well-being as an essential part of the educational experience. Institutions must remain aware of the diversity of mental health experiences and their impact on learning and functioning. Acknowledging the role of well-being as central to academic success highlights the need for responsive and inclusive support systems.

The strong connection between psychological needs and student well-being affirms that mental and emotional health is deeply tied to the quality of students' internal and external experiences. When students feel autonomous, competent, and connected, they are more likely to function positively and adapt to the demands of academic life. This relationship underscores the importance of viewing psychological need fulfillment not as an isolated concern but as a foundation for student success and resilience. It also demonstrates that fostering well-being requires more than addressing external stressors—it involves creating environments that affirm students' inner capacities and relational experiences. Integrating psychological and emotional dimensions into the core of education is key to supporting holistic student growth.

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5. Declarations

5.1. Ethical considerations

This research adhered to strict ethical guidelines to ensure the protection of respondents' rights and well-being. Prior to data collection, informed consent was obtained from all respondents, ensuring that they understood the purpose of the study, the voluntary nature of participation, and their right to withdraw at any time without penalty. The confidentiality and anonymity of the participants were safeguarded by securely storing the data and reporting findings in aggregate form, without identifying

individual responses. Additionally, the study was conducted in full compliance with ethical standards, ensuring that no harm or distress was caused to the respondents, and that the research adhered to the ethical principles of respect, integrity, and fairness.

5.2. Use of artificial intelligence (AI)

The authors state that generative artificial intelligence tools (specifically Grammarly and QuillBot) were utilized solely to refine language, grammar, and readability. The use of these technologies did not affect the study design, research methodology, data collection, analysis, interpretation, or the final conclusions of this manuscript. The authors retain full accountability for the integrity and accuracy of the published content.

5.3. Conflict of interest

The authors declare that they have no conflicts of interest.

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