

# Navigating cultural intelligence in language acquisition: Challenges and reforms in Chinese higher education

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**Abstract:** The study aims to explore the impact of examination-oriented education on Chinese English learners and the importance of cultural intelligence in second language acquisition. Through a questionnaire administered to postgraduate students majoring in English in China, the research discovered that the emphasis on test scores and strategies in China's higher English education system has led to a neglect of cultural backgrounds and cross-cultural communication. The findings underscore the necessity for reforms in English teaching within Chinese higher education to cultivate students' intercultural intelligence and enhance their readiness for international careers in the era of globalization.

**Keywords:** cultural intelligence; years of learning English; English proficiency level; attitude towards; cross-cultural communication

## 1. Introduction

Second language acquisition involves more than just comprehending linguistic patterns and norms—it is also a process of socializing into the target language culture. L2 learners must be able to appropriately use language in a culturally sensitive manner (Zhang et al., 2021). Moreover, Friedman argues that the economic landscape is undergoing a significant transformation from a hierarchical organization to a vertical structure (Vanderbok, 2005). Globalization has indeed contributed to a sense of the world becoming smaller and more interconnected, as highlighted by Friedman (2005) in his book. This concept of a “flat” world refers to the increased access to information, communication, and global markets facilitated by technological advancements. However, along with this interconnectedness, the increasing cultural diversity presents challenges for both individuals and organizations. The need for effective cross-cultural communication and understanding becomes crucial to navigate the complexities and differences that arise in a globalized world (Ang et al., 2007). On top of that, in the current era of higher education institutions' internationalization, it has experienced substantial transformation, evolving from a peripheral and minor aspect to a global, strategic, and integral element in the realm of higher education (Sylwia et al., 2023).

However, it is true that the research on individual capabilities for intercultural effectiveness is limited and lacks a systematic approach. Currently, there is no research on whether China's current approaches to English learning can effectively promote cross-cultural communication. English learning in China mainly adopts exam-oriented education, focusing on the years of learning English and academic performance. However, little attention has been paid to whether such educational methods can truly

facilitate intercultural understanding and exchange. More studies are needed to investigate how China's English teaching can be reformed and improved to better achieve the ultimate goal of applying English as a bridge to connect with other cultures, instead of just as a tool for test scores. The findings would provide insightful implications for both English pedagogy and China's national strategy in cultivating international communication capabilities among its citizens. Therefore, this study aims to figure out the potential relationships between years of learning English, English proficiency levels, and cultural intelligence. It also seeks to analyze university students' attitudes on cross-cultural communication through elicited metaphor analysis.

This study aims to propose the following three questions:

- What's the relationship between years of learning English and cultural intelligence.
- What's the relationship between English proficiency level and cultural intelligence.
- What's students' attitudes towards cross-cultural communication.

## **2. Literature review**

### **2.1. Cultural intelligence**

In recent years, the concept of cultural intelligence (known as cultural quotient, CQ) has risen in importance as a meaningful framework for successfully navigating intercultural communication and negotiations (Blasco et al., 2012).

There has been a growing interest in intelligence that goes beyond traditional measures and encompasses specific content domains. Social intelligence, emotional intelligence, and practical intelligence are examples of this expanded focus on "real-world" intelligence (Mayer et al., 2000; Sternberg et al., 2000; Thorndike and Stein, 1937). CQ aligns with this trend by acknowledging the practical realities of globalization and honing in on a specific domain: intercultural settings (Earley and Ang, 2003). It is a concept that encompasses an individual's ability to effectively navigate and lead in culturally diverse environments. It is recognized as a comprehensive and multifaceted construct that goes beyond mere knowledge of different cultures (Gozzoli and Gazzaroli, 2018). By acknowledging the complexity and breadth of cultural diversity, CQ provides a framework for individuals to develop the necessary skills and capabilities to engage with diverse cultures and effectively lead in multicultural settings.

Earley and Ang (2003) have made significant contributions to the field by introducing the construct of CQ. They recognized that intelligence is not solely a characteristic of the individual but is also influenced by the specific context in which it is applied. Additionally, they emphasized the importance of understanding how the interaction between the individual and the context can shape and influence intelligence. This classification highlights the complex and dynamic nature of intelligence and its relationship to the surrounding environment. Drawing on contemporary theories of intelligence, such as Sternberg's (1986) framework, Earley and Ang (2003) defined CQ as an individual's capacity to navigate and adapt successfully to new cultural contexts. It represents a form of situated intelligence in

which intelligent and adaptive behaviors are influenced by the specific values, beliefs, and norms of a particular society or culture. It recognizes that effective adaptation requires an understanding and appreciation of the cultural nuances and expectations within a given context. By incorporating this cultural sensitivity, individuals can engage in intelligent and adaptive behaviors that align with the values and beliefs of the culture they are interacting with.

Considering the novelty of CQ, it is important to begin by reviewing the theoretical conceptualization of its four dimensions. This will provide a foundation for further exploration. Additionally, Ang et al. (2007) developed a model that links specific dimensions of CQ to cognitive, affective, and behavioral aspects of intercultural effectiveness. Metacognitive CQ encompasses the higher-order cognitive processes that individuals employ to acquire and comprehend cultural knowledge (Flavell, 1979). It involves capabilities such as planning, monitoring, and revising mental models of cultural norms for different countries or groups of people (Ang et al., 2007). Individuals with high metacognitive CQ are consciously aware of others' cultural preferences before and during interactions. Those with high metacognitive CQ actively question cultural assumptions and are open to adjusting their mental models of cultural norms based on their ongoing interactions. This self-awareness and adaptability contribute to their ability to engage with individuals from different cultures in a culturally sensitive and effective manner (Gozzoli and Gazzaroli, 2018). Cognitive CQ is centered around individuals' knowledge of cultural norms, practices, economic and legal systems, as well as fundamental frameworks of values across different cultures (Hofstede, 2001; Triandis, 1994). This dimension of CQ involves acquiring an understanding of both the similarities and differences that exist among various cultures. Individuals with high cognitive CQ possess the ability to recognize and appreciate the diverse cultural nuances, allowing them to navigate cross-cultural interactions with a greater level of insight and sensitivity. Their knowledge and comprehension of cultural diversity contribute to their effectiveness in intercultural settings (Gozzoli and Gazzaroli, 2018). Motivational CQ reflects the ability to direct attention and energy toward learning about and functioning in situations characterized by cultural differences. Lastly, behavioral CQ pertains to the capability of displaying appropriate verbal and non-verbal actions when interacting with individuals from diverse cultures. As highlighted by Hall (1959), mental capabilities for cultural understanding and motivation must be complemented by the ability to exhibit culturally appropriate verbal and non-verbal behaviors based on the cultural values of specific settings. This dimension encompasses having a wide and flexible repertoire of behaviors (Ang et al., 2007).

Together, these four dimensions - metacognitive CQ, cognitive CQ, motivational CQ, and behavioral CQ—constitute the overall capability to function and manage effectively in culturally diverse settings (Earley and Ang, 2003). They are distinct facets of the multidimensional construct of CQ and may or may not correlate with each other. In summary, metacognitive CQ, cognitive CQ, motivational CQ, and behavioral CQ represent different capabilities that collectively form the overarching construct of CQ (Ang et al., 2007).

Scholars have studied factors impacting CQ. Crowne (2008) provided insight into how cultural exposure affects CQ development. Findings showed education or

employment abroad, as deeper exposure types, increased CQ levels. Şahin et al. (2014) longitudinally examined how international assignments impact CQ over time, finding personality also has a moderating role in the relationship between international assignment and motivational CQ.

Researchers have also explored CQ's relationship to leadership success. Rockstuhl et al. (2011) demonstrated that general intelligence predicted both domestic and cross-border leadership, while emotional intelligence predicted domestic leadership and CQ predicted international leadership. This indicates CQ's relevance for multicultural environments. Presbitero (2016) assessed the four-factor CQ model in virtual cross-cultural contexts, linking CQ positively to task performance.

Studies have also evaluated cultivating CQ through training. Ramsey and Lorenz (2016) demonstrated a cultural module increased students' CQ and course satisfaction. Imai and Gelfand (2010) controlled for other factors, showing CQ uniquely impacted intercultural negotiations. This suggests CQ may be developed via focused education.

While illuminating CQ's links to business, leadership, and global virtual teams, limited research has examined CQ in academic domains such as English majors. As English takes on greater global roles, understanding CQ functions for associated students and professionals warrant attention. CQ may influence intercultural skills, research collaborations, and managing diversity in English studies. Further investigation could offer useful insight.

## **2.2. English proficiency level**

We perceive 'English language proficiency' not merely as a standalone communication skill, but rather as a tool that enables the breakdown of communication barriers, facilitates interpersonal interactions, and assists students in shaping their attitudes and behavior while collaborating with individuals from diverse cultural backgrounds (Sylwia et al., 2023). Studies have shown that English as a global language has exerted considerable influence on the policies and practices of Asian Pacific countries (Nunan, 2003). China is no exception. In recent years, with the increasing frequency of globalization and international exchange, English education has occupied an important position in China's higher education system. However, China's higher English education faces many challenges and issues under the impact of examination-oriented education. Li (2016) pointed out that the College English Test (CET) in China has produced significant washback effects on teaching methods and student learning behaviors. Moreover, Huang and Brown (2009) explored the impact of cultural factors on Chinese English learners' academic learning and found that examination-oriented education made students more focused on test scores rather than actual language application abilities. Jin and Yang's (2006) research showed that Chinese college students' English level largely reflected the results of CET, further reinforcing the tendencies of examination-oriented education.

Cheng (2008) noted that English language tests in China are regarded as the key to success but the high-risk testing model also leads to homogenization of teaching and decline in students' learning motivation. Luo's (2013) critical analysis of the washback effects of CET-4/6 revealed that these examinations to some extent limit teaching innovation and the development of students' comprehensive abilities. Qi

(2007) studied the impact of high-stake tests on teaching reform and found that exam pressure led students to pay more attention to test skills rather than the cultivation of integrated language abilities. Zhang (2018) further analyzed the impact of high-stakes tests on students' learning motivations and strategies, finding that exam pressure significantly affected students' learning behaviors and mental health. Sun and Zou (2011) discussed reforms to China's graduate English entrance exams, emphasizing the close connection between exams and university admission. Hu and Trenkic's (2020) study showed that exam pressure had negative impacts on Chinese English learners' oral performance. Gu (2014) researched the influence of graduate English exams on students' exam motivation and anxiety, finding that high-risk tests significantly increased students' anxiety levels and affected learning outcomes.

However, CQ refers to a form of situational intelligence (Earley and Ang, 2003). Therefore, the excessive emphasis on examinations in China's current higher English education has made students pay more attention to test skills and strategies while ignoring an understanding of cultural backgrounds and cross-cultural communication. This testing model limits their performance and growth in cross-cultural communication.

### **2.3. Elicited metaphor analysis**

Elicited metaphor analysis (EMA) is a research method grounded in cognitive linguistics. It represents an approach of exploring abstract concepts through more tangible and embodied experiences. EMA aims to uncover subconscious attitudes and previous experiences related to English language learning by eliciting metaphors from learners (Hu et al., 2022). Jin et al. (2014) categorized early bilingual learners' attitudes into positive, negative, neutral and ambiguous categories. This reflects learners' feelings towards English learning and highlights the importance of culture, emotion and cognition during the early stages of acquiring a language.

EMA can examine learners' motivation toward language learning. Huang and Feng (2019) used EMA and interviews to investigate motivations of Chinese junior high Japanese learners across grades. Year 1 expressed enthusiasm through leisure and food metaphors. Year 2 indicated difficulty via journey metaphors. Year 3 valued practical benefits using skills metaphors. Data also showed Japanese learning connected to Japanese culture but faced English interference. Geng and Jin (2023) applied EMA to older Chinese adult English motivation in universities. Analysis of 412 linguistic metaphors and 34 interviews outlined key cognitive, emotional and behavioral characteristics of later-life second language motivation. Hu et al. (2022) analyzed Shanghai preschool attitudes via EMA, finding positive emotional and activity-based metaphors found metaphor helped Chinese preschoolers link language and thinking, revealing values in English learning.

In summary, EMA provides insight into deep perspectives through text analysis. While largely focused on motivation and attitudes toward English acquisition, few studies have used EMA to understand students' stances on cross-cultural communication, representing a potential avenue for future exploration. EMA proves useful for uncovering implicit perceptions affecting language learning. Therefore, this study aims to employ EMA to figure out students' attitudes towards cross-culture

communication.

Three research hypothesis were addressed as follows:

- Years of learning English does not have a significant relationship with CQ.
- English proficiency level does not have a significant relationship with CQ dimensions.
- Students' hold different attitudes towards cross-cultural communication.

### **3. Methodology**

#### **3.1. Participants**

The survey was administered to postgraduate students majoring in English in China by employing convenience sampling. The participant group consisted of students with varying travel abroad experiences. Most students were familiar with, or even enthusiastic about, popular cultures in Western countries. An online questionnaire was distributed in April 2023 with information about the study content and objective. They signed the informed consent before answering the questions, the study followed the principle of confidentiality. A total of 253 responses were received, with 249 valid after removing incomplete surveys (mean age = 24.71; 27 male, 222 female). Males and females were noticeably imbalanced in the English graduate program, a common phenomenon in CFL and other foreign language studies where females typically outnumber males (Xu et al., 2022). However, SPSS 27.0.1.0 analysis showed gender had no significant influence on the four CQ dimensions: Metacognitive [ $t(247) = 0.098, p = 0.922, \text{Cohen's } d = 1.04$ ], Cognitive [ $t(247) = -0.957, p = 0.339, \text{Cohen's } d = 1.08$ ], Motivational [ $t(247) = 0.153, p = 0.878, \text{Cohen's } d = 1.18$ ], Behavioral [ $t(247) = -1.577, p = 0.116, \text{Cohen's } d = 1.04$ ]. Participants were therefore considered homogeneous regarding CQ.

#### **3.2. Instruments**

This study employed a mixed methods approach combining quantitative survey data with Elicited Metaphor Analysis (EMA). By employing a mixed methods approach combining quantitative and qualitative research methods, the study was able to address limitations of utilizing only one method. This mixed method research enhanced the reliability and validity of the findings by triangulating data from different sources (Creswell and Clark, 2017). The survey was based on the Cultural Intelligence Scale (CQS) (Ang et al., 2007). Seven ordinal options were provided including 1 Strongly disagree to 7 strongly agree. A 20-item tool designed to assess comprehension, adaptation, and management in culturally diverse settings across four theoretical dimensions: metacognitive, cognitive, motivational, and behavioral.

Metacognitive CQ include 4 questions which asked about the mechanisms individuals employ to obtain and comprehend information. It involves the mental processes used to gain knowledge or wisdom. It has questions like: I am conscious of the cultural knowledge I use when interacting with people with different cultural backgrounds.

Cognitive CQ relates to organized knowledge structures. It underscores the significance of accumulated knowledge as part of intellectual ability. It has 6 questions

like I know the legal and economic systems of other cultures.

Motivational CQ points to the mental faculty for focusing and maintaining energy on specific tasks or circumstances. It recognizes motivational skills are crucial for tackling “real world” problems. It has 5 questions like I enjoy interacting with people from different cultures.

Behavioral CQ denotes observable manifestations or overt actions—what people demonstrate through their deeds rather than inner thoughts, correlating with Sternberg’s (1986) distinction between behavioral displays versus cognitive processes. It has 5 questions like I change my verbal behavior (e.g., accent, tone) when a cross-cultural interaction requires it.

In addition to demographic questions, participants’ English proficiency level was collected by asking students’ English exam score for graduate entrance exam. They were asked to complete the elicited metaphor: “For me, communicating with people from other cultures is like (1) \_\_\_\_\_ because (2) \_\_\_\_\_.”

## 4. Results and discussion

### 4.1. Descriptive results

To verify the original hypotheses, the study treated English learning time and initial professional course grades as independent variables. Linear regression analyses were then conducted with the four theoretical dimensions of metacognitive CQ, cognitive CQ, motivational CQ, and behavioral CQ as dependent variables.

The linear regression results showed that for the Metacognitive dimension of CQ, the influence of English majors’ English learning time ( $\beta = 0.091, t = 0.972, p = 0.332$ ) and professional course grades ( $\beta = 0.001, t = 0.670, p = 0.503$ ) were not significant. For the Cognitive dimension, the impact of English learning time ( $\beta = 0.132, t = 0.1350, p = 0.178$ ) and course grades ( $\beta = 0.000, t = -0.364, p = 0.717$ ) were also not significant. Regarding the Motivational dimension, English learning time ( $\beta = 0.055, t = 0.517, p = 0.606$ ) and grades ( $\beta = -0.002, t = -1.131, p = 0.259$ ) had no notable effects. For the Behavioral dimension, the impacts of learning time ( $\beta = 0.241, t = 2.59, p = 0.01$ ) and grades ( $\beta = 0.001, t = 0.916, p = 0.36$ ) were insignificant (see **Table 1**).

The linear regression equations are:

- Metacognitive CQ =  $5.084 + 0.091 \times \text{Years of English study} + 0.001 \times \text{English exam score}$ ;
- Cognitive CQ =  $4.492 + 0.132 \times \text{Years of English study} - 0.000 \times \text{English exam score}$ ;
- Motivational CQ =  $5.003 + 0.055 \times \text{Years of English study} - 0.002 \times \text{English exam score}$ ;
- Behavioral CQ =  $4.636 + 0.241 \times \text{Years of English study} + 0.001 \times \text{English exam score}$ .

**Table 1.** Correlation coefficients between years of English study, English exam score, and different types of learning engagement.

	Years of English study	English exam score	Metacognitive	Cognitive	Motivational	Behavioral
Years of English study	-	-	-	-	-	-
English exam score	0.022	-	-	-	-	-
Metacognitive	0.058	0.037	-	-	-	-
Cognitive	0.075	-0.027	0.661**	-	-	-
Motivational	0.025	-0.079	0.593**	0.639**	-	-
Behavioral	0.159*	0.053	0.630**	0.549**	0.621**	-

\* Correlation is significant at the 0.05 level (2-tailed). \*\* Correlation is significant at the 0.01 level (2-tailed).

#### 4.2. The Relationship between four dimensions of CQ

As shown in the (Table 2), metacognitive CQ involves advanced cognitive processes of understanding and acquiring cultural knowledge at the individual level (Flavell, 1979). The data shows that the average score of metacognitive CQ is 21.0711, with a standard deviation of 4.16844, a median of 20, and a skewness of 0.238. This indicates that the respondents' scores on this dimension were slightly below the middle level but were relatively normally distributed and concentrated. This means that most respondents performed consistently in planning, monitoring, and correcting their mental models of cultural norms (Gozzoli and Gazzaroli, 2018).

**Table 2.** Descriptive statistics for different dimensions of CQ.

Variable	M	SD	Min	Max	Median	Kurtosis	Variance
Metacognitive CQ	21.0711	4.16844	4	28	20	0.238	17.376
Cognitive CQ	25.0435	5.90484	5	35	25	0.191	34.867
Motivational CQ	23.7708	5.42141	5	35	24	0.367	29.392
Behavioral CQ	26.7826	5.20342	5	35	27	0.903	27.076

Note: N = 253.

Cognitive CQ focuses on knowledge of norms, practices, economic and legal systems, and values of different cultures (Hofstede, 2001; Triandis, 1994). The average score of cognitive CQ is 25.0435, with a standard deviation of 5.90484, a median of 25, a skewness of 0.191, and a variance of 34.867. The data shows that the respondents' scores on cognitive CQ were close to the middle level but the scores varied, indicating significant individual differences in cultural knowledge. Some respondents had relatively high cognitive knowledge of different cultures, while others had larger knowledge gaps.

Motivational CQ reflects the attention and effort individuals put into learning and adapting to cultural differences (Ang et al., 2007). The average score of motivational CQ is 23.7708, with a standard deviation of 5.42141, a median of 24, and a skewness of 0.367. This indicates that the respondents' scores on motivational CQ were slightly below the middle level but the distribution was relatively normal and the scores were dispersed. This means that individual differences in motivation in intercultural contexts were significant, reflecting differences in intrinsic interests and external



incentives (Gozzoli and Gazzaroli, 2018).

Behavioral CQ involves the ability to exhibit appropriate verbal and nonverbal behaviors in intercultural interactions (Ang et al., 2007). The average score of behavioral CQ is 26.7826, with a standard deviation of 5.20342, a median of 27, and a skewness of 0.903. This shows that the respondents' scores on behavioral CQ were slightly above the middle level and the distribution was relatively concentrated, meaning that most respondents performed consistently in adapting to different cultural environments in terms of behavior (Hall, 1959).

### 4.3. The Relationship between years of English learning and CQ

Then researchers conducted linear regression analysis. Based on the equations, years of English study had a positive influence on metacognitive CQ (coefficient = 0.091), cognitive (coefficient = 0.132), and motivational CQ (coefficient = 0.055). For behavioral CQ, the positive influence (coefficient = 0.241) was larger. However, according to the *p*-values, years of English study did not significantly influence the metacognitive CQ ( $t = 0.972, p = 0.332$ ), Cognitive CQ ( $t = 0.1350, p = 0.178$ ), or Motivational CQ ( $t = 0.517, p = 0.606$ ). For Behavioral CQ, the effect of years of study ( $t = 2.59, p = 0.01$ ) was insignificant (**Figure 1**).

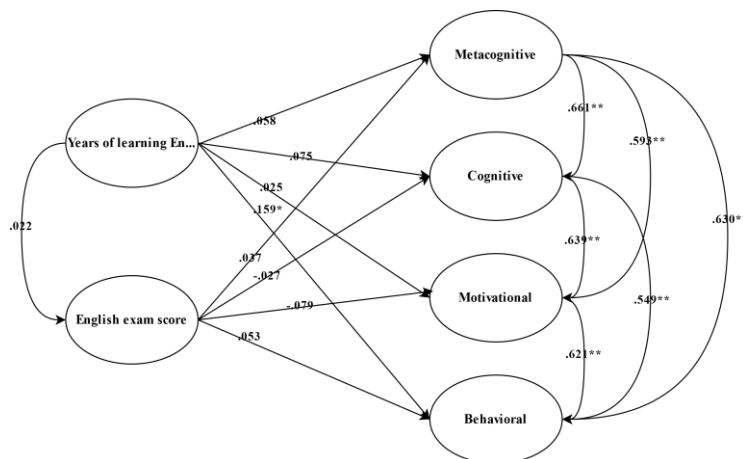


Figure 1. Structural model.

This finding indicates years of English language learning is not a determining factor in developing CQ. Initial course grades also did not notably influence any of the four dimensions. While English proficiency is important for effective communication, there is no direct relationship between it and CQ dimensions.

This answers the researchers' first question regarding the relationship between years of English study and CQ, not rejecting the original hypothesis H1 that there is no significant association. CQ distinguishes itself by culture-general abilities rather than place-specific knowledge. Hence, relying solely on English study time for cultivating CQ brings insignificant help. The researchers suggest future Chinese English education should emphasize cross-cultural communication, negotiation skills, and development of social, emotional, and practical intelligence.

#### **4.4. The Relationship between English proficiency level and CQ**

Researchers analyzed the regression equations to compare the influence of initial graduate course grades and years of English study on the four CQ dimensions. Initial course grades had a minor positive effect on the metacognitive dimension, with a coefficient of 0.001, though the impact was small. Grades had near zero effect on the cognitive dimension, with a coefficient of 0.000, meaning little noticeable influence. The impact on motivational was very minor, with a coefficient of  $-0.002$ . For behavioral, the coefficient of 0.001 indicated a small effect of grades.

However, based on p-values, grades did not significantly impact metacognitive CQ ( $t = 0.670, p = 0.503$ ), cognitive CQ ( $t = -0.364, p = 0.717$ ), motivational CQ ( $t = -1.131, p = 0.259$ ), or behavioral CQ ( $t = 0.916, p = 0.36$ ) (**Figure 1**). Therefore, the alternative hypothesis H2 could not be rejected, answering the second research question regarding the relationship between English proficiency and cultural intelligence. This also exposed issues in current Chinese English education's emphasis on grades over other competencies.

#### **4.5. University students' attitudes towards cross-cultural communication**

This study also used elicited metaphor analysis (EMA) to explore university students' attitudes towards cross-cultural communication. EMA involves analyzing metaphors based on three core elements: target domain, source domain, and entailment. As informed by previous research (Jin et al., 2016), these elements were examined within the question structure "For me, communicating with people from other cultures is like (1) \_\_\_\_\_ because (2) \_\_\_\_\_." This question format elicited metaphors describing the target domain of cross-cultural communication through a source domain, along with explanatory entailments. For example, a metaphor like "Communicating with people from other cultures is like apples because apples are sweet" positions apples as the source domain metaphor for the target of communicating with people from other cultures, with an entailment of "because apples are sweet." Before interpreting the metaphorical texts, researchers first validated the elicited metaphors and excluded any invalid ones.

Through analyzing metaphors of cross-cultural communication, this study unveils the diversified experiences in cross-cultural interactions. These experiences can be generally categorized into four aspects: novelty and unfamiliarity, barriers and challenges, necessity and norm, as well as bridges and integration. The following part will elaborate on each category respectively.

The first category is novelty and unfamiliarity. It compares cross-cultural communication to opening doors to new worlds, discovering new lands, encountering different personalities, travelling, and exploring, etc. These metaphors highlight the curiosity and sense of adventure brought by cross-cultural interactions, demonstrating people's positive attitudes towards unfamiliar cultures in the communication process. For instance, metaphors like "opening doors to new worlds" and "discovering new lands" reveal cross-cultural communication as an important approach to exploring the unknown and enriching one's life. It allows individuals to experience the unique charm of different regions and cultures, thereby broadening their horizons and cognitive scope. Furthermore, descriptions such as "travelling", "exploring" and "tasting various

cuisines” further emphasize the pleasurable experiences in cross-cultural communication. These activities serve not only as important ways of understanding other cultures but also means of personal enjoyment and relaxation. For example, “For me, communicating with people from other cultures is like discovering a new continent, because it is strange yet intriguing.” in this sentence, source domain is discovering a new continent, target domain is communicating with people from other cultures, entailment is “because it is strange yet intriguing”. It not only emphasizes the enjoyment of cross-culture communication, but also full of surprise.

The second category is “barriers and challenges”, which depicts potential communication barriers and misunderstandings in metaphorical terms like “speaking two different languages” and so on. Language barriers present notable challenges in cross-cultural interactions. For example, “speaking two different languages” not only reflects the difficulties caused by language barriers but also uncover the perceptual biases derived from cultural background discrepancies, which may lead to misunderstandings and disputes affecting interaction outcomes. In addition, metaphors such as “stepping on landmines” and “communicating with aliens” highlight the latent risks and uncertainties brought by cultural differences. They indicate the necessity of high sensitivity and adaptability in cross-cultural communication to avoid negative consequences of cultural clashes.

The third category of “necessity and norm” regards cross-cultural communication as a norm and necessity in life. Metaphors like “breathing”, “drinking water” and “air” emphasize the indispensable significance and prevalence of cross-cultural communication in everyday life. These metaphors suggest that cross-cultural communication has become an integral part of modern society, playing pivotal roles in areas like work, study and daily socializing. For example, “breathing” and “air” analogies underscore that cross-cultural communication has permeated people’s routine as crucial as basic necessities of living. However, metaphors like “national college entrance examinations” also reveal the potential pressures and discomfort cross-cultural interaction may bring about, requiring high intensity of preparation and coping capabilities in certain contexts.

The fourth category of “bridges and integration” views cross-cultural communication as bridges that facilitate mutual understanding and integration between distinct cultures. Metaphors such as “bridges”, “tying knots” and “keys” demonstrate its constructive function in connecting different cultures. They indicate that cross-cultural communication serves not only as a communication tool but an important means of promoting cultural understanding and integration. For instance, “bridges” and “keys” metaphors showcase how cross-cultural communication can open doors of mutual comprehension and establish links between diverse cultures. In addition, the metaphor of “rainbow” underscores the diversity and inclusiveness in cross-cultural interactions, symbolizing the ideal state of different cultures achieving understanding, respect and fusion through communication.

By analyzing the multifaceted experiences in cross-cultural communication, we can see its multi-dimensional roles in contemporary society. It brings not only novelty and enjoyment but also various barriers and challenges. Meanwhile, it has become both a necessity and norm in life, and plays a significant part in fostering cultural comprehension and integration. Future research can further explore how to effectively

tackle barriers in cross-cultural communication and better leverage its functions of promoting cultural diversity and inclusion. Additionally, it is worth investigating its practical applications in distinct contexts and domains to provide more theoretical guidance and empirical support for real-world practices.

## **5. Conclusion**

This study employed a mixed methods approach to investigate CQ development. Quantitative analysis found years of English study and English proficiency level had minimal effects on boosting the metacognitive CQ, cognitive CQ, motivational CQ, and behavioral CQ as measured. The results validated hypotheses that current Chinese English education provides little practical support for developing CQ, as English learning time and performance bore no relationship to levels of this ability. This study also gained insight into the varied experiences of cross-cultural interaction by examining metaphors used to describe cross-cultural communication. Four broad categories emerged from the analysis to capture these experiences: The first recognizes cross-cultural communication as bringing novel and unfamiliar encounters. A second category points to the obstacles and difficulties involved. A third sees cross-cultural interaction as both indispensable and regular aspects of modern life. Finally, a fourth perspective views cross-cultural communication as building connections between cultures and furthering mutual understanding. This study provides important inspiration for reforms in English teaching within higher education in China under the backdrop of economic globalization. As globalization further integrates the world's economies, the ability to effectively communicate cross-culturally becomes increasingly vital for China's college graduates to succeed in their international careers. The findings suggest Chinese universities should re-examine their English pedagogy and place more emphasis on developing students' intercultural competence, such as by incorporating multi-cultural perspectives and real-world intercultural communication scenarios into English teaching. This will help cultivate global graduates with both proficient language skills and cultural sensitivity, thereby better supporting China's ongoing integration into the global economic landscape in the context of deepening globalization. Incorporate more culturally diverse content and perspectives into existing English courses. For example, assign readings from non-Western authors and introduce discussion questions that prompt intercultural analysis and comparison. Higher education should develop cultural awareness courses focused on comparison of different cultural values, norms, practices, and worldviews. Moreover, teachers should adopt student-centered pedagogies instead of just lecturing. In the future, universities in China can collaborate with international universities to create joint degree programs or semester-abroad opportunities with culturally-immersive experiences.

However, this study is not without limitations. Using a convenience sample of graduate students limits the generalizability of the findings to the broader population of Chinese English learners. Future studies could aim for a more representative sample by including undergraduates from multiple universities across China. Future research can longitudinally examine specific influencing factors in CQ development over time. Alternative standards for assessing language proficiency impacting cross-cultural

effectiveness will also be explored. Studies on interplays between language ability, cultural awareness and adaptability across backgrounds can deepen understanding of how linguistic skills facilitate intercultural competence. Moreover, even though the statistical analysis didn't find gender to significantly influence the results, males perspectives may be underrepresented. Future study should explore whether attitudes differ between genders.

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