Evaluating The Effectiveness of The Intercultural Communication Needs (ICN) Model on Developing Intercultural Competence Among Iranian EFL University Students

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Article Info	Abstract
	Background: Intercultural communicative competence (ICC) has become a central objective in English as a Foreign Language (EFL) education due to increasing global interaction. However, EFL instruction in Iran has traditionally prioritized grammatical and lexical accuracy, offering limited opportunities for intercultural development. To address this gap, the Intercultural Communication Needs (ICN) model integrates three core macro-needs, language, emotion, and culture, into instructional practice **Aims:** This study examined the effectiveness of the ICN model in enhancing ICC among Iranian university EFL learners. **Methods:** A quasi-experimental pretest–posttest design was employed with 100 undergraduate students divided into experimental and control groups. Over a six-week period, the experimental group received ICN-based instruction, while the control group followed conventional EFL instruction. Data were collected using a researcher-developed 15-item ICC questionnaire measuring linguistic, emotional, and cultural needs. Paired-samples and independent-samples t-tests were conducted, and effect sizes were calculated **Results:** The results indicated a significant improvement in the experimental group's overall ICC, with a large effect size (Cohen's d = 1.735). Among the ICN components, language showed the greatest gains, followed by emotion and culture. In addition, students reported increased confidence, empathy, and curiosity toward intercultural interaction **Conclusion:** The findings provide empirical support for the ICN model as an effective pedagogical framework for fostering holistic intercultural competence in EFL contexts and highlight the importance of integrating linguistic, emotional, and cultural dimensions in language instruction.

INTRODUCTION

Intercultural communication skills are now a crucial part of English language instruction in today's globalized and multicultural society. There is a growing expectation on language learners to exhibit both linguistic accuracy and intercultural sensitivity while navigating complex cultural contexts. In English as a Foreign Language (EFL) pedagogy, the emphasis on Intercultural Communicative Competence (ICC) has increased as a result of this change in communicative demands. Students are encouraged to acquire linguistic skills in addition to emotional intelligence and cultural awareness.

Byram (1997) foundational model of ICC introduced important components like open-minded attitudes, cultural knowledge, and interpretive and interactional skills. Future frameworks by Fantini (2006) highlighted how intercultural competency is dynamic and developmental. Despite having a solid theoretical basis, these models are frequently challenging to implement in real-world classroom

settings, particularly in Iran, where there is a strong emphasis on grammatical proficiency and little exposure to other cultures.

Language, emotion, and culture are the three macro-needs that influence learners' intercultural behavior. Ghorbani and Dowlatabadi's Intercultural Communication Needs (ICN) model (2025) addresses this issue. Language, according to this model, is the means of communication, emotional sensitivity improves comprehension, and cultural awareness fosters meaningful interaction. The ICN model has yet to receive enough empirical attention, despite its theoretical potential. Little is known about how well it works in the classroom, especially in non-Western, EFL-dominant educational systems where students might not naturally have access to cross-cultural interactions.

By applying the ICN model in an EFL context atan Iranian university and analyzing its impact on students' intercultural communicative competence, this study seeks to close this gap. The study assesses overall effectiveness, the relative impact of each ICN component, and students' subjective perceptions of the model's influence using a quasi-experimental pretest-posttest design with control and experimental groups. This integrated approach offers a thorough comprehension of the intervention's effects on performance as well as attitude.

This study's importance stems from its capacity to connect theory and practice. While proving the ICN model's adaptability to classroom instruction in a culturally homogeneous setting, it provides empirical support for the model. Furthermore, it adds to the corpus of research supporting a more comprehensive approach to teaching languages, one that takes into account students' feelings and beliefs about other people in addition to their spoken language competencies. Giving EFL students these multifaceted skills is both necessary and timely, as intercultural competence is becoming more and more important for employment and global citizenship.

This study has implications for language teachers, teacher education programs, and those who develop EFL curricula. ICN-informed practices that emphasize intercultural development as a fundamental aspect of language instruction may be encouraged by the findings. The study's conclusion calls for a rethinking of EFL training that equips students to interact politely and sympathetically with people from different cultural backgrounds in addition to being proficient in the language.

The Review of The Literature:

The term Intercultural Communicative Competence (ICC) describes a person's capacity to communicate with individuals from diverse cultural backgrounds appropriately and productively (Byram, 1997). Knowledge, attitudes, interpreting and relational skills, discovery and interaction skills, and critical cultural awareness were the five savoirs that Byram's model highlighted. Byram's model has been criticized for failing to sufficiently address the emotional and dynamic components of cross-cultural interaction, despite its influence (Deardorff, 2006).

The study of intercultural communication focuses on how individuals from various cultural backgrounds interact via communication. The difficulties and methods of successful cross-cultural communication are examined in this field. According to Gudykunst (2004), intercultural communication is the exchange of messages between individuals from various cultural backgrounds in ways that are shaped by those backgrounds. Understanding what influences successful or unsuccessful communication, such as cultural variations in language, nonverbal cues, values, and social norms, is the aim of intercultural communication research.

Intercultural communication has become crucial in today's globalized society for social interaction, business, and education. People must not only communicate across linguistic barriers but also negotiate a variety of cultural norms and emotional expressions as global mobility and multilingual environments grow. Though language ability is often regarded as a cornerstone of effective communication, studies are beginning to emphasize the significance of cultural identity and emotional flexibility in promoting fruitful cross-cultural exchanges (Lyu, 2024).

The Process Model and the Pyramid Model of Intercultural Competence are two commonly used models that Deardorff (2006) proposed. They place a strong emphasis on aspects like knowledge, internal and external outcomes, and attitudes (respect and openness). Her models, however, were based on international education and did not specifically mention language as a crucial element of intercultural success. This limitation is particularly related to EFL students, who mainly depend on

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their language skills to function in cross-cultural settings. By clearly identifying language as a macro-need and emphasizing its fundamental role in cross-cultural communication, the ICN model addresses this omission.As a means of communication and a conveyor of cultural meaning, language is essential for promoting cross-cultural understanding. As stated by Samovar et al. (2007), language is the main means of transmitting and maintaining cultural values, and language and culture are inseparable. Language becomes a social and cognitive tool in the context of EFL instruction, enabling students to engage in cross-cultural communication. By establishing linguistic need as the most pressing and practical requirement in cross-cultural interactions, the ICN model expands on this notion (Ghorbani and Dowlatabadi, 2025).

Communication success can be greatly impacted by the range of emotional reactions that are frequently evoked by cross-cultural interactions, including anxiety, empathy, and frustration (Matsumoto, 2009). In multinational teams, Tenzer and Pudelko (2015) showed how emotional reactions to language barriers could breed mistrust and unease. Emotion is rarely addressed as a central construct in earlier ICC models, despite this. By considering emotional need as a mediating and crucial variable in the process of intercultural exchange, the ICN model rectifies this oversight (Ghorbani and Dowlatabadi, 2025).

A fundamental aspect of Intercultural Communication Competence (ICC) is cultural ability, which is defined as the capacity to understand and adapt to different cultural norms (Fantini, 2006). English as a Foreign Language (EFL) students who do not possess adequate cultural knowledge are more prone to misunderstandings, stereotyping, and difficulties in communication (Jie, 2010). One of the three primary components of the Intercultural Communication Needs (ICN) model is cultural need, which recognizes that effective communication involves more than just vocabulary and grammar; it also includes the sociocultural norms, values, and behaviors pertinent to a specific context. Due to its tripartite structure, this model is particularly well-equipped for real-world cross-cultural interactions (Ghorbani and Dowlatabadi, 2025).

Young & Sachdev (2011) investigated the views and methods of seasoned educators regarding the ICC in the USA, UK, and France. The research utilized multiple methods, incorporating diaries, focus groups, and surveys. Byram's model of ICC in language pedagogy was the main emphasis. Results showed a widespread agreement among locations, revealing a noticeable gap between teachers' views on and beliefs regarding ICC and their existing classroom focuses. Many indicated that their beliefs reinforced the importance of interculturality in their work, emphasizing that 'effective' learners and educators often displayed strong intercultural competence. They also indicated that ICC received comparatively minimal focus in the syllabi that were discussed with students. Participants noted a deficiency in support for effective and suitable methods of 'culture learning' and interculturality in testing, textbooks, and institutional syllabi.

The majority of the prevalent ICC models have a limited amount of application in English Language Teaching (ELT) contexts and originated in disciplines such as international education, psychology, or sociology (Jackson, 2014). New ICC models that are specifically in line with ELT have not been developed for two decades, according to Ghorbani and Dowlatabadi (2023). This gap is filled by their ICN model, which provides a framework that is theory-based and empirically supported and that is adapted to the linguistic, emotional, and cultural realities of EFL learners.

Due to a curriculum that primarily emphasizes grammatical proficiency and limited exposure to real-world cross-cultural scenarios, Iranian EFL learners encounter particular difficulties when communicating across cultural boundaries (Ghorbani and Dowlatabadi, 2023b). According to research, Iranian students frequently experience emotional misunderstandings and cultural transfer issues when interacting with people from other cultures. This emphasizes how crucial it is to use models like ICN, which incorporate affective and cultural aspects in addition to linguistic accuracy to better meet the needs of students in the real world (Ghorbani & Dowlatabadi, 2025).

Contextual and individual factors such as social status and contextual familiarity also have an impact on intercultural competence in addition to general knowledge and abilities (Nakayama and Martin, 2007). The ICN model takes this into account by including "interlocutor" and "context" as mediating factors that affect the three macro-needs' activation and priority. A more flexible and adaptive perspective on intercultural development is provided by this nuanced approach, which is particularly pertinent in dynamic classroom settings (Ghorbani & Dowlatabadi, 2025).

Using the ICN model in language instruction has a number of educational benefits. The model gives teachers the ability to create lessons that reflect real-world cross-cultural interactions by emphasizing language, emotion, and culture. For instance, exercises that combine emotional expression (e.g., addressing disagreement) with cultural contexts (e.g., courteous disagreement) and linguistic input (e.g., modal verbs or hedging) can promote a more profound understanding of other cultures. Current best practices in task-based learning and communicative language teaching (CLT) are in line with this holistic viewpoint (Zhang & Zhang, 2015; Ghorbani & Dowlatabadi, 2025). A qualitative study examining the intercultural communicative competence of Iranian university students studying overseas was carried out by Norouzi et al (2022). They identified the three primary components of intercultural communication (ICC): attitude, knowledge, and skills, using semi-structured interviews and retrospective narratives. They also highlighted barriers to intercultural encounters, such as identity conflicts and anxiety, as well as facilitating factors, such as openness and reflective thinking. Their results, which are consistent with the emotional and cultural aspects of the ICN model, highlight the significance of emotional preparedness and cultural flexibility.

The intercultural communicative competence and intercultural sensitivity of Iranian EFL teachers were examined by (Alaei & Nosrati, 2018). There is a need for more intentional teacher training that addresses emotional, cultural, and communicative aspects, as the study revealed varying degrees of competence and sensitivity. By organizing curricula around language, emotional engagement, and cultural awareness, incorporating ICN-based training could improve the efficacy of educators.

An investigation into the effects of teaching culturally charged texts on Iranian language teachers' intercultural communicative competence (ICC) was carried out by Ghorbani and Dowlatabadi (2023a). The researchers discovered that cultural instruction greatly improved teachers' intercultural communication abilities, attitudes, knowledge, and awareness. Also, increased ICC can result from combining language ability with intended intercultural training.

The inclusion of cultural content in Iranian English language teaching textbooks was examined by Aliakbari et al (2023). Their study found that there was a notable lack of representation of intercultural elements, underscoring the necessity of curriculum reforms that incorporate cultural awareness to promote intercultural competency in students. A framework for intercultural teaching competence was put forth in another study by Dimitrov and Haque (2016), highlighting the significance of teachers' capacity to overcome linguistic and cultural barriers in the classroom. The framework emphasizes how important language competency is for creating inclusive learning environments and enabling meaningful cross-cultural interactions.

A study on the opinions of Iranian language instructors on the function of language, emotion, and culture in cross-cultural communication was carried out by Ghorbani and Dowlatabadi (2023b). They investigated how these educators view language as a means of promoting cross-cultural communication. According to the study, language is thought to be the most important component of effective cross-cultural communication, followed by culture and emotion. To analyze the data, the researchers combined quantitative surveys and qualitative interviews in a mixed-methods approach. Their results highlight how language, emotion, and culture are interdependent, with emotion serving as a bridge between language and cultural comprehension. Also, emotional intelligence and cultural awareness are essential for fostering understanding between people from various cultural backgrounds; language proficiency alone is not enough for successful cross-cultural communication.

A mixed-methods study was carried out by Ghorbani and Dowlatabadi (2024a) to investigate the relative significance of linguistic, affective, and cultural needs in successful cross-cultural communication. The Oxford Placement Test and a 52-item intercultural communication questionnaire were used in the quantitative phase, which was based on data from 100 English language teachers in Iran. Twenty volunteers were interviewed for the qualitative phase. The results showed that needs were arranged hierarchically, with affective needs acting as a mediator between linguistic and cultural needs, which were ranked highest. Participants underlined that while language ability is fundamental for negotiating cross-cultural situations, emotional control and cultural awareness play crucial complementary roles.

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The relative influence of linguistic and cultural knowledge on the growth of intercultural competency in Iranian EFL learners was investigated by Ghorbani and Kianifard (2024b). Through the use of qualitative techniques such as interviews, observations in the classroom, and reflective journals, they discovered that participants thought both kinds of knowledge were equally important. Effective verbal communication was made possible by linguistic competence, and contextual interpretation, trust-building, and conflict resolution were made easier by cultural awareness. The study came to the conclusion that intercultural competence necessitates a harmonious fusion of linguistic proficiency and cultural sensitivity, suggesting that EFL curricula and teacher preparation programs simultaneously address both aspects.

The ICN model, which was presented by Ghorbani and Dowlatabadi in 2025, represents a substantial advancement in ICC theory by emphasizing the three interconnected and hierarchical needs of language, affect, and culture. According to the model, intercultural communication is a multi-layered, dynamic process that is influenced by both individual factors (e.g., personality, power status, and so forth) and contextual factors (e.g., variables (interaction formality). The ICN model, which is complemented by the Triple Needs Theory, describes the fundamental communication needs and explains how they are prioritized and triggered in response to situational demands. This signifies a change from competence as a fixed characteristic or developmental path to a responsive system that is both functional and adaptive. In light of the aforementioned findings, this study seeks to explore the following research questions:

1. Does the ICN model effectively improve students' intercultural communicative competence (ICC)?
2. Which components of the ICN model (language, emotion, culture) show the most effectiveness?
3. How do students perceive the model's influence on their intercultural ability?

METHOD

Research Design:

A quasi-experimental pretest–posttest control group design was employed in this research to examine the impact of the Intercultural Communication Needs (ICN) model on the intercultural communicative competence (ICC) of Iranian EFL university students. This design is commonly utilized in applied linguistics when comparisons between groups are necessary, yet random assignment is not feasible (Ary et al., 2019). The study was conducted during the spring 2025 academic semester within the framework of English language programs at two public universities in Iran. The ICN model developed by Ghorbani and Dowlatabadi (2025), which was integrated into the educational framework of the experimental group, identifies language, emotion, and culture as fundamental macro-needs in the realm of intercultural communication.

Participant:

The primary study involved 100 undergraduate EFL students in total. Convenience sampling was used to choose them, and their availability during the intervention period and enrollment in intermediate-level English courses were taken into consideration. A control group (n = 50) and an experimental group (n = 50) were then created from the sample. English translation, English literature, and TEFL were among the varied academic majors represented by the participants, who ranged in age from 18 to 26. Every participant had at least four semesters of English language education under their belts and had only mild exposure to cross-cultural situations. 40 EFL students were chosen for a pilot study to evaluate the validity and reliability of the instrument before the primary data collection.

Instrumentation:

Ghorbani and Dowlatabadi's (2025) Intercultural Communication Needs (ICN) model served as the foundation for a questionnaire created by the researcher. To evaluate university students' self-perceived intercultural communicative competence (ICC), the instrument was created to take into account three theoretical components: language need, emotion need, and culture need. Five items per component made up the questionnaire's fifteen total items. Every item received a rating on a 5-point Likert scale, with 1 denoting "strongly disagree" and 5 denoting "strongly agree.". Higher scores denoted a perceived level of proficiency in the pertinent field. Examples include: "When speaking

with people from different cultures, I feel comfortable expressing myself in English. During cross-cultural miscommunications, I can control my emotional responses. (Emotion) "I am receptive to acquiring knowledge and adjusting to different cultures. (Culture) Three specialists in applied linguistics evaluated the questionnaire's first draft.

To guarantee content validity, three specialists in applied linguistics and intercultural communication examined the questionnaire's first draft. Based on their comments, a few minor changes were made to increase clarity and conformity to ICN theoretical frameworks. Thirty EFL students participated in a pilot study to determine the psychometric qualities of the instrument. A three-factor solution, representing the three ICN components, was found by exploratory factor analysis (EFA) employing Principal Axis Factoring and Varimax rotation. All factor loadings were above 0.60, and eigenvalues were greater than 1. According to reliability analysis, all subscales had high internal consistency: Cronbach's α = .83 for language needs, .81 for emotional needs, .79 for cultural needs, and .88 for the total scale. These findings attest to the instrument's theoretical foundation and statistical dependability in assessing Iranian EFL learners' intercultural competency.

Data Collection Procedure

Three stages of data collection took place: pretesting, post-testing, and pilot testing. 40 EFL students answered the 15-item questionnaire during the pilot phase, and the results were examined for dimensionality and reliability. As a pretest, all 100 participants in the primary study filled out the ICN questionnaire. Targeted instruction based on the ICN model was given to the experimental group for six weeks. The lessons and activities were intended to improve cultural awareness, emotional control, and linguistic flexibility. Without ICN integration, the control group continued using the typical EFL curriculum. The identical questionnaire served as a posttest for both groups after the intervention. Paper-based questionnaires were administered under the researchers' supervision during regular class hours to guarantee a high response rate and reliable circumstances.

Data Analysis and Trustworthiness

Initial pilot data (n = 30) were analyzed to assess the reliability and construct validity of the 15-item ICN questionnaire. Cronbach's alpha was utilized to evaluate internal consistency for the overall scale and for each of the three subscales (language, emotion, and culture). Exploratory factor analysis (EFA) was performed using SPSS v22 employing principal axis factoring and varimax rotation to validate the factor structure of the tool. Factor loadings greater than 0.50 were deemed satisfactory for keeping items. During the primary stage of the research, pretest and posttest results were examined with paired-samples t-tests to assess changes within groups and independent-samples t-tests to contrast gain scores between the experimental and control groups. The effect size of the ICN-based instruction was determined by calculating Cohen's d. A significance level of $p < .05$ was established for all statistical analyses. To evaluate the efficacy of the ICN model, two varieties of t-tests were performed. A paired-samples t-test was conducted for each group (experimental and control) to assess the differences in students' pretest and posttest scores and to determine if there was a statistically significant enhancement over time. This assessment was suitable because it considers the same individuals being evaluated on two occasions. Moreover, an independent-samples t-test was conducted to analyze the gain scores of the experimental group versus the control group. This enabled immediate evaluation of the varying impact of the ICN model on standard teaching. The integration of within-group and between-group comparisons offered a stronger assessment of the model's efficacy (Field, 2018).

RESULTS AND DISCUSSION

Result:

This section showcases the findings of the research aimed at assessing the impact of the Intercultural Communication Needs (ICN) model on enhancing intercultural communicative competence (ICC) in Iranian EFL university students. The results are structured according to the study's three research queries and encompass descriptive statistics, inferential analyses, and

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interpretation of effect sizes. **RQ 1:** Does the ICN model effectively improve students' intercultural communicative competence (ICC)?

Table 1. Descriptive Statistics for Pretest, Posttest, and Gain Scores by Group

Group	Pre M	Pre SD	Pre Min	Pre Max	Post M	Post SD	Post Min	Post Max	Gain M	Gain SD	Gain Min	Gain Max
Experimental	53.2	7.47	39.32	69.82	63.29	9.06	43.71	81.6	10.09	4.37	-3.1	17.82
Control	54.69	8.12	39.65	74.71	57.11	9.48	36.78	81.42	2.42	4.47	-5.57	15.6

The descriptive statistics of the experimental and control groups' pretest, posttest, and gain scores are shown in Table 1. From the pretest (M = 53.2, SD = 7.47) to the posttest (M = 63.29, SD = 9.06), the experimental group's mean gain score increased significantly, reaching 10.09. However, the gain (M = 2.42) was significantly less for the control group, which also demonstrated an increase from the pretest (M = 54.69, SD = 8.12) to the posttest (M = 57.11, SD = 9.48). These variations imply that the experimental group benefited from the ICN model.

Table 2. Paired Samples T-Test for Pretest–Posttest Scores

Group	Mean Difference	SD	t	df	Sig. (2-tailed)	95% CI (Lower–Upper)
Experimental	10.09	4.37	16.319	49	0.000	8.85 to 11.33
Control	2.42	4.47	3.829	49	0.000	1.15 to 3.69

Table 2 presents the outcomes of paired-samples t-tests for every group. The experimental group demonstrated a statistically significant enhancement (t = 16.319, df = 49, p < .001), validating the efficacy of the ICN-focused teaching. The average difference was 10.09, with a 95% confidence interval from 8.85 to 11.33. The control group displayed a statistically significant yet considerably smaller enhancement (p < .001), probably because of continued class exposure. Table 2 presents the findings of paired-samples t-tests for every group. The experimental group demonstrated a statistically significant enhancement (t = 16.319, df = 49, p < .001), validating the efficacy of the ICN-based teaching method. The average difference was 10.09, and the 95% confidence interval went from 8.85 to 11.33. The control group exhibited a statistically significant yet considerably smaller enhancement (p < .001), probably because of continuous class exposure.

Table 3. Independent Samples T-Test on Gain Scores

Comparison	t	df	Sig. (2-tailed)	Cohen's d
Experimental vs Control	8.675	98	0.000	1.735

Table 3 displays the independent-samples t-test that compares gain scores for the experimental and control groups. The findings indicate a statistically significant variation (t = 8.675, df = 98, p < .001), accompanied by a substantial effect size (Cohen's d = 1.735). This reinforces the idea that the ICN model significantly influenced students' intercultural competence in a positive manner.

RQ2: Which components of the ICN model (Language, Emotion, Culture) show the most effectiveness?

Table 4. Descriptive Statistics of Gain Scores by Component and Group

Group	Lang M	Lang SD	Emo M	Emo SD	Cult M	Cult SD
Experimental	3.23	1.12	3.02	0.87	2.46	0.91
Control	1.09	0.98	0.95	1.09	0.58	0.97

Table 4 displays descriptive statistics for the gain scores corresponding to each component of the ICN (Language, Emotion, Culture). The experimental group excelled over the control group in each of the three components. The greatest average improvement was found in language need (M = 3.23), next was emotion (M = 3.02), and then culture (M = 2.46). This suggests that students gained the most in linguistic flexibility, with additional improvements in emotional control and cultural sensitivity.

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Table 5. Independent Samples T-Test by ICN Component

Component	t	df	Sig. (2-tailed)	Cohen's d
Language	10.138	98	0.000	2.028
Emotion	10.448	98	0.000	2.090
Culture	9.980	98	0.000	1.996

Table 5 displays the findings of independent-samples t-tests that compare the component-level gain scores of the experimental and control groups. All three elements displayed statistically significant variations ($p < .001$), with the most substantial effect size for Language (Cohen's d = 2.028). Emotion (d = 2.090) and Culture (d = 1.996) displayed significant effects as well. These results reinforce the hierarchical framework of the ICN model and confirm that Language Need is the most significant and influential area for initial growth.

RQ3: How do students perceive the model's influence on their intercultural ability?

Table 6. Descriptive Statistics for Student Perceptions of the ICN Model

Category	Mean	SD	Min	Max
Confidence	4.08	0.46	3.22	5.0
Empathy	4.01	0.52	2.43	4.94
Curiosity	3.85	0.66	2.56	5.0

Table 6 presents an overview of student views on the ICN model, focusing on three reflective measures: assurance in utilizing English during cross-cultural interactions, compassion for others amid misunderstandings, and interest in diverse cultures. The average confidence score was the highest (M = 4.08), suggesting that students perceived themselves as notably more confident in intercultural communication. Empathy (M = 4.01) and curiosity (M = 3.85) received high ratings, exhibiting moderate variability (SDs ≈ 0.5–0.7), indicating a consistent and favorable shift in attitudes among participants. These results affirm the emotional and motivational influence of the ICN model beyond simply acquiring skills. These findings show that the ICN model was effective not just in enhancing performance but also in influencing students' intercultural attitudes. Future studies might improve these findings by incorporating open-ended qualitative questions or performing structured focus group interviews for more in-depth analysis.

Discussion:

This research aimed to examine how effective the Intercultural Communication Needs (ICN) model is in enhancing intercultural communicative competence (ICC) in Iranian EFL university students. The results demonstrated the value of the ICN model in enhancing both language skills and emotional control, along with cultural awareness. This part offers an in-depth analysis of the findings concerning the research questions, relevant literature, and the theoretical basis supporting the ICN model.

The initial research question investigated whether the ICN model notably enhanced students' overall intercultural communicative competence. The findings demonstrated a statistically significant improvement in the experimental group relative to the control group ($p < .001$), accompanied by a large effect size (Cohen's d = 1.735). This result aligns with earlier research highlighting the effectiveness of need-oriented instructional models in EFL settings (Ghorbani & Dowlatabadi, 2024a). It furthermore corresponds with the extensive literature indicating that comprehensive intercultural training improves communicative preparedness and effectiveness (Byram, 1997; Deardorff, 2006). In other terms, the findings of the initial research question revealed a statistically significant enhancement in the overall ICC scores of students in the experimental group, accompanied by a considerable effect size (Cohen's d = 1.735). This indicates that the ICN model, with its organized focus on language, emotion, and cultural requirements, promotes quantifiable growth in intercultural competence. These results correspond with prior studies on intercultural frameworks like Byram's (1997) model of intercultural communicative competence and Deardorff's (2006) pyramid model, which highlight the significance of both knowledge and attitudes for successful intercultural interaction. Although conventional language teaching often focuses on

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grammar and vocabulary, the ICN model's holistic method seems to foster greater involvement, resulting in more extensive results in both ability and mindset. Utilizing both paired-samples and independent-samples t-tests strengthens the internal consistency and external validity of these enhancements.

The second research question focused on identifying which aspects of the ICN model, language, emotion, or culture, were the most effective. The analysis indicated that language needs exhibited the greatest mean gain and largest effect size, with emotion following, and culture last. These findings strengthen the foundational theory of the ICN model, which regards language as the primary gateway to intercultural competence, with emotional and cultural adaptation occurring in succession (Ghorbani & Dowlatabadi, 2025). This trend also reflects results from earlier studies indicating that language skills generally exhibit quicker growth than emotional or cultural receptivity. To put it differently, about the second research question, component-level analysis indicated that students in the experimental group achieved the greatest improvements in the language aspect, followed by emotion and culture. This result aligns with the ICN model's assertion that linguistic requirements emerge initially and are the most easily shaped by teaching. Emotion and culture, though enhanced, might need more continuous exposure to various contexts and more profound reflective experiences. The six-week duration of the current study might have been adequate to influence surface-level emotional awareness, but it was likely insufficient for facilitating deep cultural change. Comparable patterns were noted in Sercu's (2004) cross-cultural education research and Fantini's (Fantini, 2006) findings, indicating that cultural development often lags behind cognitive and linguistic advancement during initial phases. These findings further reinforce Ghorbani and Dowlatabadi's (2024a, 2025) theoretical arrangement of ICN macro-needs, confirming the model's hierarchical adaptability to educational input.

The third research question examined students' views on the ICN model. The group that underwent the intervention indicated increased levels of confidence, empathy, and curiosity, implying both cognitive enhancement and a favorable shift in attitude. This discovery is consistent with research conducted by Young & Sachdev (2011), who highlighted the importance of emotional factors in intercultural growth. The perception findings reinforce the affective-emotional routes highlighted in the ICN model, indicating that learners assimilate more than mere skills, they also cultivate motivation and receptiveness to others. Qualitative perception data showed that students in the experimental group reported feeling greater confidence in self-expression, increased empathy toward others, and heightened curiosity about international cultures after the ICN intervention. These changes in attitude are vital, as emotional preparedness frequently serves as the key to effective intercultural communication (Young & Sachdev, 2011). The elevated scores in confidence (M = 4.08), empathy (M = 4.01), and curiosity (M = 3.85) indicate that the ICN model not only imparts skills but also nurtures learner disposition, resonating with Deardorff's (2006) concept of 'attitudinal grounding' in intercultural development. These results further indicate that students can internalize and appreciate affective and cultural skills when these are taught through instruction.

Norouzi et al (2022) emphasized the importance of emotional readiness, openness, and reflective thinking in promoting intercultural development among Iranian students studying abroad. The notable enhancements in participants' empathy and curiosity observed after the ICN-based intervention in this study imply that even in local EFL settings, structured instruction can encourage similar emotional and attitudinal growth. Likewise, Tenzer and Pudelko (2015) contended that emotional responses to language-related challenges frequently erode trust in multicultural interactions. The current findings, especially the significant improvements in emotional competence within the experimental group, support their claim and suggest that explicit affective training, such as that integrated into the ICN model, can act as a proactive approach to overcoming emotional obstacles in intercultural communication.

Moreover, the results support Jie (2010) assertion that a lack of cultural knowledge can lead to stereotyping and communication failures. The significant enhancement in students' cultural adaptability observed in this study indicates that the ICN model effectively tackles this challenge by prioritizing sociocultural awareness as a key educational objective. These findings also resonate with the observations of Young and Sachdev (2011), who highlighted the disparity between educators' recognition of the significance of intercultural competence and its insufficient integration into language teaching. Conversely, the ICN-based curriculum applied in this study illustrates that when

intercultural competence is intentionally incorporated into EFL teaching, learners can demonstrate considerable emotional and cognitive advancements. Furthermore, the favorable shifts in confidence and empathy noted in this research align with the dimensions of intercultural sensitivity identified by Chen and Starosta (2000), especially the aspects of emotional resilience and openness to others. This implies that the ICN framework may operate in harmony with broader constructs of intercultural sensitivity, thus enhancing its theoretical strength.

Ultimately, the findings corroborate the claims made by Aliakbari et al (2023), who noted a deficiency of intercultural content in Iranian EFL textbooks. In spite of these curricular shortcomings, the ICN intervention proved to be significantly effective in improving students' intercultural communicative competence, suggesting that pedagogical innovation can address the structural deficiencies present in instructional materials. Similarly, Rezaei and Salehi (2022) highlighted the relationship between intercultural competence and learner motivation. Although the present study did not explicitly evaluate motivational factors, the heightened levels of curiosity and confidence reported by participants suggest an increase in engagement, thereby further emphasizing the overall educational importance of incorporating intercultural models into EFL practices.

The ICN model showed notable impacts on both quantifiable intercultural competence and the internal attitudes of learners. Its intricate framework seems to facilitate a comprehensive development process, equipping Iranian EFL students with resources to not only converse but also to interact meaningfully across cultures. Based on these results, the ICN model could provide a useful framework for creating EFL curricula that combine language teaching with emotional and cultural preparedness. Future research should explore long-term effects and confirm these results in a broader range of learner groups.

Implications

The findings of this study have important pedagogical implications for EFL instruction. Integrating the ICN model into language classrooms can help teachers move beyond form-focused instruction toward a more holistic approach that simultaneously develops linguistic ability, emotional regulation, and cultural awareness. Curriculum designers may incorporate ICN-based tasks that combine language use with emotional expression and cultural reflection. Teacher education programs can also benefit from introducing ICN-informed practices to better prepare instructors for intercultural teaching contexts.

Research Contribution

This study contributes to intercultural communication research by providing empirical validation of the ICN model within an EFL university context. Unlike traditional ICC frameworks, the ICN model explicitly positions language, emotion, and culture as hierarchical and interdependent needs. By demonstrating significant gains across all three components, this research extends existing ICC literature and offers a context-sensitive framework tailored to EFL settings, particularly in non-Western educational environments.

Limitations

Despite its contributions, this study has several limitations. First, the intervention was limited to a six-week period, which may not have been sufficient to capture long-term cultural development. Second, data were collected through a self-report questionnaire, which may be subject to response bias. Third, the sample consisted only of Iranian university EFL students, limiting the generalizability of the findings to other educational contexts or learner populations.

Suggestions

Future research should adopt longitudinal designs to examine the sustained effects of the ICN model over longer instructional periods. Incorporating qualitative methods such as interviews, classroom observations, or reflective journals could provide deeper insights into learners' intercultural development. Further studies may also apply the ICN framework to different educational levels, cultural contexts, or professional settings to evaluate its broader applicability.

CONCLUSION

This research explored the impact of the Intercultural Communication Needs (ICN) model on the intercultural communicative skills of Iranian EFL university learners. The findings indicated that the ICN model greatly boosts students' intercultural abilities, with the most notable progress seen in language-related skills. The emotional and cultural aspects were also enhanced, demonstrating the model's effectiveness in tackling the affective and cognitive facets of intercultural learning. Students expressed favorable views of the model, demonstrating enhanced confidence, empathy, and curiosity, which further reinforced the model's educational significance. Although the results appear encouraging, it is important to recognize several limitations. Initially, the intervention took place over a limited time frame (six weeks), potentially restricting the comprehensive enhancement of deeper cultural competencies. Additionally, the self-report format of the questionnaire might lead to response bias, particularly concerning questions about empathy or curiosity. Even though the instrument showed satisfactory reliability and validity, upcoming studies ought to employ triangulated approaches, like behavioral observations or interviews, to confirm results. Third, the applicability of findings is restricted to Iranian EFL learners at the university level. Wider demographic and institutional diversity is essential to assert universality. In spite of these constraints, the ICN model exhibited significant educational worth in facilitating intercultural growth within an EFL environment. The subsequent chapter offers concluding observations, implications for language teaching, and suggestions for future studies.

The results indicate that EFL curriculum designers and language teachers ought to incorporate the ICN model into their instructional methods. By concentrating on language, emotion, and culture, students are empowered to communicate effectively while also grasping and valuing various viewpoints. The ICN model provides a thorough framework that can improve learners' preparedness for intercultural interactions in academic and real-life situations. Teacher training programs could also gain from including ICN-based methods to enhance educators' understanding of intercultural requirements in classrooms. Upcoming research should adopt a longitudinal approach to explore the lasting impacts of the ICN model. Moreover, researchers are prompted to apply the ICN framework across various cultural settings to assess its applicability. Incorporating a wider range of samples (e.g., high school students, professionals, or international learners) could provide more comprehensive insights. Ultimately, qualitative approaches like interviews or reflective journals can enhance quantitative results by examining learners' individual experiences with intercultural development.

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AUTHOR CONTRIBUTION STATEMENT

I am the sole author of this work and was responsible for all aspects of the study, including conception, design, data collection, analysis, and manuscript preparation.

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