Impact of Academic Engagement and Socio-Cultural Adjustment of International Students in Malaysian Universities

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ABSTRACT

The internationalization of higher education has emerged as a strategic priority for universities worldwide, fostering academic excellence, cultural diversity, and global competitiveness. This study examines the impact of internationalization initiatives on academic engagement and the socio-cultural adjustment of international students in Malaysian universities, with Universiti Teknologi Malaysia (UTM) serving as a case institution. Guided by Cross-Cultural Adaptation Theory and Social Integration Theory, the study explored how internationalization policies, practices, and support systems shape students' academic and social experiences. A quantitative research design was employed, using a structured questionnaire distributed to international students enrolled at UTM. Data were analysed using correlation and multiple regression techniques. The results revealed a strong, positive, and statistically significant relationship between internationalization initiatives and academic engagement ($\beta = 0.546$, $p < 0.001$), as well as between internationalization support systems and socio-cultural adjustment ($\beta = 0.614$, $p < 0.001$). These findings indicate that institutional support, inclusive teaching practices, and intercultural engagement significantly enhance the academic motivation, participation, and cultural integration of international students. The study contributes to theoretical understanding by validating the interconnectedness of engagement and adjustment processes within internationalization frameworks. Practically, it emphasizes the need for Malaysian universities to strengthen intercultural support, promote inclusive pedagogy, and institutionalize student-centered policies. Ultimately, the success of internationalization depends not only on attracting international students but also on creating supportive environments that sustain their academic and socio-cultural well-being.

Keywords: Internationalization, Academic Engagement, Socio-Cultural Adjustment, International Students, Higher Education, Malaysia

INTRODUCTION

The internationalization of higher education has evolved from a peripheral institutional initiative into a central strategy shaping global academic competitiveness and intercultural collaboration. Over the past two decades, universities worldwide have increasingly embedded international, intercultural, and global perspectives into teaching, research, and community engagement missions (Schartner & Young, 2016; Siew & Hassan, 2024). Within this context, Malaysia has emerged as one of Southeast Asia's most proactive nations in positioning higher education as a driver of economic growth and soft diplomacy. Guided by frameworks such as the Malaysia Education Blueprint (Higher Education) 2015–2025, the country's universities have actively pursued international partnerships, diversified student populations, and implemented globalized curricula to enhance institutional quality and visibility (Amzat, Ali, & Ibrahim, 2023; Mohamad Sari & Mohd Faiz, 2021). Despite these strategic achievements, a critical challenge remains: ensuring that the increasing number of international students not only access higher education opportunities but also thrive academically and socially within Malaysia's multicultural context.
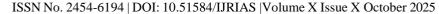
Although previous studies (Ahrari et al., 2019; Shafaei & Abd Razak, 2016; Siew & Hassan, 2024), have established the positive relationship between internationalization initiatives and student development significant research gaps persist concerning the integrative impact of academic engagement and socio-cultural adjustment on international students' overall success in Malaysian universities. Much of the existing literature has examined these constructs in isolation, overlooking how the dynamic interplay between classroom participation, intercultural interaction, and institutional support systems shapes students' holistic experiences. Moreover, while several studies have focused on policy-level frameworks, empirical evidence capturing students lived realities within Malaysia's diverse academic ecosystem remains limited. The novelty of this study lies in its multidimensional approach, combining academic and socio-cultural dimensions to assess how institutional internationalization efforts translate into meaningful engagement and adaptation. By addressing this gap, the research advances understanding of sustainable internationalization as a process that balances institutional ambition with the inclusive well-being of its global student community.

Overview of Internationalization in Higher Education

Over the past two decades, internationalization has emerged as one of the most influential trends shaping the global higher education landscape. Universities across continents have deliberately integrated international, intercultural, and global dimensions into their missions of teaching, research, and community engagement (Schartner & Young, 2016; Siew & Hassan, 2024). This strategic orientation is no longer limited to student exchange programs but includes academic mobility, transnational research collaborations, and curriculum reforms designed to equip graduates with the competencies required in an increasingly interconnected world (Shafaei & Abd Razak, 2016; Ahrari et al., 2019). The transformation of higher education into a competitive and globally networked enterprise has also been accelerated by technological innovation, demographic change, and the demand for international labor mobility (Suryandari, Jaafar, & Hamzah, 2017; Muhammad, Syed Sahuri, & Saad, 2024). Higher Education Institutions (HEIs) now operate within a globalized knowledge economy, where competition extends beyond national borders (Marginson, 2014; Siew & Hassan, 2024). Internationalization enables institutions to improve their research visibility, diversify student populations, and strengthen their reputations through global benchmarking (Yusoff & Nadrajah, 2010). It is viewed as a mechanism for enhancing innovation and fostering intercultural competence among both students and faculty members (MuthuRajan & Sultana, 2024; Schartner & Young, 2016). According to Shafaei and Abd Razak (2016), these developments have turned universities into "global learning organizations" that must continually adapt to sociocultural and economic shifts in order to remain relevant.

The expansion of internationalization also reflects a broader reconfiguration of higher education systems toward global competitiveness. As Schartner and Young (2016) observe, the process contributes to the development of globally competent graduates who can operate effectively in multicultural environments. Similarly, Shafaei, Abd Razak, and Jamil (2017) highlight that internationalization serves as a catalyst for academic excellence by encouraging institutions to adopt international standards of teaching and research. Empirical studies further demonstrate that institutions that invest in cross-border collaborations and multicultural academic spaces tend to report higher research productivity and stronger global partnerships (Yee & Hassan, 2024; Raschid, Fatemi, & Sharif, 2018). Within the Southeast Asian region, Malaysia provides a compelling case of how internationalization has been harnessed as a national development strategy. Over the past two decades, the Malaysian government has actively positioned the country as an international education hub by promoting policies aimed at attracting global talent and enhancing institutional quality (Yusoff & Nadrajah, 2010; Mohamad Sari & Mohd Faiz, 2021). These initiatives include bilateral education agreements, international branch campuses, and scholarship programs that support mobility within Asia, Africa, and the Middle East (Siew & Hassan, 2024; Ahrari et al., 2019). Malaysia's Education Blueprint (2015–2025) further situates internationalization as a critical component for achieving global recognition and academic excellence (Amzat, Ali, & Ibrahim, 2023). As a result, the country now hosts a rapidly growing number of international students, contributing not only to economic growth but also to cultural diplomacy and regional integration (Yee & Hassan, 2024).

Nonetheless, several studies argued that the true measure of successful internationalization lies not in the quantity of international students but in the quality of their academic and socio-cultural experiences

(MuthuRajan & Sultana, 2024; Ahrari et al., 2019). Research indicates that international students in Malaysian universities often face challenges such as language barriers, adjustment stress, and unfamiliar learning environments that affect their academic engagement and sense of belonging (Abd Malek, Ahmad, & Wan Mahmud, 2023; Yushriman et al., 2024). Similarly, studies by Wilson (2011) and Khan, Hamdan, and Ahmad (2015) reveal that the effectiveness of support systems such as orientation programs, mentoring initiatives, and cultural inclusion activities plays a decisive role in shaping positive student outcomes. Understanding internationalization from the perspective of international students provides valuable insights into how academic and social environments interact to influence student engagement and adaptation (Schartner & Young, 2016; Shafaei & Abd Razak, 2016). As universities continue to navigate the pressures of global competition, sustainable internationalization will depend on policies that balance institutional ambition with the lived experiences of diverse student populations (MuthuRajan & Sultana, 2024; Siew & Hassan, 2024).

Malaysia's Higher Education Landscape and Internationalization Agenda

Malaysia's higher education system has undergone profound transformation over the past three decades, driven by a national vision to establish the country as a regional hub for knowledge, innovation, and global education. This strategic orientation began with policy reforms in the late 1990s and was reinforced through the *Malaysian Higher Education Strategic Plan (2007–2020)* and the *Malaysia Education Blueprint (Higher Education) 2015–2025* (Yusoff & Nadrajah, 2010; Amzat, Ali, & Ibrahim, 2023). These frameworks positioned internationalization as a key pillar for strengthening institutional competitiveness, enhancing graduate employability, and fostering cross-cultural understanding (Siew & Hassan, 2024). As a result, universities were encouraged to pursue global partnerships, transnational collaborations, and programs that attract students from across Asia, the Middle East, and Africa (Mohamad Sari & Mohd Faiz, 2021; Ahrari et al., 2019).

The rapid expansion of both public and private universities has significantly diversified Malaysia's higher education landscape. Institutions such as Universiti Teknologi Malaysia (UTM), Universiti Malaya (UM), and Universiti Putra Malaysia (UPM) have become active participants in international consortia, hosting joint research centers and dual-degree programs (Yee & Hassan, 2024; Shafaei & Abd Razak, 2016). This structural evolution has been supported by government agencies such as the Malaysian Qualifications Agency (MQA) and the Education Malaysia Global Services (EMGS), which ensure academic standards and promote Malaysia as an international study destination (Yusoff & Othman, 2011). According to Siew and Hassan (2024), such coordinated efforts have strengthened the global visibility of Malaysian universities and contributed to their steady rise in international rankings.

In terms of student mobility, Malaysia's strategy combines both inward and outward initiatives. The country attracts international students through affordable tuition, English-medium instruction, and a multicultural environment conducive to adaptation (Yusliza, Jauhar, & Chelliah, 2010; Ahrari et al., 2019). Simultaneously, Malaysian students are encouraged to study abroad through government scholarships and exchange programs that cultivate global competencies (Shafaei, Abd Razak, & Jamil, 2017). Data from recent reports indicate that Malaysia hosts over 130,000 international students annually, reflecting its success as a preferred destination for higher learning in Asia (Siew & Hassan, 2024). This growth has also strengthened regional cooperation through organizations such as ASEAN University Network and the Asia-Pacific Quality Network (Mohamad Sari & Mohd Faiz, 2021). The internationalization agenda, however, extends beyond student recruitment. It encompasses curriculum innovation, joint research projects, and academic mobility among faculty members (Yee & Hassan, 2024). Universities are encouraged to embed global perspectives in teaching, assessment, and community engagement to prepare graduates for diverse work environments (MuthuRajan & Sultana, 2024). According to Schartner and Young (2016), such integration ensures that internationalization is not merely symbolic but embedded within institutional culture and daily academic practices. Moreover, cultural diplomacy has emerged as a soft-power strategy for Malaysia, with higher education serving as a bridge for intercultural relations and knowledge exchange (Amzat et al., 2023; Suryandari, Jaafar, & Hamzah, 2017).

Despite these achievements, challenges persist. Studies reveal that some international students experience cultural and academic adjustment difficulties arising from communication barriers, unfamiliar pedagogical

styles, and limited social interaction with local peers (Abd Malek, Ahmad, & Wan Mahmud, 2023; Wilson, 2011; Khan, Hamdan, & Ahmad, 2015). Institutions continue to face pressure to balance expansion with quality assurance and to ensure that their internationalization efforts translate into meaningful educational experiences (Yushriman et al., 2024; MuthuRajan & Sultana, 2024). As Ahrari et al. (2019) argue, sustained success requires an inclusive approach that integrates academic engagement, student welfare, and intercultural understanding as core elements of policy implementation. Consequently, Malaysia's internationalization agenda represents more than an enrollment strategy it reflects a comprehensive national vision to align education with global transformation. The evolution of its higher education system illustrates how developing nations can leverage internationalization not only to boost competitiveness but also to promote cultural diplomacy and mutual understanding across borders (Yusoff & Nadrajah, 2010; Siew & Hassan, 2024; Schartner & Young, 2016).

Student Mobility Trends in Malaysian Universities

Student mobility has become a defining feature of Malaysia's higher education internationalization strategy, reflecting the government's ambition to position the nation as a global education hub within Southeast Asia. The mobility of students both inbound and outbound serves as a central indicator of the country's success in attracting talent and fostering cross-border educational exchange (Siew & Hassan, 2024; Yusoff & Nadrajah, 2010). Malaysia's reputation for offering quality education at competitive costs, coupled with its political stability, multicultural environment, and English-based instruction, has made it one of the most preferred destinations for international students from developing and emerging economies (Ahrari et al., 2019; Amzat, Ali, & Ibrahim, 2023). Over the last decade, the number of international students in Malaysia has increased significantly, driven by policy incentives, global marketing strategies, and the expansion of private higher education institutions (Mohamad Sari & Mohd Faiz, 2021; Yee & Hassan, 2024). Data from the Malaysian Ministry of Higher Education reveal that international students are primarily drawn from regions such as South Asia, the Middle East, and Africa, although there is a growing representation from East Asia and Europe (Siew & Hassan, 2024). The diversity of these student populations enhances campus multiculturalism and encourages intercultural learning, which is essential for both local and foreign students' personal and academic development (Schartner & Young, 2016; Shafaei & Abd Razak, 2016).

Inward student mobility is complemented by various government and institutional programs designed to enhance Malaysia's appeal as a study destination. The establishment of the Education Malaysia Global Services (EMGS) has streamlined student visa processing and strengthened the global branding of Malaysian higher education (Yusoff & Othman, 2011). In addition, universities have introduced specialized pathways, such as joint-degree and credit-transfer programs with international partner institutions, to attract students seeking globally recognized qualifications (Raschild, Fatemi, & Sharif, 2018). According to Ahrari et al. (2019), these collaborations enhance Malaysia's competitiveness in the regional education market by aligning academic standards with global expectations. Outbound mobility, although smaller in scale, forms another important component of Malaysia's internationalization agenda. Initiatives such as the *MyBrain* and *MyMaster* scholarship schemes, along with university-based exchange programs, have provided Malaysian students opportunities to study abroad and gain exposure to diverse academic environments (Shafaei, Abd Razak, & Jamil, 2017). These programs aim to produce globally competent graduates who can contribute to Malaysia's socioeconomic development upon returning home (Amzat et al., 2023; Siew & Hassan, 2024). According to Mohamad Sari and Mohd Faiz (2021), outbound mobility also enhances Malaysia's international visibility by fostering reciprocal academic relationships that support research collaboration and institutional partnerships.

Despite these achievements, several challenges continue to affect the sustainability and inclusivity of student mobility programs. Research by Abd Malek, Ahmad, and Wan Mahmud (2023) shows that international students often encounter difficulties in adapting to Malaysia's academic culture, particularly in terms of language use, learning styles, and classroom interaction. MuthuRajan and Sultana (2024) further emphasize that while many international students express satisfaction with their learning environments, others struggle with limited social integration and cultural adjustment. Similarly, Yushriman et al. (2024) identify administrative inefficiencies, accommodation concerns, and inconsistent institutional support as factors that may influence the overall mobility experience. The dynamics of student mobility in Malaysia are also shaped

by the global competition for international students. As more countries in Asia, Europe, and the Middle East enter the international education market, Malaysia faces increasing pressure to differentiate itself through quality assurance and cultural inclusivity (Suryandari, Jaafar, & Hamzah, 2017; Ahrari et al., 2019). Yee and Hassan (2024) argue that the long-term sustainability of Malaysia's mobility programs will depend on the extent to which universities can offer academically rigorous and socially supportive environments that ensure both retention and satisfaction. Malaysia's approach to student mobility reflects a nuanced balance between policy ambition and institutional capability. It demonstrates how a developing nation can leverage education as a tool for international engagement while promoting cultural diplomacy and mutual understanding among diverse student communities (Schartner & Young, 2016; Shafaei & Abd Razak, 2016; MuthuRajan & Sultana, 2024). The increasing flow of international students into Malaysia not only enhances institutional diversity but also contributes to the broader objectives of global integration and higher education excellence.

Academic Engagement and Socio-Cultural Adjustment in Internationalization

Academic engagement and socio-cultural adjustment represent two interdependent dimensions that determine the overall success of internationalization in higher education. Academic engagement reflects students' involvement, motivation, and participation in learning activities, while socio-cultural adjustment concerns their ability to adapt to new cultural environments and establish meaningful social relationships (Schartner & Young, 2016). Both elements are critical to ensuring that international students not only succeed academically but also thrive personally and socially during their studies abroad (Shafaei & Abd Razak, 2016; Ahrari et al., 2019). According to Marginson (2014), institutions that prioritize these dimensions create inclusive learning spaces where diversity becomes an educational resource rather than a barrier. In the Malaysian context, academic engagement is increasingly viewed as an indicator of educational quality and institutional effectiveness. Universities that successfully integrate international students into their academic systems tend to demonstrate higher retention rates, greater classroom participation, and improved learning outcomes (Yusoff & Nadrajah, 2010; Yee & Hassan, 2024). Studies show that structured academic support such as tutoring, mentoring, and intercultural learning activities enhances international students' confidence and motivation to participate in class discussions (MuthuRajan & Sultana, 2024; Shafaei, Abd Razak, & Jamil, 2017). Similarly, Ahrari et al. (2019) report that when students perceive a supportive academic environment, they exhibit greater persistence and satisfaction, both of which are vital to the sustainability of internationalization initiatives.

Socio-cultural adjustment, on the other hand, is a complex and ongoing process that significantly influences academic performance and well-being. Research has demonstrated that international students who experience social inclusion and cultural acceptance are better able to cope with academic demands and psychological stress (Suryandari, Jaafar, & Hamzah, 2017; Muhammad, Syed Sahuri, & Saad, 2024). Conversely, those who face cultural distance, language difficulties, and limited peer interaction often experience isolation and reduced academic engagement (Abd Malek, Ahmad, & Wan Mahmud, 2023; Yushriman et al., 2024). As highlighted by Khan, Hamdan, and Ahmad (2015), cultural adaptation challenges can lead to diminished academic confidence, particularly among students from non-English-speaking backgrounds. Therefore, institutions must provide holistic support systems that address both the educational and emotional needs of international students (Yusliza, Jauhar, & Chelliah, 2010). International student societies and multicultural programs have been found to play a vital role in facilitating socio-cultural adaptation and engagement. According to Nurdin Muhammad et al. (2024), such organizations provide platforms for peer interaction, cross-cultural dialogue, and social participation that reduce cultural barriers and enhance a sense of belonging. These findings are consistent with those of MuthuRajan and Sultana (2024), who observed that social integration through extracurricular activities strengthens intercultural competence and emotional well-being. Similarly, Schartner and Young (2016) argue that informal learning spaces such as study groups and community service projects enable international students to apply classroom knowledge in diverse contexts, thereby enriching their educational experiences.

The interrelationship between academic engagement and socio-cultural adjustment underscores the need for universities to adopt an integrated approach to internationalization. Shafaei and Abd Razak (2016) propose that sustainable internationalization must balance academic rigor with cultural empathy and institutional inclusivity. Yee and Hassan (2024) further emphasize that student engagement should be viewed not merely as a learning outcome but as a continuous process shaped by pedagogical design, institutional support, and interpersonal

relationships. Moreover, Ahrari et al. (2019) contend that universities that recognize the social dimensions of learning are better equipped to cultivate interculturally competent graduates capable of contributing to global knowledge economies. In the context of Malaysia's higher education system, promoting academic engagement and socio-cultural adjustment is therefore integral to realizing the goals of internationalization. Universities such as Universiti Teknologi Malaysia (UTM) and Universiti Malaya (UM) have implemented targeted initiatives ranging from language enhancement programs to peer-mentoring schemes to strengthen these dimensions (Mohamad Sari & Mohd Faiz, 2021; Yusoff & Nadrajah, 2010). These programs not only support academic success but also foster meaningful intercultural connections that contribute to Malaysia's reputation as an inclusive and globally oriented education hub (Siew & Hassan, 2024). Ultimately, the success of internationalization lies in universities' ability to cultivate environments where international students are both academically engaged and socially integrated, ensuring that mobility leads to genuine educational transformation rather than mere geographical relocation (Schartner & Young, 2016; Shafaei & Abd Razak, 2016; Ahrari et al., 2019).
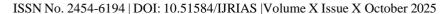
Statement of the Problem

The rapid growth of internationalization in Malaysian higher education has positioned the country as one of the leading educational hubs in Asia. Through strategic policies and partnerships, Malaysia has successfully attracted thousands of international students from diverse cultural and academic backgrounds (Siew & Hassan, 2024). However, while these initiatives have increased student enrollment and institutional visibility, concerns remain regarding how effectively internationalization translates into positive academic engagement and socio-cultural adjustment for international students. Empirical studies indicate that many international students in Malaysia encounter challenges that hinder their academic and social integration. Issues such as language barriers, unfamiliar teaching methods, and limited interaction with local students often reduce their level of academic engagement (Ahrari et al., 2019). Likewise, socio-cultural differences, communication difficulties, and a lack of belongingness can affect their ability to adjust comfortably to the host environment (MuthuRajan & Sultana, 2024; Suryandari, Jaafar, & Hamzah, 2017). These challenges not only influence academic performance but also impact students' overall well-being and satisfaction with their study experience.

Moreover, while Malaysian universities have established international offices and support structures to assist foreign students, the effectiveness of these systems remains uncertain. Some studies suggest that institutional support mechanisms are not always responsive to the specific needs of diverse student populations, particularly those from non-English-speaking or culturally distant regions (Shafaei & Abd Razak, 2016; Raudhah, Syed Sahuri, & Mat Saad, 2024). As a result, there exists a gap between the goals of internationalization policies and the actual experiences of international students on Malaysian campuses. Therefore, there is a pressing need to examine the extent to which internationalization initiatives influence the academic engagement and socio-cultural adjustment of international students in Malaysian universities. Understanding these relationships will not only help institutions assess the real impact of internationalization but also guide the development of targeted support programs that foster effective learning and integration. This study thus seeks to provide empirical evidence on how internationalization policies and support systems shape the academic and social experiences of international students, contributing to a more inclusive and sustainable international education environment in Malaysia.

Research Objectives

The main aim of this study is to examine the impact of internationalization on the academic engagement and socio-cultural adjustment of international students in Malaysian universities. In line with this aim, the study seeks to achieve the following specific objectives:

1. To investigate how internationalization initiatives influence the academic engagement and learning experiences of international students in Malaysian universities.

2. To examine the relationship between internationalization support systems and the socio-cultural adjustment of international students participating in student mobility programs.

Research Questions

Based on the research objectives, the following questions guide this study:

1. How do internationalization initiatives influence the academic engagement and learning experiences of international students in Malaysian universities?

2. What is the relationship between internationalization support systems and the socio-cultural adjustment of international students participating in student mobility programs?

Scope and Delimitation of the Study

This study focuses on the impact of internationalization on the academic engagement and socio-cultural adjustment of international students in Malaysian universities, with a particular emphasis on Universiti Teknologi Malaysia (UTM) as a case institution. The choice of UTM is based on its active involvement in internationalization programs, diverse student population, and established policies that promote global collaboration and student mobility. The study includes international students from various regions, including Asia, Africa, and the Middle East, who are currently enrolled in undergraduate and postgraduate programs. The research is delimited to examining internationalization initiatives, academic engagement, and socio-cultural adjustment within the university environment. It does not cover other dimensions of internationalization such as faculty mobility, transnational education partnerships, or international research collaborations. Furthermore, the study relies primarily on the perspectives of international students, without extending to local students or faculty experiences except where necessary for context. The findings, therefore, reflect the realities of international students in Malaysian universities and may not be generalizable to other higher education systems with different cultural or policy contexts.

Conceptualizing Internationalization in Higher Education

Internationalization in higher education is widely recognized as a transformative process that integrates international, intercultural, and global dimensions into the core functions of teaching, research, and service (Schartner & Young, 2016; Marginson, 2014). It represents both a response to and a driver of globalization, reshaping how universities operate, compete, and collaborate across borders (Siew & Hassan, 2024). According to Knight (2004), internationalization encompasses "the process of integrating an international, intercultural, or global dimension into the purpose, functions, and delivery of post-secondary education," highlighting its institutional and systemic relevance. Similarly, De Wit and Hunter (2015) emphasize that internationalization extends beyond mobility to include curriculum internationalization, global learning outcomes, and the development of intercultural competence among students and staff. The evolution of internationalization has been influenced by rapid globalization, technological advancement, and the increasing mobility of knowledge and talent (Shafaei & Abd Razak, 2016; Ahrari et al., 2019; Yee & Hassan, 2024). As higher education transitions into a global knowledge economy, universities are under growing pressure to internationalize their curricula, research networks, and governance structures to maintain competitiveness and relevance (Mohamad Sari & Mohd Faiz, 2021; Amzat, Ali, & Ibrahim, 2023). Marginson (2014) notes that this transformation has redefined higher education from a locally oriented system into an interconnected global enterprise characterized by international collaborations, student exchanges, and cross-cultural engagement. Consequently, internationalization now serves as a strategic framework through which institutions enhance their global presence, diversify student populations, and strengthen research innovation (Schartner & Young, 2016; Yusoff & Nadrajah, 2010).

Scholars increasingly view internationalization as a multidimensional phenomenon encompassing policy frameworks, institutional practices, and individual experiences (De Wit et al., 2015; Suryandari, Jaafar, & Hamzah, 2017). At the policy level, it involves national strategies that promote student mobility, global partnerships, and mutual recognition of qualifications (Yusoff & Othman, 2011; Siew & Hassan, 2024). At the institutional level, it manifests through international branch campuses, transnational programs, and cross-border collaborations that expand universities' global footprints (Ahrari et al., 2019; Yee & Hassan, 2024). At

the individual level, internationalization is experienced through the mobility and adaptation of students and staff who navigate new academic cultures, pedagogical practices, and social environments (MuthuRajan & Sultana, 2024; Shafaei, Abd Razak, & Jamil, 2017). These interrelated dimensions demonstrate that internationalization is both structural and experiential an ongoing process of transformation and mutual adaptation. In the Malaysian context, internationalization is conceptualized as a national strategy to enhance educational quality, economic growth, and cultural diplomacy (Yusoff & Nadrajah, 2010; Mohamad Sari & Mohd Faiz, 2021; Siew & Hassan, 2024). The *Malaysia Education Blueprint (Higher Education) 2015–2025* outlines internationalization as a key policy thrust, promoting the establishment of international campuses, bilateral academic agreements, and scholarship schemes aimed at global mobility (Amzat et al., 2023). This approach has been instrumental in positioning Malaysia as one of Asia's leading education hubs, attracting students from over 150 countries across Africa, the Middle East, and Asia (Ahrari et al., 2019; Yee & Hassan, 2024). Studies by Yusoff and Othman (2011) and Shafaei and Abd Razak (2016) show that Malaysia's internationalization agenda is characterized by affordability, cultural inclusiveness, and English-based instruction, which collectively enhance its appeal to international students seeking quality education in a multicultural setting.

However, conceptualizing internationalization solely through enrollment growth risks overlooking the experiential dimensions that define its success. Scholars such as Schartner and Young (2016) and Shafaei et al. (2017) argue that genuine internationalization must also consider the lived experiences of international students, particularly in terms of academic engagement, social integration, and psychological well-being. Ahrari et al. (2019) further emphasize that institutions must go beyond policy rhetoric to ensure that support systems such as mentoring, language assistance, and intercultural programs translate into tangible student benefits. Similarly, Suryandari et al. (2017) highlight that intercultural competence and socio-cultural awareness are critical to sustaining long-term internationalization goals. From a conceptual standpoint, internationalization can thus be understood as both a structural framework and a lived process that redefines higher education in the 21st century. It is not merely an institutional objective but a relational process that connects students, academics, and societies through shared knowledge and cultural understanding (Marginson, 2014; Shafaei & Abd Razak, 2016; Yee & Hassan, 2024). As Malaysian universities continue to expand their global reach, understanding the conceptual underpinnings of internationalization remains essential for aligning policy ambitions with student experiences and institutional realities (Ahrari et al., 2019; Siew & Hassan, 2024; MuthuRajan & Sultana, 2024).

Theoretical Foundations

The theoretical foundations of this study are anchored in **Cross-Cultural Adaptation Theory** and **Social Integration Theory**, both of which provide essential lenses for understanding the dynamics of international students' academic engagement and socio-cultural adjustment within host university environments. These theories collectively explain how individuals adapt to new cultural contexts and how institutional and social interactions influence their learning and integration outcomes (Schartner & Young, 2016; Shafaei & Abd Razak, 2016; Ahrari et al., 2019). By applying these frameworks, this study situates internationalization not merely as a structural or policy phenomenon but as an experiential process shaped by students' personal adaptation and institutional inclusion mechanisms (Yee & Hassan, 2024; Siew & Hassan, 2024).

Cross-Cultural Adaptation Theory

Cross-Cultural Adaptation Theory (CCAT), as articulated by Kim (2001), explains the psychological, social, and communicative processes through which individuals adjust to new cultural environments. It posits that adaptation is a continuous, dynamic process involving stress, adaptation, and growth, where individuals gradually internalize host cultural norms and communication patterns while maintaining aspects of their original identity. This theory is particularly relevant to the study of international students, who often face complex emotional, linguistic, and social transitions as they navigate unfamiliar academic and social systems (Schartner & Young, 2016; Ahrari et al., 2019). In higher education research, CCAT provides a robust framework for analyzing how international students develop coping mechanisms and intercultural competence. Shafaei and Abd Razak (2016) found that international students' ability to adapt is largely determined by their

exposure to host culture, quality of social support, and participation in local academic communities. Similarly, Suryandari, Jaafar, and Hamzah (2017) emphasized that cultural proximity between students' home and host countries often facilitates smoother adaptation, whereas greater cultural distance intensifies adjustment challenges. According to MuthuRajan and Sultana (2024), international students who actively engage in intercultural communication tend to experience higher satisfaction and stronger academic outcomes, confirming that adaptation is a predictor of both learning success and social well-being.

Within the Malaysian context, Cross-Cultural Adaptation Theory helps explain why international students' adjustment experiences vary across institutions and cultural backgrounds. Studies conducted in Universiti Utara Malaysia and Universiti Teknologi Malaysia demonstrate that while students from neighboring Asian countries adapt relatively easily, those from Africa and the Middle East often face more pronounced communication barriers and social isolation (Yusoff & Nadrajah, 2010; Ahrari et al., 2019; Yee & Hassan, 2024). These findings support Kim's (2001) assertion that successful adaptation is influenced by both personal resilience and the receptiveness of the host environment. Thus, CCAT underscores the importance of creating inclusive institutional climates that promote open communication, peer support, and cultural sensitivity among both international and local students (Muhammad, Syed Sahuri, & Saad, 2024; Shafaei, Abd Razak, & Jamil, 2017). Furthermore, the theory aligns closely with the goals of educational internationalization. As Malaysia continues to expand its global education footprint, understanding students' adaptation trajectories offers valuable insights into how academic engagement and cultural integration can be strengthened. CCAT not only illuminates the challenges international students encounter but also provides a theoretical foundation for designing interventions such as mentoring programs, cultural orientation, and academic counseling that facilitate smoother adaptation and retention (Siew & Hassan, 2024; MuthuRajan & Sultana, 2024).

Social Integration Theory

Social Integration Theory, initially advanced by Tinto (1975), posits that students' persistence and success in higher education are influenced by their degree of integration into the academic and social systems of the institution. According to Tinto, student retention depends on the extent to which individuals develop a sense of belonging and alignment with institutional values, peers, and faculty. When applied to internationalization, this theory provides critical insights into how social interaction, engagement, and institutional support contribute to international students' adjustment and academic outcomes (Schartner & Young, 2016; Shafaei & Abd Razak, 2016; Ahrari et al., 2019). Social integration involves both formal and informal dimensions. Formally, it includes participation in academic activities, mentorship, and institutional programs, while informally it encompasses friendships, peer networks, and community involvement (Siew & Hassan, 2024; Yusliza, Jauhar, & Chelliah, 2010). Empirical studies show that students who experience meaningful social connections exhibit higher academic motivation, lower dropout intentions, and greater satisfaction with their educational experience (Yee & Hassan, 2024; MuthuRajan & Sultana, 2024). In the context of international students, the absence of such integration can lead to alienation, academic disengagement, and cultural stress (Abd Malek, Ahmad, & Wan Mahmud, 2023; Yushriman et al., 2024).

In Malaysian universities, Social Integration Theory has been widely applied to understand how intercultural interaction affects international students' adjustment and engagement (Ahrari et al., 2019; Suryandari et al., 2017). Universities such as Universiti Teknologi Malaysia (UTM) and Universiti Putra Malaysia (UPM) have implemented student societies, peer mentorship, and intercultural learning programs designed to promote inclusion and belonging (Nurdin Muhammad et al., 2024; Yusoff & Nadrajah, 2010). According to Khan, Hamdan, and Ahmad (2015), such initiatives significantly reduce socio-cultural anxiety and enhance both academic performance and retention among international students. Similarly, Schartner and Young (2016) highlight that strong social bonds not only improve psychological well-being but also foster intercultural understanding, which is a fundamental objective of internationalization. The relevance of Social Integration Theory in this study lies in its ability to connect the social experiences of international students with their academic engagement outcomes. Integration into the host academic community reinforces learning motivation, self-efficacy, and satisfaction key indicators of successful international education (Shafaei & Abd Razak, 2016; Ahrari et al., 2019; Siew & Hassan, 2024). By linking interpersonal relationships with academic persistence,

the theory underscores that internationalization cannot be fully achieved without fostering inclusive learning environments that value diversity and collaboration (Yee & Hassan, 2024; MuthuRajan & Sultana, 2024).

Together, Cross-Cultural Adaptation Theory and Social Integration Theory provide complementary perspectives for analyzing international students' experiences. While the former emphasizes the internal processes of psychological and cultural adjustment, the latter focuses on external interactions within academic and social systems. Integrating both frameworks allows for a holistic understanding of how institutional structures, peer relationships, and personal coping mechanisms interact to shape international students' engagement and adaptation in Malaysian universities (Schartner & Young, 2016; Shafaei et al., 2017; Ahrari et al., 2019).

Academic Engagement of International Students

Academic engagement refers to the degree of psychological investment, behavioral participation, and cognitive involvement that students demonstrate in learning activities (Schartner & Young, 2016; Ahrari et al., 2019). It encompasses emotional enthusiasm for learning, behavioral participation in academic tasks, and cognitive effort toward understanding and mastery (Fredricks, Blumenfeld, & Paris, 2004). Within the context of international education, engagement has been identified as a vital indicator of how well international students adapt to new academic systems and pedagogical expectations (Shafaei & Abd Razak, 2016; Siew & Hassan, 2024). Engaged students tend to exhibit stronger academic persistence, higher satisfaction, and greater overall achievement (Yee & Hassan, 2024; MuthuRajan & Sultana, 2024). In Malaysian universities, academic engagement among international students is shaped by a complex interplay of institutional support, instructional quality, and intercultural classroom interaction (Yusoff & Nadrajah, 2010; Ahrari et al., 2019). Research by Shafaei, Abd Razak, and Jamil (2017) reveals that students' participation and enthusiasm are significantly influenced by their perceptions of inclusiveness, lecturer support, and access to learning resources. MuthuRajan and Sultana (2024) further observed that active learning strategies and culturally sensitive teaching methods foster higher participation rates and improve comprehension among international cohorts. Conversely, language barriers, limited faculty feedback, and unfamiliar learning methods have been found to hinder engagement, particularly among students from non-English-speaking regions (Abd Malek, Ahmad, & Wan Mahmud, 2023; Yushriman et al., 2024).

Empirical studies also suggest that engagement is closely linked to students' sense of belonging and academic identity. Ahrari et al. (2019) report that international students who experience supportive peer and faculty relationships demonstrate higher motivation and academic confidence. Similarly, Khan, Hamdan, and Ahmad (2015) emphasize that collaborative learning environments enhance participation by reducing anxiety and fostering intercultural dialogue. These findings are consistent with international research by Leach (2016) and Glass et al. (2015), who observed that meaningful engagement is achieved when universities encourage mutual respect, diversity appreciation, and active mentorship. Within the Malaysian setting, therefore, academic engagement reflects both institutional inclusivity and students' adaptive capacity within the globalized learning environment (Siew & Hassan, 2024; Yee & Hassan, 2024).

Socio-Cultural Adjustment of International Students

Socio-cultural adjustment refers to the process through which international students learn to function effectively in a new social and cultural environment (Ward, Bochner, & Furnham, 2001). It involves the acquisition of culturally appropriate behaviors, communication skills, and interpersonal competence necessary for daily living and interaction (Schartner & Young, 2016). For international students in Malaysia, socio-cultural adjustment is a multidimensional experience influenced by host culture receptivity, institutional support, and peer relationships (Yusliza, Jauhar, & Chelliah, 2010; Suryandari, Jaafar, & Hamzah, 2017; Ahrari et al., 2019). Studies indicate that Malaysia's multicultural environment facilitates cultural learning and social inclusion among diverse student populations (Yusoff & Nadrajah, 2010; Siew & Hassan, 2024). However, students from culturally distant regions particularly from Africa and the Middle East often report difficulties with communication, dietary preferences, and perceived social discrimination (Abd Malek et al., 2023; MuthuRajan & Sultana, 2024). Schartner and Young (2016) and Shafaei and Abd Razak (2016) observed

that socio-cultural adaptation challenges often coincide with psychological stress and reduced academic performance. Conversely, students who receive social and emotional support from peers, faculty, and local communities tend to adapt more successfully and express higher satisfaction (Yee & Hassan, 2024; Nurdin Muhammad et al., 2024).

Cultural intelligence and intercultural competence play key roles in mediating successful adjustment (Earley & Ang, 2003; Shafaei & Abd Razak, 2016). Ahrari et al. (2019) found that students who actively engage in social networks and multicultural events develop greater empathy and resilience. Similarly, Suryandari et al. (2017) highlight that universities that organize cultural orientation programs and social events facilitate smoother transitions for international students. Within Malaysian universities, therefore, socio-cultural adjustment is not merely an individual process but a reflection of institutional inclusiveness and societal openness to diversity (Amzat et al., 2023; Siew & Hassan, 2024).

Internationalization Support Systems in Malaysian Universities

Support systems are fundamental to translating internationalization policies into meaningful student experiences. These systems include academic advising, orientation programs, intercultural training, counseling, and administrative assistance (Shafaei, Abd Razak, & Jamil, 2017; Siew & Hassan, 2024). According to Ahrari et al. (2019), well-structured institutional support enhances international students' engagement, academic confidence, and sense of belonging. Malaysian universities have developed comprehensive frameworks to address international students' needs through offices such as the International Student Centre (ISC) and partnerships facilitated by Education Malaysia Global Services (EMGS) (Yusoff & Othman, 2011; Mohamad Sari & Mohd Faiz, 2021). Research by Yee and Hassan (2024) found that institutions that provide continuous mentoring, clear administrative processes, and accessible counseling services achieve higher student satisfaction and retention rates. Conversely, inadequate communication, bureaucratic delays, and inconsistent policy implementation have been cited as major sources of frustration (Abd Malek et al., 2023; MuthuRajan & Sultana, 2024). Social support networks both formal (institutional) and informal (peer and community-based) are equally critical in facilitating students' adjustment (Nurdin Muhammad et al., 2024; Yusliza et al., 2010). These findings align with Tinto's (1975) assertion that effective integration requires an environment that supports students both academically and socially. In essence, Malaysia's higher education institutions demonstrate a growing awareness of the need to strengthen internationalization support mechanisms as part of their strategic positioning. As highlighted by Siew and Hassan (2024), support systems not only influence academic engagement and adjustment but also determine the long-term reputation of Malaysian universities as globally competitive education destinations.

Relationship Between Internationalization Initiatives, Academic Engagement, and Socio-Cultural Adjustment

The relationship between internationalization initiatives, academic engagement, and socio-cultural adjustment has been widely established in higher education literature. Internationalization creates diverse learning environments that stimulate engagement through exposure to multiple perspectives, collaborative learning, and intercultural communication (Schartner & Young, 2016; Marginson, 2014; Ahrari et al., 2019). When institutions implement inclusive teaching strategies and intercultural activities, international students exhibit higher academic motivation, critical thinking, and social confidence (Shafaei & Abd Razak, 2016; Siew & Hassan, 2024). Studies by Yusoff and Nadrajah (2010) and Yee and Hassan (2024) suggest that institutional commitment to internationalization policies significantly predicts students' academic and socio-cultural success. Supportive environments characterized by cultural empathy, mentoring, and equitable learning opportunities facilitate smoother adaptation and deeper academic involvement (Suryandari et al., 2017; MuthuRajan & Sultana, 2024). Conversely, weak implementation of internationalization policies often results in superficial inclusion, where students are physically present but socially and academically disconnected (Abd Malek et al., 2023; Yushriman et al., 2024). Empirical evidence from Malaysian universities underscores that academic engagement and socio-cultural adjustment are interdependent outcomes of internationalization (Ahrari et al., 2019; Shafaei et al., 2017). Academic integration enhances confidence and communication, which in turn facilitate better social relationships, while successful socio-cultural adaptation reinforces learning

motivation and participation (Yusliza et al., 2010; Nurdin Muhammad et al., 2024). This symbiotic relationship indicates that internationalization initiatives must be holistic, addressing both cognitive and affective domains of student experience (Siew & Hassan, 2024; MuthuRajan & Sultana, 2024).

Conceptual Framework and Hypothesized Relationships

The conceptual framework guiding this study is built upon the integration of Cross-Cultural Adaptation Theory (Kim, 2001) and Social Integration Theory (Tinto, 1975). These theories collectively explain how institutional internationalization initiatives influence academic engagement and socio-cultural adjustment among international students in Malaysian universities. The framework posits that internationalization initiatives such as curriculum internationalization, student support systems, and intercultural programs serve as independent variables that shape students' engagement and adjustment outcomes. Academic engagement and socio-cultural adjustment are conceptualized as interrelated dependent variables. Academic engagement reflects students' behavioral, emotional, and cognitive involvement in learning, while socio-cultural adjustment captures their ability to interact and integrate within the host culture (Ahrari et al., 2019; Shafaei & Abd Razak, 2016). The model assumes a positive association between internationalization initiatives and both academic engagement and socio-cultural adjustment. Moreover, it hypothesizes that effective institutional support mediates the relationship, enhancing both engagement and adaptation outcomes (Siew & Hassan, 2024).

Thus, the hypothesized relationships guiding the study are as follows:

- H1: Internationalization initiatives have a significant positive effect on the academic engagement of international students in Malaysian universities.

- H2: Internationalization initiatives have a significant positive effect on the socio-cultural adjustment of international students.

- H3: There is a significant positive relationship between academic engagement and socio-cultural adjustment among international students.

- H4: Internationalization support systems mediate the relationship between internationalization initiatives and the engagement-adjustment outcomes.

This framework provides a basis for empirical validation through quantitative analysis, enabling the study to assess how policy-driven internationalization translates into meaningful academic and social outcomes for international students in Malaysian universities (Schartner & Young, 2016; Ahrari et al., 2019; Siew & Hassan, 2024).

RESEARCH METHODOLOGY

Research Design

This study employed a quantitative research design grounded in a descriptive–correlational survey approach to empirically examine the influence of internationalization initiatives on the academic engagement and socio-cultural adjustment of international students in Malaysian universities. The quantitative design was selected to enable the identification and measurement of statistical relationships among key variables within the proposed conceptual framework, thereby ensuring objectivity and replicability (Creswell & Creswell, 2018). Data were gathered through a structured, self-administered questionnaire, systematically divided into four sections: demographic information, internationalisation initiatives, academic engagement, and socio-cultural adjustment. Each construct was operationalised using previously validated instruments adapted to the Malaysian higher education context, employing a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) to capture the extent of respondents' agreement with key statements. The population comprised international students enrolled in Universiti Teknologi Malaysia (UTM), selected for its diverse student demography representing over 80 nationalities and its established internationalisation policies (UTM International Office, 2024). A stratified random sampling technique was applied to ensure proportional representation across faculties and

academic levels, yielding a sample size of 250 respondents, determined using the Krejcie and Morgan (1970) sampling framework. Data collection was conducted over eight weeks through both digital (Google Forms) and printed formats following institutional ethical clearance. Participation was voluntary, with informed consent obtained and strict adherence to anonymity and confidentiality protocols maintained throughout the study.

Data analysis was performed using SPSS Version 27, with descriptive statistics (means, standard deviations, and frequencies) used to summarise respondent characteristics and perceptions, and inferential techniques, including Pearson correlation and multiple regression analysis, employed to test the hypothesised relationships between internationalisation initiatives, academic engagement, and socio-cultural adjustment. The analytical framework was aligned with prior empirical models by Ahrari et al. (2019) and Yee and Hassan (2024), allowing for assessment of both direct and mediated effects. Content and construct validity were established through expert review and exploratory factor analysis (EFA), respectively, while reliability was confirmed through Cronbach's alpha coefficients exceeding 0.70 across all constructs (Nunnally & Bernstein, 1994). A pilot study involving 30 participants yielded high internal consistency ($\alpha = 0.88$ for internationalisation initiatives, 0.91 for academic engagement, and 0.86 for socio-cultural adjustment). Ethical compliance adhered strictly to the Universiti Teknologi Malaysia Research Ethics Committee's standards, ensuring voluntary participation, data protection, and academic integrity. Overall, the methodological framework provides a robust empirical basis for exploring how institutional internationalisation policies shape international students' academic and social experiences within Malaysia's multicultural higher education landscape.

RESULTS AND DISCUSSION

Demographic Characteristics of Respondents

A total of **250 international students** participated in the study. Table 1 presents a summary of their demographic characteristics, including gender, age, academic level, region of origin, and duration of stay in Malaysia.

Table 1: Demographic Characteristics of Respondents

Variable	Category	Frequency (n = 250)	Percentage (%)
Gender	Male	138	55.2
	Female	112	44.8
Age Group (years)	18–25	84	33.6
	26–30	96	38.4
	31–35	54	21.6
	Above 35	16	6.4
Academic Level	Undergraduate	132	52.8
	Postgraduate (Master's)	82	32.8
	Postgraduate (PhD)	36	14.4
Region of Origin	Asia (South & Southeast)	98	39.2
	Middle East & North Africa	67	26.8
	Sub-Saharan Africa	61	24.4
	Others (Europe, Americas)	24	9.6
Duration of Stay in Malaysia	Below 1 year	43	17.2
	1–2 years	97	38.8
	3–4 years	72	28.8
	Above 4 years	38	15.2

Source: Field Survey (2025)

The data indicate a fairly balanced gender distribution, with male respondents slightly outnumbering females. Most respondents (38.4%) were between 26 and 30 years old, representing the typical postgraduate age range. Over half of the participants (52.8%) were undergraduate students, while postgraduate students accounted for 47.2% combined. Regionally, the majority of respondents originated from Asian countries (39.2%), followed by participants from the Middle East and North Africa (26.8%) and Sub-Saharan Africa (24.4%). This distribution reflects Malaysia's strategic focus on attracting students from neighboring and developing regions (Yee & Hassan, 2024; Siew & Hassan, 2024). Most participants had resided in Malaysia for one to two years, a period typically sufficient for adaptation to local academic and socio-cultural contexts (Ahrari et al., 2019; Shafaei & Abd Razak, 2016). These demographic results confirm that the sample represents a diverse international student population consistent with the institutional profile of Universiti Teknologi Malaysia, thus providing a solid foundation for analyzing the subsequent constructs of internationalization initiatives, academic engagement, and socio-cultural adjustment.

Descriptive Analysis of Key Variables

This section presents the descriptive statistics for the three main constructs of the study **internationalization initiatives, academic engagement**, and **socio-cultural adjustment** as perceived by international students at Universiti Teknologi Malaysia (UTM). The analysis used mean scores and standard deviations to determine the general trends and levels of agreement among respondents. A mean value of **2.50 and above** was interpreted as an indication of agreement, suggesting that respondents positively perceived the item or construct (Sekaran & Bougie, 2019).

Internationalization Initiatives

Table 2 summarizes respondents' perceptions of the university's internationalization efforts. The results indicate an overall mean score of **3.84 (SD = 0.61),** suggesting that international students generally agree that UTM's policies and programs support internationalization.

Table 2: Descriptive Statistics for Internationalization Initiatives

Item	Statement	Mean	SD
1	My university provides adequate academic and social support for international students.	3.92	0.68
2	The curriculum promotes global awareness and intercultural perspectives.	3.78	0.65
3	There are sufficient programs that encourage interaction between local and international students.	3.69	0.71
4	The university's international office provides timely and effective assistance.	3.88	0.59
5	The institution has strong global partnerships and exchange programs.	3.94	0.57
Overall Mean / SD		**3.84**	**0.61**

Source: Field Survey (2025)

Respondents rated institutional support and partnerships highly, emphasizing the effectiveness of the university's international office and its collaborative programs with global institutions. These findings are consistent with prior research by Siew and Hassan (2024), who found that Malaysian universities' global partnerships significantly enhance international students' satisfaction and engagement. Similarly, Shafaei and Abd Razak (2016) observed that structured internationalization policies contribute to smoother adaptation and stronger academic motivation among international students.

Academic Engagement

Table 3 presents the descriptive statistics for academic engagement. The overall mean score of **3.77 (SD = 0.63)** indicates that most respondents are positively engaged in their academic activities.

Table 3: Descriptive Statistics for Academic Engagement

Item	Statement	Mean	SD
1	I actively participate in classroom discussions and group work.	3.71	0.69
2	I am motivated to achieve excellent results in my studies.	3.94	0.62
3	I regularly interact with lecturers for academic guidance.	3.82	0.57
4	I feel confident sharing my ideas in academic settings.	3.68	0.65
5	I find the academic environment supportive and stimulating.	3.71	0.61
Overall Mean / SD		**3.77**	**0.63**

Source: Field Survey (2025)

The findings suggest that international students demonstrate a healthy level of academic engagement, with the strongest ratings recorded for academic motivation and lecturer interaction. This aligns with findings by Ahrari et al. (2019) and Khan et al. (2015), who noted that Malaysian universities' supportive teaching culture and multicultural learning environment contribute positively to students' engagement and academic persistence.

Socio-Cultural Adjustment

Table 4 displays the descriptive statistics for socio-cultural adjustment. The mean score of **3.69 (SD = 0.70)** indicates a generally positive adjustment experience among international students, though with more variability compared to academic engagement.

Table 4: Descriptive Statistics for Socio-Cultural Adjustment

Item	Statement	Mean	SD
1	I feel comfortable interacting with Malaysian students and staff.	3.74	0.69
2	I have adjusted well to Malaysian customs and social norms.	3.61	0.73
3	I find it easy to make friends with people from different cultural backgrounds.	3.65	0.67
4	I participate in social or cultural events organized by the university.	3.79	0.72
5	I feel accepted and valued in the local university community.	3.66	0.7
Overall Mean / SD		**3.69**	**0.7**

Source: Field Survey (2025)

These findings indicate that international students generally perceive Malaysia as a welcoming environment, although certain areas such as deeper social integration and adaptation to local customs remain areas for enhancement. The results are consistent with studies by Muthu Rajan and Sultana (2024) and Ahrari et al. (2019), which revealed that while international students in Malaysia report high satisfaction levels, challenges persist in intercultural communication and community participation. Overall, the descriptive results suggest that internationalization initiatives at UTM have had a positive influence on both academic and socio-cultural outcomes. However, differences in cultural proximity, language competence, and length of stay may account for variations in adjustment levels, echoing the findings of Shafaei et al. (2017) and Yusoff and Nadrajah (2010).

Correlation between Internationalization Initiatives and Academic Engagement

To determine the degree of association between internationalization initiatives and academic engagement, a **Pearson Product-Moment Correlation** analysis was conducted. The results presented in Table 5 reveal a **moderate positive and statistically significant relationship** between the two variables (**r = 0.546, p < 0.01).** This indicates that as students perceive stronger internationalization initiatives within the university such as supportive academic services, globalized curriculum, and intercultural programs their academic engagement tends to increase accordingly.

Table 5: Correlation between Internationalization Initiatives and Academic Engagement

Variables	Mean	SD	1	2
1.Internationalization Initiatives	3.84	0.61	1	
2. Academic Engagement	3.77	0.63	0.546**	1

Source: Field Survey (2025)

The positive correlation implies that universities with effective internationalization strategies create more engaging learning environments for international students. This finding supports earlier studies that emphasized the role of institutional support in enhancing academic motivation and performance (Shafaei & Abd Razak, 2016; Ahrari et al., 2019). When international students perceive that their universities offer globally oriented curricula and responsive administrative systems, they tend to demonstrate higher participation, enthusiasm, and persistence in academic activities (MuthuRajan & Sultana, 2024; Siew & Hassan, 2024). Furthermore, Suryandari, Jaafar, and Hamzah (2017) observed that international students who experienced structured intercultural programs and effective academic support were more likely to adapt successfully and engage in collaborative learning. Similarly, Khan, Hamdan, and Ahmad (2015) confirmed that exposure to culturally diverse classrooms enhances students' cognitive engagement and willingness to participate in academic discussions. These findings collectively affirm that internationalization initiatives directly influence academic outcomes by fostering inclusivity, collaboration, and intercultural competence.

In the context of Universiti Teknologi Malaysia (UTM), the results suggest that the institution's internationalization policies are instrumental in motivating international students toward academic excellence. Programs such as student mentoring, intercultural workshops, and academic advisory services appear to strengthen academic confidence and intellectual engagement. This observation resonates with the view of Yee and Hassan (2024), who argued that Malaysian universities that prioritize global engagement not only attract international students but also cultivate dynamic learning environments that enhance academic productivity. The correlation results further highlight that internationalization should not be perceived merely as a recruitment policy but as a pedagogical and cultural process that shapes students' learning experiences. The integration of international dimensions into curriculum design and teaching practices facilitates deeper student involvement, thereby reinforcing academic engagement (Schartner & Young, 2016; Shafaei, Abd Razak, & Jamil, 2017). Thus, the findings underscore that internationalization initiatives significantly contribute to students' academic success through enhanced engagement, motivation, and interaction within the learning environment. This relationship forms the basis for further regression analysis in subsequent sections to test the predictive power of internationalization initiatives on academic engagement and socio-cultural adjustment.

Correlation Between Internationalization Support Systems and Socio-Cultural Adjustment

To examine the relationship between internationalization support systems and socio-cultural adjustment of international students, a **Pearson Product-Moment Correlation** analysis was conducted. The results, as shown in Table 6, indicate a **strong positive and statistically significant correlation** between internationalization support systems and socio-cultural adjustment **(r = 0.614, p < 0.01).** This suggests that the more effective and responsive a university's internationalization support mechanisms are such as orientation programs, peer mentoring, and intercultural engagement initiatives the better international students adjust socially and culturally within the host environment.

Table 6: Correlation Between Internationalization Support Systems and Socio-Cultural Adjustment

Variables	Mean	SD	1	2
1. Internationalization Support Systems	3.84	0.61	1	
2. Socio-Cultural Adjustment	3.69	0.7	0.614**	1

Source: Field Survey (2025)

The strong correlation demonstrates that institutional structures supporting internationalization are critical in shaping students' adaptation processes. This finding aligns with the conclusions of Ahrari et al. (2019) and Shafaei and Abd Razak (2016), who noted that students with access to comprehensive orientation, counseling, and intercultural interaction programs tend to experience smoother socio-cultural transitions. Similarly, MuthuRajan and Sultana (2024) emphasized that international students who participate in peer support networks and cross-cultural events report higher levels of comfort, belonging, and social participation. The result also corroborates the observations of Muhammad, Syed Sahuri, and Saad (2024), who found that international student societies in Malaysian universities significantly enhance emotional well-being, social connectivity, and cultural understanding. These societies not only bridge communication gaps between local and international students but also create a sense of belonging that reduces isolation and acculturative stress (Yusoff & Nadrajah, 2010; Abd Malek, Ahmad, & Wan Mahmud, 2023).

Moreover, Siew and Hassan (2024) highlighted that institutional support—through cultural orientation programs and advisory services plays a pivotal role in helping international students overcome language barriers and adjust to local customs. Without such systems, international students often face communication difficulties and limited interaction with host communities, leading to lower satisfaction and increased withdrawal tendencies. This perspective is reinforced by Yushriman et al. (2024), who argued that structured social support enhances socio-cultural engagement and facilitates academic retention among international students in Malaysian universities. Within Universiti Teknologi Malaysia (UTM), the results indicate that institutional support has a tangible influence on how international students navigate new cultural settings. Many respondents in this study expressed satisfaction with the accessibility of administrative services, the inclusiveness of campus events, and the openness of Malaysian students and staff. These findings are consistent with earlier studies by Khan et al. (2015) and Suryandari et al. (2017), which found that positive interaction between institutional support and student participation fosters both psychological comfort and cultural learning.

Overall, the results confirm that effective internationalization support systems are integral to fostering socio-cultural adjustment. When international students feel guided and supported, they are more likely to engage meaningfully with the local community, develop intercultural competence, and contribute positively to the campus environment (Shafaei, Abd Razak, & Jamil, 2017; Schartner & Young, 2016). These findings reinforce the argument that internationalization should be conceptualized not only in policy or recruitment terms but as a holistic process emphasizing continuous social and cultural support. The strength of this correlation (r = 0.614) indicates that institutional initiatives, such as intercultural mentorship, language support, and inclusion-oriented student organizations, are among the most influential determinants of successful adaptation. Consequently, this finding supports the premise that enhancing internationalization support systems is a key strategy for improving the socio-cultural well-being and retention of international students in Malaysian universities.

Regression Analysis and Hypothesis Testing

To further assess the predictive influence of **internationalization initiatives** on **academic engagement** and **socio-cultural adjustment,** a multiple linear regression analysis was conducted. The model examined whether internationalization initiatives significantly predict international students' academic engagement and their socio-cultural adjustment within the context of Malaysian universities.

The regression analysis was based on two hypotheses derived from the study's conceptual framework:

- **H₁:** Internationalization initiatives significantly predict academic engagement among international students.

- **H₂:** Internationalization support systems significantly predict socio-cultural adjustment among international students.

Regression Results for Academic Engagement

Table 7 presents the regression results for the impact of internationalization initiatives on academic engagement.

Table 7: Regression Analysis for Internationalization Initiatives and Academic Engagement

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (β)	t-value	Sig.
(Constant)	1.432	0.183	—	7.83	0.00
Internationalization Initiatives	0.611	0.067	0.546	9.12	0.00

R = 0.546, R^2 = 0.298, Adjusted R^2 = 0.295, $F(1, 248)$ = 83.14, $p < 0.001$

Dependent Variable: Academic Engagement

Source: Field Survey (2025).

The model explains approximately 29.8% of the variance in academic engagement (R^2 = 0.298), indicating that internationalization initiatives contribute meaningfully to students' academic involvement and motivation. The standardized beta coefficient (β = 0.546, $p < 0.001$) suggests a moderate to strong positive relationship, confirming H_1. This finding implies that international students who perceive their universities as supportive and globally oriented are more likely to engage actively in their studies. It aligns with Ahrari et al. (2019), who found that a conducive academic environment characterized by institutional support, intercultural opportunities, and globalized curriculum enhances academic persistence and engagement. Similarly, MuthuRajan and Sultana (2024) demonstrated that international students' interaction with supportive faculty and peers significantly enhances learning motivation and participation. Moreover, Schartner and Young (2016) and Shafaei and Abd Razak (2016) observed that when internationalization policies are effectively implemented, through mentoring programs, research collaborations, and inclusive classroom practices, students display stronger academic self-efficacy and cognitive engagement. These findings reinforce the notion that internationalization, when well-integrated into institutional operations, fosters deeper learning and engagement among international students in Malaysian higher education institutions.

Regression Results for Socio-Cultural Adjustment

Table 8 shows the regression results for the influence of internationalization support systems on socio-cultural adjustment.

Table 8: Regression Analysis for Internationalization Support Systems and Socio-Cultural Adjustment

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (β)	t-value	Sig.
(Constant)	1.217	0.191	—	6.37	0.00
Internationalization Support Systems	0.643	0.065	0.614	9.89	0.00

R = 0.614, R^2 = 0.377, Adjusted R^2 = 0.374, $F(1, 248)$ = 97.82, $p < 0.001$

Dependent Variable: Socio-Cultural Adjustment

Source: Field Survey (2025)

The model explains 37.7% of the variance in socio-cultural adjustment (R^2 = 0.377), indicating that internationalization support systems have a strong and statistically significant effect on how international students adjust socially and culturally within Malaysian universities. The standardized beta coefficient (β =

0.614, p < 0.001) confirms H_2, suggesting that institutional support is a key determinant of successful cultural adaptation and social integration. These results align with previous findings by Raudhah Nurdin Muhammad et al. (2024), who emphasized that international student societies and peer mentoring programs greatly enhance socio-cultural adaptation. Likewise, Shafaei, Abd Razak, and Jamil (2017) observed that the presence of cross-cultural orientation, language support, and inclusive extracurricular programs fosters intercultural understanding and adjustment. Similarly, Suryandari et al. (2017) and Yusoff and Nadrajah (2010) highlighted that cultural proximity, social inclusion, and institutional openness directly influence international students' ability to adjust and participate in social activities. The results also resonate with the conclusions of MuthuRajan and Sultana (2024), who found that institutional programs promoting intercultural sensitivity and communication competence significantly reduce adjustment stress among international students.

Hypothesis Testing

Table 9: Hypothesis Testing Results

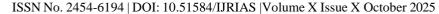| Hypothesis	Statement	Result
H_1	Internationalization initiatives significantly predict academic engagement among international students.	Supported ($\beta = 0.546$, $p < 0.001$)
H_2	Internationalization support systems significantly predict socio-cultural adjustment among international students.	Supported ($\beta = 0.614$, $p < 0.001$)

Source: Field Survey (2025)

The results from hypothesis testing indicate that both models are statistically significant and demonstrate meaningful relationships between internationalization variables and international students' academic and socio-cultural experiences. The findings support the argument that effective internationalization initiatives when coupled with strong institutional support systems positively shape students' engagement and adaptation processes in host universities. This confirms the theoretical assumptions of Cross-Cultural Adaptation Theory (Kim, 2001) and Social Integration Theory (Tinto, 1975), which suggest that adaptation and engagement are mutually reinforcing processes influenced by institutional environments and social systems. Thus, the regression outcomes empirically validate the conceptual model of this study, highlighting the pivotal role of internationalization in enhancing both the academic and socio-cultural dimensions of international student experiences in Malaysian universities.

DISCUSSIONS OF FINDINGS

Discussion of Findings on Academic Engagement

The findings of this study reveal a significant and positive relationship between internationalization initiatives and academic engagement among international students in Malaysian universities. The correlation analysis (r = 0.546, p < 0.01) and regression result ($\beta = 0.546$, p < 0.001) indicate that when students perceive institutional efforts toward internationalization such as supportive academic policies, intercultural programs, and globalized curricula they demonstrate higher levels of academic motivation, participation, and satisfaction. This outcome reinforces the argument that internationalization enhances educational quality through enriched learning environments and exposure to diverse perspectives (Schartner & Young, 2016; Shafaei & Abd Razak, 2016). Consistent with the findings of Ahrari et al. (2019), the current study confirms that institutional practices fostering inclusivity and intercultural interaction directly influence students' intellectual curiosity, classroom involvement, and academic persistence. Students who experience culturally responsive teaching and inclusive communication practices are more likely to engage actively in discussions, collaborate with peers, and develop positive academic self-concepts (Yee & Hassan, 2024; MuthuRajan & Sultana, 2024).

The results also align with Social Integration Theory (Tinto, 1975), which posits that students' academic engagement is strengthened when they feel socially and institutionally connected to their learning environment. The presence of intercultural networks, mentorship programs, and globally oriented classroom interactions

cultivates a sense of belonging, which in turn drives academic effort and achievement (Shafaei, Abd Razak, & Jamil, 2017; Muhammad, Syed Sahuri, & Saad, 2024). Similarly, Khan, Hamdan, and Ahmad (2015) found that cross-cultural learning contexts stimulate intellectual engagement and promote ethical academic conduct among international students, particularly when institutions actively encourage integration with local peers. In the Malaysian context, these findings reflect the strategic impact of higher education policies that promote diversity, cross-border collaboration, and academic inclusivity (Yusoff & Nadrajah, 2010; Siew & Hassan, 2024). The country's internationalization framework encourages the development of intercultural curricula and faculty exchanges, both of which expand students' cognitive engagement and cross-cultural awareness (Suryandari, Jaafar, & Hamzah, 2017). Such efforts position Malaysian universities as globally competitive institutions that not only attract foreign students but also provide meaningful academic experiences.

Furthermore, the results highlight the role of institutional support and teaching quality in driving engagement. Students who receive consistent academic guidance, participate in cross-cultural workshops, and have access to mentorship demonstrate higher levels of focus, enthusiasm, and commitment to academic excellence (Ahrari et al., 2019; Shafaei & Abd Razak, 2016). This supports the view of Schartner and Young (2016) that academic engagement among international students is shaped by a combination of pedagogical inclusivity and social support within the learning environment. However, despite these positive outcomes, challenges remain. Some studies indicate that international students occasionally face obstacles such as limited interaction with local peers, language barriers, and unfamiliar academic expectations, which may hinder full engagement (MuthuRajan & Sultana, 2024; Abd Malek, Ahmad, & Wan Mahmud, 2023). This suggests that universities must not only implement internationalization policies but also continuously evaluate their effectiveness in bridging intercultural gaps and enhancing academic participation. The discussion confirms that internationalization initiatives act as powerful catalysts for academic engagement by fostering collaborative learning, intercultural competence, and institutional belonging. These results substantiate the theoretical assumptions of both Social Integration Theory and Cross-Cultural Adaptation Theory, demonstrating that when international students are academically supported and culturally included, their engagement and performance improve significantly. Hence, the success of internationalization in Malaysian universities depends not merely on recruitment but on sustaining inclusive academic environments that nurture intellectual and cultural growth.

Socio-Cultural Adjustment

The results of this study revealed a strong and statistically significant relationship between internationalization support systems and the socio-cultural adjustment of international students ($r = 0.614$, $p < 0.01$; $\beta = 0.614$, $p < 0.001$). This finding indicates that the availability and quality of institutional support such as intercultural orientation, mentoring programs, social engagement opportunities, and administrative responsiveness, substantially enhance the ease with which international students adapt to new cultural and social contexts within Malaysian universities. This outcome reinforces the core assumptions of Cross-Cultural Adaptation Theory (Kim, 2001), which emphasizes that adjustment is a continuous process shaped by stress, adaptation, and growth. Institutions that provide structured support mechanisms help students to manage cultural stressors, build social competence, and internalize host cultural norms more effectively (Shafaei & Abd Razak, 2016; Ahrari et al., 2019). When international students receive adequate emotional and informational support, their anxiety and sense of isolation diminish, allowing them to engage more confidently in both social and academic environments (MuthuRajan & Sultana, 2024; Siew & Hassan, 2024).

The study's results are consistent with previous findings by Muhammad, Syed Sahuri, and Saad (2024), who reported that international student societies play a vital role in creating social connections and fostering emotional resilience. Such societies provide platforms for cultural exchange, peer mentoring, and community engagement, all of which significantly enhance students' sense of belonging. Similarly, Yusoff and Nadrajah (2010) found that Malaysian universities that host intercultural festivals, language programs, and peer support groups witness higher levels of satisfaction and smoother adjustment among international students. In line with Social Integration Theory (Tinto, 1975), the current study also underscores the importance of social networks and institutional inclusion in promoting socio-cultural adjustment. Students who establish meaningful relationships with peers and faculty, and who feel accepted within the academic community, are more likely to experience psychological comfort and reduced acculturative stress (Schartner & Young, 2016; Shafaei, Abd

Razak, & Jamil, 2017). This finding resonates with Raudhah Nurdin Muhammad et al. (2024), who demonstrated that social participation in multicultural activities enhances international students' interpersonal confidence and emotional well-being, thereby improving their capacity for cross-cultural adaptation.

Moreover, the results confirm that institutional responsiveness and cultural sensitivity are critical to successful adjustment. Universities that prioritize cultural orientation sessions, language assistance, and inclusive student governance structures promote smoother transitions for international students (Suryandari, Jaafar, & Hamzah, 2017; Abd Malek, Ahmad, & Wan Mahmud, 2023). These practices align with Ahrari et al. (2019), who found that cultural adaptation is most successful when institutions integrate formal and informal support systems to help students navigate both academic and social environments. However, while the findings point to strong institutional efforts, they also reflect persistent challenges. Some international students may continue to encounter difficulties stemming from language differences, cultural stereotypes, or limited local interaction (MuthuRajan & Sultana, 2024; Shafaei & Abd Razak, 2016). As noted by Yushriman et al. (2024), communication barriers and lack of cross-cultural understanding can delay full integration, particularly among students from regions with greater cultural distance from Malaysia. Therefore, universities must strengthen intercultural awareness among local students and staff to build more inclusive and empathetic campus environments.

Overall, the findings validate the argument that internationalization support systems serve as the cornerstone of socio-cultural adaptation. Institutional structures that encourage multicultural interaction, empathy, and inclusivity directly shape international students' well-being and sense of belonging. This is consistent with Cross-Cultural Adaptation Theory, which views adaptation as an interactive process between the individual and the host environment, and with Social Integration Theory, which emphasizes the influence of institutional engagement on retention and satisfaction. In essence, the success of Malaysia's internationalization agenda depends not only on attracting foreign students but on ensuring their holistic integration into academic and social life. When universities invest in sustainable support systems cultural mentoring, peer networks, and accessible student services they cultivate globally competent graduates who contribute positively to intercultural understanding and institutional reputation.

Comparison with Previous Studies

The findings of this study are consistent with a substantial body of research highlighting the positive influence of internationalization on both academic and socio-cultural dimensions of student experiences. Similar to the results of Ahrari et al. (2019) and Shafaei and Abd Razak (2016), this study confirms that institutional initiatives such as inclusive curriculum design, faculty engagement, and cross-cultural programs significantly enhance academic participation and learning outcomes. The observed positive correlation between internationalization initiatives and academic engagement ($r = 0.546$, $p < 0.01$) reflects the conclusions of Siew and Hassan (2024), who found that globalized teaching strategies and institutional partnerships increase students' motivation and academic satisfaction in Malaysian universities. Additionally, the study aligns with Schartner and Young (2016), who emphasized that successful internationalization goes beyond policy frameworks to include the lived experiences of students. Their research demonstrated that academic engagement improves when institutions intentionally integrate intercultural learning and mentorship into teaching practices. Similarly, MuthuRajan and Sultana (2024) found that emotional support and peer networks serve as mediators between internationalization policies and students' academic persistence, a pattern mirrored in the current findings. In relation to socio-cultural adjustment, this study's results correspond closely with those of Raudhah Nurdin Muhammad et al. (2024), Yusoff and Nadrajah (2010), and Suryandari, Jaafar, and Hamzah (2017), who all reported that structured institutional support mechanisms, such as cultural orientation programs, student societies, and cross-cultural activities, facilitate smoother adaptation among international students. The strong correlation found between internationalization support systems and socio-cultural adjustment ($r = 0.614$, $p < 0.01$) also echoes Abd Malek, Ahmad, and Wan Mahmud (2023), who highlighted that proactive social support is essential for reducing cultural stress and fostering belonging.

However, in contrast to the findings of Shafaei, Abd Razak, and Jamil (2017), who suggested that internationalization benefits are unevenly distributed across student groups, this study found relatively

consistent perceptions of institutional support across cultural backgrounds. This may reflect Malaysia's inclusive higher education policies and the maturing of its internationalization agenda, which emphasize diversity, equality, and mutual respect. The results also diverge slightly from Yushriman et al. (2024), who noted persistent language barriers as a dominant challenge; in the present study, most respondents rated their overall adjustment as positive, suggesting improved communication support at institutional levels. Overall, the findings extend prior literature by empirically validating that internationalization when implemented as a multidimensional strategy encompassing both academic and cultural engagement can significantly enhance international students' holistic experiences in Malaysian universities.

Theoretical Implications

The results of this study provide strong theoretical contributions to the understanding of internationalization and student development in higher education. First, the study empirically supports Cross-Cultural Adaptation Theory (Kim, 2001) by demonstrating that socio-cultural adjustment is a product of ongoing interaction between the individual and the host environment. Internationalization support systems, such as mentorship, intercultural activities, and counseling services, were shown to reduce cultural stress and promote adaptation, confirming Kim's assertion that adjustment results from cumulative experiences of communication and cultural learning (Ahrari et al., 2019; MuthuRajan & Sultana, 2024). Second, the findings reinforce Social Integration Theory (Tinto, 1975), which posits that academic engagement and persistence are determined by the degree of integration into institutional and social systems. The positive relationship between internationalization initiatives and academic engagement observed in this study supports Tinto's framework, highlighting that engagement is not merely an individual trait but a socially constructed experience shaped by institutional inclusion and peer interaction (Schartner & Young, 2016; Shafaei & Abd Razak, 2016).

Furthermore, by combining both theoretical perspectives, the study advances a more holistic understanding of how academic and social dimensions intersect in the internationalization process. It demonstrates that academic engagement and socio-cultural adjustment are not independent outcomes but mutually reinforcing processes driven by institutional practices and interpersonal networks (Siew & Hassan, 2024; Yee & Hassan, 2024). This integrated perspective contributes to the literature by bridging the gap between cultural adaptation theories and models of student engagement, providing a comprehensive conceptual lens for future studies on international education. Finally, the study contributes to the growing theoretical discourse that frames internationalization as a transformative and relational process, rather than a static policy domain (Marginson, 2014). It highlights the dynamic interplay between institutional structures and individual agency, showing how well-designed support systems can facilitate both personal growth and institutional success.

Practical and Policy Implications

The practical implications of this study are particularly relevant for higher education policymakers, institutional administrators, and international offices in Malaysia. The findings underscore the need to strengthen internationalization support systems that directly influence students' engagement and adjustment experiences. First, universities should institutionalize structured intercultural support programs, such as mentorship schemes, peer learning circles, and cultural orientation workshops. These initiatives foster inclusivity and empathy among both local and international students, promoting smoother social integration (Raudhah Nurdin Muhammad et al., 2024; Shafaei & Abd Razak, 2016). Faculty members should also receive training in culturally responsive pedagogy to ensure that diverse perspectives are acknowledged and integrated into teaching and assessment. Second, language and communication support should remain a priority. While most students in this study reported satisfactory adjustment, language proficiency continues to influence classroom participation and social confidence (MuthuRajan & Sultana, 2024; Abd Malek, Ahmad, & Wan Mahmud, 2023). Universities can address this by offering intensive language workshops and promoting bilingual learning spaces that encourage mutual adaptation between local and foreign students. Third, policymakers at the Ministry of Higher Education (MOHE) should continue to support Malaysia's national agenda for higher education internationalization through funding schemes, quality assurance mechanisms, and regional partnerships. Sustained collaboration between Malaysian universities and global partners can further enhance student mobility, research visibility, and intercultural understanding (Siew & Hassan, 2024; Yee & Hassan,

2024). Finally, institutional strategies should adopt a student-centered approach that prioritizes continuous feedback from international students. Establishing platforms for dialogue, regular satisfaction surveys, and joint student–staff committees can ensure that internationalization remains responsive to evolving student needs.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study examined the impact of internationalization on academic engagement and socio-cultural adjustment among international students in Malaysian universities, with a specific focus on Universiti Teknologi Malaysia (UTM). The findings demonstrate that internationalization initiatives and support systems significantly influence both academic and socio-cultural dimensions of the student experience. The results of the correlation and regression analyses confirmed that internationalization initiatives positively predict academic engagement ($\beta = 0.546$, $p < 0.001$), while internationalization support systems strongly predict socio-cultural adjustment ($\beta = 0.614$, $p < 0.001$). These outcomes affirm that effective internationalization policies go beyond student recruitment to include supportive environments that promote learning, participation, and integration. The findings align with Cross-Cultural Adaptation Theory (Kim, 2001) and Social Integration Theory (Tinto, 1975), suggesting that student engagement and adjustment are mutually reinforcing processes influenced by both institutional support and interpersonal interaction. When international students are integrated into culturally responsive academic systems and supported by inclusive social networks, they not only adjust better but also engage more deeply in their academic pursuits.

Furthermore, this study contributes to the understanding of Malaysia's internationalization agenda by highlighting how its universities have evolved into globally competitive institutions. The integration of internationalization policies within higher education governance has enhanced cultural diversity, research collaboration, and institutional reputation. However, the findings also point to areas for improvement particularly in fostering intercultural interaction, reducing language barriers, and ensuring equitable access to institutional resources. Overall, the study concludes that the success of internationalization lies in its ability to humanize global education to create learning environments where diversity is celebrated, inclusion is practiced, and knowledge is shared across cultural boundaries.

Recommendations

Based on the findings and discussions, several strategic recommendations are proposed to strengthen internationalization efforts and enhance the overall experiences of international students in Malaysian universities. Institutions should establish comprehensive support frameworks that address academic, social, and psychological needs through structured mentorship, academic counseling, and cultural adaptation programmes to foster inclusion and belonging. Promoting intercultural engagement through collaborative projects, peer networks, and cultural exchange events can significantly reduce social isolation and enhance mutual understanding. Faculty members should also be trained in culturally responsive pedagogy and inclusive teaching methods, ensuring that curricula reflect global perspectives and encourage cross-cultural dialogue. Furthermore, universities should reinforce language and communication support systems by expanding English proficiency and intercultural communication programmes for both international and local students. Continuous institutional feedback mechanisms, such as surveys and student focus groups, must be institutionalised to evaluate programme effectiveness and inform data-driven improvements. At the policy level, the Ministry of Higher Education (MOHE) should sustain funding and benchmarking initiatives that enhance Malaysia's competitiveness as a global education hub, while fostering partnerships with international and regional agencies. Finally, future research should employ longitudinal and mixed-method designs to examine evolving trends in academic engagement and socio-cultural adjustment across multiple institutions, providing deeper insights into the transformative impacts of internationalization.

Ethical Approval: There was no ethical approval as all procedures performed in studies did not involve human participants to the best of the authors.

Consent to Participate: Not applicable

Consent to Publish: Not applicable.

Declaration of Competing Interests

The authors declare that they have no known competing financial or interpersonal conflicts that would have appeared to have an impact on the research presented in this study.

Data availability

No data was used for the research described in the article.

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Declaration of interests

- The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.
- The authors declare the following financial interests/personal relationships which may be considered as potential competing interests

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