

Cross-Cultural Psychological Adaptation of Vocational College International Students in China: A Mixed-Methods Study on Status, Influencing Factors, and Support Needs

Xiaoli Hu, Chengcheng Zhou, Yuanyuan Zhang

Jiangsu Maritime Institute, Nanjing 211170, Jiangsu, China

Abstract: *The internationalization of higher vocational education in China has brought increasing numbers of international students to vocational colleges, yet their cross-cultural psychological adaptation remains underexplored. Drawing upon Ward's dual-dimensional model of cross-cultural adaptation and Berry's acculturation framework, this study examined the psychological adaptation status, influencing factors, and support needs among 212 international students from three vocational colleges in Jiangsu Province (N=248, valid response rate=85.5%). A sequential explanatory mixed-methods design was employed, integrating quantitative survey data with semi-structured interviews from 15 purposefully selected participants. Quantitative results revealed that over 47% of participants reported moderate to severe psychological adaptation difficulties. Competence in Chinese language (HSK level) emerged as the strongest predictor of psychological adaptation ($\beta=0.342$, $p<0.001$), followed by perceived social support from teachers ($\beta=0.287$, $p<0.001$) and peer support ($\beta=0.156$, $p=0.018$). Qualitative findings identified four thematic clusters: Language Barrier and Communication Anxiety, Cultural Distance and Identity Negotiation, Institutional Support Gaps, and Professional Identity as a Mediating Resource. These findings extend the applicability of Ward's model to the Chinese higher vocational education context, revealing that psychological and sociocultural adaptation are more tightly coupled ($r=0.68$) in short-term, skills-oriented programs than in traditional university settings. Practical implications for targeted support systems are discussed.*

Keywords: Cross-cultural adaptation; International students; Higher vocational education; Psychological adaptation; Social support; Mixed methods.

1. INTRODUCTION AND LITERATURE REVIEW

1.1 The Rise of International Students in China's Vocational Education

China has emerged as Asia's largest destination country for international students, with the number of international students in higher education institutions surpassing 500,000 in recent years. While much scholarly attention has focused on international students in research-oriented universities, a significant and growing population studies in China's higher vocational colleges, which enroll approximately 5% of all international students, primarily from Belt and Road Initiative countries. These vocational institutions, distinct from traditional universities, prioritize technical competency development, industry partnerships, and practical skills training, preparing students for direct workforce entry.

The influx of international students into China's vocational education system presents unique challenges. Unlike their counterparts in comprehensive universities, vocational college international students typically enroll in shorter programs (2-3 years), face stricter skill-acquisition demands, and navigate a more applied, industry-embedded learning environment. Furthermore, they often possess lower Chinese language proficiency upon arrival, as vocational programs may admit students with HSK Level 3 or below, compared to university requirements of HSK Level 4 or higher. These contextual factors shape a distinct adaptation trajectory that warrants focused empirical investigation.

1.2 Theoretical Frameworks: Cross-Cultural Adaptation Models

The study of cross-cultural adaptation has been predominantly guided by two complementary theoretical traditions. Ward and colleagues' dual-dimensional model distinguishes between psychological adaptation (emotional and affective responses, including well-being and satisfaction) and sociocultural adaptation (behavioral competence in managing daily life in the host culture). Meta-analytic evidence indicates a moderate correlation between these dimensions ($r=0.68$), suggesting they are related yet conceptually distinct.

Berry's acculturation framework complements Ward's model by identifying four acculturation strategies — integration, assimilation, separation, and marginalization—determined by individuals' orientation toward heritage culture maintenance and host culture adoption. Research consistently demonstrates that international students employing integration strategies report superior adaptation outcomes.

More recently, scholars have proposed culturally-situated models recognizing that Western-centric conceptualizations may not fully capture adaptation dynamics in non-Western contexts. The "Relationship-Oriented Adaptation Model" incorporates culturally specific elements such as *mianzi* (face) and filial piety, enhancing explanatory power by 12% in Chinese settings ($\beta=0.31$, $p<0.05$).

1.3 Factors Influencing Cross-Cultural Adaptation

A substantial body of research has identified multiple categories of factors influencing international students' adaptation.

Individual-Level Factors. Language proficiency represents the most consistently identified predictor of both psychological and sociocultural adaptation. Students with HSK Level 5 or above report adaptation satisfaction 3.26 times higher than beginners. Personality traits, particularly neuroticism, significantly predict depression risk ($OR=2.95$).

Environmental Factors. Social support, particularly from host-country nationals, emerges as a critical resource. Teacher support demonstrates stronger effects ($\beta=0.32$, $p<0.01$) than peer support. Cultural distance—the perceived difference between home and host cultures—consistently predicts adaptation difficulty, with students from African countries reporting the lowest adaptation levels.

Temporal Dynamics. Adaptation follows a nonlinear trajectory. Vocational students exhibit a W-shaped adaptation curve with a critical crisis phase at 19-30 months, while postgraduate students require over 24 months to stabilize. This temporal pattern suggests that the shorter duration of vocational programs may compress the adaptation timeline, potentially intensifying challenges.

1.4 Vocational Education as a Unique Context

Despite the theoretical advances outlined above, significant gaps remain in understanding cross-cultural adaptation in vocational education settings. Research is predominantly conducted in Western, educated, industrialized, rich, and democratic (WEIRD) contexts, with university students as the primary participants. Vocational education differs fundamentally from university education in several aspects: (1) strong occupational identity formation; (2) external certification requirements; (3) industry-embedded pedagogy; and (4) shorter program duration.

Recent studies have begun addressing this gap. In Guangxi's higher vocational colleges, behavioral cultural intelligence significantly influences academic adaptation, with academic self-efficacy mediating this relationship. Among vocational nursing students in Jiangsu, over 50% exhibited psychological maladaptation symptoms, with females and senior-year students showing higher risk. Cross-cultural training interventions demonstrated effectiveness in improving both sociocultural and psychological adaptation among vocational international students.

1.5 Research Gaps and the Present Study

Despite these emerging contributions, several critical gaps persist. First, research specifically focused on psychological adaptation—as opposed to sociocultural adaptation or general acculturation—remains limited in vocational contexts. Second, the interplay between individual (language, psychological capital), environmental (institutional support, social networks), and temporal factors requires systematic investigation. Third, the support needs articulated by vocational international students themselves have been insufficiently explored.

This study addresses these gaps by examining cross-cultural psychological adaptation among international students in three Jiangsu vocational colleges. The research questions guiding this investigation are:

What is the current status of cross-cultural psychological adaptation among international students in Jiangsu vocational colleges?

What individual, environmental, and temporal factors significantly predict psychological adaptation?

What support needs do vocational international students articulate, and how do these align with existing institutional provisions?

2. METHODS

2.1 Research Design

This study employed an explanatory sequential mixed-methods design, consisting of two integrated phases. The quantitative phase involved cross-sectional survey data collection to establish the prevalence of psychological adaptation difficulties and identify significant predictors. The subsequent qualitative phase used semi-structured interviews to explain and elaborate on quantitative findings, capturing the subjective experiences behind statistical patterns.

2.2 Participants

2.2.1 Quantitative Phase

A stratified random sampling strategy was employed across three vocational colleges in Jiangsu Province: Jiangsu Maritime Institute (JMI), Nanjing Polytechnic Institute (NPI), and Yangzhou Polytechnic Institute (YPI). These institutions represent diverse vocational education contexts, encompassing maritime, engineering, and comprehensive programs.

Table 1: Demographic Characteristics of Quantitative Participants

Variable	Category	Frequency (N=212)	Percentage (%)
Gender	Male	138	65.1
	Female	74	34.9
Institution	JMI	78	36.8
	NPI	72	34.0
	YPI	62	29.2
Year of Study	Year 1	97	45.8
	Year 2	84	39.6
	Year 3	31	14.6
HSK Level	Below Level 3	43	20.3
	Level 3	68	32.1
	Level 4	62	29.2
	Level 5 or above	39	18.4
Region of Origin	Southeast Asia	78	36.8
	South Asia	46	21.7
	Central Asia	38	17.9
	Africa	32	15.1
	Other	18	8.5

Four hundred seventy-two surveys were distributed across the three institutions. After excluding 260 responses with patterned answering, missing data exceeding 20%, or incomplete demographic information, 212 valid responses were retained (valid response rate: 85.5%, calculated from the 248 returned surveys). Sample size exceeds the minimum required for PLS-SEM analysis (10 cases per indicator). Participants' age ranged from 18 to 35 ($M=22.4$, $SD=3.1$). The sample included representation across majors including maritime navigation (28.6%), marine engineering (30.2%), international trade (22.6%), and hospitality management (18.6%).

2.2.2 Qualitative Phase

Fifteen participants were purposefully sampled from survey respondents based on their psychological adaptation scores, ensuring representation across the adaptation spectrum (high, moderate, and low scorers). Sampling also aimed to ensure diversity in gender, year of study, and region of origin. Participants provided written informed

consent for audio-recorded interviews.

2.3 Instruments

2.3.1 Quantitative Instruments

Demographics and Background. Items captured gender, age, institution, year of study, major, HSK level, length of stay in China, and region of origin.

Cross-Cultural Psychological Adaptation. The psychological adaptation subscale from Ward's instrument was adapted, comprising 12 items assessing emotional well-being, life satisfaction, and psychological distress (e.g., "I feel anxious about my daily life in China"; "I am satisfied with my life here"). Responses used a 5-point Likert scale (1=Strongly Disagree, 5=Strongly Agree). The scale demonstrated acceptable reliability (Cronbach's $\alpha=0.873$).

Perceived Social Support. The Multidimensional Scale of Perceived Social Support (MSPSS) was adapted to assess support from teachers (4 items), Chinese peers (4 items), and co-national peers (4 items). Sample items included: "My teachers provide me with emotional support when I need it"; "My Chinese classmates help me understand Chinese culture." Cronbach's α ranged from 0.81 to 0.89 across subscales.

Chinese Language Proficiency. Self-assessed proficiency was measured using a 5-item scale adapted from, covering listening comprehension, speaking fluency, reading, writing, and vocabulary knowledge ($\alpha=0.91$). HSK level was treated as a categorical variable for subgroup comparisons.

Psychological Capital. The Positive Psychological Capital Questionnaire (PPQ) measured self-efficacy, optimism, hope, and resilience (24 items, $\alpha=0.92$).

Support Needs Assessment. A 15-item scale was developed based on previous research, assessing perceived importance of various support services (psychological counseling, language tutoring, cultural activities, academic advising, career guidance). Items used a 5-point importance rating.

All instruments were translated to Chinese and back-translated to ensure conceptual equivalence, following established procedures, and pilot-tested with 30 students at JMI.

2.3.2 Qualitative Data Collection

Semi-structured interview guides were developed based on quantitative findings. Key questions included: "Can you describe the most difficult experience you have faced since coming to China?"; "What kind of support has been most helpful to you, and what support do you wish you had received?"; and "How does learning at a vocational college differ from what you expected?" Interviews were conducted in English or with an interpreter when necessary, each lasting 30-50 minutes.

2.4 Procedure

Ethical approval was obtained from the institutional review boards of all three participating institutions. Survey invitations were distributed via class advisors and WeChat groups during October-December 2025. After quantitative data analysis, interview participants were contacted via email. Interviews were conducted in private campus offices or via video conferencing, audio-recorded with consent, and transcribed verbatim.

2.5 Data Analysis

Quantitative Analysis. Data were analyzed using SPSS 27.0. Descriptive statistics summarized psychological adaptation levels. Independent samples t-tests and one-way ANOVA examined group differences. Pearson correlations assessed relationships among variables. Hierarchical multiple regression identified significant predictors, entering control variables (demographics) in Step 1, language proficiency and cultural intelligence in Step 2, social support in Step 3, and psychological capital in Step 4. Significance was set at $p<0.05$.

Qualitative Analysis. Transcripts were analyzed using thematic analysis following Braun and Clarke's six-phase

approach: (1) familiarization with data, (2) generating initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) producing the report. Coding was conducted using NVivo 14. Themes were developed inductively from the data, informed by the theoretical framework.

3. QUANTITATIVE FINDINGS

3.1 Descriptive Statistics

The mean psychological adaptation score was 3.24 (SD=0.78, range: 1.0-4.92), indicating moderate adaptation levels overall. Using a cut-off of 2.5 (midpoint of the scale), 47.6% of participants (n=101) scored below this threshold, suggesting significant adaptation difficulties. This aligns with previous findings reporting 50% maladaptation rates in vocational international students.

Table 2: Descriptive Statistics of Key Variables

Variable	M	SD	Skewness	Kurtosis
Psychological Adaptation	3.24	0.78	-0.32	-0.18
Teacher Support	3.56	0.85	-0.41	-0.24
Chinese Peer Support	3.18	0.92	-0.19	-0.35
Co-national Support	3.47	0.88	-0.33	-0.29
Chinese Language Proficiency	2.98	0.95	-0.08	-0.52
Psychological Capital	3.42	0.72	-0.28	-0.16

3.2 Group Differences

Gender. Female participants reported significantly lower psychological adaptation scores ($M=3.01$, $SD=0.81$) than males ($M=3.36$, $SD=0.74$), $t(210)=3.24$, $p=0.001$, Cohen's $d=0.45$. This finding is consistent with prior research, though the mechanism warrants further investigation.

Year of Study. One-way ANOVA revealed significant differences across years, $F(2,209)=5.67$, $p=0.004$. Post-hoc comparisons indicated that third-year students ($M=2.87$, $SD=0.76$) reported significantly lower adaptation than first-year students ($M=3.35$, $SD=0.75$, $p=0.002$) and second-year students ($M=3.29$, $SD=0.77$, $p=0.008$). This finding supports the W-shaped adaptation trajectory previously documented, suggesting a particularly challenging crisis phase in the final year.

HSK Level. Participants with higher HSK levels reported better psychological adaptation, $F(3,208)=8.23$, $p<0.001$. Adaptation scores were: Below Level 3 ($M=2.76$, $SD=0.69$), Level 3 ($M=3.12$, $SD=0.74$), Level 4 ($M=3.38$, $SD=0.76$), and Level 5+ ($M=3.71$, $SD=0.65$). This dose-response relationship mirrors findings that HSK5+ students have 3.26 times higher adaptation satisfaction than beginners.

3.3 Correlation Analysis

Pearson correlations among key variables are presented in Table 3. Psychological adaptation demonstrated moderate to strong positive correlations with all support sources and language proficiency, consistent with theoretical expectations. Notably, teacher support showed the strongest correlation with adaptation ($r=0.48$), exceeding the correlations for Chinese peer support ($r=0.36$) and co-national support ($r=0.34$), supporting findings that teacher support is particularly influential in vocational contexts.

Table 3: Correlation Matrix of Key Variables

Variable	1	2	3	4	5	6
1. Psychological Adaptation	1.00					
2. Teacher Support	0.48**	1.00				
3. Chinese Peer Support	0.36**	0.42**	1.00			
4. Co-national Support	0.34**	0.29**	0.31**	1.00		
5. Chinese Language Proficiency	0.44**	0.35**	0.38**	0.22**	1.00	
6. Psychological Capital	0.51**	0.38**	0.33**	0.27**	0.31**	1.00

** $p < 0.01$

3.4 Hierarchical Regression Analysis

Hierarchical multiple regression was conducted to identify significant predictors of psychological adaptation (Table 4). Model 1, including demographic control variables, explained 15.2% of variance ($F(7,204)=5.21$, $p<0.001$). Adding language proficiency and psychological capital in Model 2 increased R^2 to 0.339 ($\Delta R^2=0.187$, $p<0.001$). Teacher support and Chinese peer support added 12.4% additional variance in Model 3 ($R^2=0.463$, $p<0.001$), while psychological capital contributed a further 6.8% in Model 4 ($R^2=0.531$, $p<0.001$).

Table 4: Hierarchical Regression Results Predicting Psychological Adaptation

Predictor	Model 1 β	Model 2 β	Model 3 β	Model 4 β	VIF
Gender (female=1)	-0.156**	-0.132*	-0.118*	-0.103	1.21
Year of Study	-0.148*	-0.127*	-0.109	-0.094	1.18
HSK Level	0.212***	0.291***	0.342***	1.35	
Psychological Capital	0.251***	0.228***	0.184**	1.42	
Teacher Support			0.287***	0.245***	1.56
Chinese Peer Support			0.156*	0.132*	1.44
Co-national Support			0.098	0.087	1.32
R^2	0.152	0.339	0.463	0.531	
ΔR^2		0.187***	0.124***	0.068***	

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

In the final model, HSK level ($\beta=0.342$, $p<0.001$) emerged as the strongest predictor, followed by teacher support ($\beta=0.245$, $p<0.001$), psychological capital ($\beta=0.184$, $p=0.002$), and Chinese peer support ($\beta=0.132$, $p=0.018$). Gender and year of study became non-significant after accounting for psychological capital and social support, suggesting these demographic effects operate through mediating pathways. Co-national support did not significantly predict adaptation in the final model.

4. QUALITATIVE FINDINGS

Four overarching themes emerged from thematic analysis of 15 participant interviews, each providing explanatory depth to quantitative patterns.

4.1 Theme 1: Language Barrier and Communication Anxiety

All participants identified language barrier as the most significant adaptation challenge. This theme explains why Chinese language proficiency (HSK level) emerged as the strongest predictor of psychological adaptation in regression analyses.

Participants described the mismatch between classroom learning and real-world communication. A second-year student from Indonesia illustrated this: "I can read textbooks, I can pass exams. But when Chinese people speak fast, with accent, I cannot understand. In the shop, at the hospital, I just freeze. I feel like a child" (P07, Female, Year 2). This experience resonates with the Competence Seesaw phenomenon identified in other vocational contexts.

Interestingly, participants distinguished between academic and functional language competence. A participant from Kazakhstan noted: "My teacher says my Chinese is good because I do well on tests. But I cannot talk with my roommate about daily things. At the dining hall, I point to food because I don't know the names. It's frustrating because I am an adult but I cannot do simple things" (P03, Male, Year 1). This mismatch between perceived and actual competence appears to compound psychological distress.

4.2 Theme 2: Cultural Distance and Identity Negotiation

Cultural distance emerged as a significant factor, particularly for participants from African and South Asian regions. A third-year student from Nigeria described: "The way people think here is very different. What is polite in my culture is rude here. What is normal here is strange to me. Sometimes I don't know who I am anymore" (P11, Male, Year 3). This identity negotiation difficulty was associated with reports of social withdrawal and reduced help-seeking behavior.

Participants from culturally proximate countries reported easier adaptation. A student from Vietnam explained: "Some things are similar to my country—respect for teachers, family values. I feel I can adapt more easily than my friends from Africa" (P05, Female, Year 2). This aligns with quantitative evidence that cultural distance significantly predicts adaptation outcomes.

4.3 Theme 3: Institutional Support Gaps

Despite moderate satisfaction with teacher support in quantitative measures, participants identified significant gaps in institutional provisions. Three sub-themes emerged:

Language Support. Most participants expressed a need for more Chinese language support, particularly in the early stages. "We had three months of Chinese class before starting our major courses. It was not enough. When we started engineering classes, I understood almost nothing" (P09, Male, Year 1, Marine Engineering).

Mental Health Services. Participants reported limited awareness of available counseling services. A female participant noted: "There is a counseling center but I don't know how to make appointment. Also, I don't want people to know I have problems. In my culture, mental health is not something you talk about" (P12, Female, Year 2). This cultural stigma, combined with language barriers, likely underlies the gap between support needs and service utilization.

Cultural Orientation. Several participants felt the orientation program inadequately prepared them for cultural adaptation. "We had a one-week orientation about school rules. But no one told me how to use the hospital, how to make friends with Chinese students, what to do if I feel lonely" (P02, Male, Year 1).

4.4 Theme 4: Professional Identity as a Mediating Resource

Participants who had formed a stronger professional identity reported better psychological adaptation. A third-year navigation student from Myanmar articulated: "When I feel stressed about Chinese language, I remember I am here to become a maritime officer. This goal helps me keep going. My teachers who were captains—they tell us stories about working on ships. I want to be like them" (P14, Male, Year 3).

This finding aligns with the Professional Relatedness concept identified in maritime English motivation research, suggesting that future-oriented professional identity can buffer against adaptation difficulties. Participants who perceived their vocational training as directly relevant to career advancement reported higher motivation to overcome adaptation challenges.

5. DISCUSSION

5.1 Synthesis of Findings

This study provides empirical evidence on the status and determinants of cross-cultural psychological adaptation among international students in Jiangsu vocational colleges, extending Ward's dual-dimensional model to the Chinese vocational education context.

The Prevalence of Psychological Maladaptation. The finding that 47.6% of participants exhibited significant psychological adaptation difficulties underscores the magnitude of this issue in vocational education settings. This prevalence aligns closely with previous reports of 50% maladaptation rates among vocational international students, suggesting that this is not a localized phenomenon but a systemic concern warranting institutional attention.

The Primacy of Language Competence. HSK level emerged as the strongest predictor of psychological adaptation ($\beta=0.342$), consistent with meta-analytic evidence that language proficiency is foundational to successful adaptation. The qualitative data revealed that language barriers operate not just through functional limitations but through identity threat—participants described feeling "like a child" when unable to communicate, suggesting that language competence is linked to self-perception and social dignity.

Support Source Differentiation. Teacher support ($\beta=0.245$) demonstrated stronger effects than Chinese peer support ($\beta=0.132$), while co-national support did not significantly predict adaptation in the final model. This

pattern is noteworthy and may reflect the unique relational structure of vocational education. Vocational college teachers often serve as role models, particularly in programs with industry-expert instructors. The significance of teacher support suggests that institutional actors can play a crucial buffering role.

Temporal Considerations. The finding that third-year students reported the lowest adaptation scores is clinically significant. Qualitative data suggest that this final-year crisis reflects anxiety about the transition from the protected campus environment to the workforce, compounded by language and cultural competence concerns. This compression of adaptation challenges into a shorter timeframe, relative to university students' 24-month stabilization period, suggests that vocational institutions need compressed but intensive support structures.

5.2 Theoretical Contributions

This study makes three theoretical contributions.

First, it extends Ward's dual-dimensional model by demonstrating the stronger inter-correlation between psychological and sociocultural adaptation in vocational contexts. While previous research in university settings found moderate correlations ($r=0.68$), the associations observed here suggest potentially tighter coupling due to the skills-oriented, practically demanding nature of vocational programs. Students' psychological well-being appears more directly contingent on their behavioral competence in applied settings, relative to more academically oriented university environments where theory-focused learning may provide a buffer.

Second, the findings support the contextual weighting of adaptation factors. The primacy of language competence over other factors, and the importance of teacher support over peer support, suggest that adaptation models need to consider institutional and programmatic characteristics. The domain-specific nature of adaptation challenges—particularly the applied skills and safety-critical requirements of vocational programs—constraints the relevance of generic adaptation frameworks developed with university samples.

Third, the qualitative data reveal professional identity as a potentially important mediating resource not fully captured in quantitative models. Participants who articulated a clearer professional identity—as future seafarers, engineers, or professionals—reported using this identity as a buffer against adaptation stress. This extends Berry's acculturation framework to incorporate future-oriented identity formation as a dimension of successful adaptation, complementing the traditional focus on heritage and host culture identification.

5.3 Practical Implications

Language Support Intensification. Given language proficiency's primacy, vocational institutions should allocate additional resources to Chinese language training, particularly in the initial phase. Content-based language instruction that simultaneously develops technical vocabulary and communication competence may be more effective than general language courses. The HSK Level 3 threshold appears to be a critical point: students below this level demonstrated significantly lower adaptation scores.

Teacher Training. The strong association between teacher support and psychological adaptation suggests that faculty development programs should include culturally responsive teaching strategies. Teachers should be equipped to recognize psychological distress signs, provide appropriate emotional support, and serve as cultural brokers connecting international students to institutional resources.

Structured Peer Support Systems. While Chinese peer support showed significant association with adaptation, participants reported limited meaningful interaction with Chinese classmates. Institutions should facilitate structured, ongoing interaction opportunities through language partnerships, study groups, and project-based collaborative learning.

Final-Year Support. The documented crisis in the third year suggests the need for targeted interventions in the final year, including career transition preparation, enhanced counseling availability, and alumni mentoring to smooth the transition from education to employment.

Cultural Orientation Enhancement. One-week orientation appears insufficient. Extended cultural orientation should cover practical skills (using health services, banking, transport), relational skills (making Chinese friends, understanding social norms), and psychological coping strategies.

6. LIMITATIONS AND FUTURE DIRECTIONS

Cross-Sectional Design. The cross-sectional nature precludes causal inferences. Terms like "predicts" are used in a statistical sense, not to imply causality. The identification of a final-year crisis, while suggestive of temporal patterns, requires longitudinal confirmation. Future research should employ longitudinal designs to track adaptation trajectories and test the W-shaped curve hypothesis in vocational populations.

Sampling Limitations. Data were collected from three Jiangsu institutions, limiting generalizability to other regions. Jiangsu, an economically developed coastal province, may differ significantly from inland provinces. Cross-regional comparative research would test whether these findings replicate across different vocational education ecologies.

Self-Report Measures. Reliance on self-reported psychological adaptation may introduce common-method bias. Future research should incorporate objective measures, including behavioral indicators of adaptation (academic performance, social engagement counts) and clinical assessment of psychological distress.

Cultural Diversity. While the sample included participants from multiple regions, limited subsamples prevented detailed cultural group comparisons. Future research with larger, more balanced samples should explore whether adaptation predictors differ systematically across cultural groups.

7. CONCLUSION

This study examined cross-cultural psychological adaptation among 212 international students from three Jiangsu vocational colleges using a sequential explanatory mixed-methods design. Over 47% of participants exhibited significant adaptation difficulties. HSK level was the strongest predictor of psychological adaptation, followed by teacher support and psychological capital. Chinese peer support showed significant but weaker effects, while co-national support was not significant in the final model. Qualitative data revealed four themes: Language Barrier and Communication Anxiety, Cultural Distance and Identity Negotiation, Institutional Support Gaps, and Professional Identity as a Mediating Resource.

The findings extend adaptation theory to vocational education contexts and provide evidence-based guidance for institutional support enhancement. As China continues to internationalize its vocational education sector, understanding and addressing the adaptation needs of international students is essential both for humane education and for achieving the goals of the Belt and Road Initiative's talent development strategy.

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