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Role of English language teaching methods in enhancing English language learning at Chinese vocational colleges: Mediating influence of intercultural communicative competence

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Abstract: The purpose of the current study is to examine the mediating role of intercultural communicative competence on the relationship between teaching of English language and learning at Chinese higher vocational colleges. The convenience sampling technique was used to collect data from 668 teachers, teaching English language subjects in different public and private Chinese higher vocational colleges. Smart partial least squares-structural equation modeling on SmartPLS software version 4 was used to test the hypotheses. The result revealed the direct effect of English language teaching (ELT) is not significant on English language learning (ELL). However, the intercultural communicative competences (ICC) have been tested and proved to be a potential mediator between English language teaching and learning. Because the indirect effect of ELT on ELL is positive and significant through mediator ICC. Therefore, based on the findings of this study, it can be concluded that the inclusion of intercultural communication ability is a crucial component in the vocational education of college students. Policymakers should be cautious about promoting and expanding the availability of cultural teaching and learning across demographic conditions (e.g., linguistic and ethnic diversity, age, and gender) and various levels of language proficiency. In accordance with the effects of teacher education and professional development programs, the implementation of ICC content necessitates a harmonization of pedagogical approaches and assessment practices across designated levels in order to effectively achieve educational objectives. To promote ICC in English language education, there must be clear guidelines and communication to school leaders, educators, and administrators regarding the necessity and goals of cultural integration.

Keywords: English language teaching; intercultural communicative competence; English language learning; structural equation modeling; SmartPLS software

1. Introduction

In the present era of globalization, it is crucial to take into account the importance of effective communication skills while interacting with people from different origins and cultures (Abidin et al., 2024). In this regard, English has become a global language that is widely used in communication across countries due to its dissemination through information technology, trade, and education (Khamkhien, 2012). Different ethnicities, English speaker carries standards and expectations from their culture and education (Wang, 2023). Hence, proficient language users must possess both linguistic competences, encompassing grammatical proficiency, and the capacity to effectively engage in cross-cultural communication and interaction (Dinh and Vu, 2022). For instance, prior research

showed the need to educate students to be cross-culturally competent to effectively engage and collaborate with people from various aspects of life (Fathi and Rahimi, 2022).

Higher vocational education is crucial in today's culture because it provides students with the specialized knowledge and skills necessary to succeed in the ever-changing work market. In addition, students can improve their global competitiveness through increased language fluency and an expanded worldview through higher vocational English education (Ling et al., 2023). Besides that, higher vocational students must have cross-cultural communication skills due to the increasing globalization of the economy and the number of foreign exchanges. They can better communicate in a multicultural setting, understand cultural norms, practices, and feel more comfortable competing on a global stage because of these abilities (Zhu, 2024). The main objective of English language instruction has shifted from strengthening language abilities to helping students communicate across cultures (Liu, 2022). The ability to communicate effectively and appropriately across cultural boundaries is known as intercultural communicative competence. This competency encompasses a person's cognitive, affective, and behavioral capacities. Moreover, the capacity to communicate and work well with people from different cultural backgrounds is known as intercultural competence. Finding common ground in interactions with people who have diverse cognitive-affective, behavioral, and affective worldviews is a key component of intercultural competence, according to earlier research (Abidin et al., 2024).

Knowledge, attitudes, and abilities are the three pillars of Byram's (2021) alternative paradigm for ICC. According to Byram's (1997) ICC model, attitudes are people's evaluations of their own cultural meanings, beliefs, values, and actions. When interacting with members of one's own social group, these attitudes tend to be more subtle. Two parts make up the knowledge dimension: (a) knowing one's own social groupings and culture, as well as the other person's; (b) knowing how people interact with each other on a personal and societal level. The competency metric measures people's familiarity with their own and other contexts in order to evaluate and understand documents written in a foreign language (Han et al., 2022). Moreover, Byram (2021) claims that intercultural and communication ability are key to ICC. The former includes linguistic, sociocultural, formulaic, interactional, strategic, and discourse competence and the capacity to utilize the target language effectively in various settings. The latter is the ability to communicate effectively in one's own language with people from different cultures. Thus, teaching ICC to students is crucial because it will help them understand their own and others' cultures and communicate with people from different cultures in the specified language (Permatasari, 2023).

The significance of ICC in ELT is extensively recognized (Ardi and Iswandari, 2022). As a result, ICC instruction has become standard practice at many universities throughout the world. However, ICC teaching and learning emphasizes the significance of changing students' responsibilities (An et al., 2024). In order to successfully interact with people from different cultural backgrounds, ICC students need to have self-awareness, transformational skills, and the ability to transcend. English language learners in the modern era should not passively absorb information

but rather actively seek it out and use it as a lens through which to view and make sense of the world (Syarif, 2023). In order to develop ICC, students need to participate in collaborative activities that promote two-way communication and encourage them to investigate the association between language and culture (Gutiérrez-Santiuste et al., 2023).

English instruction in higher vocational education goes beyond simply improving language skills. It also aims to cultivate students' ability to communicate effectively across different cultures by promoting cultural understanding (Zhou, 2019). Vocational college students' intercultural communication ability mostly develops via the utilization of intercultural teaching activities conducted by English professors (Li and Yuan, 2023). In the current educational setting, it is evident that English teachers in higher vocational education possess a subjective perception on intercultural education (Hutchison and McAlister-Shields, 2020) and have mixed feelings about incorporating cultural aspects into language training, according to studies (Luk, 2012). They possess a flawed understanding of foreign language teaching methodologies and harbour misconceptions on the concept of intercultural competence. The teaching methods remain focused on the instructor and prioritize the instruction of the language and culture of the nation where the target language is spoken. The main goal is still to develop language proficiency (Friedman, 2023).

Ladegaard et al. (2015) found that intercultural communication competence (ICC) has a substantial influence when individuals interact with a diverse group. ICC is often used in an adaptive way, developing through the skills gained from intercultural contact. In order to equip students to work in multicultural and multinational work environments across various industries, vocational education has had to adapt to the demands of intercultural communication (ICC) based on the principles of intercultural communication theory (Penbek et al., 2012). When considering the extent of ICC, it becomes apparent that elevated levels of ICC can contribute to the existing intercultural obstacles faced by ELT in vocational education (Thumawongsa and Thongpan, 2023).

English instructors in higher technical education who lack cultural literacy are facing difficulties in teaching cross-cultural communication and assisting their students in effectively interacting with individuals from diverse cultures (Hao, 2022). Prior research has overlooked the stages and progression of intercultural competence development and lacks a precise understanding of how intercultural competence develops among students (Bùi, 2023). Intercultural teaching differs from traditional teaching methods, requiring educators to possess advanced instructional skills. The present instructional strategy primarily focuses on textual material, with a strong emphasis on elucidating English vocabulary, translating texts, and analyzing grammatical concepts (Yang, 2023).

The purpose of the current study is to examine the role of ELT methods on intercultural communicative competence for teaching of English language learning (ELL) at Chinese Higher vocational colleges. Primarily, one can develop intercultural awareness through one's immediate social circle; secondarily, one can learn it in formal educational settings; for example, when one learns a new language, they learn both the language and the culture of the target country. When it comes to the worldwide English language market, Chinese English speakers are a major

player. It is important to comprehend how Chinese English language students themselves see and interact with ELT in China. An illustration of this can be seen in the fact that intercultural communicative competence assists learners in becoming intercultural speakers by integrating culture into language instruction, whereas previous approaches emphasized native speakers (Li and Liao, 2023). Besides that, intercultural acceptance, respect, and understanding will be fostered. In a similar vein, the students possess a restricted comprehension of foreign cultures and an insufficient command of Chinese culture, which is also their country of origin. Students' intercultural comprehension gap is mostly due to teachers' intercultural instructional approaches (Wang et al., 2023). This study set out to reveal how crucial intercultural communicative competency (ICC) and English language teaching (ELT) approaches are to second language acquisition. Previous research in this area was also limited.

2. Literature review

2.1. Supporting theory

2.1.1. Byram's model of intercultural communicative competence

Byram (2000) argues that there are three primary components of intercultural communicative competence (ICC) as proposed by the paradigm: knowledge, skills, and attitudes. As a whole, knowledge includes not only the ability to communicate effectively in a variety of social and cultural settings, but also cultural awareness, knowledge about particular cultures, and knowledge about sociolinguistics. The capacity to hear, see, understand, assess, and make associations are all components of skill. Having the right attitude means accepting and even embracing uncertainty, as well as tolerating ambiguity and others. It is generally acknowledged that ICC has a developmental quality as a paradigm and set of components. This means that it is not static but rather stands for an ongoing process of learning that occurs at every stage of life. The development of cultural knowledge, attitudes, and behaviors related to language is essential for successful intercultural communication and can thus lead to an enhancement of ICC (Ghajarieh and Safiyar, 2023). Additionally, this can be achieved by means of language development, as language development contributes to an improvement in ICC. According to previous study, 'the link between the capacity to operate effectively in a foreign language and the clusters of skills, knowledge, and attitudes that may be learned or transformed' can improve ICC. Therefore, second-language proficiency may be linked to ICC development (Sevimel-Sahin, 2020).

2.1.2. English language teaching methods and ICC

In the contemporary era of globalization, the capacity to communicate and establish connections with individuals of diverse cultural contexts has assumed paramount importance. The development of intercultural communication abilities is presently recognized as an essential prerequisite for people to participate in significant exchanges (Makhmudov, 2023). In a similar vein, globalization has expanded as a result of numerous factors, including commerce, education, and technology, tourism. Due to globalization, international relations have increased,

making intercultural communication, specifically cross-cultural communication, essential (Sevimel-Sahin, 2020). Hismanoglu (2011) found that intercultural competence (ICC) was better among pre-service English language teaching (ELT) students who possessed advanced language abilities, had lived abroad before, and had undergone ICC training explicitly. Furthermore, English teaching methodologies in China have progressed to integrate a more interactive and practical approach. Although grammar teaching is crucial, there is now a stronger focus on cultivating practical language skills for effective communication in real-world situations. An increasing number of educational initiatives aim to equip students with the skills necessary to engage in global exchanges by enhancing their oral communication, listening comprehension, and speaking ability. Many studies have shown that creating an entirely immersive learning environment with multimedia resources, interactive exercises, and language immersion programmes can significantly improve language acquisition (Liu and Fang, 2017).

Numerous academics (Abdzadeh et al., 2020; Kusumaningputri et al., 2018; Mohamed et al., 2020; Sevimel-Sahina, 2020) have discovered that incorporating explicit instruction on cultural aspects in English language lessons, in conjunction with the study of linguistic principles, can significantly strengthen students' intercultural awareness. Consequently, this leads to the advancement of their ICC (Permatasari, 2023). Within the context of Intercultural ICC, it is reasonable to assume that undergraduate English language leaching (ELT) students in teacher education programs are exposed to the English language to a significant degree. They study the English language intensively in preparation for teaching it in their future classes and are also significantly engaged with various linguistic aspects. As a result, persons who are more likely to exhibit a higher degree of skill in the language also have a deeper awareness of its historical and cultural background (Sevimel-Sahin, 2020). Therefore, we hypothesized as:

H1: There is a significant positive association of ELT with ICC.

2.1.3. ICC and English language learning

The association between language and culture might be conceptualized as that of a medium and its message. Intercultural communication is widely acknowledged as an essential aspect of language learning and development, since it helps foster learners who have long-lasting cultural and linguistic identities (Al Khateeb et al., 2023). Intercultural communication competence pertains to those who possess proficient communication abilities and actively participate in conversations, while concurrently possessing extensive understanding of the political, cultural, and societal aspects of diverse nations (Tursunovich, 2023). Al Khateeb et al. (2023) state that in order to highlight the use of language in different cultural situations, the cultural dimension of foreign language instruction moved from the communicative method to the intercultural communicative approach. The former acronym ICC encompassed competencies including intercultural sensitivity, global competence, and effective cross-cultural communication. Furthermore, according to Bale and Rossiter (2023), individuals who possess the capacity to develop their cultural and sociolinguistic awareness and can readily observe, attend, evaluate, analyze, and interpret information are considered interculturally competent.

By incorporating intercultural language learning into the curriculum, students are exposed to cultural elements that are fundamental to the proper use of a language. This perspective acknowledges that language is more than just a system of rules for words and grammar; it is also strongly related to the people who speak it. As a result, both successful communication and language acquisition depend on being aware of cultural context (Phuong and Trang, 2023). According to Sevimel-Sahin (2020), a correlation exists between the acquisition of intercultural communicative competence and proficiency in the target language. The capacity to effectively communicate across cultural boundaries is related to a set of skills, attitudes, and information that can be improved through training and education (Fantini, 2012). Therefore, it is reasonable to assume that developing one's ICC (intercultural communicative competence) is associated with taking language classes. Thus, it was hypothesized as:

H2: There is a significant positive association of ICC with ELL.

2.1.4. ELT and ELL

According to Abdulkhay and Nasibulloh (2023), English is the most spoken language in the world. It opens doors to new opportunities, helps economies grow, and promotes international participation. From elementary school all the way through university, the Chinese educational system stresses the importance of teaching students English. All students are expected to complete English language studies as part of their curriculum, and it is highly encouraged that they strive for higher competence levels (Wang et al., 2023). Nevertheless, empirical investigations are necessary to explore the pedagogical approaches and strategies that might be used to foster these skills in language learning, as there is a lack of research on ELT (Javadi and Sarkhosh, 2023). ELT materials contain hidden curriculum explicitly addressing diverse cultural messaging.

English teaching approaches incorporate the development of language skills, critical thinking, and intercultural competency (Ye, 2024). Curriculum investigations encompass a range of subjects, such as the curriculum planning framework, pedagogy knowledge, prior learning, the significance of practice, contemporary practices in English Language Teaching (ELT) curriculum, collaborations and partnerships, and curriculum assessment. Even training programs require curriculum evaluations in order to develop an efficient, content-relevant, and feasible curriculum (Downes et al., 2017). The changing face of English poses a challenge for ELT practices to more accurately reflect sociolinguistic reality and English as a lingua franca (ELF) usage. In order to prepare students for global English use, general education researchers have emphasized the necessity for ELT to improve students' understanding of its multiplicity. Such practice is highly relevant in the era of globalization because it enables students to communicate with native speakers and non-native speakers who speak various varieties of English (Jindapitak et al., 2022). Thus, we formulate following hypothesis:

H3: There is a significant positive association of ELT with English language learning.

2.1.5. ICC as a mediator between ELT and English language learning

Intercultural competence is "the ability of an individual to behave appropriately and with flexibility when confronted with the actions, attitudes, and expectations of representatives of foreign cultures" (Derin et al., 2009). According to Fitriyah and Munir (2019), ICC has the ability to initiate students' personal and social development by promoting their learning and comprehension of both their own and the target culture. Applying the principles of ICC enables learners to bridge cultural and linguistic gaps and build connections. Intermediaries with an in-depth understanding of diversity are able to accomplish this (Berardo and Deardorff, 2023). ICC is a tool that helps individuals understand each other and break down barriers. Being able to communicate effectively across cultural boundaries is only one benefit of developing intercultural competence; it also opens doors to meeting and forming relationships with people from many walks of life. Therefore, it is crucial to improve the integration of ICC instruction in ELT (Garcia, 2022).

Supporters of incorporating cultural components into ELT textbooks with the goal of improving students' ability to communicate across cultural boundaries are becoming more vocal. Haerazi and Thayyib (2023) state that language learners can potentially have their cultural knowledge and awareness enhanced through the development of intercultural communicative competence. Enhancing their communication and language skills in a practical and efficient manner is closely related to this particular talent. In order to foster the development of intercultural attitudes among language learners, the idea of ICC offers a useful framework for researching and analyzing different cultures. It is possible that local curriculum developers and publishers are oblivious to the potential impact that ICC could have on English language education (Moghaddam and Tirnaz, 2023). In order to encourage self-directed learning and the development of a multicultural identity, previous studies have shown that language classes should place an emphasis on cultural elements and discourse. This approach aims to equip students with the necessary skills to address their own challenges and effect positive change in their society (Torres et al., 2021). Therefore, based on the above-mentioned literature (see **Figure 1**), following hypothesis was developed:

H4: ICC has a mediating role between ELT and English language learning.
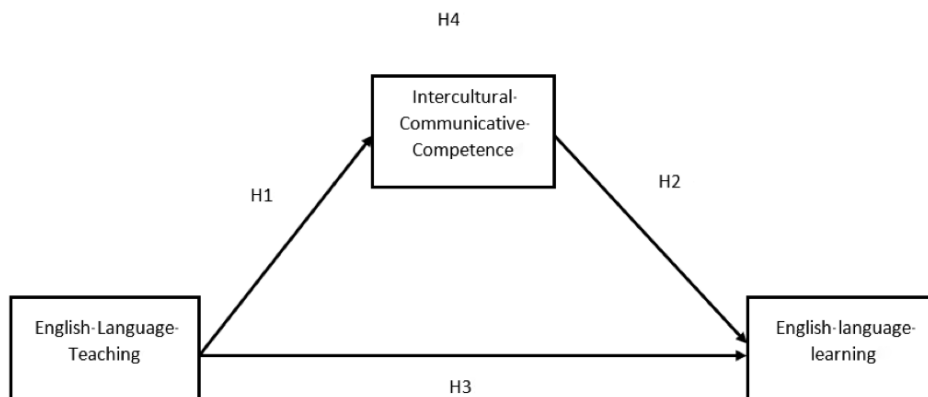

Figure 1. Conceptual model.

2.2. Research methodology

Due to the disruptive impacts of the COVID-19 pandemic, nationwide shifts to online teaching and learning prompted the use of a convenience sampling technique to collect data from Chinese higher vocational college teachers (Taherdoost, 2016). The first author liaised directly with department heads from both public and private higher vocational college in China to facilitate data collection. The heads of departments agreed to assist by disseminating an online survey through WeChat and G-mail, a popular social media app, to vocational college teachers. Data collection occurred over five months, teachers willing to participate further shared the questionnaire within their course department WeChat groups. Clear information about the survey's nature, purpose, estimated completion time, anonymity, and the participants' freedom to decline or withdraw at any point was communicated to the teachers.

The G* power software indicates that a minimum sample size of 119 respondents is required for this study to reach a power of 0.95 and a medium effect size of 0.15 (Faul et al., 2007). The researchers collected data from 668 teachers, surpassing the necessary sample size. 830 surveys were distributed, and 698 were returned. After eliminating 30 incomplete responses, 668 surveys remained, yielding an impressive response rate of 80.48%. To assess common method variance, Harman's single-factor test was conducted post-data collection. The result, indicating an extraction sum of squared loading of 16.78% variance, fell below the 50% threshold, suggesting an absence of common method bias in the data (Tehseen et al., 2017). Among the 668 participating teachers, 446 were female (66.8%) and 222 were male (33.2%). The majority of teachers fell within the 31 to 40 years of age bracket and held Master's degrees. Lastly, the majority of teachers were teaching English language courses from 6 to 10 years (see **Table 1**).

Table 1. Descriptive Statistics.

Demographics	Categories	Frequency	Percent
Gender	Female	446	66.8
	Male	222	33.2
Age	20–30	146	21.9
	31–40	326	48.8
	41–50	179	26.8
	> 50	17	2.5
Education	Bachelor	18	2.7
	Masters	58	8.7
	MS	517	77.4
	PhD	55	8.2
English language course teaching experience	Less than 1 year	56	8.4
	1–5	83	12.4
	6–10	350	52.4
	Greater than 10	179	26.8

Questionnaires were used to gather data, and all construct items were adapted from prior studies. A validation of the instrument was accomplished through a pilot study before conducting the investigation on a larger scale (Van Teijlingen et al., 2001). All questions were assessed using a five-point Likert scale, ranging from "Strongly Disagree" (1) to "Strongly Agree" (5). This instrument proved suitable for quantitative information gathering, offering efficiency and ease of use. To measure the independent variable English Language Teaching (ELT) a 40-items scale was used and adopted from Khany and Malmir (2017). The 15-items scale was used to measure the mediating variable, intercultural communicative competence (ICC), and adapted from Seepho and Tran (2016). Laslty, the dependent variable, English language learning (ELL), was evaluated using an 18-items scale adapted from Hennebry-Leung and Xiao (2023).

To address potential common method variance (CMV), measures such as a cover letter to safeguard respondent confidentiality and explanations of unfamiliar terms were implemented. Despite these procedural precautions, CMV remained a concern. The Correlation Matrix Procedure (CMP), per Lindell and Whitney (2001), was utilized to examine CMV's influence, yet correlations between primary variables were below 0.90, making CMV detection inconclusive. A comprehensive assessment of collinearity was conducted concerning CMV. Data were bootstrapped to 5000 samples using Smart-Partial Least Squares (PLS) version 4 software (Sarstedt et al., 2022) to gauge the sampling distribution's adequacy and estimate population standard errors, ensuring the sample data's representativeness. Multivariate factor-based tests included factor loading, convergent validity, discriminant validity measured by the fornell-larcker criteria and Heterotrait-Monotrait Ratio (HTMT), and structural equation modeling (SEM) to compute coefficient of determination (R^2), explained predictive relevance (Q^2), effect size (f^2) and path analysis.

2.3. Research findings

In the first stage of the measurement model, the survey questionnaire's variables are examined and the instrument is adjusted to ensure reliability. Evaluations of factor loadings, Cronbach's Alpha, Composite Reliability (CR), and Average Variance Extracted (AVE) are conducted. If the factor loadings of two or more variables are larger than 0.50, it means that the explicit indicator hypotheses are considerably reflected (Hair et al., 2011). The AVE, CR, and Cronbach's Alpha must all be greater than 0.6 for a variable to be considered to have convergent validity (Hair et al., 2020). In order to improve the AVE and composite reliability values in reflective measures, Hair et al. (2020) proposed an approach to exclude items with factor loadings between 0.40 and 0.70 from assessment. Therefore, in order to enhance the AVE values, the following items were deleted: from the English Language Teaching scale the items (ELT 16, ELT 17, ELT 21, ELT 22, ELT 23, and ELT 24) and the Intercultural Communicative Competence items (ICC 10). Removing certain items will result in factor loadings, Cronbach's Alpha, CR, and AVE values greater than the required thresholds values. **Table 2** displays the measurement model with convergent validity.

Table 2. Measurement model.

Constructs	Items	Factor loadings	Items	Factor loadings	α	CR	AVE
					0.930	0.938	0.604
English Language Teaching	ELT1	0.621	ELT20	0.777			
	ELT2	0.579	ELT25	0.779			
	ELT3	0.645	ELT26	0.326			
	ELT4	0.631	ELT27	0.403			
	ELT5	0.607	ELT28	0.486			
	ELT6	0.488	ELT29	0.488			
	ELT7	0.643	ELT30	0.800			
	ELT8	0.641	ELT31	0.482			
	ELT9	0.621	ELT32	0.880			
	ELT10	0.630	ELT33	0.628			
	ELT11	0.630	ELT34	0.647			
	ELT12	0.638	ELT35	0.610			
	ELT13	0.621	ELT36	0.642			
	ELT14	0.603	ELT37	0.370			
	ELT15	0.525	ELT38	0.662			
	ELT18	0.849	ELT39	0.670			
	ELT19	0.782	ELT40	0.646			
					0.903	0.909	0.674
English language learning	ELL1	0.666	ELL10	0.591			
	ELL2	0.700	ELL11	0.634			
	ELL3	0.640	ELL12	0.645			
	ELL4	0.629	ELL13	0.625			
	ELL5	0.666	ELL14	0.788			
	ELL6	0.599	ELL15	0.561			
	ELL7	0.883	ELL16	0.594			
	ELL8	0.778	ELL17	0.610			
	ELL9	0.822	ELL18	0.544			
					0.866	0.870	0.586
Intercultural Communicative Competence	ICC1	0.655	ICC8	0.899			
	ICC2	0.559	ICC9	0.854			
	ICC3	0.577	ICC11	0.758			
	ICC4	0.714	ICC12	0.621			
	ICC5	0.620	ICC13	0.639			
	ICC6	0.628	ICC15	0.615			
	ICC7	0.710					

Once confirming model convergence and meeting predetermined conditions, the subsequent step involved assessing discriminant validity based on the Fornell-Larcker Criterion. According to Fornell and Larcker (1981), the square root of the AVEs should exceed the correlations between constructs to establish discriminant

validity. **Table 3** demonstrates satisfactory discriminant validity, showcasing bolded products where the square roots of AVEs exceed the inter-construct correlations. Also, HTMT test was performed to confirm the discriminant validity. Henseler et al. (2015) comprised two approaches: Firstly, computing the HTMT threshold value aimed to discern the absence of bias or prejudice, noticeable when scores surpass the minimum HTMT level. However, determining precise HTMT cutoff values becomes challenging, particularly with correlations nearing one. Some scholars advocate against HTMT values surpassing 0.90, while others propose a threshold below 0.85 (Hair Jr et al., 2021). Secondly, examining HTMT values within a confidence range of 0 to 1 aimed to reveal the actual variability among variables, excluding the value of 1 from the interval. **Table 3** displays HTMT values among different constructs, all falling below 0.85, affirming the presence of discriminant validity in this research.

Table 3. Discriminant validity using fornell-larcker criteria and HTMT.

Constructs	ELT	ELL	ICC	Relationship among constructs	HTMT
ELT	0.709			ELL ↔ ELT	0.426
ELL	0.447	0.611		ICC ↔ ELT	0.691
ICC	0.551	0.593	0.621	ICC ↔ ELL	0.627

Abbreviations: English Language Teaching (ELT), English language learning (ELL), Intercultural Communicative Competence (ICC).

After the measurement model is computed, the structural equation model based on the observed data is constructed. By using the bootstrapping approach, we discovered statistically significant relationships among the variables. To examine the relationships between ELT and ELL through the mediating role of ICC, we used the methodology developed by Henseler et al., (2017). It follows that the structural equation model's direct and indirect effects were evaluated using the following four criteria: Firstly, each construct's variance is estimated using the degree of R^2 for endogenous latent variables (Hair et al., 2017). The research design determines whether an appropriate evaluation of R^2 can be carried out (Cohen, 1998). The following are the results for the high, medium, and low scores: 0.26, 0.13, and 0.09. However, with an R^2 value of 0.503 for the endogenous factors of the specified ICC, ELT is able to predict 50.3% of the change in ICC in the present study's direct impact model. Also, the fact that ELT and ELL have an R^2 value of 0.353 for ELL indicates that they can predict a change of 35.3% for ELL. Thus, the model has an adequate level of predictive accuracy, as seen in **Table 4**.

Secondly, in order to determine predictive relevance, the research model's accuracy in identifying its important elements was evaluated using a cross-validation redundancy (Q^2) (Hair et al., 2017). **Table 4** shows that $Q^2 = 0.191$ and ICC $Q^2 = 0.496$, both of which are more than zero, illustrate the direct influences of the aforementioned components on ELL. Therefore, the model's predictive relevance may be considered appropriate (Henseler et al., 2015). The **Figure 2** presented that the direct effect of ELT on ELL is not significant ($\beta = 0.129$, $t = 0.818$, $p = 0.414$) because *p* value is greater than 0.05. Therefore, Hypothesis H1 is not supported. Furthermore, the direct effect of ELT on ICC has a positive and significant impact

on ICC (β = 0.708, t = 42.475, p < 0.001) and ICC on ELL (β = 0.571, t = 13.478, p < 0.001), this suggests that the H2 and H3 were supported.
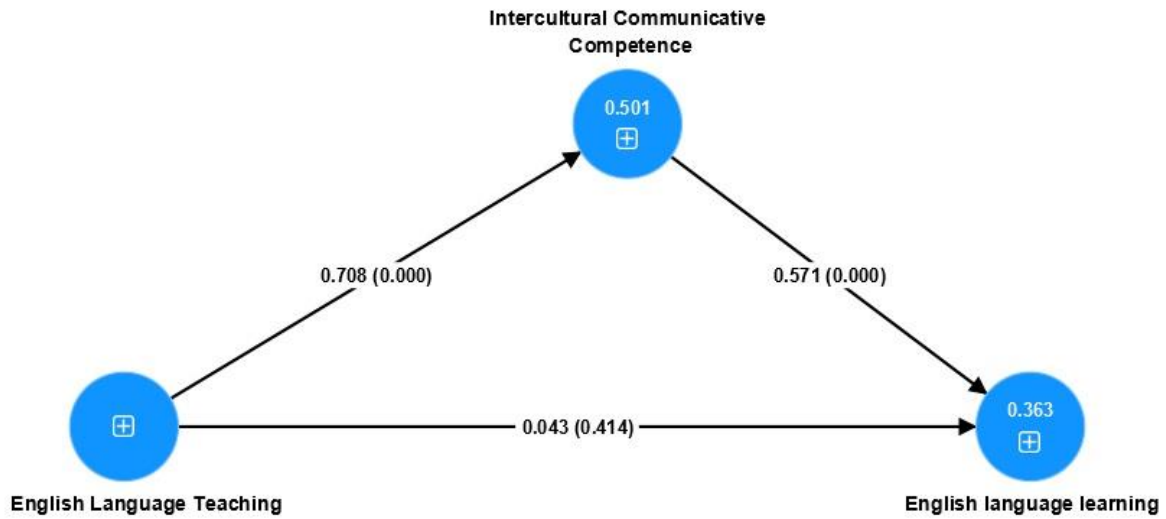

Figure 2. Path result using SEM modeling.

Furthermore, according to Hair et al. (2017), the effect size (f^2) is a measure of the influence of an independent variable on the dependent variable. It is used to evaluate the amount of an exogenous variable's effect on an endogenous variable. Cohen (1988) states that effect size (f^2) values ranging from 0.02 to 0.15 or 0.35 indicate small, medium or large impacts, respectively. **Table 4** indicated the effect size as follows: 0.002 of ELT to ELL, 1.011 of ELT to ICC and 0.237 of ICC to ELL. The findings show that these exogenous factors have a small and large impact on the endogenous variables, respectively. Finally, the **Table 4** presented that the indirect mediating effect of intercultural communicative competence on the relationship between ELT and ELL is positive and significant (β = 0.404, t = 11.881, p <0.001). Therefore, H4 was supported.

Table 4. Results of the structural equations model.

Hypothesis	Relationship among variables	β	Sample mean	Standard deviation	t values	f square	P values	Remarks
Direct Effect								
H1	ELT → ELL	0.043	0.043	0.052	0.818	0.002	0.414	Not Supported
H2	ELT → ICC	0.708	0.712	0.017	42.475	1.011	0.000	Supported
H3	ICC → ELL	0.571	0.575	0.042	13.478	0.237	0.000	Supported
Mediating Effect								
H4	ELT → ELL	0.404	0.410	0.034	11.881		0.000	Supported
Coefficient of determination								
	Constructs	*R*-square		*R*-square adjusted		Q^2 predict		
	ELL	0.353		0.351		0.191		
	ICC	0.503		0.502		0.496		

Abbreviations: English Language Teaching (ELT), English language learning (ELL), Intercultural Communicative Competence (ICC).

3. Discussion and conclusion

The purpose of the current study was to investigate the role of ELT methods on intercultural communicative competence for teaching of English language learning at Chinese higher vocational colleges. Language and culture are believed to be inseparable because they are interdependent. The significance of communicative competence in ELT is generally acknowledged, and it is commonly regarded as the ultimate objective of ELT in numerous countries globally. The primary objective of English language acquisition for the majority of learners is to effectively engage in oral and written communication, encompassing speaking, listening, reading, and writing skills. The attainment of effective communication also necessitates the acquisition of ICC. However, within the realm of ELT, ICC is frequently referred to as a concealed curriculum due to its lack of recognition and acknowledgment (Harper, 2020).

First, it was hypothesized that there is a significant positive association of ELT on ICC. The study findings indicate that there is a favorable correlation between ELT and ICC. Prior research on English teacher education programs indicates that ELT students are considerably more exposed to the language due to their intensive study of English for future teaching purposes and their high level of engagement with numerous linguistic aspects. They are consequently more likely to possess a profound comprehension of the language and its culture. Furthermore, it is plausible to suggest that training programs exert an influence on the process of language development. Likewise, upon the culmination of students' academic careers, they may further cultivate intercultural communicative competence (Jiang et al., 2022). Previous studies have also shown that ELT can enhance students' linguistic, intercultural competence, and sociocultural skills, enabling them to effectively communicate in English in real-life circumstances. Additionally, it increases teachers' awareness (Abidin et al., 2024).

Second, it was hypothesized that there is a significant positive association of ICC with English language learning. The study's results were in line with previous research. Previous research indicates that ICC is significantly influenced by the environment in which one acquires the English language (Saini et al., 2023). This particular context pertains to the ability to communicate proficiently with individuals who possess varied cultural heritages. Through the acquisition of English language skills, individuals have the opportunity to develop a comprehension of the cultural norms, beliefs, and communication patterns that are intrinsic to the target language culture. This facilitates the development of cultural sensitivity and the ability to adapt to intercultural interactions. According to Byram (2021), developing proficiency in English could potentially contribute to the growth of ICC by providing individuals with the capability to employ the language as an appropriate and respectful mode of communication in diverse cultural contexts. A proficiency in the English language enables individuals to develop an appreciation and comprehension of various cultures, interpret communications with precision, and improve their ability to communicate across cultures. As a result, attaining a high level of English proficiency is an essential strategy for promoting ICC, which facilitates amicable and seamless exchanges between people of various cultural origins.

Third, it was hypothesized that there is a positive association of ELT on English language learning. The study's findings indicate that there is a strong direct impact of ELT on English Language Learning (ELL). The findings of the study were consistent with prior investigations. The enhancement of language learning efficiency may result from the development of nurturing skills in ELT, according to a study by Almefleh and Alshuraiaan (2023). Students are capable of actively engaging in language input and generating meaning via problem-solving and inquiry-based activities due to these capabilities. The incorporation of local culture into ELT provides students with a sense of familiarity and context, thereby enriching their experience of learning the English language. Acquisition of knowledge is enhanced when students are capable of making connections to practical scenarios and comprehend the cultural milieu (Ratri et al., 2024).

Fourth, it was hypothesized that ICC has a mediating role between ELT and English language learning. The study's results were consistent with the current literature. Byram et al. (2002) argues that this competency is vital for language instructors to foster because it helps students better understand and interact with individuals from diverse cultural backgrounds. Similarly, studies have shown that when students learn this talent, they are better able to communicate and connect with others from all walks of life. Additionally, it gives students the opportunity to build self-confidence, connect with others from diverse cultural backgrounds, and learn from one another's unique viewpoints, experiences, and opinions (Torres et al., 2021). In addition, despite the fact that ICC's importance has been demonstrated by multiple researchers and studies, the English language has not consistently adequately acknowledged the importance of culture and intercultural communication (Syam et al., 2020).

The aim of this research was to examine the effects of English Language Teaching (ELT) methodologies on intercultural communicative competence among Chinese higher vocational college English instructors. A positive correlation was found between ELT, ICC, and English language acquisition among Chinese students, according to the study's findings. In summary, the amalgamation of ICC and pedagogy is vital in establishing an educational environment that is vibrant, promotes improved intercultural communication, and nurtures a more profound admiration for cultural diversity. This integration serves to augment the understanding, appreciation, and involvement of students in future cross-cultural collaborations.

4. Practical implications

Following are the implications of current study. It is important for policymakers to exercise caution while promoting and expanding access to cultural education and training in diverse demographic contexts, including those characterized by age, gender, language competency, ethnicity, and linguistic variation. The results of professional development programs for educators suggest that in order to successfully deploy ICC material, there needs to be a convergence of pedagogical strategies and assessment methods at certain levels. School resources, instructor

credentials, and student proficiency all have a role in the accessibility of educational materials.

To promote the incorporation of intercultural communicative competence into English language education, it is critical to furnish school leaders, educators, and administrators with clear directives and efficient communication that elucidate the significance and goals of cultural integration. Promoting instructors' cultural awareness is crucial; this can be accomplished by directing them to acquire information pertaining to their own cultures, the cultural backgrounds of their students, and other pertinent resources originating from diverse English speakers. In order to foster ICC and critical cultural awareness in their students, professors must set an exemplary example. Educators will demonstrate an increased propensity to establish educational environments that prioritize cultural democracy, equity, and inclusiveness. This methodology seeks to inspire students to achieve exceptional results in their scholastic endeavors while also promoting efficient intercultural dialogue.

Additionally, teachers' familiarity with ICC assessment is critical for the successful integration of ICC into English as a foreign language (EFL) course. Instructors may employ reflective self-assessment and performance-based evaluation methods to ascertain the ICC of their pupils. The integration of ICC training into programs designed for aspiring EFL instructors would serve to augment their pedagogical capabilities and knowledge of the ICC. By participating in seminars and workshops provided as part of professional development initiatives, educators can enhance and refine their understanding of the ICC and its pedagogy. It is advisable that English language instruction incorporate the development of intercultural communicative competence; instructors should possess a thorough comprehension of its importance and the requisite skills to teach it effectively.

5. Limitations and future recommendations

There are limitations to our investigation. To begin with, our quantitative data was limited. To augment the research outcomes, it is recommended that future investigations encompass a wider range of students' circumstances, learning objectives, and post-graduation aspirations. Moreover, although the majority of our investigation was conducted through the utilization of quantitative data, it is critical to include qualitative data as well including classroom observations and material analysis in order to comprehensively ascertain the viewpoints of students regarding the components of their ICC development. In order to increase the efficacy of ICC education, it may be possible to use the qualitative data to convince stakeholders to increase the quantity of teaching and learning activities. In order to address these deficiencies, forthcoming research endeavors ought to incorporate supplementary metrics, including participant focus groups and in-depth interviews, optimize the utilization of participants' linguistic capabilities, or expand the study's duration. Ultimately, it is critical that educators scrutinize the assumptions underlying their pedagogical practices, course materials, and classroom activities with regard to the cultural contexts of their students, even though these aspects were not considered in this study.

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