

WHAT MATTERS MOST FOR THE MENTAL HEALTH ISSUES OF INTERNATIONAL UNIVERSITY STUDENTS: THE PREDOMINANT ROLE OF ACADEMIC STRESS

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ABSTRACT

Students encounter a range of complex challenges throughout their academic journeys, particularly when pursuing studies abroad. Some of the leading challenges include boredom, low self-worth, social withdrawal, and poor emotional control in maintaining stable mental health. This study examines the mental health issues of international university students, including communication, academic stress, financial difficulties, and culture adaptation. A study involved 244 university students from Asia, Africa, and the Middle East, all of whom were pursuing their education in Malaysia. The data were obtained through an adapted instrument based on an established and validated questionnaire. The findings indicated that only one significant factor affected their mental health, which was academic stress. This study identified that academic stress was the only statistically significant factor influencing the mental health of international students, underscoring the critical importance of effective academic stress management in supporting their overall well-being. Despite common perceptions, communication skills, culture adaptation, and financial difficulties were found to be insignificant. Hence, the university student affairs department should foreground stress-mitigation strategies as a central component of their support services.

Keywords: academic stress; culture adaptation; international university students; mental health issues

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1. INTRODUCTION

The internationalization of higher education continues to reshape university communities globally, fostering diversity while presenting unique adjustment challenges for students pursuing studies away from their home countries (Cantwell, 2023). Compared to their domestic counterparts, international students often face increased vulnerability to mental health issues such as boredom, low self-worth, social withdrawal, and poor emotional control, navigating a complex interplay of new academic, social, and culture demands (Chen et al., 2024; Razgulin et al., 2023). Among these vulnerabilities, academic stress has especially significant consequences. In addition to causing psychological issues like anxiety, depression, and self-doubt, academic stress can diminish students' motivation, hinder concentration, and adversely impact academic performance. For international students, this challenge is intensified by language obstacles, unfamiliar evaluation techniques, and significant pressure to meet high academic standards, often accompanied by financial commitments and family obligations. In the absence of efficient coping mechanisms or institutional assistance, ongoing academic pressure can result in burnout, social isolation, and a diminished ability to excel both academically and personally.

This adaptation process, frequently occurring without the buffer of established support networks, can significantly strain psychological well-being, elevating the risk for conditions such as stress, anxiety, loneliness, and depression (Zhou et al., 2024; Hussin et al., 2021; Auerbach et al., 2018). Exacerbating these baseline challenges, recent global disruptions such as the COVID-19 pandemic introduced further stressors, including abrupt shifts to online learning and enforced social isolation, which profoundly affected student mental health worldwide (Chen et al., 2024; Parilla, 2022; Hussin et al., 2021).

Recent studies have consistently highlighted communication challenges, academic stress, financial difficulties, and culture adaptation as key stressors impacting international students (Chen et al., 2024; Salameh et al., 2024; Gao et al., 2024; Fazly & Kulaweera, 2023; Parilla, 2022; Li et al., 2022; Cogan et al., 2021; Ye et al., 2021; Hussin et al., 2021; Mikolajczyk et al., 2021). Communication issues, whether due to language barriers or unfamiliar intercultural norms, can interfere with social integration and restrict access to support systems, often resulting in loneliness and psychological distress.

Academic stress is another key factor, including heavy workloads, performance pressures, multiple assignments, and struggles to adapt to different teaching styles or online learning environments (Misra & Castillo, 2004; Lee et al., 2021; Parilla, 2022). Financial difficulties are particularly evident for international students, who often face higher tuition fees and living expenses, resulting in a reduced state of well-being and increased mental health challenges (Mikolajczyk et al., 2021). Finally, culture adaptation, including managing culture shock, adjusting to new social customs, and developing a sense of belonging, poses significant challenges to psychological adjustment (Smith & Khawaja, 2011; Lee et al., 2021). While strong peer networks and adaptive coping strategies can buffer these effects, it remains essential to identify and address the primary sources of stress.

Despite the growing body of work exploring these factors, a notable gap persists in understanding their relative influence and predictive power concerning the mental health of international students within specific, non-Western host environments. Research conducted in contexts such as Malaysia during the pandemic has explored aspects like loneliness and coping (Hussin et al., 2021) and examined academic stress related to online learning (Parilla, 2022). However, few studies have simultaneously investigated the comparative weight of academic stress, communication challenges, financial difficulties, and culture adaptation difficulties specifically for international students in Malaysia (Elheneidy & Mohd, 2025; Ong & Cheong, 2018). Determining which factors exert the predominant influence is essential for universities to move beyond generalized support strategies toward more targeted, effective interventions.

Therefore, this quantitative study aims to investigate the primary determinants influencing the mental health of international students in Malaysia. The research aims to rigorously analyze the relationships between key potential stressors, specifically academic stress, communication, financial difficulties, and culture adaptation challenges. A central objective is to ascertain the relative significance and predictive strength of these factors, identifying which play the predominant role in shaping mental well-being within the specific student population and institutional context. The significance of this study lies in its potential to provide crucial, context-specific empirical evidence. By elucidating the most impactful stressors, the findings can directly inform university administrators, mental health professionals, and student support services, enabling evidence-based prioritization of resources and the development of focused interventions designed to effectively enhance the mental health and overall success of international students.

2. LITERATURE REVIEW

The mental health of international students is a growing area of focus in higher education research, reflecting the unique pressures associated with studying in a foreign environment (Zhou et al., 2024; Razgulin et al., 2023). Navigating academic, social, and culture transitions simultaneously can significantly strain psychological resources (Auerbach et al., 2018). This review synthesizes recent, credible literature examining four key factors consistently identified as impacting the mental health issues of this population: communication, academic stress, financial difficulties, and culture adaptation.

2.1 *Communication and Mental Health Issues*

Communication plays a pivotal role in the adjustment and well-being of international students (Cogan et al., 2021). For many individuals, difficulties with verbal communication, grasping academic standards, or recognizing social cues are exacerbated by unfamiliar language and cross-culture norms. Barriers related to language proficiency or navigating different interculture communication styles can significantly hinder social integration, impede participation in academic life, and limit access to essential support services (Ye et al., 2021; Cogan et al., 2021). These difficulties are frequently associated with increased feelings of loneliness, social isolation, and psychological distress (Hussin et al., 2021; Ye et al., 2021). Students facing communication challenges may feel less comfortable forming close relationships or seeking help when needed, which further impacts their mental health (Cogan

et al., 2021). These experiences not only impact emotional health but also intersect with academic performance, particularly in group-based coursework or when engaging with lecturers. Conversely, practical communication skills and access to supportive social networks, including peer relationships, are crucial protective factors associated with better adjustment and reduced loneliness (Razgulin et al., 2023; Hussin et al., 2021; Ye et al., 2021). Therefore, communication effectiveness must be understood as more than a functional skill. It is directly connected to how international students experience emotional connection, institutional support, and mental resilience. Based on the discussion above, we hypothesize that;

H1: There is a significant relationship between communication and mental health issues among international students in Malaysia.

2.2 Academic Stress and Mental Health Issues

High levels of perceived academic stress are strongly associated with adverse mental health outcomes among university students globally (Chen et al., 2024; Li et al., 2022). For international students in particular, the burden is uniquely intense. They often struggle to meet rigorous academic standards in a foreign language, adapt to unfamiliar teaching styles, and cope with different assessment methods (Fazly & Kulaweera, 2023; Parilla, 2022). Difficulties related to specific learning modalities, such as the widespread shift to online education during the pandemic, also contributed significantly to academic stress (Parilla, 2022). Numerous recent studies confirm a direct correlation between elevated academic stress and increased symptoms of depression and anxiety (Chen et al., 2024; Fazly & Kulaweera, 2023; Li et al., 2022). Furthermore, significant stress and resulting poor mental health can directly impair academic performance, creating a detrimental cycle (Arthur et al., 2025). While individual coping strategies and resilience influence how students manage stress (Hussin et al., 2021), the evidence consistently shows that international students report higher levels of academic stress compared to their domestic peers, underscoring the critical role it plays in their mental health landscape.

H2: There is a significant relationship between academic stress and mental health issues among international students in Malaysia.

2.3 Financial Issues and Mental Health Issues

Concerns regarding financial difficulties are a prominent stressor for many university students, often amplified for those studying internationally due to factors such as higher tuition fees, relocation costs, living expenses in potentially more expensive countries, and sometimes limited work opportunities (Salameh et al., 2024). International students often lack access to local financial support systems or face restrictions on employment, which can place them in precarious financial positions. Such constraints elevate their risk for emotional distress, including feelings of helplessness and inadequacy (Mikolajczyk et al., 2021). A substantial body of recent research demonstrates a clear link between financial strain, perceived financial stress, and negative impacts on student mental health, including increased symptoms of depression and anxiety (Chen et al., 2024; Salameh et al., 2024; Mikolajczyk et al., 2021). Disruptions like the COVID-19 pandemic highlighted this vulnerability, as worsened financial situations were directly associated with increased depressive symptoms,

particularly among international students (Mikolajczyk et al., 2021). The constant worry associated with managing financial difficulties can create significant psychological pressure, detracting from academic focus and negatively influencing overall mental health and well-being (Salameh et al., 2024). Based on the above discussion, we hypothesize;

H3: There is a significant relationship between financial difficulties and mental health issues among international students in Malaysia.

2.4 Culture Adaptation and Mental Health Issues

The process of culture adaptation constitutes a core dimension of the international student experience, requiring navigation of unfamiliar social norms, value systems, academic demands, and daily routines (Gao et al., 2024). Challenges with culture shock, loneliness, and role confusion are particularly acute among newly arrived students, who may struggle to connect socially or understand unspoken institutional expectations. Difficulties encountered during this process, including potential culture shock and challenges forming meaningful social connections, are significant predictors of psychological distress (Gao et al., 2024; Cogan et al., 2021).

International students often report feelings of marginalization or alienation if their culture identity is not acknowledged or supported within the host institution. These emotional disruptions may surface as depressive symptoms, irritability, or disengagement (Zhou et al., 2024). Successful sociocultural adjustment, often facilitated by factors like language ability, social support, and participation in campus activities, is crucial for fostering a sense of belonging and mitigating stress (Razgulin et al., 2023; Ye et al., 2021). Conversely, significant struggles with culture adaptation can exacerbate feelings of isolation, anxiety, and depression, thereby negatively impacting overall mental health challenges (Zhou et al., 2024; Cogan et al., 2021). Therefore, cultural adaptation should not be treated merely as a logistical hurdle but as a deep psychological process that shapes self-esteem, resilience, and emotional well-being among international students. Based on the above discussion, we hypothesize;

H4: There is a significant relationship between culture adaptation and mental health among international university students in Malaysia.

3. METHODOLOGY

3.1 Research Design

This study utilized a cross-sectional, quantitative research design to investigate the hypothesized relationships between communication, academic stress, financial difficulties, and culture adaptation with the mental health of international university students. Partial Least Squares Structural Equation Modeling (PLS-SEM) was employed to analyze these relationships. This technique was selected due to its suitability for prediction-oriented research, its effectiveness with relatively small sample sizes, its ability to handle non-normally

distributed data, and its capacity to model complex relationships involving indicators that reflect the underlying concept that represents psychological traits like stress or anxiety constructs (Hair et al., 2019; Hair et al., 2016).

3.2 Participants and Sampling

The target population consisted of international undergraduate students registered at an international private university located in Malaysia. Data collection involved the distribution of self-administered questionnaires. A total of 300 questionnaires were initially distributed, with 244 fully completed and usable responses returned, resulting in a final sample size (N=244) and a response rate of 81.33%. This sample size meets the recommended guidelines for PLS-SEM analysis, given the model's complexity (Hair et al., 2019). Participants were recruited using sampling methods appropriate for accessing diverse student groups within the university setting (Husin et al., 2021). Ethical considerations were prioritized, and informed consent was obtained from all participants. Anonymity and confidentiality were guaranteed throughout the research process. The data was taken from an international private university located in Malaysia in a period of six (6) months, starting from November 2024 to April 2025, through both online and offline questionnaire distribution.

3.3 Instrument Development

The constructs in this study were measured using items adapted from previously established scales, utilizing a 5-point Likert-type response format, anchored as follows: 1 = Never, 2 = Almost Never, 3 = Sometimes, 4 = Often, 5 = Very Often. This construct is adapted from the Mental Health Questionnaire (Roldán-Merino et al., 2017). Specific items included in the final analysis after model assessment were B2 ("I find life to be boring"), B3 ("I find it hard to establish deep relationships with others"), and B5 ("I try to look for the positive side when bad things happen to me" - likely reverse-coded in analysis), B7 ("I am able to maintain a high level of self-control in conflictive situations in my life" - likely reverse-coded), and B8 ("I feel useless"). Consistent with the scale's focus on negative indicators or reverse-coded positive indicators, higher composite scores represented poorer mental health.

Communication: The perceived ease or difficulty in communication within the university context was measured using items adapted from scales that explore student experiences, potentially drawing on concepts discussed in work by Sawir et al. (2008), as referenced in the provided source link. Items included in the final analysis were C1 ("I often converse with fellow international students about shared experiences?"), C4 ("I feel comfortable approaching university staff (administrative or support staff) when facing mental health challenges?"), and C5 ("Communicating with my lecturer has significantly reduced my academic stress.")

Academic Stress: The perceived stress directly related to academic tasks and performance was assessed using items adapted from Husin et al. (2022). The items included in the final analysis were D1 ("I often feel unclear about my task scope"), D3 ("I often feel that I am not fully able to handle my task"), and D5 ("I often think that my workload will affect my academic performance").

Financial Difficulties: This construct measured perceived financial strain and worries related to university life, using items also adapted from Husin et al. (2022). Items included in the final analysis were E1 (“I feel that having less money affects my concentration to study”), E3 (“I don’t have enough money to pay for my monthly food expenses”), and E5 (“I worry about having enough money to pay for my living expenses”).

Culture Adaptation: Items assessed perceived adjustment and integration into the host Malaysian culture, adapted from relevant literature on student acculturation. The items included in the final analysis were F4 (“I have good support from university management”) and F5 (“I have a good relationship with my peers”).

3.4 Data Analysis

Data were analyzed using SmartPLS 4.0. The analysis followed the recommended two-stage procedure for PLS-SEM, which involves assessing the measurement model followed by the structural model (Hair et al., 2019).

Model Evaluation: Reliability was assessed using Cronbach’s alpha (CA) and composite reliability (CR) (threshold > 0.70). Convergent validity was evaluated via average variance extracted (AVE) (threshold > 0.50) and indicator loadings (threshold > 0.70 recommended) (Hair et al., 2019; Fornell & Larcker, 1981). Discriminant validity was assessed using the Fornell-Larcker criterion and the heterotrait–monotrait (HTMT) ratio (threshold < 0.85) (Henseler et al., 2015), ensuring that each construct was distinct and measured a unique concept within the model.

Structural Model Evaluation: The significance of path coefficients (β) was determined using bootstrapping (5,000 resamples). Predictive accuracy was assessed using the coefficient of determination (R^2), and the explanatory power of individual predictors was assessed via effect sizes (f^2) (Hair et al., 2016; Cohen, 1988). Standard interpretation thresholds were applied (R^2 : 0.25 = weak, 0.50 = moderate, 0.75 = substantial; f^2 : 0.02 = small, 0.15 = medium, 0.35 = large).

4. RESULTS AND DISCUSSION

4.1 Profile of Respondents

The demographic characteristics of the 244 international student respondents are summarized in Table 1. The sample exhibited a near-even gender split (50.8% male, 49.2% female). The largest group originated from Asia (64.3%), with significant representation from Africa (27.5%) and the Middle East (8.2%). The data indicate that a majority of international students (59.4%) had been in Malaysia for two years or less, indicating they were still in the early stages of academic and culture adjustment. A substantial portion of the sample comprised first-year students (44.3%), and approximately one-third (33.2%) had been residing in Malaysia for less than a year. The reliability and validity of the measurement model were assessed.

Table 1: Demographic Profile of Respondents (N=244)

Respondent's	Background	Frequency	Percentage (%)
Gender	Male	124	50.8
	Female	120	49.2
Region	Asia	157	64.3
	Africa	67	27.5
	Middle East	20	8.2
Been in Malaysia	Less than a year	81	33.2
	1-2 years	64	26.2
	3-5 years	52	21.3
	More than 5 years	47	19.3
Year of Study	First	108	44.3
	Second	64	26.2
	Third	59	24.2
	Fourth	13	5.3
Total		244	100%

4.2 Measurement Model Assessment

The reliability and validity of the measurement model were assessed. Table 2 presents the results, including specific item loadings. All constructs demonstrated acceptable internal consistency reliability, with Cronbach's alpha (CA) values ranging from 0.611 (communication) to 0.838 (central health issues) and composite reliability (CR) values ranging from 0.667 (communication) to 0.885 (mental health issues), generally meeting or exceeding the 0.70 threshold (Hair et al., 2019). Convergent validity was established, as the average variance extracted (AVE) for all constructs exceeded the minimum value of 0.50, and most indicator loadings were above the recommended threshold of 0.70.

Table 2: Measurement Model Assessment: Loadings, Reliability, and Convergent Validity (N=244)

Construct and Items	Loadings	CA	CR	AVE	Convergent Validity
Communication					
C1	0.821	0.611	0.667	0.537	Yes
C4	0.712				
C5	0.750				
Academic stress					
D1	0.870	0.712	0.777	0.834	Yes
D2	0.849				
D3	0.742				
Financial difficulties					
E1	0.794	0.770	0.783	0.866	Yes
E3	0.830				
E5	0.853				
Culture adaptation					
F4	0.753	0.766	0.878	0.844	Yes
F5	0.904				
F6	0.928				
Mental health issues					
B2	0.745	0.838	0.846	0.885	Yes
B3	0.793				
B5	0.723				
B7	0.787				
B8	0.843				

Discriminant validity was assessed using both the Fornell–Larcker criterion and the HTMT ratio. The Fornell–Larcker results (Table 3) showed that the square root of the AVE for each construct (diagonal values) was greater than its correlation with any other construct (off-diagonal values), meeting the criterion (Fornell & Larcker, 1981). Furthermore, the HTMT ratios (Table 4) were all below the conservative threshold of 0.85, providing additional evidence for discriminant validity (Henseler et al., 2015). Collectively, these results confirm the reliability and validity of the measurement model.

Table 3: Discriminant Validity Assessment (Fornell-Larcker Criterion, N=244)

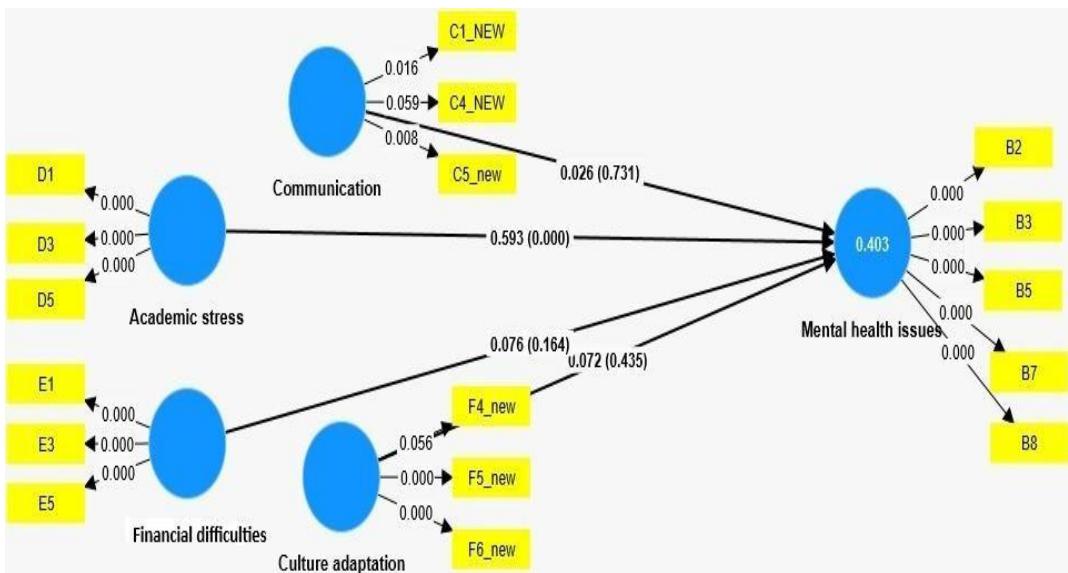
	Communication	Culture adaptation	Financial difficulties	Mental health issues	Academic stress
Communication	0.733				
Culture adaptation	0.527	0.809			
Financial difficulties	0.074	0.149	0.826		
Mental health issues	0.106	0.112	0.276	0.7590	
Academic stress	0.062	0.063	0.351	0.6260	0.794

Table 4: Discriminant Validity Assessment (HTMT Ratio, N=244)

	Communication	Culture adaptation	Financial difficulties	Mental health issues
Communication				
Culture adaptation	0.810			
Financial difficulties	0.174	0.195		
Mental health issues	0.153	0.159	0.333	
Academic stress	0.216	0.170	0.460	0.769

4.3 Structural Model Assessment

The structural model was evaluated to test the proposed hypotheses regarding the predictors of mental health issues. The path coefficients, significance levels (p-values), and variance explained (R^2) are presented in Figure 1 and summarized as follows.

Figure 1: PLS-SEM Structural Model Results (N=244)

The results of the hypothesis tests were as follows:

H1: There is a significant relationship between communication and mental health issues, since ($\beta = 0.026$, $p = 0.731 > 0.05$). Thus, H1 was not supported.

H2: There is a significant relationship between academic stress and mental health issues, since ($\beta = 0.593$, $p = 0.000 < 0.05$). Thus, H2 was supported.

H3: There is a significant relationship between financial difficulties and mental health issues, since ($\beta = 0.076$, $p = 0.164 > 0.05$). Thus, H3 was not supported.

H4: There is a significant relationship between culture adaptation and mental health issues, since ($\beta = 0.072$, $p = 0.435 > 0.05$). Thus, H4 was not supported.

Table 5: Effect Size

Variable	F ²	Effect Size
Academic stress	0.509	large
Communication	0.001	small
Financial difficulties	0.008	small
Culture adaptation	0.006	small

The model explained 40.3% of the variance in mental health issues ($R^2 = 0.403$), indicating a moderate predictive power according to established guidelines (Hair et al., 2019). The effect

size (f^2) was calculated for the paths. The f^2 value for the academic stress indicated a large effect size ($f^2 = 0.509$; Cohen, 1988). In contrast, the f^2 values for the paths from communication ($f^2 = 0.001$), financial difficulties ($f^2 = 0.008$), and culture adaptation ($f^2 = 0.006$) were negligible (i.e., below 0.02). These results raise important questions about the structure of stress experienced by international students. Despite literature emphasizing multiple sources of psychological burden, only academic stress emerged as a significant predictor. The statistical dominance of academic stress suggests that, for the sampled students, psychological strain is not fragmented across domains but rather concentrated in academic performance.

4.4 Discussion of Findings

The results of the structural model analysis provided compelling insights into the factors influencing the mental health of international students within the studied Malaysian university setting. The most striking outcome was the robust and singular predictive power of academic stress. The highly significant positive relationship ($\beta = 0.593$, $p < 0.001$) and its large associated effect size ($f^2 = 0.509$) firmly established academic pressures as the predominant factor linked to poorer mental health in this sample. This finding resonated strongly with a substantial body of international research that has consistently identified academic demands as a primary source of distress for university students across diverse contexts (Chen et al., 2024; Fazly & Kulaweera, 2023; Li et al., 2022).

The findings suggest that the core challenges are associated with coursework, performance expectations, adjustments to pedagogical styles, and potentially navigating specific learning modalities, such as online education (Parilla, 2022), constitute the most significant burden on the psychological well-being of these students. For international students, this academic pressure may be further intensified by factors such as the need to justify the significant investment in overseas education or the inherent challenges of learning complex material in a non-native language, even if language itself did not emerge as a direct predictor via the communication variable in this specific model.

Perhaps more counterintuitive are the non-significant direct relationships observed between communication, financial difficulties, and culture adaptation with mental health. These findings contrast with established literature, which frequently cites these factors as critical stressors for international students (Salameh et al., 2024; Gao et al., 2024; Cogan et al., 2021; Hussin et al., 2021). Several interpretations, grounded in the study's specific context, warrant consideration. Firstly, the unique institutional environment of the participating private university may offer specific support structures or foster a particular campus climate that mitigates the direct negative impact of these challenges. For instance, targeted orientation programs, accessible peer support networks, and culturally sensitive communication channels may serve as buffers against difficulties.

Secondly, the demographic composition of the sample, predominantly from Asian backgrounds, may have influenced experiences of culture adaptation and communication differently than in studies conducted in Western countries with more diverse international student cohorts. Shared regional norms or prior interculture experiences could have eased certain aspects of adjustment within the Malaysian context.

Thirdly, while direct paths were non-significant, these factors likely contribute to the overall academic stress ecosystem. It is highly plausible that variance associated with communication difficulties (e.g., struggling to understand lectures), financial difficulties (e.g., worry impacting concentration), or culture adaptation challenges (e.g., feeling isolated affecting motivation) was substantially captured within the broader, dominant academic stress construct. Academic stress, therefore, might act as a primary conduit through which these other pressures ultimately affect mental health, even if their independent statistical pathways are obscured in this model.

Lastly, the sample characteristics, particularly the large proportion of first-year students, may indicate that the findings reflect the acute phase of academic adjustment stress. The specific impacts of longer-term financial pressures or deeper, nuanced culture integration challenges might manifest more clearly as direct predictors in studies examining students at later stages of their academic journey. While not statistically significant as direct predictors of the mental health variable in this analysis, communication, financial difficulties, and culture adaptation remain critical dimensions of the overall international student experience, influencing integration, satisfaction, and potentially contributing indirectly to the dominant stressor identified: academic pressure. Research conducted during the pandemic in Malaysia, for example, identified links between social support (related to communication and adaptation) and loneliness (Hussin et al., 2021), reinforcing the importance of these social dimensions, even if their direct path to the broader mental health outcome measured here was not significant against the impact of academic stress.

The additional explanation lies in the demographic profile of the respondents. Nearly 44.3% of the sample were first-year students, and over 33% had been in Malaysia for less than one year. This suggests that many were still in an initial adjustment phase, where academic expectations and performance pressures take precedence over longer-term concerns such as cultural integration or financial sustainability. Academic performance also directly affects visa status, scholarship eligibility, and familial expectations, making it an urgent and high-stakes issue for this group. Moreover, the predominantly Asian origin of the respondents (64.3%) may reflect collectivist cultural norms, in which academic achievement is central to personal identity and familial pride. These students may internalize academic success as a primary measure of self-worth, leading to heightened emotional reactivity to academic stressors compared to social or financial ones.

4.5 Implications

These findings provide actionable insights for international universities hosting students from across the globe. The clear identification of academic stress as the primary driver of poor mental health strongly suggests that institutional efforts should prioritize strategies aimed at mitigating these academic pressures. Practical steps could include enhancing academic advising services by offering workshops focused on study skills, time management, and coping with exam anxiety. This could also involve promoting faculty awareness of student stress indicators and ensuring that accessible mental health counseling is equipped to handle academic-related distress. Reviewing academic policies and workloads to ensure they are rigorous yet manageable may also be beneficial. While holistic support addressing communication,

financial literacy, and culture integration remains crucial for overall student success and may indirectly alleviate academic burdens (Razgulin et al., 2023; Hussin et al., 2021), this study indicates that interventions directly targeting academic stress are likely to yield the most significant improvements in the measured mental health outcomes for this population.

4.6 Limitations and Future Research

This study is subject to several limitations that inform directions for future inquiry. The data collection was limited to a single private international university in Malaysia, which hosts more than 1000 international students from 62 countries. The cross-sectional design limits the ability to infer causality; longitudinal research is needed to better understand the dynamic relationship between academic stress and mental health over time. Findings from this specific sample may not fully generalize to international students in public universities or other national contexts. The reliance on self-report questionnaires introduces potential standard method variance and common method bias.

Future research should extend, not shift, the current model. Building on the dominant role of academic stress identified here, researchers might investigate which academic factors (e.g., curriculum intensity, feedback quality, or faculty interaction) most directly contribute to stress among international students. Furthermore, context-specific research that universities in Malaysia can implement to support students from Asia, Africa, and the Middle East in managing academic stress warrants investigation. Suggestions may include culturally tailored academic mentorship programs, inclusive counseling services, and faculty training on cross-culture sensitivity. Future studies could strengthen validity by incorporating diverse methodologies, such as qualitative interviews or objective data points. Rather than proposing entirely new variables, future research should test potential mediators or moderators such as self-efficacy or resilience within the academic stress–mental health pathway. Furthermore, the broad measurement of the key constructs may benefit from more granular assessment; future work could explore specific facets of academic stress (e.g., workload vs. assessment anxiety) or types of communication challenges. Finally, given that the model explained a moderate amount of variance, future research should explore additional factors influencing international student mental health, including personality characteristics, specific coping mechanisms employed (Hussin et al., 2021), and the quality of social support. More complex models involving mediation or moderation may also be valuable, inspired by conceptual frameworks found in studies such as Parilla (2020).

5. CONCLUSION

This study sought to identify the primary determinants influencing the mental health issues of international students at a private university in Malaysia, focusing on the relative impact of academic stress, communication challenges, financial difficulties, and culture adaptation. These students were all selected and come from underprivileged countries, and are fully funded, enabling them to overcome other challenges. As such, these international students are primarily expected to concentrate on their studies, graduate on time, and bring pride to their home countries. The quantitative analysis, employing partial least squares structural equation

modeling (PLS-SEM), yielded a distinct and significant primary finding: academic stress emerged as the sole statistically significant predictor of poorer mental health outcomes within this specific student sample and context. This relationship was not only statistically significant ($p < 0.001$) but also practically meaningful, demonstrating a large effect size ($f^2 = 0.509$) and indicating that academic pressures were the predominant factor associated with the psychological distress reported by these students.

While factors such as difficulties with communication, concerns over financial difficulties, and challenges related to culture adaptation are widely recognized in the literature as significant stressors for international students globally (Salameh et al., 2024; Gao et al., 2024; Cogan et al., 2021), their direct predictive paths to mental health were found to be non-significant in this particular model. As discussed, this divergence from some previous research may reflect unique contextual factors within the studied institution or the Malaysian environment, potential statistical overshadowing by the dominant academic stress variable, or specific characteristics of the sample, particularly a large proportion of newer students who may be experiencing acute academic adjustment stress most intensely. Nonetheless, the findings compellingly highlight the centrality of the academic experience itself as the most potent influence on the mental health of this international student group.

The practical implications derived from this research are clear and directed. The predominant role of academic stress strongly suggests that universities hosting international students, particularly within Malaysia and potentially similar Southeast Asian contexts, should strategically prioritize resources and interventions to mitigate academic pressures and bolster students' capacity to cope within the academic domain. This strategy includes enhancing academic support services by providing workshops on effective study habits and stress management techniques tailored to academic demands, fostering greater faculty awareness of student pressures, and ensuring accessible mental health counselling adept at addressing performance anxiety and study-related stress. While holistic support addressing communication, financial literacy, and culture integration remains fundamentally important for overall student success and adaptation (Razgulin et al., 2023; Hussin et al., 2021), the current findings indicate that focusing on reducing the burden of academic stress offers the most direct and impactful route to improving the mental health outcomes measured in this population.

This study contributes valuable, context-specific evidence regarding the key mental health determinants for international students in a non-Western setting. However, its limitations, including the cross-sectional design, single-institution focus, and reliance on self-report measures, underscore the need for continued investigation. Future research should employ longitudinal designs to better capture the dynamic interplay between stressors and mental health over time. Expanding the scope to include diverse institutional types (e.g., public universities) and broader national or cross-national samples would enhance generalizability. Furthermore, by exploring the specific facets within the broad academic stress construct, investigating potential indirect pathways or moderating variables (such as coping strategies or social support quality, building on work by Parilla, 2022, and Hussin et al., 2021), and utilizing mixed-methods approaches, a more nuanced understanding could be achieved.

In conclusion, this research identifies academic stress as the most critical factor associated with the mental health challenges faced by international students at the studied Malaysian university.

By pinpointing this specific pressure point, the study provides clear direction for institutional leaders and support services seeking to foster a healthier and more supportive environment, ultimately contributing to the well-being and academic success of their international student community. Addressing academic burdens appears paramount in enhancing the international student experience.

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