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A SCOPING REVIEW OF ACADEMIC ADAPTATION OF INTERNATIONAL STUDENTS: LITERATURE FROM 2004 TO 2024

Yi Xue¹, Abd Razak Zakaria ^{2*}, Mohammad Ismath Ramzy Mohammad Ismail³

- Faculty of Education, Universiti Malaya, Kuala Lumpur, Malaysia
 - Email: 17221471@siswa.um.edu.my Faculty of Education, Universiti Malaya, Kuala Lumpur, Malaysia
 - Email: abdrazak@um.edu.my
- Faculty of Education, Universiti Malaya, Kuala Lumpur, Malaysia Email: ismathramzy@um.edu.my
- * Corresponding Author

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Abstract:

This scoping review examines the academic adaptation of international students, a topic that has gained importance with the rise in students seeking higher education abroad. Covering literature from 2004 to 2024, the review identifies critical themes and trends, emphasizing international students' challenges and the support mechanisms aiding their academic success. The research is categorized to understand various challenges such as language barriers, cultural differences, and diverse teaching methods, as well as to assess the effectiveness of support services like orientation programs, academic advising, and peer mentoring. The review also highlights several research gaps, including more quantitative studies with rigorous designs, research focused on less affluent countries, including younger and male students, and studies on health promotion and community settings. The insights from this review aim to guide the creation of effective support systems and policies to improve the academic adaptation of international students in higher education institutions worldwide.

Keywords:

Academic Adaptation, Scoping Review, International Students, Higher Education

Introduction

With the progress of globalization and the rise in human mobility, pursuing higher education overseas has become increasingly common (Hanada, 2023; Hofhuis et al., 2019; Malay et al., 2023). Over the past forty years, the population of international students worldwide has grown dramatically and is expected to reach 8 million by 2025 (Lin, 2020). The adjustment of international students to academic environments has consequently emerged as a crucial area of study, reflecting the growing trend of students pursuing education across borders. As globalization progresses, international education is crucial for cultural exchange and intellectual development (Gautam et al., 2024). However, the transition to new academic environments presents substantial challenges for international students, impacting their academic performance, personal development, and overall well-being (Huang, 2017).

International students face numerous obstacles when adjusting to unfamiliar academic settings (Kelly, 2021). These challenges include language barriers, differing academic expectations and teaching styles, unfamiliar assessment methods, and social and cultural adjustments (Volchenkova, 2023). Understanding these challenges is crucial for developing effective support systems to enhance these students' educational experiences and outcomes. International students from various cultural and educational backgrounds face distinct challenges. Language proficiency, for instance, significantly impacts their ability to comprehend course material, participate in class discussions, and complete assignments (Wilczewski & Alon, 2023). Furthermore, cultural differences in learning and teaching styles can create additional hurdles, as students may be accustomed to different forms of instruction and evaluation in their home countries (Ameen & Najeeb, 2023).

This scoping review endeavors to identify the primary themes and trends in the global literature on the academic adjustment of international students. By examining current research, this review aims to thoroughly understand the challenges these students encounter and the support systems that aid their academic success and integration. The findings from this review will guide the creation of more effective support systems and policies to improve the academic adaptation of international students in higher education institutions around the world. Studies have highlighted several critical aspects concerning the academic adjustment of international students. These aspects include the importance of language support services, the influence of cultural adaptation on academic outcomes, and the efficacy of various support measures such as orientation programs, academic counselling, and peer mentoring (Hill, 2023). Despite these insights, there remains a need for a comprehensive understanding of how these factors interact and influence the overall academic adaptation process.

This scoping review aims to chart the existing research on the academic adjustment of international students, highlighting key themes and trends in various contexts. By synthesizing results from numerous studies, this review strives to offer a comprehensive understanding of international students' challenges and support requirements. The knowledge derived from this review will guide the creation of more effective support systems and policies to improve international students' academic adaptation and success in higher education institutions globally.

Literature Review

Academic Adaptation

Various scholars have offered definitions of academic adaptation. International students may encounter "academic shock" upon entering a new educational environment that differs significantly from their previous experiences (Mukminin, 2012). Researchers have used different terms to describe the process and outcomes of students adapting to new academic settings. Rienties et al. (2012) described academic adaptation for international students as managing the demands of their academic environment and enhancing their motivation to succeed. Hussain and Shen (2019) noted that academic adaptation in a cross-cultural context fundamentally differs from adapting within one's own country and familiar educational systems. Shamionov et al. (2020) defined academic adaptation as the process and outcome of students adjusting to their educational surroundings, including interpersonal relationships, activities, and the educational space.

"Academic adjustment" and "academic acculturation" are often interchangeably employed to describe the process. According to Yadak (2017), academic adaptation results from an interactive and beneficial relationship between students and their surroundings, which fosters academic and personal growth. Several good indicators of this relationship include the degree of educational diligence, satisfaction, acceptance of university standards, and the timely completion of assignments. This recent view underscores the importance of a supportive educational environment in facilitating academic adaptation. The existing literature establishes that academic adaptation is a multifaceted and dynamic process. It entails the interplay of diverse elements, including individual traits, social support networks, the nature of the academic institution, and the specific academic challenges encountered. Successful adaptation is characterized by seamless integration into the academic community, contentment with the educational journey, and attaining academic objectives. This review underscores the complexity inherent in academic adaptation and highlights the necessity for comprehensive support strategies, especially for international students.

Research Method

This research utilized the scoping framework outlined by Arksey and O'malley (2005). A scoping study aims to broadly map existing literature within a particular area of interest, covering diverse topics and accommodating various study designs. Unlike systematic reviews, scoping studies do not evaluate the quality of the included literature (Arksey & O'malley, 2005). Following the outlined framework, the researchers adhered to the following five steps:

Define The Research Questions

The research questions are:

What are the key factors influencing the academic adaptation of international students, including but not limited to language proficiency, cultural differences, teaching methods, and social support?

What strategies and methods are reported in the literature that international students use to adapt academically to their new academic environments, and how do these strategies vary across different disciplines and cultural backgrounds?

Identify Relevant Studies

Under the guidance of the corresponding author, relevant studies on international students' academic adaptation were identified through searches in three databases: Science Direct, SCOPUS, and Web of Science, which yielded most of the pertinent and impactful papers. The search and review process spanned three weeks, focusing on articles published from 2004 to 2024. A peer-reviewed approach was implemented to ensure this review's reliability (Merriam & Tisdell, 2015).

According to Arksey and O'malley (2005), using a comprehensive definition of key terms in search queries ensures extensive coverage of the literature. We devised vital concepts and search terms to include studies on international students' challenges and academic adaptation, emphasizing international perspectives. A university librarian with expertise in teaching and learning was consulted, providing valuable insights for refining search terms and identifying the most relevant databases. The search strategies employed included using educational subject headings and Boolean operators to refine and combine literature searches. Table 1 presents the critical search terms developed for guiding the search process. To comprehensively identify primary evidence while considering time and budget limitations (Kenny et al., 2013), we established inclusion and exclusion criteria, detailed in Table 2.

Table 1: Key Search Terms

Search terms	
("academic adaptation" OR "academic adjustment")	
("international students " OR "foreign students" OR "overseas students ")	

Table 2: Inclusion And Exclusion Criteria

Criterion	Inclusion	Exclusion		
Time	2004 to 2024	Research published outside		
Language	English	the specified date range Studies not conducted in English		
Type of article	Original research published in a peer-reviewed journal	Articles lacking peer review or not presenting original research		
Ethics clearance	Studies with approved ethics notification	Studies without approved ethical clearance		
Study focus	International students in higher education	The research focused on student populations other than international students.		
Literature focus	Articles where the overwhelming theme relates to academic adaptation	Articles that only briefly or superficially mentioned academic adaptation.		

			Articles a	are categorize	d as
			editorials,	discussions,	or
			personal or	pinion pieces.	
Population and sample	International	students	Any stud	dents are	not
	registered in an ac	ccredited	participatin	ng in an accred	lited
	academic program.		academic p	rogram.	

Study Selection

The search procedure concluded on June 16, yielding 161 references. After removing 47 duplicates found across multiple databases, 114 articles remained. Despite "academic adaptation" being a search criterion, 64 articles were excluded for not addressing the topic, leaving 50 articles. After a full review, 2 more articles were excluded for various reasons. Following Arksey and O'malley (2005) suggestion, the reference lists of the excluded literature reviews were examined, but no additional references were identified. Consequently, 37 articles were retained for analysis. Figure 1 illustrates the article selection process, and Table 1 provides an overview of each selected article.

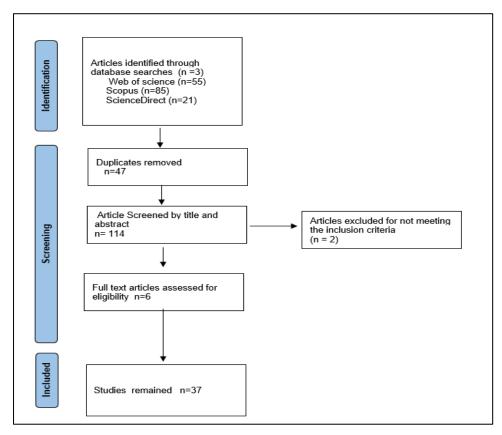


Figure 1: Flow Diagram For The Process Of Article Selection

Screening of Literature

In the initial screening, non-journal articles and studies without authors were first excluded. Subsequently, after reviewing the titles and abstracts, studies related to the academic adaptation of international students in higher education were considered for further inclusion. For example, studies focusing on areas outside of higher education, non-international student populations,

non-peer-reviewed articles, studies without ethics clearance, and articles with little relevance to academic adaptation were excluded. However, if an article was deemed relevant to addressing the research questions, it could still be included in the final list of review articles, even if it did not strictly meet the researchers' screening criteria.

Determining the Final Literature

The first and last authors thoroughly reviewed all 37 articles. Data were extracted from each and recorded in a "data charting form" Arksey and O'malley (2005), as shown in Table 1. Initially, descriptive quantitative data such as author names, publication year, study context, objectives, study design, sample, and theoretical approach were extracted and summarized. Subsequently, the articles were reviewed multiple times to determine how academic adaptation was addressed about various research topics, and they were categorized accordingly.

Table 3: Literature review overview matrix

NO.	Year	Authors	Sample characteristics	Country and recruitment setting	Study design	Analytical methods	Findings on Academic Adaptation
1	2005	Zeynep Cemalcilar	280 first-year	Austin	a web survey	structural equation model analysis	C.M.C. use is linked to better academic adaptation for international students by supporting social connections and cultural identity, which are crucial for their adjustment to new educational settings.
2	2007	Moira Peelo	Chinese student s in a "2+2" programm e	U.K.	Embedded course design within a Social Science degree	Qualitative and quantitative feedback, focus groups	The course contributed to improved academic performance and confidence, a better understanding of British culture, and enhanced ability to engage in academic assessments such as essay writing and oral presentations
3	2008	Zeynep Cemalcilar	90 graduate students	U . S . A .	Longitudinal study	MANOVA	Significant decline in psychological well-being post-transition. Increased identification with host culture, stable identification with home culture. Students with a separation strategy had the lowest social adaptation, while bicultural and marginalized students showed better social and academic adaptation.
4	2006	Huay Jun	10 international	Australia	semi- structured in-	Thematic analysis	International students initially faced language barriers and cultural differences in classroom interaction. They gradually adjusted, finding

		Poh	Students		depth		advantages in the quiet, less distracting regional
_	• • • • •				interviews		area, which helped them focus on their studies.
5	2008	Yuefang Zhou	257 Chinese postgraduate students	U.K.	Longitudinal study	thematic content analysis	
					·	·	Students initially faced difficulties with academic reading and lectures, which decreased over time. Peer support and pre-departure preparation were crucial for adaptation, with group arrivals benefiting more than individuals.
6	2013	Qingchun	5 Asian international students	Belgium	Photovoice project	Descriptive thematic analysis	International students faced challenges with extensive reading in English, using academic resources, language barriers, and time management. Peer support and pre-departure preparation aided their adaptation. Group arrivals benefited more than individual ones.
7	2015	Maribel Blasco	35international full-degree students	Denmark	Exploratory study	Qualitative content analysis	Students struggled with implicit aspects of the local learning culture, like informal student-teacher interactions and self-directed learning. Making these expectations explicit improved adaptation and academic performance.
8	2016	Ümit Cura	298international students	Turkey	Descriptive- correlational study	SPSS	
							Academic adjustment was negatively correlated with acculturative stress and positively with social

							DOI 10.35631/IJEPC.955005
9	2016	Kathryn Nel	18first-year unde rgraduate studen ts	South Africa	Qualitative exploratory study	Thematic Content Analysis	support. Acculturative stress had a more significant impact on academic adjustment than social support.
10	2016	·	20Chinese postg raduate students	UK	Qualitative study	Thematic and template analysis	Positive academic adaptation included support from departments and lecturers and financial assistance through bursaries—negative experiences involved unsupportive lecturers, a high workload, different teaching methods, and a lack of accommodation.
		Rose Quan	radate statems				The study identified a four-stage model: overconfidence before departure, stress, engagement, and gaining competence. Key factors include pre-arrival preparation, stress management,
11	2017		60 CI: 1	Australia	quantitative research	GNAT	system engagement, and compatriot support, with
		Joel R.	68 China-born students		research	NOVA	strategies varying by stage. This aligns with your research questions on factors and strategies for academic adaptation.
		Anderson					
12	2018			U.S.A.	hierarchical	Descriptive statistics	Chinese students in Australia identified more with Chinese culture, resulting in higher acculturation stress and lower life satisfaction and academic
		Gilberte	122 internatio		regressions		motivation. Cultural reaffirmation may help
		Bastien	nal students				mitigate educational challenges.
13	2018	_ u		Malaysia		AMOS 23	The study identifies duration in the U.S., English proficiency, and help-seeking as key to academic adaptation for international students while noting
		Sana Anwar					age impacts on psychological adaptation. It

							DOI 10.35631/IJEPC.955005
		Lashari	200 postgraduate s		cross- sectional research		highlights the separate influences on academic and psychological adjustment.
			international	U.S.A.		case and	The study found that social support is significantly linked to better academic and psychological
14	2018		students			cross-anal ysis	adjustment for international students. It mediates the impact of acculturation stress, underscoring the vital role of social support in facilitating
		Jiaqi	13 East Asian	Belgium	consensual qualitative research		international students' adaptation to new academic settings.
15	2017		international students	Deigium			The study identified challenges in academic adaptation, such as language proficiency and course preparedness, and highlighted students'
		Qian Meng	206 Chinese internationa l students	Germany		S.E.M.	mixed emotions and self-reliance strategies. It also emphasized the importance of goal-setting and peer support for improvement.
16	2018			·	quantitative research		English and local language proficiency significantly predict global competence. Global
		Jianni Zhu	Chinese international students			thematic and content analysis	competence then substantially impacts social connectedness, social adaptation, and academic adaptation.
	2014			Belgium	Longitudinal Qualitative		Key factors influencing academic adaptation included language proficiency, cultural differences,
17					study	Thematic analysis	and teaching methods. Strategies reported include building self-confidence through participation,
	2019			Malaysia			

		Qingchun	South American International		Photo		adapting to Western academic styles, and
18	2019	Wang	Students		elicitation		leveraging social support networks.
					methodology	Thematic	Adjustment processes do not automatically lead to adaptation. Individual factors such as students'
4.0	2017	Seyedali	10 1 1	Russia		analysis	acculturation strategies and coping mechanisms,
19		Ahrari	10 international Postgraduate	Belgium			and situational variables like social interaction and cultural discomfort affect their adjustment.
			students	- B	Qualitative		·
20	2018	O. A.	310 international		study	Descriptive Statistic	Highlight the importance of English language proficiency, adaptability to diverse teaching
		Beregovay	students			s Correlati	methods, and the utilization of academic support
		a	202 Chinese		quantitative	on Analysi s	services. It also underscores the challenges faced due to language barriers and the need for effective
	2021	Chun Cao	Tutamatianal	T. 1	research		guidance and practical application of learning
	2021		International	Turkey			approaches in the Malaysian education system.
21	2020		students		cross-sectional research	EFA CFA SEM	International students in Russia struggle with academic adaptation due to language barriers and
21	2020			South Korea	research	SEM	differences in teaching methods. They need
	2021	Nilufer Demiral	127				targeted support to overcome these challenges and successfully integrate into the educational system.
	2021	Yilmaz	127			SPSS	successfully integrate into the educational system.
22					mixed-method	NVivo 10	
22	2021		132	U.S.A.			The study found that more extended residence and
		Madhu Sudhan				Pearson	participation in academic orientation programs improve academic adaptation among Chinese
23	2019	Atteraya				Correlation	international students. Local language proficiency
					Quantitative		influences academic adaptation indirectly through

				Kazakhstan			social connectedness and support satisfaction.
	2021					~ ~ ~	English proficiency has a direct effect, partially
24		HyunJin Cho	321			S.E.M.	mediated by these social factors.
		CIIO					Themes included educational goals, different
	2022	Gulzhana			Quantitative		studying habits, accommodation and transportation
		Kuzembaye	171	New Zealand	-		conditions, access to academic advisors, and
		va					scholarship-related pressures. Students faced
25	2022			UK	0 "' "	Descriptive	difficulties adjusting to a different education
	2022				Quantitative	statistics correlation	system and heavy course loads.
						statistics	These findings emphasize the importance of
26			62	Germany		Statistics	addressing acculturation stressors, particularly
		Radiah		·		Interviews	perceived fear and discrimination, to facilitate
	2022	Othman	101/17				better academic adjustment for international
27		II 1 DI			mixed-		students in South Korea.
27		Hanh Pho			methods	SPSS NVivo	The study highlighted the critical role of both
			3837	Canada	modified by	51 55 11 110	personal determination and systemic support in
	2022			2 33-33 33			facilitating international students' academic
		Hüseyin					adaptation, with a clear emphasis on the need for
20		Hilmi	2 (1)	****	Longitudinal		institutional measures to address the unique
28		Yildirim	3 Chinese international	UK	study	Mplus	challenges faced by these students.
	2023		students			Mpius	Academic adaptation was significantly and
			Statems		Qualitative		positively related to the G.P.A. scores of second-
		Ju Huang					year students.
	2022					Thematic	
29	2023		8 Chinese			analysis	Academic adjustment is a gradual process,
							suggesting future research to include international

							DOI 10.35631/IJEPC.955005
	2023	Guangxiang Liu	international students	Australia	Qualitative		students at different stages of study better to understand coping strategies and relationships with academic achievements
30				Hungary	Qualitative	Thematic analysis	Provided emotional and academic support, contributing positively to academic adaptation
	2023		55				
31	2023	Jasvir Kaur Nachatar				Reflexive	These findings highlight the importance of a sense of university belonging for the academic and
	2023	Singh	42	Malaysia	Qualitative	Thematic analysis	psychological adaptation of international students in Germany and suggest that interventions to promote belonging may enhance students' adaptation and academic success
32		Aigerim Yerken		China		Thematic	These findings underscore the complexity of academic adaptation for Chinese international students and the critical role of language, cultural
32	2022		Purposive	Cima	Qualitative	analysis	understanding, and institutional support in facilitating their adjustment process
		Safrena	Sampling		-		These findings highlight the complex interplay of
33		Noreen Abd Malek	642/12	China		Thematic analysis	pandemic-related and pre-existing challenges in the academic adaptation of Chinese international students and underscore the importance of multifaceted support systems to facilitate their adjustment
		Yuezu Mao					•

						DOI 10.35631/IJEPC.955005
34				Mixed	Multiple regr	Language barriers, cultural differences, and limited
				longitudinal	ession	prior research experience. These issues affected
		134/9	China	design	Thematic	their communication with supervisors,
					analysis	participation in group work, and overall academic
	Huichun					performance students often struggle with the
	Ning					Western educational system's distinct approaches
			G.C.C	mixed-		to teaching and learning.
				methods	SPSS AMOS	
35						Significant language barriers and cultural
						differences impact their understanding of lectures
		259				and participation in class. Despite these challenges,
					Multinomial	support from peers, faculty, and university
36					logistic .	resources played a crucial role in facilitating their
	Zhang		~	0	regression	academic adaptation and success.
	Wenyan	303	China	Quantitative	3.6	
				study	Marginal	
					effects	There for the a bightight the immediate of
	17				analyses	These findings highlight the importance of
	Kausar					acculturation strategies and social support in
	Yasmeen			Cross-sectional		facilitating academic adjustment for international students in China.
				survey	Structural	students in Clinia.
37		2540 internation		sui vey	Equation	This study suggests raising the academic standards
31		al	<u>[</u>		Modeling	to ensure their educational progress, improving
		aı			Modeling	teacher-student relations, establishing a supportive
		Students		Quantitative		peer network, enhancing academic resources, and
		Students		study		offering increased opportunities for cultural
	Junqi Zhu			•		exchange.
	vangi zita					

Psychological adaptation has a direct positive influence on international students' academic adaptation. Sociocultural Adaptation has an indirect influence on international students' academic adaptation.

These findings suggest that improving psychological factors and addressing language challenges can significantly enhance the academic adjustment of international students in the GCC countries.

These findings suggest targeted interventions by universities and the government to improve the academic adaptation of international students in China, emphasizing the importance of course learning and self-regulation support.

Findings

In studies on academic adaptation of international students from multiple countries, there is a notable diversity in sample sizes and participant backgrounds. Sample sizes ranged from 3 to 3837 individuals, involving countries such as the U.S.A., Australia, the U.K., Belgium, Denmark, Turkey, South Africa, Malaysia, Germany, and China (Townsend & Poh, 2008; Wang & Hannes, 2014), among others. The study designs were primarily qualitative, quantitative, and mixed-methods. Qualitative studies were the most common, employing semi-structured in-depth interviews, thematic analysis, and longitudinal qualitative studies. Quantitative studies included cross-sectional and descriptive-correlational studies, using techniques such as Structural Equation Modeling (S.E.M.), Analysis of Variance (ANOVA), and hierarchical regressions. Mixed-methods studies combined qualitative and quantitative tools to analyze the data comprehensively.

The findings indicate that social and cultural integration is crucial in academic adaptation. Many studies highlighted the importance of social connections and cultural identity in supporting academic adjustment (Cemalcilar et al., 2005; Cura & Işik, 2016; Lashari et al., 2018; Meng et al., 2018). Peer support, pre-departure preparation, and social support networks were identified as essential factors for better adaptation (Nel et al., 2016; Wang & Hannes, 2014; Yildirim et al., 2021). Language barriers significantly affect academic adaptation (Othman et al., 2021; Quan et al., 2016; Singh & Jack, 2022), particularly proficiency in English or the local language, often impacting students' academic performance. High levels of acculturative stress were negatively correlated with academic adjustment, while social support mediated these stresses (Atteraya, 2021; Nel et al., 2016).

Differences in teaching methods and academic practices between home and host countries were common challenges (Anderson & Guan, 2018). Adapting to new academic styles and understanding local learning cultures were necessary for academic success. Both psychological well-being and sociocultural adaptation are critical for academic success, with psychological adaptation having a direct positive influence and sociocultural factors having an indirect impact (Liu et al., 2022). Institutional support, including financial assistance, support from lecturers, and access to academic resources, significantly contributed to positive academic adaptation.

For instance, Zeynep Cemalcilar's study utilized a web survey and Structural Equation Modeling analysis to link computer-mediated communication (C.M.C.) use with better academic adaptation by supporting social connections and cultural identity(Cemalcilar & Falbo, 2008; Cemalcilar et al., 2005). Moira Peelo's study focused on Chinese students in a "2+2" program in the U.K. (Peelo & Luxon, 2007), using qualitative and quantitative feedback to show improved academic performance and cultural understanding. These studies, among others, provided unique insights into factors influencing academic adaptation, such as duration of residence, pre-departure preparation, peer support, and personal determination.

Overall, the data indicates a rich diversity in the research on academic adaptation of international students, highlighting the importance of social support, language proficiency, cultural adaptation, and institutional resources. The findings underscore the need for targeted interventions to address international students' unique challenges in various academic environments.

Discussion

This review aimed to identify and describe how academic adaptation has been studied across various contexts and to pinpoint potential research gaps in the literature from recent years. The analysis of the studies revealed several knowledge gaps and areas needing further exploration. Despite numerous studies on academic adaptation, a consistent theoretical model has not been prominently developed or universally applied. As seen in most studies, the predominant use of qualitative designs suggests a need for more diverse methodological approaches, particularly those involving quantitative and mixed-methods designs. This would enhance the robustness and generalizability of findings. A significant finding was the research's limited representation of less affluent countries. Most studies were carried out in the United States, Australia, Canada, and the United Kingdom, probably due to the emphasis on English-language sources in the literature search. This highlights a crucial knowledge gap concerning how academic adaptation theories apply to students from less affluent regions. Expanding research to include diverse geographic and cultural contexts would provide a more comprehensive understanding of global academic adaptation processes.

The demographic characteristics of study participants also indicated gaps. There was a predominance of middle-aged or older participants, with fewer studies focusing on younger individuals or male participants. Moreover, vulnerable groups, such as refugees and individuals from socio-economically disadvantaged backgrounds, were underrepresented. Given the increasing inequality and socio-political challenges globally, future research should aim to include these groups to understand better their unique academic adaptation experiences and needs. Furthermore, there was a notable lack of studies focused on health promotion in the context of academic adaptation. Although some research suggests that theories of academic adaptation can be applied to health promotion, this link remains underexplored. Future studies should investigate how academic adaptation frameworks can contribute to health promotion, potentially providing holistic support to international students.

Another area requiring attention is developing and applying instruments to measure academic adaptation. This review and previous studies, such as Grajo and Boisselle (2018), found a lack of clear definitions and measurement tools for academic adaptation. Developing standardized instruments would facilitate more consistent and comparable research findings, aiding in the refinement of theoretical models. Finally, it is crucial for future research to systematically test theoretical models of academic adaptation in new and evolving contexts. As the global educational landscape changes, so do the challenges and needs of international students. By continuously refining and testing theoretical models, researchers can ensure their work remains relevant and practically applicable, ultimately enhancing international students' academic success and well-being worldwide.

Conclusions

This scoping review successfully identified and described how academic adaptation has been studied across different contexts and highlighted several knowledge gaps in the literature. The findings suggest that while there is significant research on academic adaptation, the theoretical frameworks and empirical research supporting these concepts require further development and application. The review also emphasizes the importance of expanding research to include diverse geographic and cultural contexts, particularly those from less affluent regions, to understand global academic adaptation processes comprehensively. Developing standardized instruments to measure academic adaptation is crucial for consistent and comparable research

findings. Future research should include underrepresented demographic groups, such as younger individuals and vulnerable populations, and explore the link between academic adaptation and health promotion. Researchers can enhance international students' academic success and well-being by continuously refining and testing theoretical models.

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