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Stress Among University Students: A Case Study of UiTM Johor

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ABSTRACT

This study investigates the relationships between interpersonal, intrapersonal, and academic stressors and their impact on overall stress levels among students at UiTM Segamat. The primary objective is to identify key stress factors influencing mental well-being and provide insights for effective interventions. Data were collected from 340 respondents using a structured questionnaire distributed online, with simple random sampling ensuring a representative sample. The reliability of the questionnaire was assessed using Cronbach's alpha, which demonstrated good internal consistency for most constructs. Multiple linear regression analysis was employed to examine the predictive relationships between stressors and overall stress levels. The findings revealed that all three stressor categories significantly contributed to students' stress levels, with academic stressors exerting the strongest influence. The model explained 74.6% of the variance in stress levels, underscoring the complexity of factors affecting student well-being. These results emphasize the need for targeted interventions focusing on academic pressures, interpersonal relationships, and internal psychological challenges. By addressing these stressors, educational institutions can better support students' mental health and academic performance, fostering a healthier and more conducive learning environment.

Keywords: *mental well-being, multiple linear regression*, *stress factors, stress management*

INTRODUCTION

Everyone in the world faces stress in their daily lives; it's an inherent part of being human. Stress is a natural reaction that our bodies and minds have to various changes or challenges in our environment. It triggers a range of responses, including mental strain, emotional upheaval, and physical tension, as our systems adapt to new or demanding situations. This response is a fundamental aspect of how we cope with and navigate different life experiences (Luo et al., 2024). Throughout life, individuals encounter

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various situations and changes that may evoke feelings of unease and discomfort. Stress is a universal experience, often defined as the physical, emotional, or psychological response to demands that exceed an individual's coping resources (Lazarus & Folkman, 1984). While moderate levels of stress can motivate individuals to perform better, excessive or chronic stress can lead to negative outcomes, including mental health issues, reduced productivity, and physical ailments. In the context of higher education, stress is particularly significant as it directly impacts students' academic performance, mental well-being, and future professional prospects (Bhujade, 2017). Everyone must manage stressors and navigate challenges using appropriate coping mechanisms, which significantly influence mental and physical well-being (Ovsiannikova et al., 2024). These challenges affect people across all age groups, including college students.

College students, in particular, face unique stressors as they adapt to new environments, establish social connections, and navigate academic pressures. These transitions often involve significant lifestyle changes, such as living independently and managing new responsibilities, which can be both overwhelming and stimulating (Smith et al., 2024). The period of adjustment can be fraught with uncertainties and unfamiliar circumstances, testing students' ability to build resilience. Resilience, the capacity to adapt positively despite adversity, plays a critical role in mitigating stress and fostering mental well-being during such life changes (Neff et al., 2023). Stress is inherently challenging, but effective stress management strategies can empower students to handle life's complexities with greater ease and confidence.

University students face a unique combination of stressors as they transition to adulthood. These include interpersonal stressors, such as conflicts with peers, social exclusion, and relationship challenges (Martinez et al., 2023); intrapersonal stressors, including self-esteem issues, negative thought patterns, and emotional regulation difficulties (Neff et al., 2023); and academic stressors, such as heavy coursework, high-performance expectations, and examination pressures (Bulo & Sanchez, 2014). Research has consistently shown that these stressors are associated with increased anxiety, depression, and burnout among students (Ruiz et al., 2024). Students encounter various types of stressors depending on their circumstances. These include interpersonal stressors, conflicts, and uncomfortable interactions (Bulo & Sanchez, 2014).

The Transactional Model of Stress and Coping (Lazarus & Folkman, 1984) posits that stress occurs when individuals perceive a discrepancy between environmental demands and their coping resources, with interpersonal contexts being particularly influential. Attachment Theory (Bretherton, 2013) further highlights how early relationships with caregivers influence individuals' stress responses in later relationships, indicating that secure attachments foster resilience while insecure attachments may heighten stress vulnerability. College life requires students to form connections with peers, which can be challenging due to factors like shared living spaces and group assignments (Smith et al., 2024). Shy or introverted students may struggle to make friends and adapt to communal living. This pressure to fit in can lead to overthinking and pretending to be someone they're not, causing exhaustion and emotional outbursts. Peer Interactions contribute significantly to stress, particularly during adolescence. Negative peer interactions, including bullying, social exclusion, and peer pressure, are associated with increased anxiety and depression. Recent research by Martinez et al. (2023) demonstrates that peer victimization and social exclusion continue to be strong predictors of emotional distress and lower self-esteem among adolescents. Additionally, romantic relationships, common during college years, add another layer of stress (Tatkin, 2024). Balancing these relationships with academic demands can be difficult, especially if conflicts arise, affecting concentration and class attendance. The impact of these stressors is extensive, affecting both mental and physical health. Chronic exposure to interpersonal stress can lead to serious mental health issues, such as anxiety and depression, and physical health problems, including hypertension and weakened immune function (Ovsiannikova et al., 2024). Moreover, interpersonal stress in educational and occupational settings can impair performance and motivation, contributing to burnout and disengagement (Khan et al., 2024).

Another significant cause of stress among college students is intrapersonal stressors. Intrapersonal stressors, which stem from an individual's internal experiences, including their thoughts, emotions, and self-perceptions, significantly influence mental health and overall well-being. Cognitive distortions, such as negative self-talk and catastrophic thinking, are central intrapersonal stressors that exacerbate stress by distorting an individual's perception of events and their ability to cope effectively (Durbano et al., 2024). Cognitive-behavioural therapy (CBT) remains a widely utilized intervention for addressing these distortions, helping individuals challenge and reframe maladaptive thought patterns to alleviate stress (Gilman & Chard, 2015). According to Bulo & Sanchez (2014), a survey of 2,253 randomly selected undergraduate students aged 18 to 24 revealed that primary sources of stress were intrapersonal. These stressors include financial problems, relationships, family issues, and extracurricular activities. Intrapersonal stressors refer to internal factors affecting mental well-being, such as one's thoughts, emotions, and personal characteristics (Punia et al., 2021).

Self-esteem and self-compassion are crucial factors in managing intrapersonal stress. Low self-esteem is often linked to higher stress levels and increased vulnerability to mental health issues, as individuals with low self-esteem may experience greater self-criticism and feelings of inadequacy (Starrs et al., 2015). In contrast, self-compassion, which involves treating oneself with kindness and understanding during times of difficulty, has been associated with reduced stress and enhanced emotional resilience. Research by Neff et al. (2023) underscores the importance of self-compassion in buffering against stress and fostering emotional well-being. Common issues include insecurities about achievement, appearance, and lifestyle, exacerbated by societal pressures (Bogár et al., 2024). As young adults, they experience numerous life changes, navigating trends, relationships, and personal identity. They may feel compelled to meet unrealistic standards portrayed in social media, leading to stress over differences in friend circles, lifestyles, and personal styles (Keles et al. 2024).

Emotional regulation is another key aspect of intrapersonal stress. Difficulties in regulating emotions can lead to increased stress and psychological distress. Maladaptive emotional regulation strategies, such as emotional suppression and rumination, are associated with higher levels of stress and poorer mental health outcomes (Navas-Casado et al., 2023). Adaptive strategies, such as cognitive reappraisal, are shown to be effective in reducing stress and improving emotional well-being by helping individuals reinterpret stressful situations in a more positive light (Tsai et al., 2024). Social comparisons can intensify feelings of loneliness and envy among students who struggle with social skills or have smaller friend groups. However, this isolation can also shield them from the drama and toxicity prevalent in larger social circles. Moreover, many students find it challenging to accept diversity and adapt to change, further complicating their stress management. The chronic impact of intrapersonal stressors can be profound, affecting both mental and physical health. Persistent intrapersonal stress is associated with various mental health issues, including anxiety, depression, and burnout (Holliday et al., 2024). Understanding and effectively managing intrapersonal stressors are crucial for fostering resilience and preserving mental health in college students.

The final category of stressors faced by students is academic stressors (Bhujade, 2017). As students mature, they encounter increasingly complex challenges, particularly in academic matters. As studies progress, learning materials become more intricate compared to earlier years in school. This complexity can make students struggle with adapting to the intensified learning process, ultimately impacting their exam performance. Academic stressors, such as intense coursework, high-performance expectations, time management issues, and examination pressures, significantly impact students' mental health and academic performance. Recent research underscores that these stressors contribute to elevated levels of anxiety, depression, and burnout, which in turn can diminish students' academic motivation and self-esteem (Ruiz et al, 2024). Academic stress is closely tied to performance anxiety, where students may find certain subjects challenging and invest additional time and effort to achieve good grades, only to fall short of their goals (Adu, 2024). Some students set high academic standards and anticipate graduating with top honors, but failing to meet these expectations can lead to feelings of depression and

thoughts of dropping out. For instance, a study by Jagiello (2024) reveals that academic stress negatively affects cognitive functions and increases procrastination, further impeding academic success.

Additionally, adaptive coping strategies, such as effective time management, seeking social support, and utilizing academic resources, have been associated with better management of academic stress and improved well-being (Restrepo et al., 2023). Students need to realize that success requires sustained enthusiasm and dedication, even in the face of setbacks. According to Barbayannis et al. (2022), academic stress is often the most significant factor affecting the mental well-being of college students. Struggling with academic stress can have a profound impact on overall well-being, leading to increased class absenteeism due to stress and boredom while studying. Missing classes can hinder learning, reduce interaction with professors, and result in lower grades or the need to repeat courses. The fear of falling behind, combined with the pressure to catch up on missed lectures and coursework, can further exacerbate anxiety and stress levels. This heightened workload, including additional assignments, readings, and exams, often leads to time constraints and increased stress from managing deadlines.

Stress levels among students are a critical area of research due to their profound impact on both mental and physical health. High-stress levels are frequently linked to academic pressures, such as heavy coursework, performance expectations, and time management difficulties. Research indicates that these stressors significantly contribute to elevated anxiety, depression, and burnout among students (Johnson, 2020). For example, a study by Koppenborg et al. (2024) found that students experiencing high levels of academic stress reported lower academic performance and increased emotional distress. Although the effects of individual stressors have been well-documented, limited research explores how multiple stressors interact to influence overall stress levels. Additionally, most studies have been conducted in Western contexts, leaving a gap in understanding how cultural and institutional factors shape stress experiences in other regions, such as Malaysia. The unique sociocultural and academic environment at Universiti Teknologi MARA (UiTM) Segamat provides an important context for examining these dynamics.

The current study addresses this gap by investigating the combined effects of interpersonal, intrapersonal, and academic stressors on the overall stress levels of students at UiTM Segamat. Specifically, the research seeks to determine the relative contribution of each stressor type and identify key areas for intervention. This study is guided by the following problem statement: while stress is a common issue among university students, a lack of targeted and culturally relevant interventions continues to hinder efforts to improve student well-being. This study addresses this gap with the following research objectives:

1. To examine the relationships between interpersonal, intrapersonal, and academic stressors and overall stress levels among UiTM Segamat students.
2. To identify the most significant predictors of stress levels in this population.
3. To provide evidence-based recommendations for stress management strategies tailored to the needs of Malaysian university students.

By achieving these objectives, the study aims to contribute to a broader understanding of stress dynamics within the higher education context and offer actionable insights to improve mental well-being and academic outcomes for students.

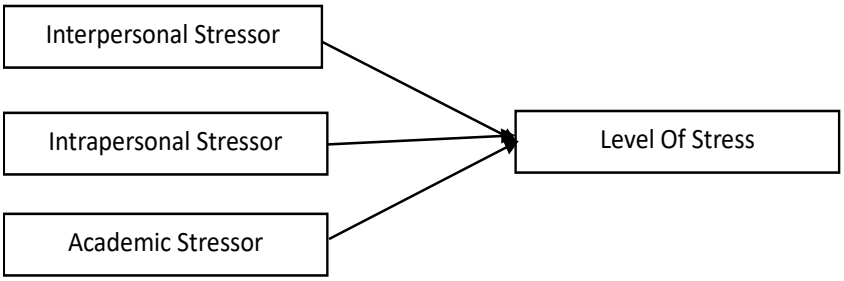

Figure 1: Theoretical Framework

The framework posits that interpersonal, intrapersonal, and academic stressors interact to influence the overall level of stress experienced by students. Interpersonal stressors can create interpersonal conflicts and social pressures, exacerbating stress levels. Intrapersonal stressors, stemming from internal psychological processes, contribute to self-perceived stress and emotional distress. Academic stressors, influenced by educational demands and performance expectations, further elevate stress levels among students. Understanding the interplay between these stressors is crucial for developing effective interventions and support mechanisms to alleviate stress and promote mental well-being among students at UiTM Segamat.

METHODOLOGY

Sample Size and Sampling Method

The sample size was calculated using the Rasoft sample size calculator, which considers population size, margin of error, and confidence level. For a 95% confidence level and a 5% margin of error, a recommended sample size of approximately 250 students was determined. Rasoft software is known for its survey and data collection functionalities, commonly used for academic, research, and business purposes. Its accuracy largely depends on factors such as the design of the survey, the quality of data input, and the specific methodologies applied (Sayed et al., 2024; Alsubaie et al., 2024). However, to enhance the robustness of the data, 340 students participated in the study, exceeding the minimum requirement and providing greater statistical power for the analysis. A simple random sampling technique was employed to select participants. This method ensured that each student in the eligible population had an equal chance of being included in the sample. Random selection helped provide an unbiased representation of the student body across different academic programs and year levels. Several measures were implemented to minimize potential biases in the study. Simple random sampling was employed to reduce selection bias, ensuring that all eligible students had an equal chance of inclusion. A standardized questionnaire was used for all participants to maintain consistency in data collection. Anonymity was assured to respondents, promoting honest and unbiased responses. Additionally, the questionnaire was distributed broadly across faculties and programs to ensure representation from diverse academic backgrounds.

Questionnaire Design

The questionnaire was adapted from studies by Bulo & Sanchez (2014), which extensively examined various sources of stress among college students, and Ahmad et al. (2021), which specifically assessed stress levels in a college setting in Srinagar, J & K, India. These studies were chosen for adaptation because they utilized validated measures and methodologies that are applicable to assessing stress factors across different cultural and educational contexts. By drawing from these sources, the adapted questionnaire aims to capture a broad spectrum of stressors relevant to UiTM Segamat students, ensuring robustness and relevance in addressing the specific mental health challenges they may face.

The questionnaire focused on three main domains: interpersonal stressors, intrapersonal stressors, and academic stressors. Each domain had 4 items, while the overall level of stress was assessed using 6 items. The questionnaire was designed to assess various factors contributing to stress across three key domains. Questions related to interpersonal stressors focused on social conflicts and pressures, while those addressing intrapersonal stressors explored internal thoughts, emotions, and self-perception. Items on academic stressors evaluated aspects such as workload, performance expectations, and time management. The questionnaire was administered using Google Forms, providing an easy and accessible platform for students to participate. This online format ensured convenience, allowing respondents to complete the questionnaire at their preferred time and location. The questionnaire utilized a Likert scale ranging from 1 to 5, where respondents indicated their level of agreement with each statement. The scale was structured as follows: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree.

Statistical Test

The relationships and reliability of the questionnaire were assessed using several statistical tests. Calculating Cronbach's alpha ensures that the questionnaire is both reliable and suitable for analyzing the relationships between constructs. Cronbach's alpha will be calculated to evaluate the internal consistency and reliability of the questionnaire items, ensuring that it accurately measures constructs like interpersonal stressors, intrapersonal stressors, academic stressors, and overall stress levels among students (Zam et al., 2023; Isahak et al., 2024; Mohammad et al., 2024). Additionally, multiple linear regression analysis will examine how the independent variables (interpersonal stressors, intrapersonal stressors, and academic stressors) relate to the dependent variable (level of stress), controlling for potential confounding variables (Ya'acob et al., 2023; Mohammad et al., 2024). This method will determine the extent to which each stressor contributes to overall stress levels and identify significant predictors and their coefficients, offering insights into how these factors collectively impact students' stress levels at UiTM Segamat. The data analysis for this study will be conducted using SPSS version 27 to ensure robust statistical evaluation and accurate interpretation of the results.

RESULT AND DISCUSSION

Respondents Profile

In this section, we present and discuss the results of statistical analyses conducted to explore the relationships between interpersonal, intrapersonal, and academic stressors as independent variables, and the levels of stress reported by UiTM Segamat students. These findings provide insights into the significant predictors and their respective impacts on students' overall stress levels, aiming to enhance understanding of the complex factors influencing mental well-being within this student population.

Table 1: Frequency of respondent gender

Gender	Frequency
Male	201
Female	139

The table above shows the frequency and percentage of male and female students. From the table, there are 139 male students and 201 female students. The total number of students involved in this study is 340. Most of the respondents are female with a percentage of 59.1% compared to male respondents at 40.9%.

Table 2: Frequency of respondent age

Age	Frequency

< 20 years old	50
>24 years old	21
20-21 years old	177
22-23 years old	92

The table above shows the age distribution of students involved in this study. Specifically, 14.7% of the students are under 20 years old, 52.1% are between 20 and 21 years old, 27.1% are between 22 and 23 years old, and 6.2% are over 24 years old. This demographic distribution reflects the typical student population at the institution and provides a representative sample for analyzing stress dynamics among university students.

Reliability Testing

Cronbach's alpha coefficient was computed to evaluate the reliability and internal consistency of the questionnaire employed in this study. This statistical measure determines the degree to which the set of questionnaire items are interrelated and thus reliably measures the constructs of interpersonal stressors, intrapersonal stressors, academic stressors, and overall stress levels among UiTM Segamat students. A high Cronbach's alpha value indicates a robust internal consistency, affirming that the instrument is a reliable tool for assessing the targeted stress factors within this population.

Table 3: Cronbach's Alpha Value for independent variables and dependent variable

Variable	Cronbach's Alpha Value
Interpersonal Stressors	0.777
Intrapersonal Stressors	0.609
Academic Stressors	0.775
Level of Stress	0.826

The Cronbach's alpha values for the variables in this study provide insights into the reliability and internal consistency of the questionnaire items. The Cronbach's alpha was calculated for each scale: Interpersonal Stressors, Intrapersonal Stressors, and Academic Stressors, each containing 4 items, and the Level of Stress scale, which included 6 items. The alpha value for Interpersonal Stressors is 0.777, indicating a good level of internal consistency. This suggests that the items related to interpersonal stressors are reliably measuring this construct, with consistent responses across these items. The variable Intrapersonal Stressors has a Cronbach's alpha value of 0.609, considered acceptable but reflecting a lower level of internal consistency compared to the other constructs. While the items generally measure intrapersonal stressors, there may be some variability in respondents' interpretations and responses. Refining these items might improve their reliability. With an alpha value of 0.775, Academic Stressors demonstrate good internal consistency. This suggests that the items designed to measure academic stressors consistently capture this construct and are reliable for assessing academic-related stress among students. The highest Cronbach's alpha value, 0.826, is found for the Level of Stress variable, indicating excellent internal consistency. This high value suggests that the items measuring overall stress levels are highly reliable and consistently reflect the respondents' perceived stress. Overall, Cronbach's alpha values indicate that the questionnaire is a reliable tool for measuring the targeted stress factors among UiTM Segamat students. The exception is intrapersonal stressors, which may need further refinement to improve consistency. These results affirm that the instrument effectively assesses the constructs of interpersonal, intrapersonal, and academic stressors, as well as the overall level of stress within this student population.

Relationship Between Stress and Stressors

Multiple linear regression analysis was employed to investigate the relationships between interpersonal, intrapersonal, and academic stressors (independent variables) and the overall level of stress (dependent variable) among UiTM Segamat students. This statistical approach allowed for the

determination of how each stressor contributes to the overall stress levels while controlling for the influence of other variables. The analysis revealed that all three types of stressors significantly predict the level of stress, with academic stressors showing the strongest impact. These findings highlight the multifaceted nature of stress and underscore the need for targeted interventions to support students' mental well-being. The results of the regression analysis are summarized in the table below:

Table 4: Regression Analysis for the independent variables and dependent variable

Model	B	Std. Error	Beta	t	Sig
(Constant)	.327	.123	0	2.653	.008
Interpersonal Stressors	.381	.045	.404	8.534	<.001
Intrapersonal Stressors	.256	.043	.247	5.982	<.001
Academic Stressors	.273	.044	.297	6.171	<.001

Dependent Variable: Level of Stress

Interpersonal Stressors (B = 0.381, Beta = 0.404, t = 8.534, $p < 0.001$) significantly predict the level of stress. The positive Beta coefficient indicates that as interpersonal stressors increase, the level of stress among students also increases. This highlights the substantial impact of interpersonal relationships and conflicts on student stress levels. Intrapersonal Stressors (B = 0.256, Beta = 0.247, t = 5.982, $p < 0.001$) also significantly predict the level of stress. The positive Beta coefficient here suggests that higher levels of intrapersonal stress, such as internal thoughts and emotions, are associated with increased stress levels. This finding underscores the importance of addressing internal psychological factors in stress management interventions. Academic Stressors (B = 0.273, Beta = 0.297, t = 6.171, $p < 0.001$) are significant predictors of the level of stress as well. The positive Beta coefficient indicates that as academic stressors increase, the overall stress levels among students rise. Academic pressures, such as workload and performance expectations, have a pronounced effect on student stress. All three predictors (interpersonal, intrapersonal, and academic stressors) were found to be statistically significant, with p-values less than 0.001. This suggests that each type of stressor independently contributes to the overall stress levels of students at UiTM Segamat. The equation is as follows:

$$\begin{aligned} \boldsymbol{Levelofstres} &= \mathbf{0.327} + \mathbf{0.381}(\boldsymbol{InterpersonalStressor}) \\ &\quad + \mathbf{0.256}(\boldsymbol{IntrapersonalStressor}) \\ &\quad + \mathbf{0.273}(\boldsymbol{AcademicStressor}) \end{aligned}$$

Beta coefficients are standardized (z-scores) and can be compared across different variables within the model to determine their relative importance. The Beta coefficients reveal that interpersonal stressors have the largest impact on stress levels (Beta = 0.404), followed by academic stressors (Beta = 0.297), and intrapersonal stressors (Beta = 0.247). These findings indicate that while all three types of stressors are important, interpersonal stressors exert the greatest influence on student stress levels. In summary, the multiple linear regression analysis indicates that interpersonal, intrapersonal, and academic stressors all significantly contribute to the level of stress among UiTM Segamat students. Understanding these relationships can inform the development of targeted interventions to mitigate stress and promote mental well-being among students.

Table 5: R^2 for multiple linear regression model

Regression Statistics	
R^2	0.746

The R-squared (R^2) value of 0.746 in the multiple linear regression analysis indicates that approximately 74.6% of the variance in the level of stress among UiTM Segamat students is explained by the independent variables included in the model—interpersonal stressors, intrapersonal stressors, and academic stressors. This high R-squared value suggests that these variables collectively have strong explanatory power in predicting student stress levels based on the data used in the analysis. R-squared

is a measure that ranges from 0 to 1, where 1 indicates that all variability in the dependent variable (level of stress) is explained by the independent variables, while 0 indicates none of the variability is explained. In this context, an R-squared value of 0.746 indicates a substantial portion of the variability in stress levels is accounted for by the selected stressors, highlighting their importance in understanding and addressing student stress. Adjusted R-squared adjusts the R-squared value for the number of predictors in the model, providing a more accurate measure of how well the model fits the data. However, since we are focusing only on R-squared, it's important to note that 74.6% of the variation in stress levels is attributed to the combined influence of interpersonal, intrapersonal, and academic stressors among UiTM Segamat students, demonstrating a strong relationship between these factors and student stress experiences.

The results of this study revealed that academic stressors were the most significant predictors of overall stress, a finding consistent with Bhujade (2017) and Ruiz et al. (2024), who reported that academic workload and performance pressures are primary sources of stress among university students globally. The strong influence of academic stressors in this study highlights the universal nature of academic challenges, regardless of geographical or institutional context. Interpersonal stressors were the second most influential category, aligning with findings by Martinez et al. (2023), who emphasized the role of peer relationships and social conflicts in shaping emotional well-being. The significant impact of interpersonal dynamics underscores the need for interventions targeting social integration and conflict resolution within university settings. In contrast, intrapersonal stressors had a moderate impact in this study, differing from Neff et al. (2023), who found internal psychological factors to be highly influential. This variation could be attributed to cultural differences, as Malaysian students may benefit from strong familial and social support networks that mitigate the effects of intrapersonal challenges. These comparisons situate the current findings within the broader research landscape, highlighting both commonalities and contextual nuances in understanding stress among university students.

CONCLUSION

This study examined the relationships between interpersonal, intrapersonal, and academic stressors and their impact on the overall stress levels of students at UiTM Segamat. The findings revealed that all three stressor categories significantly influenced stress levels, with academic stressors exerting the strongest effect, followed by interpersonal and intrapersonal stressors. The model explained 74.6% of the variance in stress levels, emphasizing the multifaceted nature of student stress and its considerable impact on mental well-being. These results underscore the importance of addressing stress holistically by targeting academic pressures, improving interpersonal relationships, and enhancing students' ability to manage internal psychological challenges. The study's significance lies in its contribution to understanding stress dynamics within the Malaysian university context and its implications for developing tailored interventions to support students' mental health and academic performance. However, the study is not without limitations. The use of a single institution limits the generalizability of the findings to other universities or regions. Additionally, reliance on self-reported data may introduce response bias. Future research should consider including longitudinal designs to explore stress trends over time and expanding the sample to include multiple institutions for broader applicability. Further studies could also investigate the effectiveness of specific interventions in mitigating identified stressors. By addressing these limitations and building on the current findings, future research can provide deeper insights into the challenges faced by university students and inform more effective strategies for fostering a supportive academic environment.

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AUTHORS' CONTRIBUTION

The authors contributed to the manuscript as follows: Fatin Farazh Ya'acob led the conceptualization of the study, framing the primary objectives and research questions. Basri Badyalina and Amir Imran Zainoddin developed and refined the methodology, ensuring a robust approach to data collection and analysis. Nur Diana Zamani and Muhammad Zulqarnain Hakim Abd Jalal were responsible for data collection, and gathering comprehensive and accurate data. Data analysis was conducted by Basri Badyalina and Rusnani Mohamad Khalid, who interpreted the results and highlighted key findings. Fatin Farazh Ya'acob prepared the initial draft of the manuscript, detailing the main insights, while Basri Badyalina and Amir Imran Zainoddin reviewed and revised it, enhancing clarity and accuracy. Rusnani Mohamad Khalid supervised the study, offering guidance on the study design, methodology, and final review. All authors reviewed and approved the final manuscript, taking responsibility for their respective contributions.

CONFLICT OF INTEREST DECLARATION

The authors declare that there are no conflicts of interest regarding the publication of this manuscript.

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