

A Longitudinal Qualitative Study of International Students' Motivation to Study in China

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ABSTRACT

This study identified international students' motivation profiles to study in China, focusing on how their motivation develops over time. Although China has become a major destination for international students, existing studies have paid limited attention to how their motivation changes longitudinally, particularly through a qualitative approach. Addressing this gap, the study contributes to research on international students' motivation and mobility by exploring their motivation profiles. A longitudinal qualitative design tracked 20 master's students and one PhD student at a university in Northeast China. Data were collected across two waves of semi-structured interviews, conducted six months apart, following a theory-guided qualitative approach. The data were analysed using grounded theory coding procedures in NVivo 15. Findings revealed four dynamic and multidimensional motivation profiles: intrinsic motivation, identified regulation, introjected regulation, and external regulation. International students' motivation moved from external motives, expectations, and curiosity towards internalised personal and academic goals, reinforced by intercultural competence, coping strategies, and environmental adaptation. However, language barriers, academic pressure, environmental conditions, and culture shock continued to shape their day-to-day experiences. The study highlights the need for stronger language support, academic guidance, social integration, and policy interventions to improve international students' adaptation in China.

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1. Introduction

In recent years, the number of international students in China has increased rapidly, rising from 61,869 in 2001 to 492,185 in 2018, and now representing students from over 196 countries (Ministry of Education, 2019; Wu et al., 2021). This trend reflects internationalisation strategies that promote soft power and enhance global competitiveness (Ma & Zhao, 2018). However, research by Mao et al. (2022) has shown that China was not among the traditional international study hubs.

Motivation to study in China involves changes in international students' motivation during their study period and is important for understanding the challenges they face in achieving academic and professional success (Dai et al., 2023). Motivational factors include intrinsic factors such as personal growth and extrinsic factors such as scholarships and high-quality education (Wu et al., 2021). Intrinsic and extrinsic motivation contribute to international students' adaptation and success, and motivated students develop coping mechanisms and acculturation strategies to overcome challenges in a new environment (Muzychenko & Morozova, 2025).

Previous research has shown that international students have distinct motivations for pursuing higher education in China (Lee, 2025). However, a comprehensive analysis of motivation to study in China remains underexplored. Most research has relied on mixed-methods designs rather than qualitative approaches (Mao et al., 2022), and few empirical studies have used longitudinal, grounded-theory designs to track motivational changes over time. Furthermore, previous studies have mostly examined students' motivational shifts toward English-speaking countries in the West (Gong et al., 2020), and few studies in China have examined international students' motivation and its determinants. To address these gaps, this study qualitatively explores international students' motivation to study in China to gain in-depth insight into its dynamic nature. The research question was: What are international students' motivation profiles to study in China? The study contributes to the body of knowledge on motivation among international students by providing qualitative findings grounded in Self-Determination Theory. By tracking changes in their motivation to study in China.

2. Literature

2.1 Self-Determination Theory as a theoretical framework guiding the present study

Self-Determination Theory (SDT) has been developed by Ryan & Deci (1985) used for examining and understanding the motivational processes that shape individual participation in certain activities. SDT has been widely applied to the study of individual behaviour and intrinsic and extrinsic motivation (Großmann et al., 2025; Ryan & Deci, 2000b, 2020). Across different contexts such as culture and mobility, scholars have used SDT to explain the experiences of travellers, tourists, international students, and individuals with mobility impairments (Hua et al., 2025; Meridha, 2025; Wang et al., 2025). These studies suggest that motivation is associated with personal goals, decision-making, wellbeing, and adaptation.

Motivation has shaped international students' mobility in international education, as present studies have demonstrated. Intrinsic motivation reflects personal growth, cultural exposure, and meaningful, insightful experiences when studying abroad (Robledo et al., 2025; Shkoler & Rabenu, 2023; Yue & Lu, 2022), and is connected to persistence, personal wellbeing, academic success, and adaptation (Kamberi, 2025). In the host environment, social exposure, technology, and positive adaptation provide greater support for international students' engagement and acculturation (Nguyen & Hajek, 2024; Raja et al., 2021). Together, these studies suggest that motivation is not static; it changes as an individual is exposed to new settings. They also connected how a person engages in certain activities.

Likewise, extrinsic motivation influences international mobility and decisions among students. Existing studies indicate that factors such as scholarships, host-country expectations, admission processes, affordable living costs, and broader contextual factors influence choices to study abroad (Ryan & Deci, 2000a). Extrinsic motivation in the

SDT framework includes introjected regulation, which involves personal behaviour driven by internal pressure, such as a sense of guilt or the desire to prove oneself; identified regulation, which occurs when an individual recognises the personal value of an activity; and external regulation, which refers to personal behaviour shaped by external rewards or conditions, such as tuition fees, scholarships, and educational institutional opportunities.

Taken together, these studies show that international students' motivation cannot be understood through a single motivational factor. Rather, intrinsic and extrinsic motivations interact to shape students' decisions, adaptation, academic engagement, and personal development. Although recent studies have examined international students' motivation and mobility, limited attention has been given to their motivation to study in China. Moreover, few studies have explored how different forms of motivation combine into distinct motivational profiles or how these profiles change over time. To address this gap, this study identified international students' motivation profiles to study in China and tracked how they developed longitudinally over time.

2.2 The Importance of Motivation Profiles on Adaptation

Motivation profiles in this study refer to the distinct SDT-based categories of intrinsic motivation, identified regulation, introjected regulation, and external regulation. Amotivation was excluded because it reflects the absence of intention to act, while integrated regulation was not treated separately because it shares several autonomous and unconflicted qualities with intrinsic motivation (Ryan & Deci, 2000b). Examining these profiles is useful because it captures the multiple and overlapping reasons why international students engage in academic and social activities and adapt to a new learning environment.

Existing literature on the host context highlights culture shock, language barriers, emotional discomfort, and academic pressure as factors international students encounter (Muganga et al., 2025; Ying et al., 2025). Students' reactions to these difficulties are well described through motivation profiles, which shape individual behaviour, engagement, decision-making, and adaptation. Rather than focusing only on students' motivation levels, motivation profiles highlight why students are motivated and how different forms of motivation influence their experiences over time.

Prior studies further suggest that academic and social adaptation in the host environment is supported especially by intrinsic motivation and identified regulation through engagement and cultural learning (He et al., 2025). In a cross-cultural context, motivation profiles are described as strengthening and supporting emotional stability, resilience, and intercultural competence among international students. Likewise, Mao et al. (2022) and Muzychenko & Morozova (2025) emphasised that, in coping with stress, adaptation difficulties, and anxiety, motivation is linked to psychological adaptation and wellbeing. These studies suggest that adaptation in a new environment is supported by various factors such as engagement and acquired competencies that assist in adaptation development.

Motivation profiles are also important in longitudinal research because they make it possible to trace changes in students' motivation across time (Howard et al., 2021). Examining these profiles over time reveals how international students gradually internalise their goals, reinterpret their experiences, and adjust to the academic, social, and cultural demands of the host environment. Understanding international students' motivation profiles is therefore essential for explaining why they choose to study in China and how their motivation develops throughout their adaptation process.

3. Research Methodology

A longitudinal design was adopted to leverage the strengths of a qualitative approach in exploring international students' motivation to study in China. This design facilitated the collection of in-depth data through semi-structured interviews, yielding detailed insights and supporting a comprehensive understanding of the research topic.

Study Design

The study used a theory-guided qualitative coding approach, analysing data using grounded theory coding procedures to develop concepts rather than theory (Corbin & Strauss, 1990). SDT was used as a reference for identifying the main categories of motivation to study in China, since no existing model directly explains the problem under study.

Context and Participants

The study was conducted at a renowned university in Northeast China that hosts many international programs and students. A sample of 21 international students, comprising 20 MA students and one PhD student from different countries and majors, was chosen as the focal group of study participants: 8 women and 13 men, with an average length of stay in China of 6 months. Their ages ranged from 27 to 45 years, with a mean of 34 years. The researcher employed purposive sampling to select participants who had strong motivation to study in China and were ready to share it during their stay. Poan et al. (2022) indicated that participants selected this way provide in-depth information about a specific issue. Detailed information about the participants, along with their pseudonyms, is shown in Table 1 below.

Table 1 : Detailed information about the participants, along with their pseudonyms

Demographic Information (N = 21)

Characteristics	N	%	Mean
Age			34
25 – 29	5	23.8	
30 – 35	8	38.1	
36 – 39	4	19.1	
40 – 45	4	19.1	
Gender			
Male	13	61.9	
Female	8	38.1	
Major			
Educational Management	15	71.4	
Comparative Education	2	9.5	
Curriculum and Methodology	2	9.5	
Curriculum and Pedagogy	2	9.5	
Duration (Months)	6	100	
Study Program			
Master's	20	95.2	

PhD	1	4.8
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Note. N represents frequencies, % represents percentage, and M represents the mean

Data Collection Procedures

Data for the study were collected through two interviews that thoroughly captured international students’ motivation to study in China. The researcher conducted two waves (W1 and W2) of semi-structured interviews, both in English, with international students over a six-month interval. Both the first (September 2025) and second (March 2026) interviews were conducted in the office, depending on participants’ availability, and lasted approximately 30 minutes per participant. An interview guide provided guidance on asking questions and allowed for probing when it emerged. Sample questions included: “Do you have specific reasons that motivate you to study in China?” Both interviews were audio-recorded and used during transcription and analysis.

Data Analysis

Data collection yielded 42 transcripts, with two interviews conducted for each participant. After transcription, the transcripts were compared with the original recordings to ensure accuracy. The study employed grounded theory coding procedures (Corbin & Strauss, 1990), following the process of open coding, axial coding, and selective coding to analyse data in NVivo 15.

First, open coding was carried out abductively for the two interview waves separately. This stage allowed the researcher to remain close to participants’ accounts and to identify initial meanings, experiences, and motivational patterns from the data. Open coding generated 58 codes from Wave 1 and 70 codes from Wave 2, developed from participants’ narratives rather than imposed directly from pre-existing SDT categories.

Second, axial coding was used to examine relationships among the initial codes and to group related codes into broader categories or subthemes. Through this process, 18 subthemes were identified across the two interview waves. The researcher compared codes within each wave and across the two waves to identify convergent and divergent changes in motivation over time.

Selective coding was the third step, where subthemes were grouped into broader motivation profiles. At this stage, SDT explained the meaning and organisation of the categories that emerged to form motivation profiles, including intrinsic motivation, identified regulation, introjected regulation, and external regulation. SDT was used as a theoretical lens for interpretation, with the main categories emerging from the data rather than being predetermined by the open and axial codes.

Trustworthiness

Four criteria were considered to address trustworthiness (Shenton, 2004). Credibility was established through iterative engagement with transcripts and the use of participants’ own words in the findings. Transferability was maintained through direct quotation of participants, for ease of judgement. Dependability was sustained through the use of a coded excerpts matrix to trace data trends and simplify analysis. Confirmability was addressed through reflexive attention and member checking against personal bias.

Ethical Consideration

Participants were informed orally and via a consent form about the importance of their participation in the study. They signed consent forms approved by five members of the defence committee. Pseudonyms were used throughout the study, instead of participants’ real names, to protect their identity. Confidentiality was further maintained by locking audio recordings and transcripts on external storage, and participants were able to review their transcripts. Grammarly was used to refine grammar in the study.

4. Results for the study

The following section presents an analysis of longitudinal data on international students' motivation profiles to study in China. The results showed four motivation profiles, each with subthemes, across two interview waves, with convergent and divergent patterns over time.

Identified regulation

The convergent analysis showed that participants initially framed external reasons to study in China and gradually came to value them as personally meaningful goals from Wave 1 (W1) to Wave 2 (W2), although the degree and mechanism of change varied across cases. At W1, respondents commonly cited practical and developmental factors, including the availability of scholarships, affordability during the application process, and China's technological development and educational infrastructure. By W2, respondents highlighted clear future directions and meaningful opportunities, including further studies, business, and career networks. For example, in W1 Seung explained, "China has a lot of success in various fields, including science, technology, education, and the economy," whereas at W2 he remarked, *"First is to make my master's thesis and publish it, and make me grow academically."* Here, publications and other research outputs were linked to important personal goals. Likewise, Favour (W1) moved from praising external rewards *"The reason why I wanted to come and study in China is that they had offered us a scholarship"* to valuing her personal life at W2: *"I'm having the best time of my life, honestly, in China. China is good to me."* These accounts show that participants' reasons to study in China were not only about financial accessibility but also about the value it offered for their personal and academic development.

Other participants valued broader opportunities and prospects to study in China beyond academic goals. In W1, Bangu's statement reflected, *"China's development was inspiring, and studying there provided a valuable opportunity to learn firsthand,"* whereas in W2 he explained, *"I had a pleasant experience with the classes, course delivery, social integration, and overall environment."* Other participants also linked the value of the education they obtained to technology and future opportunities. Jummy (W1) explained that *"When I look at China's economy, its education, and its educational products, it looks more advanced as compared to our education system,"* which changed to competence gained at W2: *"The course has increased my motivation and confidence, leading to new perspectives on opportunities in business or being employed."* These reflections suggest that participants perceived studying in China as an opportunity that extended beyond academic achievement, encompassing lifelong learning and a broader promise for international students.

At the divergent level, each respondent experienced different motivations over time across both waves, depending on the experiences encountered. At W1, participants experienced heavy workloads, language barriers, and academic demands; later, in W2, each participant began using different strategies. One area of variation that became particularly evident was engagement in social integration and friendship. For example, in W1, Blacce clarified, *"I casually go around talking to local students, especially those who are bilingual,"* whereas in W2 he described, *"I make friends easily, and all these individuals that I've befriended have contributed to me, and I feel indeed that it has been good."* This suggests that the respondent was initially selective based on language proficiency but later chose friends who were beneficial. In contrast, Joy (W1) responded, *"For Chinese students, I have found it challenging to interact with them due to the language barrier."* In W2, there were more opportunities to make friends, as she narrated: *"I am getting more comfortable making friends. Interactions become much easier now."* This indicates that in W1 participants explained their failure to interact due to the language barrier, whereas in W2 the respondent engaged more to make friends.

Intrinsic motivation

In this theme, the results showed that focus shifted from impression and novelty-seeking to mastery-oriented engagement. Three main subthemes emerged after analysis: cultural exposure and learning, personal and mindset growth, and the quality of teaching.

The cross-case analysis on cultural exposure and learning showed a shift from respondents' curiosity-based enjoyment at W1 to gaining intercultural competence when engaging with Chinese culture at W2. As Farai (W1) described, the shift from admiration to competence is reflected in the change from "... *incorporating Chinese culture and language into their modules, which has improved our communication with the host country*" to "*I have learned and benefited a lot*" at W2. This shows that participants were motivated intrinsically. Also, Joy in W1 expressed an interest in learning Chinese narratives, saying, "*I like exposure, I like to learn new things.*" Joy gained new knowledge in W2 after meeting a diverse range of people, as narrated: "*I would say it's a very good experience, getting to see the different culture.*" This captures the openness and interest that motivates participants to learn culture not only for socialisation but also for future career opportunities. Exploring the city and streets, interacting with the environment, and meeting local people were sources of intrinsic interest, enjoyment, positive social networks, and curiosity. For example, Hope (W1) moved from an unfamiliar environment, "*I have been trying to explore different streets,*" to competence in doing things without fear at W2: "*I know many markets and how they pay online, especially when travelling between areas.*" This growth captures the role of self-exploration in sustaining curiosity.

The study results showed that in W1, experiences shifted from expecting transformative possibilities to actively consolidating personal and mindset growth in W2, as participants gained confidence and developed a transformative view of education. For example, Favor (W1) framed her experience living in China as enjoyment: "*I'm having the best time of my life, honestly, in China,*" whereas in W2 she remarked, "*It makes me have an open mind and to always look forward to new challenges, new experiences, and it opens up our eyes to see the world positively.*" Participants also connected growth to improvements in self-reliance and practical skills for the future, as Sen (W1) commented, "*They are teaching you to be self-reliant, so when you get back home, you're able to do things on your own.*" In W2, he explained, "*I think I have learned a lot as compared to when I came here initially.*" This shows that the freedom and competencies acquired in China fostered motivation, boosted participants' confidence, and deepened their understanding of a multicultural community.

Participants connected their intrinsic motivation to teaching quality and academic engagement; in W1, their experiences shifted from initial appreciation of teaching methods to self-driven study habits in W2. They described high-quality, supportive, motivating, and engaging teaching and learning approaches that also fostered autonomy and growth. As H.H (W1) highlighted, "*We need to write maybe 10 papers. That will greatly improve our academic writing.*" In W2, H.H showed self-regulation: "*I was exposed to some of the new ways of delivering the content, such as poster presentation.*" This shows how participants engaged in academic writing activities. Assistance from academic and social networks such as professors, supervisors, and peers was described as a motivating factor to study in China, contributing to confidence, competence, and engagement in academic life. As Blacce (W1) explained, "*The most motivating factor is the school's environment and the professors' helpfulness.*" In W2, however, Blacce self-regulated: "*I found that there came a point where I had to delete some of these AI tools because I wanted to use my brain as much as possible.*" This shows that academic and social networks were intrinsically motivating, fostering self-reliance and enabling effective engagement during academic activities over time. Within-case analysis showed that participants diverged in how intrinsic motivation developed, shaped by their experiences and exposure to the new context. Jimmy's progress was a little slower in W2 compared to W1: "*Yet, we have acquired certain skills through the education system. I just feel this one is better, just to learn how they do it.*" In W2, participants also expressed pressure in learning, emphasising that "*I feel more pressure to learn it.*" This indicates that participants faced challenges in engaging in academic activities. In a similar vein, participants also differed in the depth of their cultural immersion.

Introjected regulation

In this theme, the results showed emotional discomfort, culture shock, and a recovery stage after adjustment. In W1, participants expressed initial pressure, mild distress, and negative emotions, while in W2 their adaptation experiences strengthened due to emerging coping efforts. Three main subthemes emerged after analysis: emotional discomfort, culture shock, and personal expectations.

The cross-case analysis showed that emotional discomfort shifted from worry to persistent stress and fatigue. In W1, participants expressed worry and language anxiety after entering a new learning and cultural environment, describing these feelings as being unprepared and confused about how to handle academic work. In W2, this emotional and

academic anxiety persisted and became part of their daily experiences. For example, Seung in W1 narrated that *"during the seminar, a lot of discussions concerning our topic,"* while in W2 he reported, *"I arrived here without knowing my research and how to complete my master's thesis. I was very worried about the process."* Joy (W1) similarly explained, *"I feel regret, just being away from the family,"* while in W2 she reported, *"Considering that I went home for the holiday, and I got to compare the life there and here, and it's good here."* These shared experiences indicate not only emotional discomfort during adaptation but also internal pressure to adapt to the new context.

The analysis also indicated that culture shock and academic pressure were other contributing factors to introjected regulation. In W1, participants' experiences moved from confusion, fear, and a sense of unpreparedness toward gaining confidence in W2. As Blacce (W1) reported, *"this cultural experience can lead to what we call culture shock, where you feel frustrated because you're not very aware of the culture you are in."* In W2, Blacce reflected, *"Sometimes you get depressed, but then I think it's important just to accept that it's a new environment."* These quotations suggest that difficulties with adaptation and a desire to avoid guilt reinforced introjected regulation. Within-case results showed that participants shared experiences of being limited in interaction early on. As Zarzu (W1) described, *"I come from the Occident, so it's so culture, languages, and many things, far from China's culture."* Later, in W2, he stated, *"But then day by day I was learning and getting more confidence to go out, to use services and something."* This suggests that culture shock undermined participants' competencies, while successful coping mechanisms led to effective adaptation.

Lastly, results in the personal expectations subtheme showed that participants held mixed feelings of hope and anxiety before later internalising pressure. In W1, their personal expectations remained abstract, leading to interpersonal conflict, while in W2 they internalised these expectations. Bangu expressed the mixed feeling: *"It is like a great challenge, but I want to turn it into an opportunity to learn."* In W2, he elaborated, *"The expectation has been met. My experience here matches my expectations. It wasn't easy, as it was a new experience in the academy after years."* This suggests that introjected regulation was influenced by the extent to which the institutional program informed participants' expectations before their arrival.

External regulation

In this theme, the results showed that the focus shifted from environmental demands structuring participants' behaviour to environmental adaptation and a source of strain. Three main subthemes emerged after analysis: climate and general environment, daily life and logistics, and personal expectations about China.

The cross-case analysis on climate and general environment showed a shift from a positive impression of environmental conditions in W1 to climate shock and limited mobility in W2. As Hope explained in W1, *"I was amazed by how things are arranged, the technology, the airports, and everything else here,"* whereas in W2 she said, *"I was unprepared for the winter climate and unfamiliar with the environment."* This suggests that unfamiliarity with climate conditions was among the initial external difficulties participants faced. Similarly, Joy shared in W1, *"There are things we like, no problems with electricity, and we have Wi-Fi, which are nice perks,"* whereas in W2 she described, *"The environment is good except for the cold, which I really hate, because I have experience of falling."* This indicates that the physical environment was not always promising, yet participants were required to adapt to it. Personal pressures related to family distance and homesickness also significantly affected participants' experiences. For example, in W1 Seung recalled what his professor said: *"The professor said that here will be your home,"* while in W2 he described, *"I sometimes feel homesick, nostalgic, recalling memories that remind me of my family members and close friends in my country."* Similarly, Farai's feelings in W1 were enjoyable: *"I feel much more comfortable,"* whereas in W2 she shared, *"... back home, your kids wanted to speak to you; it's now midnight."* This shows that participants experienced loneliness when far from their relatives and close friends.

The study results showed that daily life and logistics were shaped by university systems in W1, while in W2 external factors continued to shape students' experiences. In W1, Mayi highlighted, *"I had one problem, and it was the food. I can't eat spicy food, which makes it a little bit difficult to find beef and chicken,"* whereas in W2 Sug advised, *"Search for some videos on YouTube about food because, as Muslims, we don't eat pork."* This suggests that these community systems laid the foundation for participants' acculturation in their everyday lives. Likewise, Sug was impressed with

daily life in W1: “I went off campus several times,” while in W2 he described an unsatisfying experience: “When I entered the dormitory room for the first time, I was disappointed because the room was too small.” This implies that a person can adapt to the environment depending on the situation encountered.

Table 2 : Summary of quotations for each motivation profile

Themes		W1	W2
Identified Regulation	Jam	<i>China is developing in the world in terms of technology and infrastructure.</i>	<i>In fact, since I arrived here it has motivated me to learn and achieve more.</i>
	Farai	<i>the only challenge to me is the language barrier.</i>	<i>Academic challenge is just working with heavy tasks, a lot of tasks.</i>
Intrinsic Motivation	Joy	<i>I have 4 years of experience, mostly gained from lecturers and other students around me.</i>	<i>now I am more comfortable that I think I can manage any situation.</i>
Introjected Regulation	Jimmy	<i>There is a language barrier. When you go out there, you'll be using these translators, but they are not always convenient</i>	<i>I feel more pressure to learn it.</i>
External Regulation	Hope	<i>I go for an evening walk with my friends, and it's lovely and impressive.</i>	<i>... everything is organized, and I like the way the transportation routes are set up, and ... use online payment for transportation.</i>
	Bangu	<i>In terms of security, you can walk around here at any time.</i>	<i>the most important thing is to know why they're coming to China</i>

Source: Researcher's Model (2025)

5. Discussion

The results of this longitudinal study revealed that international students' motivation profiles to study in China are dynamic and multidimensional over time. As international students continued to engage in academic and social activities, their motivation shifted from arrival through to initial adaptation in the host context. The motivation profiles included intrinsic motivation, identified regulation, introjected regulation, and external regulation. This supports Ryan & Deci (1985) Self-Determination Theory (SDT) in students' mobility and cross-cultural contexts, as the same person may exhibit diverse motivational profiles.

Intrinsic motivation was characterised in this study by international students' genuine enjoyment of cultural experiences following engagement in social and academic activities. Such experiences came from exploring the streets and the city, learning Chinese, interacting with the local community, and enjoying quality teaching and support from peers and lecturers. This mirrors previous studies on cross-cultural adjustment in the Chinese context (Cao & Meng, 2022; Liu et al., 2025), providing further evidence that academic engagement cultivates psychological wellbeing. The experience gained contributed to a positive perception of individual development, autonomy, and competence, leading to increased confidence, openness, and self-realisation among international students. However, the data also revealed diverse responses over time, with some describing academic work as motivating and culturally immersive, while others found the same experience burdensome and devastating. Other research also indicated differences in motivation among international students studying in China (Gong & Huybers, 2022; Wu et al., 2021), suggesting that, despite a supportive environment, prior experience and interpretation shape an individual's intrinsic motivation.

Identified regulation was evident among international students as they internalised external factors that motivated their studies in China. These reasons included affordable application fees, scholarships, and advanced infrastructure,

which fostered meaningful academic growth and career development, aligning with findings from another study (Gong & Huybers, 2022). Over time, participants came to value changes in discipline, tolerance, and expertise as crucial outcomes of studying abroad, linking their studies to specific objectives such as publishing papers, securing future employment, and transferring skills back home. However, the pace and depth of this internalisation varied, particularly under heavy academic workloads, language barriers, and inadequate social interaction. Although some research has identified negative factors affecting academic success (Jiang et al., 2022) and examined the role of diverse friendship types in a cross-cultural context (Sheng et al., 2022), this study found that students were most deeply motivated when external factors were internalised. This suggests that opportunities alone do not guarantee identified regulation; they need to be linked to international students' life trajectories.

In a similar vein, international students exhibited introjected and external regulation. Upon arrival, they experienced homesickness, culture shock, unfamiliar academic norms, anxiety, supervisors' demands, and pressure from family and colleagues. These results align with Mao (2024) and Chen (2025), who highlighted similar adaptation struggles in a new learning environment. Climate, dormitory rules, and logistical systems shaped controlled individual behaviour and wellbeing, particularly as participants learned to navigate them. These pressures did not undermine students' engagement in academic and social activities; if anything, they accelerated participants' effort and adaptation. Participants pushed themselves to meet expectations, worked hard despite stress, and ultimately accepted the challenges of the new host environment. These results align with Van den Broeck et al. (2021) the finding that introjected and external regulation were related to affective commitment and strong engagement, which in turn led to performance outcomes. Conversely, those who socialised and built networks were able to transform pressure into constructive motivation, whereas those who isolated themselves continued to suffer from internal pressure and slower adaptation. In managing these external pressures, international students used emotion-focused coping techniques that varied across individuals and situations (Ping et al., 2026).

Generally, this longitudinal qualitative study indicated that international students' motivation profiles are not static or unidirectional. The same host environment can yield diverse motivation profiles among international students studying in China due to differences in coping strategies, social connections, and their ability to internalise incentives.

Practical Implications

These results have implications for universities, programme administrators, and policymakers who work with international students in China. First, universities should strengthen language support for both international students and lecturers through training in Chinese and English, which would help reduce communication barriers arising from isolation, anxiety, and introjected tension.

Second, universities should provide clear, organised support for international students by offering academic workshops, regular feedback, and supervisor guidance to reduce pressure and anxiety. They should also establish psychological counselling services and interactive, structured platforms for international and Chinese students, such as peer mentoring, mixed-cohort projects, and co-curricular activities that foster a sense of relatedness and reduce isolation.

At the same time, policymakers and internationalisation offices should design policies that deliberately support psychological needs to reinforce intrinsic motivation and identified regulation. These policies should also recognise the distinct needs of different provinces and provide material support, clear guidance, and social activities during the cold seasons to facilitate adaptation.

Limitations and Suggestions for Future Studies

Based on the study's results, methods, and gaps, this study had three limitations. First, it was conducted at a single university in Northeast China, limiting the transferability of the motivation profiles to other provinces; future research should extend the sample to multiple universities across different provinces to compare motivation profiles. Second, the study relied solely on self-reported experiences from two waves of semi-structured interviews over a short longitudinal period; future research would benefit from a mixed-methods approach using person-centred analyses to

examine how motivation profiles predict adaptation outcomes. Lastly, the study involved international students in the social sciences, with the added limitation of English-language interviews; future studies should examine whether motivational profiles differ across disciplines or across studies conducted in multiple languages, as personal demands and career expectations vary.

Study Contributions

Despite these limitations, the present study contributes valuable insights to research on international students' motivation and higher education. First, it moves beyond the extensively explored person-centred motivation profiles to examine more deeply the changing SDT motivation categories; the results revealed that the four motivation profiles functioned distinctly in shaping international students' motivation to study in China. Second, this is among the first studies to identify each SDT motivation category separately using longitudinal data in the Chinese context. The results revealed that international students' motivation profiles change over time, shifting from external attraction to personally meaningful engagement and becoming more internalised, influenced by factors such as academic demands, language barriers, climate, and support from supervisors and peers. This extends SDT by showing that international students' motivation is dynamic and shaped by the host institution environment.

6. Conclusion

In conclusion, this study revealed a shift from initial external curiosity, expectations, and incentives towards deeply internalised, specific goals, achieved through coping strategies, intercultural competence, and self-reliance. The results contribute to the literature by showing how SDT motivation categories interact dynamically to shape international students' adaptation, wellbeing, and mobility, and that adaptation trajectories vary across international students depending on coping strategies, social networks, and internalised career goals.

Declarations

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AI Acknowledgment

The authors used Grammarly for language refinement.

Conflict of Interest

The authors declare no conflict of interest.

Ethics Approval

This study was conducted in accordance with ethical standards for research involving human participants. Ethical approval was obtained from Northeast Normal University in China. All participants provided informed consent before participation. Participation was voluntary, and participants were informed of their right to withdraw at any time without consequences. Confidentiality and anonymity were strictly maintained, and no identifying information was included in the data or reported findings.

Consent to Participate

Informed consent was obtained from all participants before participation. Participation was voluntary.

Data Availability Statement

The datasets generated and analysed during the current study are available from the corresponding author upon reasonable request.

Reference

- Cao, C., & Meng, Q. (2022). A systematic review of predictors of international students' cross-cultural adjustment in China: current knowledge and agenda for future research. *Asia Pacific Education Review*, 23(1), 45–67. <https://doi.org/10.1007/s12564-021-09700-1>
- Chen, H. (2025). Acculturative stress and university life adjustment among international students in China: the moderating role of perceived social support. *Frontiers In Psychology*, 16. <https://doi.org/10.3389/fpsyg.2025.1690645>
- Corbin, J. M., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, 13(1), 3–21. <https://doi.org/10.1007/BF00988593>
- Dai, K., Hu, Y., Li, X., & Oladipo, O. (2023). Conducting doctoral research in China: an exploration of international students' motivation to study at Chinese universities. *Higher Education Research and Development*, 42(5), 1133–1149. <https://doi.org/10.1080/07294360.2023.2197195>
- Gong, X., & Huybers, T. (2022). International student flows into provincial China – the main motivations for higher education students. *Higher Education Research & Development*, 41(7), 2170–2186. <https://doi.org/10.1080/07294360.2021.1981254>
- Gong, Y., Ma, M., Hsiang, T. P., & Wang, C. (2020). Sustaining international students' learning of Chinese in China: Shifting motivations among New Zealand students during study abroad. *Sustainability*, 12(15), 6289. <https://doi.org/10.3390/su12156289>
- Großmann, N., Matthias, W., & Randler, C. (2025). Understanding Birdwatching Motivation Through the Lens of Self-Determination Theory. *Leisure Sciences*, 1–29. <https://doi.org/10.1080/01490400.2025.2481946>
- He, R., Sarah, K., Heather, C., & Elliot, D. L. (2025). It's more than just food: the role of food among Chinese international students' acculturation experiences in the UK and USA. *Food, Culture & Society*, 28(1), 306–324. <https://doi.org/10.1080/15528014.2024.2330180>
- Howard, J. L., Bureau, J., Guay, F., Chong, J. X. Y., & Ryan, R. M. (2021). Student Motivation and Associated Outcomes: A Meta-Analysis From Self-Determination Theory. *Perspectives on Psychological Science*, 16(6), 1300–1323. <https://doi.org/10.1177/1745691620966789>
- Hua, C., Cole, S., Zhang, Y., Wang, W., & Zhao, H. (2025). Exploring Needed Support as a Motivational Factor for Travelers with Mobility Impairments: A Sequential Mixed-Methods Exploration. *Journal of Travel Research*, 64(2), 378–394. <https://doi.org/10.1177/00472875231215017>
- Jiang, Q., Horta, H., & Yuen, M. (2022). International medical students' perspectives on factors affecting their academic success in China: a qualitative study. *BMC Medical Education*, 22(1), 574. <https://doi.org/10.1186/s12909-022-03597-z>
- Kamberi, M. (2025). The types of intrinsic motivation as predictors of academic achievement: the mediating role of deep learning strategy. *Cogent Education*, 12(1), 2482482. <https://doi.org/10.1080/2331186X.2025.2482482>
- Lee, K. H. (2025). Desire and the making of the mobile subject: China as destination for international students from the west. *Globalisation, Societies and Education*, 1–16. <https://doi.org/10.1080/14767724.2025.2468666>
- Liu, H., Wang, Y., & Wang, H. (2025). Exploring the mediating roles of motivation and boredom in basic psychological needs and behavioural engagement in English learning: a self-determination theory perspective. *BMC Psychology*, 13(1), 179. <https://doi.org/10.1186/s40359-025-02524-3>
- Ma, J., & Zhao, K. (2018). International student education in China: characteristics, challenges, and future trends. *Higher Education*, 76(4), 735–751. <https://doi.org/10.1007/s10734-018-0235-4>
- Mao, Y. (2024). Academic adaptation of international students in the chinese higher education environment: A case study with mixed methods. *International Journal of Intercultural Relations*, 103, 102082. <https://doi.org/10.1016/j.ijintrel.2024.102082>

- Mao, Y., Ji, H., & Wang, R. (2022). Expectation and Reality: International Students' Motivations and Motivational Adjustments to Sustain Academic Journey in Chinese Universities. *Front Psychol*, 13, 833407. <https://doi.org/10.3389/fpsyg.2022.833407>
- Meridha, J. M. (2025). Internationalization of higher education: trends, opportunities, and challenges. *SN social sciences*, 5(11), 194. <https://doi.org/10.1007/s43545-025-01230-6>
- Ministry of Education. (2019). Statistical Report on International Students in China for 2018
- Muganga, A., Mekonen, Y. K., Adarkwah, M. A., Oladipo, O. A., Nweze, C. N., & Bibi, S. (2025). Is everywhere I go home? Reflections on the acculturation journey of African international students in China. *International Journal of Intercultural Relations*, 105, 102136. <https://doi.org/10.1016/j.ijintrel.2024.102136>
- Muzychenko, Y., & Morozova, O. (2025). Personality and cross-cultural adjustment: The moderating role of cross-cultural motivation in Chinese students' adjustment to life in Russia. *International Journal of Intercultural Relations*, 108, 102231. <https://doi.org/10.1016/j.ijintrel.2025.102231>
- Nguyen, T. T. T., & Hajek, J. (2024). Motivation for learning Chinese in a study abroad context: Vietnamese students in Taiwan. *Journal of Multilingual and Multicultural Development*, 45(2), 444–458. <https://doi.org/10.1080/01434632.2021.1899191>
- Ping, L., Kadir, Z. B. A., Khanal, R., & Xi, J. (2026). The impact of intercultural competence on international students' academic, social and affective outcomes in China: The mediating role of coping strategies. *International Journal of Intercultural Relations*, 112, 102394. <https://doi.org/10.1016/j.ijintrel.2026.102394>
- Poan, R., Merizka, V. E., & Komalasari, F. (2022). The importance of trust factor in the intentions to purchase Islamic insurance () in Indonesia. *Journal of Islamic Marketing*, 13(12), 2630–2648. <https://doi.org/10.1108/JIMA-01-2021-0026>
- Raja, R., Zhou, W., Li, X. Y., Ullah, A., & Ma, J. (2021). Social identity change as an integration strategy of international students in China. *International Migration*, 59(5), 230–247. <https://doi.org/10.1111/imig.12827>
- Robledo, N. I., Dixon, H. E. T., Dixon, A. W., & Atwater, C. (2025). Students' motivations to participate in short-term study abroad experiences. *Journal of International Education in Business*, 19(1), 62–78. <https://doi.org/10.1108/jieb-10-2024-0141>
- Ryan, R. M., & Deci, E. L. (1985). Intrinsic Motivation and Self-Determination in Human Behavior. New York, NY: Plenum <https://doi.org/10.1007/978-1-4899-2271-7>
- Ryan, R. M., & Deci, E. L. (2000a). The Darker and Brighter Sides of Human Existence: Basic Psychological Needs as a Unifying Concept. *Psychological Inquiry*, 11(4), 319–338. https://doi.org/10.1207/S15327965PLI1104_03
- Ryan, R. M., & Deci, E. L. (2000b). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*, 25(1), 54–67. <https://doi.org/10.1006/ceps.1999.1020>
- Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61, 101860. <https://doi.org/10.1016/j.cedpsych.2020.101860>
- Sheng, L., Dai, J., & Lei, J. (2022). The impacts of academic adaptation on psychological and sociocultural adaptation among international students in China: The moderating role of friendship. *International Journal of Intercultural Relations*, 89, 79–89. <https://doi.org/10.1016/j.ijintrel.2022.06.001>
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for information*, 22(2), 63–75.
- Shkoler, O., & Rabenu, E. (2023). The motivations and their conditions which drive students to seek higher education in a foreign country. *Current Psychology*, 42(29), 25403–25416. <https://doi.org/10.1007/s12144-022-03619-5>
- Van den Broeck, A., Howard, J. L., Van Vaerenbergh, Y., Leroy, H., & Gagné, M. (2021). Beyond intrinsic and extrinsic motivation: A meta-analysis on self-determination theory's multidimensional conceptualization of work motivation. *Organizational Psychology Review*, 11(3), 240–273. <https://doi.org/10.1177/20413866211006173>
- Wang, K., Feng, Y., Qin, X., & Hu, Y. (2025). Examining the double-edged effects of digital literacy on the social integration of retirement migrants [Original Research]. *Frontiers In Public Health*, Volume 13 - 2025. <https://doi.org/10.3389/fpubh.2025.1470319>
- Wu, M.-Y., Zhai, J., Wall, G., & Li, Q.-C. (2021). Understanding international students' motivations to pursue higher education in mainland China. *Educational Review*, 73(5), 580–596. <https://doi.org/10.1080/00131911.2019.1662772>

- Ying, H., Wei, H., Herdian, Nuryana, Z., Syafitri, A. I., Rahmadonna, S., Pujiriyanto, & Pranolo, A. (2025). Understanding the impact of culture shock on mental health: Mediating effects of expectancy of success and GRIT in international students in China. *Acta Psychologica*, 259, 105344. <https://doi.org/10.1016/j.actpsy.2025.105344>
- Yue, Y., & Lu, J. (2022). International Students' Motivation to Study Abroad: An Empirical Study Based on Expectancy-Value Theory and Self-Determination Theory [Original Research]. *Frontiers In Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.841122>

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