

Study on Factors Influencing College Students' Intention to Study Abroad Based on a Structural Equation Modeling (SEM) Approach: A Case Study of Lijiang Culture and Tourism College

Qihua Li ^a, Yu Zhang ^{b,*}

Lijiang Culture and Tourism College, Lijiang City, 674199, Yunnan Province, China

^axrkqihua0917@163.com, ^bZoe9923@outlook.com

*Corresponding author

Abstract

This study uses structural equation modeling (SEM) to systematically explore the influencing mechanism of overseas study intentions among students at Lijiang Culture and Tourism College. A theoretical framework, which is constructed, and the effects of each factor are verified using questionnaire survey data comprising four dimensions: personal traits, family environment, school support, and social atmosphere. The study found that personal traits and family environment have a direct positive impact on the willingness to study abroad, while school support has an indirect effect through personal traits, and the social atmosphere indirectly affects the willingness to study abroad through the family environment. The findings provide a theoretical basis and practical reference for private universities to optimize international education services and enhance students' international competitiveness, while also expanding the boundaries of research on the internationalization of higher education.

Keywords

Structural equation modeling; Study abroad intentions; Private colleges and universities; Influencing factors; Lijiang Culture and Tourism College.

1. Introduction

Against the backdrop of accelerated globalization and profound changes in the internationalization of higher education, studying abroad has become an increasingly important strategic pathway for Chinese students to enhance their international competitiveness. In 2024, according to statistics from the Ministry of Education, the number of Chinese students studying abroad at their own expense reached 623,000 students. Among them, the proportion of students attending private universities increased from 8.7% in 2019 to 14.2% by 2024. This proportion shows a rapid expansion trend. Students from private universities are gradually becoming a core component of the overseas study population. The deeper implication of this trend lies in the fact that the decision-making mechanism for studying abroad within this group and its influencing variables possess irreplaceable academic research value.

2. Literature Review and Theoretical Framework

2.1. Current Status of Research on Factors Influencing Study Abroad Intentions

Existing research has established that the cross-border academic migration tendency of college students, that is, their intention to study abroad, is shaped by the synergistic effects of multiple

variables. These variables can be divided into four nested levels: individual endowment, family endowment, institutional ecology, and social fields.

2.2. The Unique Characteristics of Study Abroad Intentions among Students of Private Universities

Compared to public universities, students from private universities exhibit several distinct characteristics in their study-abroad decisions. First, economic factors are more pronounced. Tuition fees at private universities are generally higher than those at public universities, and a higher proportion of students come from families with better economic conditions. This makes their study abroad decisions more likely to be based on financial capability rather than academic pursuits. Second, their choice of major is more pragmatic. Private universities primarily offer applied majors, and students tend to choose study-abroad programs directly related to their future careers, such as tourism management and art design. Third, they are more dependent on information. Private universities have relatively limited international cooperation resources, and students rely more on their families, intermediary agencies, or social media to obtain information about studying abroad, making them more susceptible to irrational factors influencing their decisions. Fourth, they are more cautious in their decision-making. Due to their relatively weaker academic foundation, students from private universities are more sensitive to the risks of studying abroad and are more likely to reduce decision-making risks by extending their preparation time or lowering the level of their target universities [1].

2.3. Theoretical Framework

Based on the construction of a four-dimensional analytical framework of “individual-family-school-society,” this study proposes the following hypotheses after deeply anchoring the uniqueness of the student group in private colleges and universities.

H1: The core dimensions of individual characteristics, encompassing academic mastery, language proficiency, and cross-cultural situational adaptation, have a direct and positive effect on the formation of intentions to study abroad. For the student population, the gradual improvement of academic mastery, hierarchical leap in language proficiency, and dimensional optimization of cross-cultural situational adaptation are all positively correlated with the strength of study abroad intentions. This correlation is direct.

H2: The direct positive impact of the desire to study abroad includes economic support, cultural expectations, and social relationships, which exert a direct positive influence on students’ desire to study abroad. This influence is manifested in the fact that the degree of a student’s family’s economic conditions, the intensity of their cultural expectations, and the breadth of their social relationships are positively correlated with the intensity of their desire to study abroad.

H3: The support system provided by universities, with international exchange programs, study abroad guidance services, and an internationalized curriculum as core components, influences students’ willingness to study abroad not through a direct causal link but by acting on the mediating variable of individual traits. International resources provided by universities enhance students’ individual traits. This enhancement further strengthens students’ willingness to study overseas.

H4: Through the mediating field of the family environment, the social atmosphere, whose constituent elements include the regulation of study abroad policies, the construction of media narratives, and the transmission of behavior and cognition among peer groups, exerts an indirect shaping force on an individual’s intention to study abroad. The social atmosphere’s constructive intervention on the family-level cognitive framework and value orientation related to studying abroad, through the adjustment of the intensity and direction of the

allocation of family support resources, ultimately permeates into the student's decision matrix. This transmission path is non-linear [2].

3. Research Methods

3.1. Sample Selection and Data Collection

The target group for data collection was the students of the Lijiang Culture and Tourism College from 2022 to 2024. The sample selection process employed a stratified sampling method, dividing students by grade level (freshman to senior), major (humanities, science, and arts), and region of origin (five southwestern provinces and other provinces and municipalities) in China. A total of 1200 questionnaires were distributed. A total of 1085 valid questionnaires were returned, representing an effective response rate of 90.4. The demographic characteristics of the sample were as follows: students from the five southwestern provinces accounted for 52% of the student body, whereas students from other provinces and cities accounted for 48%. Of the respondents, 58% majored in humanities, 25% in science, and 17% in arts; 21% came from families with a monthly income below 10,000 yuan, 54% from families with a monthly income between 10,000 and 30,000 yuan, and 25% from families with a monthly income above 30,000 yuan.

3.2. Development of Measurement Tools

This study developed a structured measurement framework grounded in the prior literature and research context to operationalize key constructs related to students' intention to study abroad. All constructs were measured using multi-item scales to ensure reliability and validity. The detailed operationalization and measurement properties are presented in Table 1.

Table 1. Measurement Dimensions, Operationalization, and Psychometric Properties

Measurement Dimension	Components / Operationalization	Measurement Instrument	Reliability and Validity Indicators
Individual Characteristics	1. Academic competence: Ranked within the top 30% of the class based on academic performance. 2. Language proficiency: Holding a CET-6 certificate or an equivalent English proficiency qualification. 3. Cross-cultural adaptability: Ability to rapidly adjust to heterogeneous cultural environments.	Five-point Likert scale (1 = strongly disagree, 5 = strongly agree)	Overall Cronbach's α = 0.89; dimension-level α ranges from 0.76 to 0.85; all standardized factor loadings > 0.5; Composite Reliability (CR) > 0.7; Average Variance Extracted (AVE) > 0.5.
Family Background	1. Availability of financial support: The family has sufficient financial capacity to fully cover all study-abroad-related expenses. 2. Intergenerational transmission of educational expectations: Parents hold explicit expectations regarding their children obtaining overseas higher education degrees. 3. Existence of transregional social networks: The family has relatives or close acquaintances who have settled abroad.	Five-point Likert scale	Overall Cronbach's α = 0.89; dimension-level α ranges from 0.76 to 0.85; all standardized factor loadings > 0.5; Composite Reliability (CR) > 0.7; Average Variance Extracted (AVE) > 0.5.
Institutional Support Structure	1. International academic collaboration and mobility mechanisms: Institutionalized provision of joint or dual-degree programs. 2. Cross-border academic counseling services: Establishment of dedicated study-abroad advisor positions. 3. International alignment of curricula: Bilingual delivery of core disciplinary courses.	Five-point Likert scale	Overall Cronbach's α = 0.89; dimension-level α ranges from 0.76 to 0.85; all standardized factor loadings > 0.5; Composite Reliability (CR) > 0.7; Average Variance Extracted (AVE) > 0.5.
Social Environment	1. Study-abroad policy context: Local governments provide subsidy policies for international students. 2. Media influence: Media coverage of successful study-abroad experiences influences my decision-making. 3. Peer influence: A strong intention to study abroad exists among my peers.	Five-point Likert scale	Overall Cronbach's α = 0.89; dimension-level α ranges from 0.76 to 0.85; all standardized factor loadings > 0.5; Composite Reliability (CR) > 0.7; Average Variance Extracted (AVE) > 0.5.
Intention to Study Abroad	1. Study-abroad intention: I plan to pursue further education abroad after completing my current studies. 2. Preparatory actions: I have initiated systematic preparation for language proficiency assessment tests. 3. Persistence under uncertainty: Even when facing unforeseen challenges and difficulties, I will adhere to my study-abroad plan.	Five-point Likert scale	Overall Cronbach's α = 0.89; dimension-level α ranges from 0.76 to 0.85; all standardized factor loadings > 0.5; Composite Reliability (CR) > 0.7; Average Variance Extracted (AVE) > 0.5.

Source: The author (s) work.

3.3. Model Construction and Validation

The structural equation model (SEM) architecture was implemented using the AMOS 26.0 software. Its core lies in systematically deconstructing the path relationships between the dependent variable of study abroad intention and independent variables such as personal traits, family environment, school support, and social atmosphere. The construction parameters of this model were as follows [3].

(1) Direct effects: Personal traits → Study abroad intention, family environment → Study abroad intention.

(2) Construction of indirect causal chains: The mediating effect of personal traits on the desire to study abroad is driven by the support provided at the school level; the mediating effect of family environment on the desire to study abroad is driven by the atmosphere created at the social level.

(3) Control variables included grade, major, place of origin, and family income. Specific requirements for evaluating the model goodness of fit are as follows: the chi-square degrees of freedom ratio should be below 3. The goodness-of-fit index (GFI) should exceed 0.9. The normalized fit index (NFI) must also meet the threshold of above 0.9. The root mean square error of approximation (RMSEA) should be maintained below 0.08.

4. Empirical Analysis

4.1. Descriptive Statistical Analysis

Regarding the sample group, 41% of students expressed an intention to study abroad; among them, 28% had already begun preparations, while 13% were still observing the situation.

In terms of destination selection, the UK (35%), Australia (28%), and the US (22%) were the top three choices, with the core driving factors being the short duration of their studies, the flexible nature of their academic programs, and relaxed immigration policies. The most popular majors were business (42 %), computer science (25 %), and art and design (18 %). This distribution pattern is highly consistent with the application-oriented major-setting system promoted by private colleges and universities [4].

4.2. Reliability and Validity Tests

To assess the measurement quality of the research constructs, this study conducted systematic reliability and validity tests following established psychometric criteria. The results indicated that all constructs exhibited satisfactory internal consistency and convergent validity, confirming the robustness of the measurement model, as summarized in Table 2.

Table 2. Results of Reliability and Validity Tests

Test Category	Specific Indicator	Value	Standard
Reliability Test	Overall Cronbach's α	0.89	Yes
	Individual Traits Dimension α	0.82	Yes
	Family Environment Dimension α	0.79	Yes
	School Support Dimension α	0.81	Yes
	Social Atmosphere Dimension α	0.76	Yes
	Study-Abroad Intention Dimension α	0.85	Yes
	Study-Abroad Intention Dimension α	0.85	Yes
Validity Test	Factor Loadings (Range)	0.58 – 0.87	Yes
	Composite Reliability (CR)	0.78 – 0.86	Yes
	Average Variance Extracted (AVE)	0.52 – 0.61	Yes

Source: The author (s) work.

4.3. Model Fit and Hypothesis Testing

The initial model fit metrics, namely $\chi^2/df = 2.87$, GFI = 0.91, NFI = 0.90, and RMSEA = 0.07, met the baseline criteria. The path analysis results are presented in Table 3.

Table 3. Structural Path Estimates and Hypothesis Testing Results

Hypothesis	Influencing Factor	Standardized Path Coefficient	p-value	Significance	Key Findings
H1	Individual Traits → Study-Abroad Intention	0.42	< 0.001	Significant	H1 is supported. Academic ability ($\beta = 0.29$) and language proficiency ($\beta = 0.26$) exert strong effects, whereas cross-cultural adaptability ($\beta = 0.18$) shows a relatively weaker influence. This difference may stem from private university students' stronger emphasis on the practical value of studying abroad.
H2	Family Environment → Study-Abroad Intention	0.35	< 0.001	Significant	H2 receives empirical support. Economic support ($\beta = 0.24$) plays a foundational and antecedent role, while cultural expectations ($\beta = 0.21$) enhance study-abroad motivation through value identification, indicating a mediating transmission mechanism.
H3	School Support → Individual Traits	0.28	< 0.001	Significant	Through multiplication with the path coefficient from individual traits to study-abroad intention (0.42), an indirect effect of 0.12 on study-abroad intention is formed, supporting H3. International exchange programs ($\beta = 0.31$) and study-abroad advisory services ($\beta = 0.27$) contribute most strongly, suggesting that substantive resource-based support more effectively stimulates study-abroad intention.
H4	Social Atmosphere → Family Environment (Indirect effect on Study-Abroad Intention)	Social Atmosphere → Family Environment: 0.31 Indirect effect: 0.11 (0.31×0.35)	< 0.001	Significant	H4 is validated. Study-abroad policies ($\beta = 0.29$) and media exposure ($\beta = 0.26$) exert significant effects, demonstrating that policy guidance and public discourse structurally shape family decision-making processes.

Source: The author (s) work.

4.4. Mediation Effect Analysis

To examine the underlying transmission mechanisms among the core constructs, this study conducts mediation effect analysis using bias-corrected bootstrap procedures. The results demonstrate that both mediating paths exhibit statistically significant indirect effects, as their confidence intervals do not include zero, with detailed results reported in Table 4.

Table 4. Bootstrap Mediation Effect Analysis Results

Mediating Path	95% Confidence Interval	Includes Zero	Significant Mediation Effect	Key Path Coefficients and Influencing Factors
School Support → Individual Traits → Study-Abroad Intention	[0.08, 0.16]	No	Yes	School support shows stronger effects on academic ability ($\beta = 0.22$) and language proficiency ($\beta = 0.20$).
Social Atmosphere → Family Environment → Study-Abroad Intention	[0.06, 0.14]	No	Yes	Social atmosphere significantly shapes cultural expectations ($\beta = 0.25$) and economic support ($\beta = 0.23$).

Source: The author (s) work.

4.5. Multi-Group Analysis

To explore potential regional heterogeneity in the structural relationships, this study conducted a multi-group analysis by dividing the sample into students from the five southwestern provinces and those from other provinces and cities. The results revealed notable differences in the dominant influencing mechanisms across groups, indicating that regional context shapes the formation of study-abroad intention in distinct ways, as reported in Table 5.

Table 5. Results of Multi-Group Analysis by Student Region

Student Group	Effect of Family Environment (β)	Effect of Social Atmosphere (β)	Effect of Individual Traits (β)	Effect of School Support (β)	Potential Explanatory Factors
Students from Five Southwestern Provinces	0.38	0.33	-	-	Family cultural traditions and characteristics of social networks
Students from Other Provinces and Cities	-	-	0.45		

Source: The author (s) work.

5. Discussion

5.1. The Core Driving Role of Personal Traits

Research confirms that personal traits are the most direct factor influencing the study abroad intentions of students from private universities, with academic ability and language proficiency playing particularly prominent roles. This is consistent with the findings of research on public universities, but the influence of cross-cultural adaptability is weaker, possibly because students from private universities pay more attention to the practicality of studying abroad. Students from private universities generally tend to choose majors with shorter study periods and stronger employment orientations, and their demand for cultural experiences is relatively low. Therefore, the influence of cross-cultural adaptability on decision-making is weakened.

5.2. The Supporting and Moderating Role of Family Environment

The dual driving force of the family environment on the willingness to study abroad—namely, the fundamental role of economic support and the non-negligible nature of cultural expectations—constitutes the core dimension of its influence. Economic support is a fundamental condition. Within the student population of private higher education institutions, the intensity of family cultural expectations is positively correlated with the intensity of the desire to study abroad. This correlation is particularly pronounced in the student sample from the five southwestern provinces. The widespread emphasis placed on educational investment by families in Southwest China and the view of studying abroad as a key means of enhancing their children's social status constitute the underlying explanatory mechanism for this phenomenon. Cultural expectations, through the construction of value identity, reinforce the motivation to study abroad.

5.3. The Indirect Effects of School Support

School-level support works lies in its indirectly influences the generation of study abroad intentions through the systematic cultivation of individual characteristics. This mechanism reveals the pivotal role of private higher-education institutions in the process of internationalization. The outstanding contributions of international exchange programs and study-abroad consulting services highlight that, compared to the superficial promotion of internationalization concepts, the provision of substantial resources has a more significant effect on stimulating students' desire to study abroad.

5.4. The External Catalytic Effect of Social Atmosphere

The indirect influence of social atmosphere through the family environment essentially highlights the pervasive impact of the external environment on the family's decision-making process. The significant influence of study-abroad policies and media propaganda reveals the structural shaping effect of policy guidance and public opinion on the family's cognitive framework. The core mechanism of the study-abroad subsidy policy implemented by local governments is to alleviate the economic pressure on families and strengthen the feasibility of studying abroad. The media's narrative dissemination of successful study abroad cases, through the demonstration effect, activates students and their families' study abroad intentions.

6. Conclusion

The empirical study supported by the SEM model reveals that the study abroad intentions of students from private universities are influenced by the interplay of four dimensions: individual, family, school, and society. Individual endowments and family environments are direct motivating factors, whereas school support networks and social contexts have indirect moderating effects. The study abroad choices of students from private universities show a stronger path dependence on the family's economic foundation and the school resource matrix. Their perception thresholds for cultural discipline expectations and social atmosphere are significantly higher, and the heterogeneity of student origins leads to a wide range of configurational differences in influencing factors, making the construction of a differentiated intervention framework necessary.

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