

*Case Study*

# Cultural Integration and Adaptation Challenge: A Study of International Students in Wenzhou

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**Abstract:** This study explores the cultural, social, and academic adaptation experiences of international students in Wenzhou, China. Based on surveys and interviews with 52 students from 20 countries—predominantly Morocco—the research investigates key challenges and coping strategies related to local integration. The findings indicate that while Wenzhou offers a generally supportive academic environment—enhanced by AI integration and practical teaching methods—language barriers continue to hinder students’ daily life, academic engagement, and social interactions. Limited Mandarin proficiency made it difficult for many students to build friendships with locals and navigate everyday tasks. Cultural adaptation also presented obstacles, particularly in adjusting to local food and social norms. Despite these challenges, students employed various strategies to facilitate integration, such as attending HSK language courses, watching Chinese media, and initiating conversations with local peers. While most participants described the local community as welcoming, perceptions varied based on individual experiences and language ability. The study highlights the importance of enhanced language support and structured cross-cultural exchange initiatives in improving international students’ experiences. It contributes to the broader discourse on international student mobility by offering insights from a second-tier Chinese city, emphasizing the role of institutional practices in shaping adaptation outcomes.

**Keywords:** international students; adaptation challenges; language barriers; cultural adaptation

## 1. Introduction

Any student who travels to another country to further their education is referred to as an “international student.” When moving from one culture to another, an individual is likely to experience substantial changes in various aspects of their life (Wang, 2009). Higher education policy makers in every nation are coming up with innovative approaches to unlock the mysteries of shifting circumstances that boost student mobility and further internationalize higher education (Hussain et al., 2019). China has been the world’s foremost source of international students seeking cross-border education and cross-cultural experiences for nearly ten years (Cao & Meng, 2022; Meng et al., 2018). Additionally, China has advanced significantly in recent years to rank among the top “receivers” of international students, ranking first in Asia (Ma & Zhao, 2018) and third globally, just behind the United States and the United Kingdom (English & Zhang, 2019). Asian, African, European, and American students make up the majority of China’s international student population. The student body at Chinese universities is becoming more varied and complex (Hussain et al., 2019). According to the Ministry of Education of China (2019), 492,185 international students were enrolled at Chinese universities in total in 2018. This figure has more than doubled over the previous ten years and represented about 10% of all international enrollments globally in



that year (Tian & Liu, 2020). The number of overseas students in China is influenced by the scholarships that Chinese governments, local province governments, and universities provide to them. According to Hussain and Hong (2019) the number of students at Chinese universities is increasing every year due to quality of university education, social development and introduction of various types of scholarships i.e., China government scholarships, university scholarships and MOFCOM scholarship (Hussain et al., 2019). One of China's first open coastal cities, Wenzhou is a hub for frequent foreign interactions. The number of international students studying in Wenzhou has increased dramatically in recent years, Wenzhou University has made significant efforts to expand its international education program in response to the Chinese government's request, all against the backdrop of the Belt and Road Initiative (Zhang, 2020). When foreign students first arrive in Wenzhou, they will experience culture shock. According to Pedersen, culture shock is "any situation where an individual is forced to adjust to an unfamiliar social system where previous learning no longer applies" and is "the process of initial adjustment to an unfamiliar environment" (Pedersen, 1995). Students who experience culture shock are forced to deal with limitations on their spare time (Hong and Ye, 2023).

Understanding the adaptation process can lead to improved support systems, directly influencing students' academic performance. Effective adaptation enables students to integrate into university life, enhancing their learning experiences and outcomes (Rahman & Mullick, 2019). Insights from such studies can guide universities and policymakers in creating programs that address the specific needs of international students, fostering a more inclusive and supportive educational environment. This is particularly important in cities like Wenzhou, which may have different challenges compared to larger urban centers (Rahman & Mullick, 2019). Research in this area promotes cross-cultural awareness and sensitivity, benefiting both international students and the local community. It facilitates mutual understanding and respect, essential components in today's globalized world (Du, 2022). Language difficulties are a common challenge for international students in China, affecting their academic and social integration. By studying these challenges, institutions can develop targeted language support programs to assist students in overcoming these barriers (Study and Go Abroad, 2020). International students often encounter difficulties in building social relationships in the host country. Gaining insight into these challenges can enable universities to develop initiatives that promote stronger social integration and improve students' overall experience (N.P., 2018). While significant research exists on international students' adaptation in larger Chinese cities like Beijing and Shanghai, there is limited literature on their experiences in smaller cities such as Wenzhou. Understanding the unique challenges and coping strategies of international students in this regional context can help universities in Wenzhou develop targeted support programs. Additionally, this study contributes to the broader discourse on the adaptation experiences of international students in non-metropolitan areas. This study aims to first, identify the cultural, social and academic challenges faced by international students in Wenzhou, and then, to explore the coping strategies used by students for adapting these challenges.

Two primary research questions guide this investigation:

Q1: What are the key adaptation challenges faced by international students in Wenzhou?

Q2: What coping strategies do international students in Wenzhou employ to navigate these adaptation challenges?

To guide the analysis of international students' adaptation processes, this study draws upon Berry's acculturation model (1997), a widely used theoretical framework in cross-cultural psychology. The model outlines four acculturation strategies—integration, assimilation, separation, and marginalization—that individuals may adopt when adjusting to a new cultural environment. These strategies are shaped by the degree to which individuals maintain their original culture and seek to engage with the host society. This framework offers a valuable lens through which to examine the varied ways international students in Wenzhou negotiate cultural, social, and academic adaptation. By applying this model, the study not only explores the challenges faced by students but also categorizes their adaptive responses within a structured theoretical context.

China has become a leading destination for international students in Asia; however, these students continue to face challenges in adapting academically within the higher education system. Both domestic and international scholars have explored this issue. According to Mao (2024), the academic adaptation of international students is influenced by several factors, including motivation, language proficiency, integration, marginalization, social support, and intercultural training. All of these factors, except marginalization, have a positive impact on academic adaptation. To support students' successful adaptation, Chinese universities should take responsibility for providing high-quality educational resources to boost motivation, incorporate Mandarin language learning into curricula to enhance proficiency in both Chinese and English, organize cross-cultural events that help students preserve their own cultures while fostering an understanding of Chinese culture, offer support to create a welcoming environment, and improve the cross-cultural framework to facilitate a deeper understanding of China from multiple perspectives.

Alasmari's study (2023), which examines the social adaptation of international students in Saudi Arabia, reveals that these students encounter challenges such as language barriers and culture shock, with some experiencing psychological issues like depression and loneliness. The study also highlights that access to high-quality educational resources, facilities, and support programs helps international students feel more satisfied and engaged in both their academic and social lives. Despite the challenges they face, international students maintain a positive attitude and are eager to build friendships with local people.

In February 2022, China proposed further strategies to promote educational digitalization. Wenzhou has embraced the integration of AI technologies with practical learning approaches, aligning with current educational policies and development trends. The use of artificial intelligence in education has already led to significant research and achievements both domestically and internationally, offering considerable benefits to the field. As Liu et al. (2024) note, AI applications in education can enhance personalized learning and foster self-directed development, helping to unlock students' potential and growth abilities. AI-driven tools allow students around the world to access high-quality learning resources, supporting educational equity. Students believe that generative AI is highly beneficial in academics, assisting with various learning tasks. They view it as a way to enhance their competitiveness and prepare for future careers. Additionally, students support the integration of generative AI into curricula, seeing it as a means of curriculum innovation that helps them better adapt to technological advancements (Barus & Hidayanto, 2025).

### *1.1. Global Trends in International Student Adaptation*

The adaptation of international students to new cultural, social, and academic environments is a significant area of research in education and sociology. With increasing global mobility, international students face common challenges, including homesickness, cultural dissonance, and unfamiliar educational systems (Rahman & Mullick, 2019). These experiences often lead to a spectrum of adaptation outcomes depending on the strategies employed. Berry's Acculturation Model provides a foundational theoretical framework for understanding adaptation strategies. According to Berry (1997), individuals adapt through integration (adopting both home and host cultures), assimilation (embracing the host culture while discarding their own), separation (preserving their own culture while avoiding the host culture), or marginalization (rejecting both cultures). Students employing integration strategies often report better academic and psychological well-being (Berry, J. W. 1997).

International students also bring significant sociocultural and economic benefits to host countries, such as fostering campus diversity and broadening global perspectives (Ward, Bochner, & Furnham, 2001). However, systemic and cultural barriers often complicate their adaptation journeys, highlighting the need for comprehensive institutional support (Rahman & Mullick, 2019). Social integration is particularly vital, as interactions with local peers enhance cultural understanding and foster a sense of belonging. Yet, many students form friendships within their ethnic or national groups, limiting their exposure to the host culture. Programs that encourage cross-cultural engagement have been shown to improve social and psychological outcomes for international students (Li & Chen, 2023).

Recent data indicates a significant increase in international student mobility, with over 6.4 million students studying abroad in 2021, up from 2 million in 2000. This growth underscores the expanding global demand for higher education across borders. Notably, the majority of these students are enrolled in high-income countries, with the United States, the United Kingdom, and Australia being top destinations. This trend highlights the importance of understanding and supporting international student adaptation to enhance their academic and social experiences in diverse educational settings (Migration Data Portal, 2025).

### *1.2. International Student Adaptation in China*

China has become a popular destination for international students, particularly in major cities like Beijing and Shanghai. International students not only need to meet the educational requirements but also struggle to balance between life and study. However, smaller cities such as Wenzhou present unique challenges due to limited multicultural environments and institutional resources. Language barriers are among the most significant issues for international students in China. Many students arrive with limited Mandarin proficiency, which restricts their academic success and social interactions (Li & Chen, 2023). Wenzhouese, especially the elder, often communicate with Wenzhou dialect, which is drastically different from Putonghua. While larger cities offer robust language support, smaller cities like Wenzhou often lack sufficient programs, exacerbating the issue.

Cultural differences also present challenges for students. China, known as a country with a civilized history of 5000 years, is greatly influenced by Confucian cultural, and thus has distinctive characteristics of Chinese traditional culture (Hafizullah, Tao, & Rong, 2024). In addition, the collectivist nature of Chinese culture, with its

emphasis on hierarchical social structures and indirect communication, contrasts sharply with the more individualistic and egalitarian values of many international students (Du, 2022). These cultural disparities can create misunderstandings and impede social integration. According to An and Chiang (2015)'s survey among international students' cultural adaptation at a major national university in China, they measured the adaptation from five dimensions, that is, cultural empathy, open-mindedness, emotional stability, social flexibility and language proficiency. Their study found that cultural empathy and emotional stability were significant in their first year, and then became less significant in the following years.

Academic adaptation is another critical area. The Chinese education system emphasizes lecture-heavy teaching styles, rote memorization, and high-stakes assessments, which can be unfamiliar and stressful for international students (Rahman & Mullick, 2019). Mao (2024) highlights that international students' academic adaptation is related to individual factors (i.e., motivation, language proficiency, acculturation strategies) and sociocultural factors (i.e., support resources, intercultural training) as well as the interplay of the factors over time. Institutions in smaller cities, such as Wenzhou, often lack the English-language resources and specialized academic support programs needed to address these challenges effectively (Li & Chen, 2023). Additionally, international students in smaller cities face limited opportunities for social and cultural exchange. Unlike metropolitan areas, cities like Wenzhou have fewer international communities, which can lead to a sense of isolation (Study and Go Abroad, 2020). The absence of institutional mental health support and peer mentoring programs further compounds these difficulties, leaving students vulnerable to anxiety, depression, and other mental health issues (Du, 2022).

Digital platforms, particularly WeChat, play an important role in helping international students adjust to life in China. By enabling easier communication, offering access to essential information, and supporting the development of social networks, these tools assist students in overcoming both cultural and academic obstacles. Research suggests that students who make regular use of WeChat tend to adapt more successfully, as the platform helps reduce language-related difficulties and fosters social engagement. This highlights the growing importance of technology in easing the process of cross-cultural adaptation (N.P., 2018).

Despite these challenges, students employ various coping strategies, including joining cultural exchange programs, participating in language courses, and forming support networks with peers (Rahman & Mullick, 2019). Universities play a crucial role in facilitating adaptation, but smaller institutions often struggle to provide the necessary resources, highlighting a disparity that needs to be addressed through policy and resource allocation.

While numerous studies have explored international student adaptation in major Chinese cities such as Beijing, Shanghai, and Guangzhou, there remains a notable gap in research concerning students in non-first-tier urban environments. These studies often emphasize institutional prestige, resource abundance, and extensive internationalization, factors that may not be representative of the broader landscape of Chinese higher education. This study addresses this gap by focusing on Wenzhou, a second-tier city with a growing international student population but comparatively limited exposure in academic literature. By examining cultural, academic, and social adaptation in this localized context, the study contributes fresh insights into how international students navigate integration outside of China's primary urban centers.

Unlike first-tier cities where Mandarin is more widely spoken and internationalization is more advanced, Wenzhou presents a distinct linguistic and cultural context. A significant number of local residents, particularly the elderly, primarily communicate in the Wenzhou dialect, a regional variety that is mutually unintelligible with Mandarin. This adds a unique layer of complexity to international students' adaptation, especially in everyday interactions beyond the academic setting. Existing studies seldom account for such intra-national linguistic barriers, making Wenzhou a compelling case for examining the intersection of language, culture, and integration in less-studied Chinese urban environments.

## 2. Methods

### 2.1. Sample and Sampling

This study employed a convenience sampling strategy, using online platforms such as WeChat groups and student networks to distribute questionnaires. The sample consisted of 52 international students studying in Wenzhou, representing 20 countries. While efforts were made to reach a diverse participant pool, the recruitment process was influenced by accessibility and students' willingness to participate. In some cases, participants referred their peers, introducing elements of snowball sampling.

First, regarding age distribution, as shown in Table 1, the majority of participants (61.54%,  $n = 32$ ) were aged 18–24 years, which is in line with the typical undergraduate student population. A smaller proportion (34.61%,  $n = 18$ ) fell within the 25–30 years range, while only 4 participants (7.69%,  $n = 4$ ) was 31 years or older. In terms of gender, male students constituted the dominant group (71.15%,  $n = 37$ ), with female students

accounting for 28.85% ( $n = 15$ ) of the sample. As for their language proficiency, more than a half of the students are immediate Chinese learners. Moreover, participants originated from diverse cultural backgrounds, with 73.08% from Africa, 19.23% from Asia, and 7.69% from Europe. Students from 10 African countries were the most, among which students from Morocco formed the largest group (26.32%,  $n = 10$ ), followed by students from Somalia (13.16%,  $n = 5$ ), Sudan (10.53%,  $n = 4$ ), Niger (10.53%,  $n = 4$ ), and Kenya (10.53%,  $n = 4$ ). Over half of the participants are intermediate Chinese learners. This reflects the vibrant international environment in Wenzhou, where students from various regions come to pursue higher education, mainly African students.

**Table 1.** Demographics details of the study participants.

Participants		N.	%
gender	male	37	71.15
	female	15	28.85
age	18–24	32	61.54
	25–30	18	34.61
	31 or above	2	3.85
Continent	Africa	38	73.08
	Asia	10	19.23
	Europe	4	7.69
Language Proficiency	beginner	14	26.92
	intermediate	30	57.69
	advanced	8	15.39
Arrival at Wenzhou	<1 year	21	40.39
	1–2 years	19	36.54
	>2 years	12	23.08

All participants provided written consent after receiving a detailed explanation of the research purpose, voluntary participation, and data confidentiality. Personal identifiers (e.g., names, student IDs) were excluded from data collection and analysis.

## 2.2. Instrument

This study adopted a mixed-methods approach, which combined a structured questionnaire and semi-structured interviews, aiming to comprehensively explore the adaptation challenges faced by international students. The design of these research instruments was carefully tailored to align with the research objectives and was contextualized according to the unique environment of Wenzhou.

Specifically, the questionnaire was a crucial part of this approach. It consisted of 14 core questions that were organized into four key dimensions, as shown in Table 2. These questions included Demographic Profile (with 4 items, Q1 to Q5), Language Adaptation (2 items, Q6 to Q7), Cultural Adaptation (2 items, Q8 to Q9), Academic Adaptation (2 items, Q10 to Q11), and Social Adaptation (3 items, Q12 to Q14), among which questions 6–10 and Questions 12–13 are quantitative and questions 11 and 14 are qualitative, namely, open-ended questions. In terms of the question formats, quantitative items employed 5-point Likert scales, frequency scales, and multiple-choice formats. On the other hand, qualitative items allowed for open-ended responses, providing rich and in-depth information.

To further expand on the themes covered in the questionnaire, semi-structured interviews were conducted. There were 6 open-ended questions in the interviews. Each interview, which lasted 20–30 min, was conducted in either English. With the participants' consent, all responses were written down for subsequent analysis.

To elaborate, the interview was a complimentary part for the questionnaire. It consisted of 10 core questions that were organized into five key dimensions, as shown in Table 3. These dimensions included Language Adaptation (2 items, Q1 to Q2), Cultural Adaptation (2 items, Q3 to Q4), Academic Adaptation (2 items, Q5 to Q6), Social Adaptation (2 items, Q7 to Q8), and Overall Experience (2 items, Q9 to Q10). All interview questions were qualitative in nature.

**Table 2.** Basic Description of the Variants in the Questionnaire.

Variants	Content	Questions
Language adaptation	language use in daily life	Q6: How often do you use Mandarin in daily life?
	language support from the university	Q7: Did you receive any language support from your university?
Cultural Adaptation	Easiness with local cultural practices	Q8: How comfortable are you with local cultural practices?
	Participation in cultural exchange programs	Q9: Do you actively participate in cultural exchange program?
Academic Adaptation	Adjustment to the Chinese education system	Q10: How would you describe to the Chinese education system?
	Obstacles in academic learning	Q11: What is the primary challenge you face academically?
Social Adaptation	Interaction with local students	Q12: How often do you interact with local students?
	feeling supported in the university community	Q13: Do you feel supported by the university community?
	Adaptation to social communication	Q14: What role does social media play in your adaptation

**Table 3.** Basic Description of the Variants in the Interview.

Variants	Content	Questions
Language adaptation	language use in daily life	Q1: How has the language barrier impacted your daily life and studies in Wenzhou?
	Strategies to improve the language or language support from the university	Q2: Can you describe any efforts or strategies you use to improve your Mandarin proficiency?
Cultural Adaptation	Easiness with local cultural practices	Q3: What cultural differences have been most challenging for you to adjust to?
	Cultural acceptance and perception	Q4: How do you perceive local attitudes toward international students?
Academic Adaptation	Adjustment to the Chinese education system	Q5: How would you compare your academic experience in Wenzhou to that in your home country?
	Obstacles in academic learning	Q6: Are there specific academic practices in China that you found challenging or beneficial?
Social Adaptation	Interaction with local students	Q7: How would you describe your social interactions with local students and staff?
	Adaptation to social communication	Q8: Have you faced any difficulties building relationships in Wenzhou? If yes, how did you overcome them?
Overall Experience	Academic and personal growth	Q9: What has been the most rewarding aspect of studying in Wenzhou?
	Advice and future guidance	Q10: What suggestions would you give to future international students coming to Wenzhou?

### 2.3. Data Collection

Data collection was carried out through a two-phase mixed-methods approach, which aimed to comprehensively understand the adaptation experiences of international students in Wenzhou. This approach combined the strengths of both quantitative and qualitative methods to provide in-depth insights.

In the first phase, a structured questionnaire was employed. It was distributed online via Wenzhou University's international student management platform and targeted social media groups such as WeChat and WhatsApp. To ensure participants were well-informed, a bilingual (English and Mandarin) invitation letter accompanied the questionnaire. This letter clearly outlined the study's purpose, estimated completion time (15 min), and confidentiality assurances. The data collection process for the questionnaire spanned over 4 weeks. After collection, all 52 responses were carefully validated to ensure completeness.

Building on the findings from the questionnaire, the second phase involved semi-structured interviews. Purposive sampling was used to select 10 participants from the questionnaire respondents. This sampling method was designed to ensure diversity in terms of nationality, gender, and the adaptation challenges faced by the students.

The interviews were conducted face-to-face on Wenzhou. Each interview lasted between 20–30 min. Prior to the interviews, participants' consent was obtained to take down their responses in a written form. During the

sessions, in addition to the written notes were also taken to capture non-verbal cues, which could provide valuable supplementary information for a more comprehensive understanding of the students' experiences.

#### 2.4. Data Analysis

This study adopted a mixed-methods approach to analyse both quantitative and qualitative data collected through online questionnaires and semi-structured interviews. Quantitative data were analysed using IBM SPSS Statistics version 27. Descriptive statistics, including frequencies and percentages, were used to summarize demographic information and key response patterns. This helped identify general trends in international students' academic, social, and cultural adaptation experiences. For the qualitative component, data from semi-structured interviews were analysed using a thematic analysis approach (Braun & Clarke, 2006). Interviews were transcribed and read multiple times to ensure familiarity with the content. Initial codes were generated inductively from the data, and similar codes were grouped into broader themes related to the research questions. The flexibility of the semi-structured interview format allowed participants to openly share their lived experiences, while also enabling the interviewer to explore emerging issues through follow-up questions (Creswell, 2009). The analysis was also informed by Berry's (1997) acculturation model, which served as a theoretical lens to interpret the adaptation strategies described by participants. Themes were organized under three key domains: academic adaptation, social integration, and cultural challenges. This approach ensured that both the depth of individual experience and broader patterns across participants were captured and interpreted in a coherent analytical framework.

#### 2.5. Ethics Approval Statement

In accordance with the Declaration of Helsinki, all procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with Wenzhou University (No. 2023-152).

### 3. Results

This section presents the findings of the study on international students' adaptation in Wenzhou, based on both quantitative and qualitative data. A total of 52 students from 20 different countries participated in the questionnaire, providing insights into their experiences with language, cultural, academic, and social adaptation. Additionally, 10 students were interviewed to gain a deeper understanding of the challenges and strategies they employed while adapting to life in Wenzhou.

First, the results are categorized into four key areas: language adaptation, cultural adaptation, academic adaptation, and social adaptation.

For the qualitative data analysis which was interview data measure, interviews were analysed using thematic analysis following the approach outlined by Braun and Clarke (2006). This involved six steps:

- Familiarization with the data through repeated reading of transcripts;
- Generating initial codes inductively to capture meaningful features of the data;
- Searching for themes by grouping related codes;
- Reviewing themes to ensure they accurately reflected the dataset;
- Defining and naming themes clearly;
- Producing the report with detailed extracts and interpretation.

This method allowed for a rich and systematic exploration of participants' adaptation experiences, aligned with the study's research questions and Berry's (1997) acculturation model. This offers a comprehensive understanding of the adaptation process for international students in Wenzhou.

#### 3.1. Language Adaptation

Language plays a crucial role in the adaptation of international students, influencing both their daily life and academic experiences. The findings of the interviews reveal that five students reported that the language barrier significantly affects their daily life and studies, making communication and academic engagement challenging. Three students indicated that the impact was limited, with difficulties arising in specific situations, such as ordering food or shopping. One participant shared, "*I always need to struggle to ask for exact things when I go to the restaurant or shop*". Another student expressed that it took them a long time to learn how to communicate effectively with locals. In contrast, two students stated that the language barrier did not affect their experience, suggesting that individual language proficiency levels play a key role in adaptation.

To overcome these challenges, all interviewed students actively adopted various strategies to improve their Chinese proficiency. Their methods included daily study, vocabulary memorization, watching Chinese movies, engaging in conversations with locals, taking HSK courses, and utilizing digital platforms such as WeChat videos and Redbook APP videos. One student emphasized, “I always consider HSK course vocabulary to improve my Chinese”. Another shared, “*To improve my communication skills, I talk to Chinese people and try to build friendships with them*”. These strategies highlight the proactive efforts of international students to integrate linguistically into their new environment, reflecting a strong commitment to overcoming language barriers.

According to the result of investigating 52 overseas students, 57.69% students reported as an intermediate level of proficiency, with 15.39% indicating advanced skills. This highlights the challenges faced by international students in adapting to the local language.

### 3.2. Cultural Adaptation

Adapting to a new cultural environment is a significant challenge for international students, influencing their daily experiences and social interactions. The findings reveal that 8 out of 10 interviewed students found Chinese food difficult to adjust to, highlighting the importance of dietary preferences in cultural adaptation. One student remarked, “Chinese have so many dishes that I am not familiar with, so I found this difficult to adjust to.” This suggests that unfamiliarity with local cuisine can be a key barrier to comfort and integration.

Beyond food, two students identified communication and relationship-building with locals as major challenges, emphasizing the difficulties of overcoming cultural and linguistic differences. One participant shared, “*I found that making relationships and communicating with locals is very difficult*”. Additionally, one student noted that the Chinese daily routine was particularly hard to adapt to, reflecting the broader lifestyle adjustments that international students must navigate.

Regarding local attitudes toward international students, perceptions varied among respondents. Five students considered locals to be friendly, while two described them as attentive and sensitive to foreigners’ needs. However, three students noted mixed experiences, stating that while some Chinese are welcoming, others appear indifferent or even unwelcoming. One participant explained, “*Some locals are not familiar with foreigners, so they feel afraid of them or shy sometimes*”. Another shared, “*Chinese people, like all people around the world, vary—some are very friendly and try to help foreigners, while others are not easy to build relationships with*”.

These findings suggest that while many international students in Wenzhou find the local community welcoming, cultural and social barriers—such as food preferences, communication styles, and social dynamics—pose challenges that require active adjustment and engagement.

Figure 1 summarizes the comfort level with local culture. The figure indicates that the majority of the students are comfortable with local cultural practices, and very few still face challenges. This suggests a varying degree of cultural adaptation among international students in Wenzhou.

Figure 2 shows the participation in cultural exchange programs. As represented in the figure, a significant portion of the students participated in cultural exchange programs, which seems to have facilitated their cultural adaptation and understanding of Chinese society.

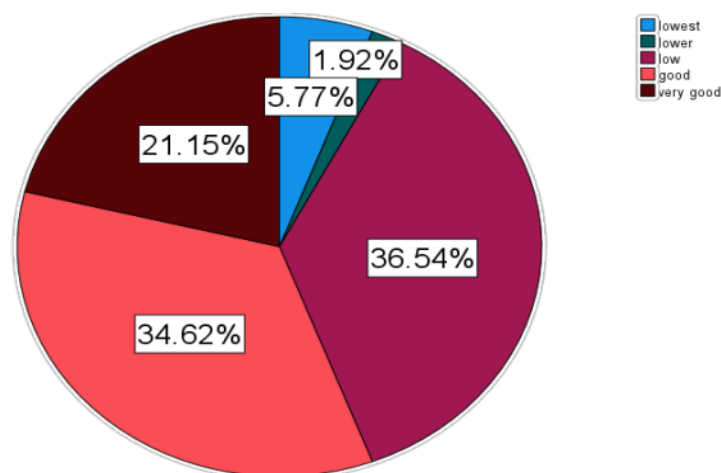


Figure 1. Participants’ Comfort with Local Culture.

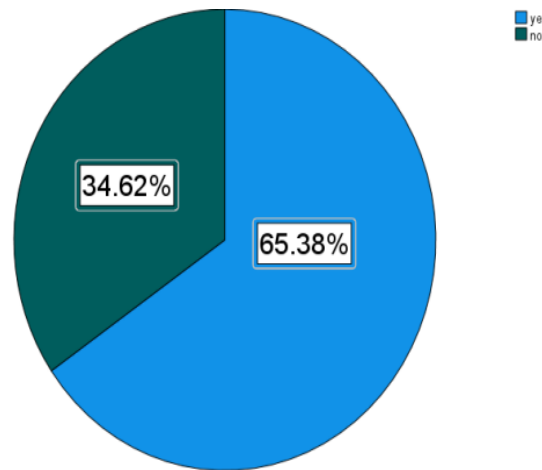


Figure 2. Participation in Cultural Exchange Programs.

### 4.3. Academic Adaptation

Academic adaptation is a crucial aspect of international students’ experiences, shaping their overall satisfaction and success in their host institution. The findings indicate that 7 out of 10 interviewed students found their academic experience in Wenzhou to be better than in their home countries, particularly due to the learning environment and the integration of AI technology in education. One student expressed, “The academic experience in Wenzhou is more productive than in my home country university because here they consider practice more than just theoretical study”. Another highlighted the role of technology, stating, “Using AI in Wenzhou makes studying very convenient and beneficial”. These perspectives suggest that Wenzhou’s education system is perceived as modern, interactive, and practical, offering students a more engaging learning experience.

However, three students believed that their academic experience in Wenzhou was neither better nor worse than in their home country, considering both advantages and disadvantages. This reflects the diverse academic backgrounds of international students, where factors such as curriculum structure, teaching methodologies, and institutional resources shape their individual perceptions.

Regarding challenges in academic adaptation, responses varied. Four students stated that they faced no significant challenges and found it easy to adapt to the academic system. However, three students identified the English pronunciation of Chinese teachers as a major difficulty, making it challenging to fully comprehend lectures and academic guidance. One student shared, “I really struggled to understand some Chinese teachers when they speak English due to their pronunciation”. Another noted, “My academic experience was good at the beginning, but later it became better. However, I still struggle with some teachers’ English when they lecture us”.

These findings indicate that while many international students appreciate the academic environment in Wenzhou—especially its practical approach and use of AI—language barriers remain a challenge for some. This highlights the need for enhanced English communication strategies and support systems to ensure a smoother academic adaptation for international.

Figure 3 illustrates the adjustment to the Chinese education system. The results suggest that most students found the academic environment in Wenzhou easier to adapt to, particularly due to its practical approach and the integration of AI technology.

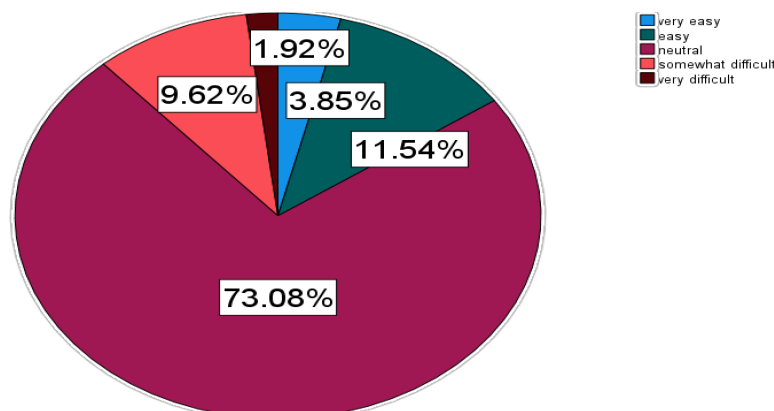


Figure 3. Adjustment to the Chinese Education System.

### 3.4. Social Adaptation

Social adaptation plays a key role in shaping international students' overall experience in Wenzhou, influencing their ability to build relationships, engage with the local community, and integrate into their new environment. The findings reveal a mixed experience among students regarding their interactions with locals. Seven students reported that their interactions with Chinese people were limited, with one student stating, "My interaction with the locals is limited, I have few friends, and I failed to make many relationships". In contrast, three students described their interactions as extensive, with one sharing, "I have a lot of Chinese friends and I didn't face much difficulty making Chinese friends". These differences suggest that social adaptation depends on individual personality, language proficiency, and opportunities for engagement with locals.

When asked about the most rewarding aspect of studying in Wenzhou, the majority of students emphasized learning the Chinese language as the most valuable takeaway. Others highlighted the overall life experience as a significant benefit, while one student found research project achievements to be the most fulfilling aspect of their academic journey. This indicates that international students in Wenzhou not only gain formal education but also develop important linguistic and personal skills that enhance their global competence.

All the interviewed students offered advice for future international students, emphasizing the importance of learning Chinese before coming to Wenzhou to ease adaptation. However, one student suggested that English proficiency is equally important, explaining, "I want to advise everyone who wants to study in Wenzhou in the future to improve their English skills first because they will inevitably learn Chinese here, but they need English to communicate with both Chinese people and other foreigners". Another student encouraged incoming students to seek learning opportunities beyond the classroom, stating, "Please don't just rely on what you study in class—try to explore multiple sources to enhance your knowledge".

These findings suggest that social adaptation varies among students, with some struggling to form local connections while others integrate more easily. The overall experience in Wenzhou is seen as rewarding, particularly in terms of language acquisition and personal growth. The students' advice highlights the importance of both language preparation and proactive learning strategies for future international students.

Figure 4 shows the interaction with local students. While some participants reported frequent interaction with Chinese students, others indicated limited social engagement. This figure highlights the varying levels of social adaptation and the influence of language barriers.

Figure 5 depicts the perceived support from the university community. According to the figure, most participants felt supported by their university community, although a small group expressed feeling less engaged or supported in their academic and social integration.

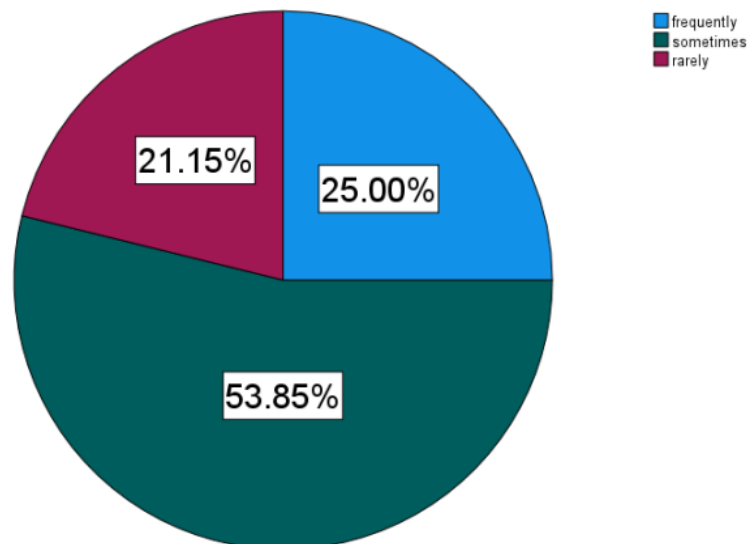
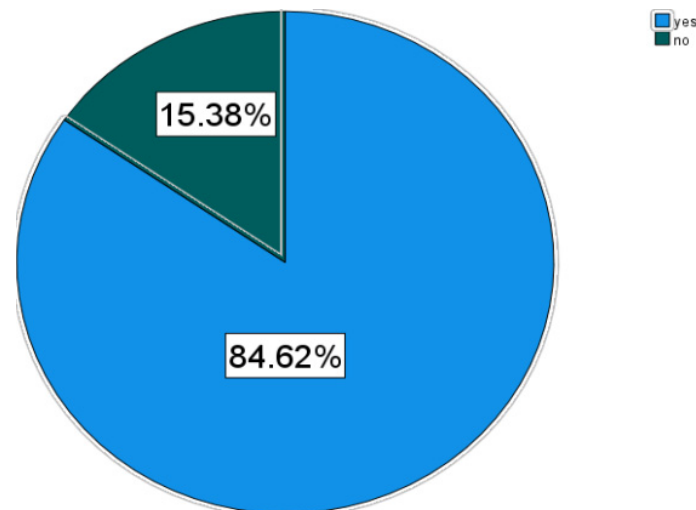


Figure 4. Interaction with Local Students.



**Figure 5.** Perceived Support from University Community.

#### 4. Discussion

This study focuses on the adaptation experiences of international students in Wenzhou. The research findings present their study and life situations in Wenzhou from multiple dimensions. In-depth discussion of these results can provide important references for relevant educational practices and policy-making.

##### 4.1. Language Adaptation: Building and Hindering of the Bridge of Communication

Language is an important factor for international students to integrate into the life in Wenzhou, and its influence is extensive and profound. There are still some barriers for people studying abroad, due to the differences in terms of cultures and customs. International students have difficulty in linguistic communication and different eating habits and also in daily shopping (Zeng et al., 2023). Only by breaking through the language barrier can effective interpersonal communication be carried out, cultural adaptation be promoted, and academic progress be achieved (Zhang, 2020). Language remains a central challenge in international students' adaptation to life in Wenzhou, despite varying levels of Mandarin proficiency. The persistence of communication difficulties in practical settings—such as shopping or dining—suggests that language education in Wenzhou may focus more on formal or academic proficiency than on functional communicative competence. This gap between classroom learning and real-life usage reflects broader issues in second-language instruction models in smaller cities. According to Berry's (1997) acculturation model, successful integration requires both maintaining one's own cultural identity and engaging meaningfully with the host culture. However, insufficient language support undermines this process, making it difficult for students to fully participate in everyday life and potentially pushing them toward separation or marginalization strategies. The lack of targeted, professional language programs in Wenzhou—when compared to major urban centres—exacerbates this challenge and may reinforce students' social isolation. Students' efforts to self-study through HSK courses or digital tools demonstrate a high level of adaptive motivation, but the variability of learning outcomes highlights the need for institutional intervention. Without structured language support and consistent access to language-rich environments, even motivated learners may struggle to achieve integration. These findings call for universities and local authorities in Wenzhou to expand investment in professionally designed Chinese language programs that emphasize practical, everyday communication—an essential component for cultural integration and student well-being.

##### 4.2. Cultural Adaptation: Dietary Differences and Social Isolation

Cultural differences are like a magnifying glass, making the cultural conflicts between international students coming to China and Chinese students more obvious, resulting in the phenomenon of “culture shock” (Lu, 2019). Cultural adaptation challenges—particularly in relation to diet and social engagement—emerged as a central theme in students' adjustment to life in Wenzhou. While food may appear to be a surface-level issue, it carries deep cultural meanings and rituals. Difficulty adapting to Chinese cuisine reflects not only sensory and dietary differences, but also students' struggle to connect with the cultural values embedded in food, such as group dining, shared dishes, and etiquette—practices which may be unfamiliar or uncomfortable for students from individualist cultures. According to Berry's acculturation model, food-related discomfort can signify resistance to cultural

immersion and may signal a tendency toward separation, especially when compounded by a lack of alternative food options or cultural accommodation.

Social interaction is likewise affected by cultural distance. Many international students found it difficult to form close relationships with locals, which may be attributed to the collectivist nature of Chinese society, where interpersonal networks are often tightly knit and slow to open to outsiders. This contrasts with the individualist communication styles of many international students, where self-expression and casual friendships are more common. These contrasting social norms—such as differences in body language, directness, or formality—often lead to misunderstandings or social withdrawal. While some students benefitted from cultural exchange programs, the varied experiences suggest that these initiatives remain uneven in depth and inclusiveness. This points to the need for structured, interculturally-informed engagement programs that move beyond surface-level exposure and instead foster deeper, two-way understanding and participation. Institutions should aim to create intentional spaces for dialogue, guided interaction, and shared cultural learning to support more meaningful integration.

#### 4.3. Academic Adaptation: Teaching Advantages and Adaptation Difficulties

The education system in Wenzhou shows a two-sided nature in terms of academic adaptation. On the one hand, most international students recognize the teaching mode that emphasizes applied learning and artificial intelligence technology, which provides students with a more attractive and practical learning experience and is in line with the current trend of education development, helping to cultivate students' practical ability and innovative thinking. On the other hand, language proficiency of instructors plays a crucial role in the academic success of international students. A study published in *English Today* highlights that “students reported difficulties in understanding course content due to instructors' English pronunciation, which affected their overall learning experience” (He & Chiang, 2016), owing to that, some students face the problem of the English pronunciation of Chinese teachers, which affects their understanding of the course content, reflecting that in the process of internationalized education, the language ability of teachers needs to be further improved. In addition, different students have different evaluations of their academic experiences in Wenzhou, which is related to students' own academic backgrounds, learning needs, and expectations of the education mode. This suggests that universities in Wenzhou should fully consider the diversity of international students when formulating teaching plans and curriculum settings, and provide more personalized academic support and guidance to meet the learning needs of different students.

#### 4.4. Social Adaptation: Differences in Integration and Growth Achievements

Research indicates that individual factors such as personality traits, language proficiency, and opportunities for interaction significantly influence the social adaptation of international students. For instance, extroverted students with strong language skills and more chances to engage with local communities tend to integrate more successfully. A study by Zhou and Zeng (2021) found that “Chinese language proficiency, length of residence, interpersonal skills, and environmental changes are the main factors affecting the socio-cultural adaptability of international students. “The social adaptation situations of international students in Wenzhou vary greatly, which is closely related to personal personality, language ability, and opportunities for contact. Students who are extroverted, have strong language ability, and have more opportunities to contact local people are more likely to integrate into the local society; conversely, they will face social difficulties. As an important place for students' social life, the school should play a greater role, provide more cross-cultural communication platforms and opportunities, and encourage international students to interact with local students. At the same time, students generally believe that studying in Wenzhou can improve their language ability and obtain rich life experiences, which shows that the study and life in Wenzhou have a positive significance for the personal growth of international students. However, some students think that the support from the university community is insufficient, indicating that universities still have room for improvement in paying attention to the social integration of international students. It is necessary to strengthen the care for international students and improve the relevant support system.

## 5. Conclusions

International students relocate to Wenzhou, and inevitably face multifaceted challenges rooted in culture, language, and social disparities. The mixed methods study sheds light on their perception experiences, revealing critical insights into the barriers they face and their perceptions of academic, cultural and social environments in Wenzhou.

To enhance international students' adaptation experiences in Wenzhou, the foremost is language proficiency. Thus, it is advisable to provide them structured language support, such as mandatory pre-arrival language training, peer language partnerships, and so on. Next, it is of great importance to cultivate their cultural bridging initiatives, by attending to intercultural workshops, local family immersion programs, or other social activities. Meanwhile, it is also necessary to enhance institutional support systems, including dedicated international student offices and mental health resources. To address the problems international students encountering in their academic study, it might be advisable to deploy bilingual teaching assistants, adopt flexible assessment methods, and enact a tour responsibility mechanism. Community integration efforts are also essential. To promote mutual understanding, cross-cultural campus events or digital support systems are possible options.

The future research can direct to investigation of the long-term impact of language proficiency on academic performance and social integration, exploration of regional variations in adaptation challenges across different Chinese cities, examination of the role digital tools play in reducing language barriers.

### *Study Limitation*

**Sampling Bias:** A key limitation of this study lies in the use of non-probability sampling techniques, specifically convenience and snowball sampling. The reliance on WeChat groups and student referrals may have introduced selection bias, limiting the representativeness of the sample. As a result, the findings may not fully generalize to all international students in Wenzhou or other regions.

### **Author Contributions**

Y.S. and A.S.A.M. wrote the main manuscript text. Y.Z., P.S. and Y.Y. collected the related references. All authors reviewed the manuscript. All authors have read and agreed to the published version of the manuscript.

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### **Institutional Review Board Statement**

Not applicable.

### **Data Availability Statement**

The authors confirm that the data supporting the findings of this study are available within the article.

### **Acknowledgments**

Ethics approval and consent to participate.

### **Conflicts of Interest**

We confirm that neither the manuscript nor any parts of its content are currently under consideration or published in another journal.

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