Self-Esteem as a Mediator between Emotional Intelligence and Academic Adaptation, and Psychological Well-Being among International Students: A Study of ASEAN and Non-ASEAN Students in Thailand

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ABSTRACT: The primary purpose of this research is to investigate how self-esteem mediated the relationship between Emotional Intelligence (EI) and adjustment—academic adaptation and psychological well-being—among international graduate students in South Thailand. The study also differentiated between ASEAN and non-ASEAN groups, analysing data from 151 students using path analysis. The results demonstrated that self-esteem fully mediated the effects of EI on both academic adaptation and psychological well-being across the entire sample. Specifically, for ASEAN students, both EI and self-esteem were crucial for academic adaptation; EI positively influenced self-esteem, which in turn enhanced psychological well-being. Conversely, for non-ASEAN students, while self-esteem significantly mediated academic adaptation, it did not significantly impact psychological well-being. The cross-sectional design and small sample size of this study are its drawbacks, which may restrict the findings' the capacity to be generalized and interpreted causally. These results underscore the importance of considering self-esteem in educational strategies to enhance academic and psychological outcomes for international students in diverse settings.

KEYWORDS: Academic Adaptation, Emotional Intelligence, ASEAN and non-ASEAN students, Psychological Well-being, Self-esteem.

INTRODUCTION

Academic adaptation and psychological well-being have developed into crucial markers of adjustment for international students. The level of influence these factors play in students' adjustment is easily understandable when considering that adjustment is conceptualized as both sociocultural and psychological [1]. As a result, finding cognitive and non-cognitive, background, and situational determinants of both indicators in higher education has attracted an enormous amount of scholarly attention [2]. For researchers, identifying protective personal factors is indeed a critical aspect of the problem-solving approach, as highlighted by Vasilopoulos [3]. These factors can include individual traits, skills, or resources that help individuals effectively manage and overcome challenges. Therefore, academics in the fields of education, psychology, and social work have emphasized how emotional intelligence (EI) and self-esteem predict these two indicators.

Moreover, generalizability of the results is limited because various background factors also impact adjustment levels [4] [5]. Numerous studies have stressed the role of cultural distance as a momentously important factor influencing adjustment in cross-cultural settings, changing students' overall adjustment [6] - [8], and affecting their sociocultural [9], and psychological adjustment [10]. Consistently, Asian students discover it more challenging to adjust in western colleges than European students [11] [12]. It is generally accepted that a shorter cultural distance facilitates better adjustment.

However, despite being closer to Asia, Rujiprak and Limprasert [13] reported that Western students in Thailand demonstrated better adjustment than Asian students in terms of their psychological well-being, physical and mental health, and academic achievement. Thus, we propose that international students of different cultural distances may show different mechanisms of adjustment to the same environment, namely, Thailand, which is one member of ASEAN (Association of Southeast Asian Nations).

Emotional intelligence

The emotional intelligence theory, created by Mayer, DiPaolo, and Salovey [14], has evolved to be an essential indicator of individual satisfaction and academic achievement [15] - [17]. For international students, understanding how emotions impact perceptions and insight is crucial [18]. This knowledge aids in navigating cultural differences and adapting to new environments, enhancing both academic and personal development.

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EI was defined as a component of social intelligence by Mayer and Salovey [19]. Based on the theory, individuals with greater EI are better equipped to manage life challenges and adapt to achieve essential goals by considering the emotional aspects of others. Although there are two distinct perspectives on EI, considering it either as an ability or a trait, similarly significant predictions of academic performance and success were documented by Qualter et al. [20]. Previous study has consistently demonstrated EI has an impact on both academic and psychological components of higher education, particularly in relation to academic achievement [21]. Additionally, given the communication challenges due to a lack of proficiency in academic language, language barriers, or social language skills among hosts, combined with the ongoing need for academic and social interaction with international students [22] [23] [24], it is highly plausible that EI strongly correlates with both academic and social adaptation [17] [25].

A recent study found that there are positive relationships between EI and various communication abilities, including interpersonal communication, group communication, and public speaking [26]. These findings underscore the importance of EI in effectively managing and navigating different forms of communication, which are crucial skills for both personal and professional success.

Moreover, engaging in higher education further amplifies the importance and complexity of psychological issues [27] [28]. Students in higher education often face a unique set of challenges, including increased academic pressure, social integration, and the need for effective communication skills. These psychological challenges can significantly impact their overall well-being and academic performance. However, research indicates that individual personality traits can mitigate these issues [29]. Personality traits such as resilience, adaptability, and a high level of emotional intelligence can help students better manage stress, build stronger social networks, and achieve greater academic success

According to the acculturation model, EI is one of the two key components that predict psychological adjustment [11]. The other essential component is psychological well-being or life satisfaction [30] - [32]. Based on this framework, we propose that EI serves as a protective predictor for both academic adaptation and psychological well-being among international students in South Thailand.

Self-esteem

Self-esteem, as defined by Baumeister [33], refers to a comprehensive sense of self-worth or sufficiency. This construct is essential in determining how individuals perceive and value themselves. For international students, self-esteem plays a crucial role in their ability to adapt academically and maintain psychological well-being. High self-esteem can boost confidence, resilience, and motivation, facilitating smoother transitions into new educational environments and social settings. Conversely, low self-esteem can hinder academic performance and contribute to psychological difficulties. Numerous studies have highlighted the significant impact of self-esteem on the adaptation process for international students [34] [35]. Understanding and supporting the development of self-esteem in these students can lead to better academic outcomes and overall mental health.

However, Komarraju and Dial [36] noted that the ongoing and unclear debate about the relationship between self-esteem and adjustment stems from differing perspectives on self-esteem. This discrepancy in views has led to varied findings and conclusions in the literature, highlighting the need for further research to clarify how self-esteem impacts the adjustment process for international students. Understanding these nuances is crucial for developing effective support systems and interventions that can help international students adapt more successfully to their new environments.

One perspective posits that self-esteem is an essential component of psychological adjustment, influenced by a range of determinants [11] [35] [37]. This viewpoint suggests that self-esteem is not an isolated trait but is significantly shaped by external factors and experiences. For instance, better academic performance can lead to an increase in self-esteem, as students derive a sense of accomplishment and confidence from their academic successes [38].

Conversely, another perspective considers self-esteem as one of the personal cognitive factors that impact adjustment [39] - [41]. For nearly thirty years, research has demonstrated positive correlations between self-esteem and various aspects of adjustment, including academic, social, personal-emotional, and institutional attachment [42]. Consistently, studies have shown that higher self-esteem promotes better psychological well-being and academic adjustment [38] [43] [44]. This body of research underscores the significance of self-esteem in facilitating students' overall adjustment and success in academic environments.

In addition to these disagreements, it is noteworthy that self-esteem's impact on adjustment may be influenced by socio-demographic factors such as gender and race within the same academic and social environment [45] [46]. These factors can influence how self-esteem affects students' adaptation to new environments, suggesting that the relationship between self-esteem and adjustment is complex and multifaceted.

Consequently, the present study aimed to contribute to the ongoing debate by providing further insight into self-esteem as a personal cognitive factor that predicts adjustment, academic adaptation, and psychological well-being across different nationality groups. By examining these dynamics among international students in South Thailand, this research seeks to enhance our understanding of the role of self-esteem in diverse educational settings, potentially informing more effective strategies for supporting students' psychological and academic success.

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Self-esteem as a mediator

Past research revealed that self-esteem may act as a mediator between EI and two key aspects of international students' adjustment: academic adaptation and psychological well-being. This potential mediation role is supported by strong positive correlations between EI and self-esteem found in previous studies [47] [48]. These findings suggest that higher EI can enhance self-esteem, which in turn, can improve both academic and psychological outcomes for international students. Furthermore, self-esteem has been identified as a mediator between personal traits and life satisfaction, as demonstrated in a study by Kwan et al. [49]. These findings suggest that self-esteem enhances the positive effects of EI on students' academic and psychological outcomes and plays a critical role in linking personal traits to overall life satisfaction. This underscores the importance of fostering self-esteem in international students to improve their adaptation and well-being in new academic environments.

Past empirical research revealed the mediation effects of self-esteem between personal traits and psychological well-being in various contexts. Self-esteem has full mediation effects between psychological distress and trait resilience among Chinese students, and partial mediation effects between trait resilience and life satisfaction [50]. Importantly, self-esteem serves a mediating function in the relationship between EI and life satisfaction [51] [52]. These findings highlight the critical role of self-esteem in enhancing the positive effects of resilience and EI on various aspects of psychological well-being and life satisfaction.

To the best of our knowledge, no study has concurrently investigated the role of self-esteem in the underlying mechanism connecting EI with the two markers of adjustment: academic adaptation and psychological well-being, specifically in Thailand. This research aims to address this gap and the existing dearth of studies examining the adjustment of international students in Thailand [53]. The anticipated outcome is to provide new insights into how self-esteem influences the relationship between EI and these key aspects of student adjustment, thereby contributing to a more comprehensive understanding of international students' experiences in Thailand.

The present study

The Emotional Intelligence theory [14] and the acculturation model [11] provide the framework for this study. The proposed model illustrating the anticipated linkages is shown in Figure 1. The primary goal of the research is to investigate the fundamental mechanisms among EI, self-esteem, academic adaptation, and psychological well-being of international students, considering distinct ethnic groups, specifically ASEAN and non-ASEAN groups. The research proposes the following: (1) EI positively impacts self-esteem; (2) EI positively impacts academic adaptation and psychological well-being, respectively; (3) self-esteem mediates between EI and academic adaptation, and psychological well-being, respectively; (4) the underlying mechanism of the model shows differences in the two groups based on the cultural distance from Thailand, ASEAN or non-ASEAN.
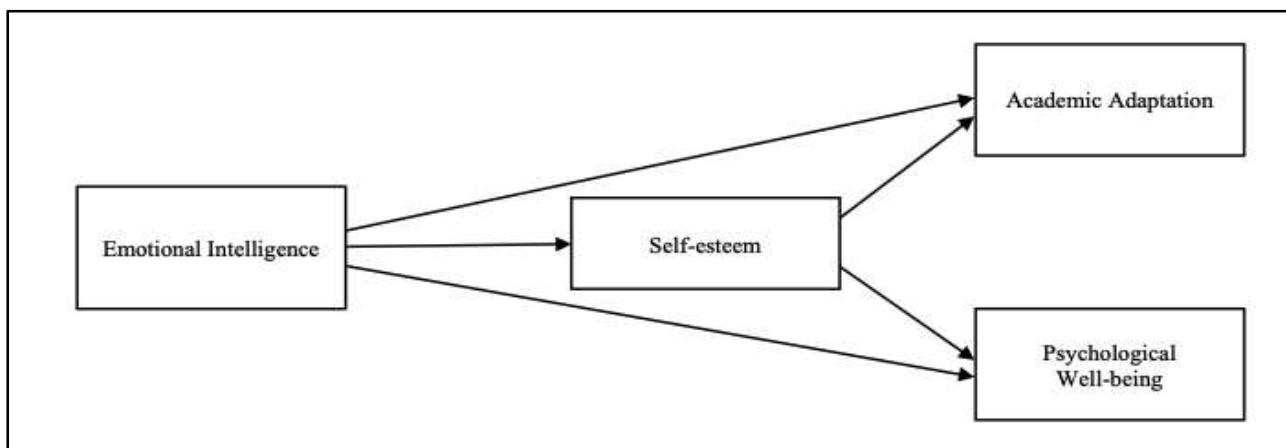

Figure 1. Proposed model of this study.

I. METHODS

A. Participants

A total of 151 international graduate students participated in a study at a university in South Thailand, comprising 102 ASEAN students (67.5%) and 49 non-ASEAN students (32.5%). This diverse cohort provided a broad perspective on the adaptation processes and experiences of students from different cultural backgrounds, allowing the research to examine the impact of cultural differences on the variables of the study.

The study involved international graduate students from two main groups: ASEAN and non-ASEAN. Participants were divided into two groups based on the nationality listed in their passports. The ASEAN group comprised students from six countries—Cambodia, Indonesia, Malaysia, Myanmar, the Philippines, and Vietnam—with the majority hailing from Indonesia (25.2%), Myanmar (22.5%), and Cambodia (11.3%). The non-ASEAN group included students from a diverse range of nations such as Bangladesh (4.0%),

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China (4.6%), India (4.0%), Pakistan (4.6%), Nigeria (6.0%), Nepal (1.3%), Bhutan (0.7%), South Korea (0.7%), Yemen (0.7%), the United Kingdom (0.7%), the United States of America (0.7%), Ethiopia (0.7%), Sudan (0.7%), Zimbabwe (0.7%), and Taiwan (0.7%).

Additional demographic data revealed a gender distribution of 58.9% male (n = 89) and 41.1% female (n = 62), with 57% (n = 86) enrolled in M.A. programs and 43% (n = 59) in Ph.D. programs. This demographic breakdown provides a balanced view of gender and academic levels among the participants, essential for analyzing differences in academic adaptation and psychological well-being.

After explaining the purpose of the research and ensuring confidentiality, voluntary consent was obtained from all participants. The ethical approval for this study was granted by the Centre for Social and Behavioural Sciences Institutional Review Board at Prince of Songkla University, ensuring adherence to ethical standards in the treatment of the participants and the handling of data.

B. Measures

Emotional Intelligence (EI)

In this study, the Schutte Self-Report Emotional Intelligence Test (SSEIT) was utilized to assess EI. The SSEIT is a widely recognized and validated tool for evaluating various aspects of EI, as conceptualized by Salovey, DiPaolo, and Mayer [14]. The English version of the SSEIT was specifically chosen to better suit the international student participants. This version comprises 33 items that encompass a broad range of EI dimensions, ensuring a comprehensive assessment of the participants' emotional intelligence capabilities. Examples of items include " I find it hard to understand the non-verbal messages of other people", "When I am in a positive mood, I am able to come up with new ideas" and " I can tell how people are feeling by listening to the tone of their voice". Participants were asked to rate each statement on a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. The internal consistency reliability (Cronbach's alpha) of the scale in this study was 0.87.

Self-Esteem

The Rosenberg Self-Esteem Scale (RSES) [54], a widely acclaimed tool for measuring self-esteem, was employed in this study. The scale is considered the most extensively used instrument for assessing this psychological construct [55]. The RSES features 10 items, including statements like "I feel that I'm a person of worth, at least on an equal plane with others" and "I am able to do things as well as most other people". Participants were asked to respond to each item using a four-point Likert scale that ranges from 1 = strongly disagree to 4 = strongly agree. To ensure a balanced measurement of self-esteem, the scale includes an equal mix of positively and negatively phrased items, allowing for a comprehensive assessment of the participants' self-regard. The internal consistency reliability of the scale used in this study, as measured by Cronbach's alpha, was 0.81, indicating a good level of reliability.

Academic Adaptation

Academic adaptation was assessed using the Student Adaptation to College Questionnaire (SACQ) designed as a comprehensive measure with 67 items across four subscales [56]. Although the scale comprises four subscales: (1) academic adjustment (24 items), (2) socio-cultural adjustment (20 items), (3) personal-emotional adjustment (15 items), and (4) institutional attachment (15 items)—this study focused on the overall scores from the full scale to gauge general academic adaptation. The scale includes items such as "I feel that I fit in well as part of the college environment" and "I have been keeping up to date on my academic work". Participants rated each on a nine-point Likert scale, with negatively keyed items ranging from 1 (applies very closely to me) to 9 (doesn't apply at all) and positively keyed items from 9 to 1. The internal consistency reliability of the scale in this study, as indicated by a Cronbach's alpha of 0.93, demonstrates a high level of reliability.

Psychological Well-being

The WHO-5 Well-Being Index [57] was utilized to evaluate the psychological well-being of participants in this study. This scale consists of 5 straightforward items, including " I woke up feeling fresh and rested" and "My daily life has been filled with things that interest me". Respondents rated each item on a six-point scale from 0 (at no time) to 5 (all of the time), providing a simple yet effective measure of well-being. The WHO-5 is also recognized for its high clinometric validity, ensuring reliable assessments [58]. The internal consistency reliability of the scale in this study was high, with a Cronbach's alpha of 0.81 indicating strong reliability.

C. Data analysis

Following the guidelines outlined by Kinney [59], the study commenced with four steps of mediation analysis to preliminarily assess the proposed model, focusing on the potential mediating role of self-esteem across all participating students. This initial phase was crucial for setting the groundwork for further in-depth analysis.

Subsequently, the fit of the model was evaluated using several established criteria, which included the chi-square statistic (χ^2), the χ^2/df ratio, the Comparative Fit Index (CFI), and the Root Mean Square Error of Approximation (RMSEA). According to guidelines suggested by Kelloway [60] and Byrne [61], a model was considered satisfactory if the χ^2/df ratio was less than or equal to 2, the

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CFI exceeded 0.90, and the RMSEA was less than 0.05. These criteria are key indicators of how well the hypothesized model conforms to the observed data.

Finally, the mediation effects within the path models for all the participants, and both ASEAN and non-ASEAN student groups were analyzed. This analysis utilized standardized path coefficients to clarify the strength and direction of the relationships within the model. The significance of both direct and indirect effects was rigorously assessed through bootstrapping via maximum likelihood estimation, a method recommended by Preacher and Hayes [62]. This comprehensive approach ensured a robust examination of the underlying mechanisms posited in the study, providing insightful findings into how self-esteem mediates the relationship between Emotional Intelligence and various adjustment outcomes among international students.

II.   RESULTS

A. Preliminary analysis

Table 1 displays descriptive statistics including the means, standard deviations, and intercorrelations among the research variables for all participants. EI, the predictor, showed positive correlations with the outcomes of academic adaptation ($r = 0.42$, $p < 0.01$) and psychological well-being ($r = 0.17$, $p < 0.05$), as well as with the mediator, self-esteem ($r = 0.47$, $p < .01$). These findings support the initial positive results as suggested by Kinney [59]. Additionally, academic adaptation also demonstrated a positive correlation with psychological well-being ($r = 0.50$, $p < 0.01$) and a strong correlation with self-esteem ($r = 0.66$, $p < 0.01$), indicating all correlations among the variables were statistically significant and below the 0.70 threshold, thus confirming that multicollinearity was not an issue.

Table 1. Descriptive statistics and correlations for measured variables

Variables	M	SD	α	1	2	3	4
1.Emotional Intelligence	125.52	10.99	0.87	1			
2. Self-esteem	29.75	4.38	0.81	0.47**	1		
3. Academic Adaptation	400.67	57.49	0.93	0.42**	0.66**	1	
4. Psychological well-being	15.20	4.34	0.83	0.17*	0.29**	0.50**	1

Note: α = Cronbach's α coefficient; * $p < 0.05$; ** $p < 0.01$.

Table 2 shows the results from the multivariate regression analysis, following the last two steps outlined by Kinney [59]. The analysis confirmed the mediation effect of self-esteem in the relationship between EI and academic adaptation. Self-esteem demonstrated a significant semipartial correlation with academic adaptation (semipartial $r = 0.52$, $p < 0.001$). Furthermore, there appeared to be mediation between EI and academic adaptation as their semipartial correlation (semipartial $r = 0.13$, $p < 0.01$) was lower than their zero-order correlation ($r = 0.42$, $p < 0.05$). A significant semipartial effect was also found in the association between EI and psychological well-being (semipartial $r = 0.24$, $p < 0.01$). EI and psychological well-being had a lower semipartial correlation ($r = 0.04$, $p = 0.59$) compared to their zero-order correlation ($r = 0.18$). More mediation testing in the path analysis was done because of these findings.

Table 2. Results of multivariate analysis

Variables	Correlations			
	Zero-order	*Semipartial r*	*t*	*p*
Academic adaptation				
Self-esteem	0.66	0.54	8.63	***
Emotional Intelligence	0.42	0.13	2.13	*
Psychological Well-being				
Self-esteem	0.29	0.24	3.05	**
Emotional Intelligence	0.18	0.04	0.54	0.59

Note: *$p < 0.05$; **$p < 0.01$; ***p < 0.001.

B. Mediation analysis

Model test

Due to the unsatisfactory model fit for all students (χ^2 (1, 151) = 29.62, $p = 0.00$, CFI = 0.83, RMSEA = 0.44), the proposed model required the elimination of the direct pathway from EI to psychological well-being. This adjustment was based on modification indices and the result indicating nonsignificant predictions in the pathway ($\beta = 0.05$, $p = 0.58$). The revised model, which excluded the direct relationship between EI and psychological well-being, was re-run and showed a satisfactory fit for all students: χ^2 (1, 151)

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= 0.30, p = 0.58, CFI = 1.00, RMSEA = 0.30. Finally, the test of the comparison between the final nested models for the two groups was conducted through the significance of difference in the chi-square value. These results indicated the difference in structural invariance between the unconstrained model and the constrained model, $\Delta \chi^2$ = 13.23, df = 4, p = 0.01. Thus, it can be interpreted that the multiple group analyses should be conducted between the two groups.

Mediational analysis for all the participants
The Boot estimation procedure in Amos 25.0 was used to assess the mediation effects for self-esteem. Direct and indirect effects were examined using standardized beta coefficients and bootstrapped standard errors, based on 1000 bootstrap samples with 95% bias-corrected confidence intervals (CIs) [63]. Squared Multiple Correlations (SMC) and bootstrapping (1000 samples) yielded p-values for the direct effects among the variables of the final model, which are shown in Figure 2.
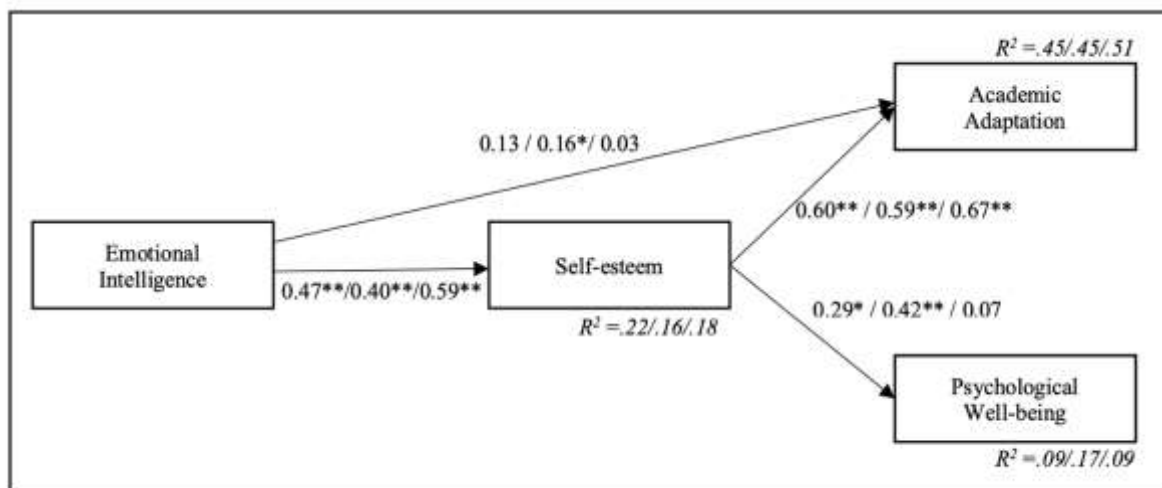

Figure 2. Findings from multiple-group path modelling across nationality groups (standardized beta coefficients and p value based on bootstrapping (1000 samples). Notes: Values refer to all the participants, ASEAN, and non-ASEAN respectively.

Table 3 displays the indirect effects across all the participants, and both groups, ASEAN and Non-ASEAN, in the final model. All the direct effects of the model among all the students were significant, except for the pathway from EI to academic adaptation (β = 0.13, p = 0.06). Furthermore, in the relationship between EI and academic adaptation (β = 0.28, p < 0.001, 95% CI: 0.20 to 0.39) and psychological well-being (β = 0.14, p < 0.01, 95% CI: 0.06 to 0.22), there was a significant correlation between the two indirect effects of self-esteem and the two outcome variables. Therefore, for all participants, self-esteem was seen as fully mediating the connections between EI and academic adaptation, and between EI and psychological well-being. Compared to EI, self-esteem had a much greater impact on the two outcome variables.

Table 3. Indirect effects of emotional intelligence on academic adaptation and psychological well-being through self-esteem

Group		Point estimate	p	95% CI	
				Lower	Upper
All the participants	EI → SE → AA	0.28	***	0.20	0.39
	EI → SE → WB	0.14	**	0.06	0.22
ASEAN	EI → SE → AA	0.24	***	0.12	0.30
	EI → SE → WB	0.17	***	0.06	0.36
None-ASEAN	EI → SE → AA	0.40	***	0.21	0.65
	EI → SE → WB	0.04	0.73	-0.23	0.38

Note: EI = emotional intelligence; SE = self-esteem; AA = academic adaptation; WB = psychological well-being; CI = confidence interval (1000 bootstrap samples); **p < 0.01; ***p < 0.001.

C. Differences across ASEAN and Non-ASEAN groups
Participant differences in EI, academic adaptation, psychological well-being was not statistically significant (p < 0.05), according to t-tests between the ASEAN and non-ASEAN groups. On the contrary, there was a significant difference (t = 4.02, p < 0.05)

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between the self-esteem scores of ASEAN and non-ASEAN students, with the former having significantly higher self-esteem than the latter.

By dividing the parameter estimates by the standard error of the difference, the Critical Ratio of Differences (CRD) was utilized to ascertain statistically significant differences between the parameter estimations. A CRD value greater than 1.96, according to Arbuckle [63], indicates a significant difference at $p < 0.05$.

In the final model, two pathways demonstrated significant differences. The first significant pathway was from EI to self-esteem, with a CRD of 2.08, $p < 0.05$. The path coefficient for non-ASEAN students ($\beta = 0.27$, SE = 0.05, $p < 0.001$) was higher than that for ASEAN students ($\beta = 0.14$, SE = 0.03, $p < 0.001$), suggesting that non-ASEAN students with higher EI tend to have greater self-evaluation and self-confidence compared to their ASEAN peers.

The second pathway, from self-esteem to psychological well-being, also demonstrated significant differences, with a CRD of 2.50, $p < 0.05$. The path coefficient for ASEAN students ($\beta = 0.46$, SE = 0.11, $p < 0.001$) was significantly greater than for non-ASEAN students ($\beta = 0.01$, SE = 0.14, $p = 0.96$), indicating that ASEAN students with higher self-esteem experience higher levels of psychological well-being compared to their non-ASEAN counterparts.

Moreover, the examination of both direct and indirect impacts between the variables verified that self-esteem acted as a mediating factor between the two groups (see Figure 2 and Table 3). All nationality groups showed significant indirect impacts of self-esteem in the association between EI and academic adaptation: $\beta = 0.40$, $p < 0.001$, 95% CI: 0.21 to 0.65 for non-ASEAN students and $\beta = 0.23$, $p < 0.001$, 95% CI: 0.12 to 0.30 for ASEAN students. While EI directly and significantly predicted academic adaptation in ASEAN students ($\beta = 0.16$, $p < 0.05$), it did not do so for non-ASEAN students ($\beta = 0.03$, $p = 0.79$). Therefore, this indicates that self-esteem partially mediated the relationship between EI and academic adaptation among ASEAN students, but fully mediated it among non-ASEAN students, with the percentage of indirect effects on total effects being 57.5% and 93%, respectively.

III. DISCUSSION AND CONCLUSION

Among a varied population of international students in South Thailand, the current study aimed to explore the important role that self-esteem plays as a mediator in the links between EI and two important outcomes: academic adaptation and psychological well-being. To investigate the impact of self-esteem on various nationality groups within the student population—ASEAN and non-ASEAN groups regardless of their cultural distance from Thailand—this study employed a mediation path analysis approach.

For the entire cohort of international students, the analysis yielded compelling evidence that self-esteem serves as a full mediator in the relationship between EI and academic adaptation, explaining approximately 45% of the variance in this relationship. Moreover, self-esteem had a substantial role as a mediator between EI and psychological well-being, explaining almost 29% of the variance. This robust mediation underscores the critical role of self-esteem in facilitating academic success and enhancing overall psychological health among international students.

These results support and add to earlier studies in the subject. For example, a study by Rey, Extremera, and Pena [51] highlighted the wider significance of self-esteem in emotional intelligence contexts by showing that self-esteem played a mediating role between emotional ability and life contentment. Similarly, Ruvlacaba-Romero et al. [64] investigated the possibility that self-esteem could operate as a mediator in the association between some aspects EI, like emotional repair and clarity, and general life satisfaction. This study highlights the significance of self-esteem in enhancing psychological and academic outcomes and expanding our understanding of the relationship between emotional intelligence and happiness/well-being.

The multiple-group path analysis also conducted in this study highlighted significant differences in how self-esteem mediates the effects of EI on the outcomes relevant to the adjustment of international students from various nationality groups. For students from ASEAN countries, both EI and self-esteem emerged as crucial factors contributing to their academic adaptation. Specifically, EI was found to positively influence self-esteem, which in turn significantly enhanced their psychological well-being, suggesting a sequential relationship where EI builds self-esteem that then promotes better psychological health. In contrast, among students from non-ASEAN countries, self-esteem played a more dominant role, fully mediating the relationship between EI and academic adaptation and accounting for 51.0% of the variance. This indicates a pivotal role of self-esteem in enhancing academic performance among these students. The absence of a direct, significant impact of EI on psychological well-being across all groups underscores the nuanced role of EI; while it aids certain aspects of adjustment, its primary effects are channelled through enhanced self-esteem. Given these nuanced findings, it becomes evident that interventions designed to facilitate the adjustment of international students in Thailand must prioritize the enhancement of self-esteem, especially among non-ASEAN students where its impact is profoundly significant. Such interventions are crucial in academic contexts, where mastery of the English language is essential, and in social settings where interactions predominantly occur in Thai. By strategically focusing on strengthening self-esteem, educational stakeholders can more effectively support the overall adjustment and well-being of international students in these diverse and challenging educational environments. This approach may help in academic and social integration and build a foundation for long-term success and satisfaction among international students navigating the complexities of studying abroad.

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The findings of this study underscore the necessity for targeted initiatives to bolster the self-esteem of international students. Developing programs and policies that provide crucial information and practical assistance regarding new academic and social opportunities is essential. These initiatives, inspired by the social support model—which has been proven to enhance global self-esteem and overall well-being, including life satisfaction and emotional states among Chinese students [65]—could significantly support cultural adjustment and increase life satisfaction for international students, as seen in Thailand [66]. Moreover, such programs have shown potential in aiding psychological adjustment in diverse contexts, as evidenced by findings from Malaysia [67]. Furthermore, these initiatives aim to enhance communication skills within both academic and everyday social settings. The critical role of proficiency in both academic and social language for the successful adjustment of international students has been highlighted in studies from Malaysia, a nation known for its linguistic diversity [68]. Enhancing language skills enables students to more effectively engage with their new environment, thereby boosting their self-confidence and facilitating smoother integration. These comprehensive interventions are designed to address the pivotal areas affecting international students' transition and success in foreign academic settings, tackling both emotional well-being and practical challenges to create a supportive educational experience. This study has several limitations that should be considered. First, the study was limited in its capacity to generalize the results to larger populations or other academic institutions because it was limited to a single university in South Thailand and had a rather small sample size. Second, the cross-sectional design of the study constrains the ability to draw causal inferences, highlighting the need for future prospective and longitudinal research to establish causality among the variables. Third, there was only one EI measure used in the study, and it did not differentiate between trait and ability EI. Future studies should utilize more differentiated measures to accurately assess these distinct dimensions of EI. Last, the study focused solely on EI as a predictive factor, neglecting other potential personal traits that could influence academic and psychological outcomes. To achieve a more comprehensive understanding of the factors influencing overseas students' academic and psychological adjustment, future research should broaden the range of predictors to include a varied variety of personal attributes.

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