

Assessing intercultural communicative competence in EFL college learners: a validation study

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Abstract

Intercultural communication competence is an integral part of linguistic competence. While the literature stresses the significance of intercultural communication competence, the assessment of this competence remains a developing area of research. This study seeks to develop an intercultural communication survey particularly for EFL learners at the college level. It further seeks to explore validation evidence for this ICC survey, which is made up of five components (Motivation, Self-knowledge, Other-knowledge, Mindfulness and Cognitive Flexibility and Tolerance for Uncertainty) comprising 20 items. The ICC survey is intended to be used as an intercultural communication assessment tool in university-level EFL programs to evaluate the intercultural communication competency in colleges that offer English education programs. The researchers further collected evidence from a nonrandom sample (N = 346 participants) on the construct validity and reliability of the ICC survey to support its design as a tool for assessing intercultural communication competence. Descriptive statistics, correlation analyses, and linear regression were used to analyze aspects of construct validity. Findings showed that the ICC survey is sufficiently reliable and valid enough to assess intercultural communication competence.

Key words: Intercultural communication competence; intercultural competency assessment; validation

تقييم الكفاءة التواصلية بين الثقافية لدى متعلمي اللغة الإنجليزية
كلغة أجنبية في المستوى الجامعي
دراسة تحيقية

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الملخص

الكفاءة في التواصل بين الثقافات هي جزء لا يتجزأ من الكفاءة اللغوية العامة. وفيما تؤكد الأدبيات على أهمية الكفاءة في التواصل بين الثقافات، يبقى تقييم هذه الكفاءة مجالاً حديثاً ومتنامياً للبحث العلمي. لذا، تسعى هذه الدراسة إلى تطوير استبانة التواصل بين الثقافات خاصة بالنسبة لمتعلمي اللغة الإنجليزية كلغة أجنبية في المستوى الجامعي. وتسمى أيضاً إلى تقنين هذه الاستبانة من خلال قياس صدقها وثباتها في البيئة السعودية. وهذه الاستبانة تتكون من خمسة عناصر (الدافعية، المعرفة الذاتية، المعرفة بالآخر، اليقظة و المرونة الإدراكية و التسامح مع الشكوك) حيث تتكون مفردات الاستبانة من 20 عنصراً. و تهدف استبانة تقييم الكفايات التواصلية بين الثقافية إلى إمكانية استخدامها كأداة تقييم للتواصل بين الثقافات أيضاً في برامج اللغة الإنجليزية كلغة أجنبية على مستوى الجامعة لتقييم الكفاءة في التواصل بين الثقافات في الكليات التي تقدم برامج تعليم اللغة الإنجليزية. قام الباحثان كذلك بجمع الأدلة من عينة غير عشوائية (N = 346) لتقييم صدق المفهوم وحساب ثبات الأداة لدعم تصميمها كأداة لتقييم كفاءة الاتصال بين الثقافات. و قد تم استخدام الإحصاء الوصفي، و تحليل الارتباط، وأسلوب تحليل الانحدار الخطي لتحليل جوانب صدق المفهوم للأداة. و أظهرت النتائج أن استبانة تقييم الكفايات التواصلية بين الثقافية تتمتع بدرجة عالية من الموثوقية و الثبات بما يكفي لجعلها صالحة لتقييم الكفاءة في التواصل بين الثقافات لدى طلاب اللغة الإنجليزية كلغة أجنبية في المستوى الجامعي. و انتهت الدراسة بجملة من التوصيات والاقتراحات لمزيد من البحث.

Introduction

Linguistic competence spans a broad spectrum of cultural awareness skills, knowledge of self and knowledge of others both in interpersonal and inter-societal interactions (Byram & Wagner, 2017; Holliday, 2011; Kramersch, 2013; May 2014; Wagner, et al., 2017). It also comprises relativizing self-attitudes and valuing attitudes of others while developing skills of interpreting communication with others as well as discovering and/or interacting with others in a given language use situation (Kramersch, 2013; Kramer, 2002; Liddicoat & Scarino, 2013).

Linguistic competence is thus associated with intercultural communication competence and is made up of factors such as social skills, self-awareness, others awareness and cultural information (Dusi, Messetti, and Steinbach, 2014; Sarwari & Abdul Wahab, 2017). These factors help to enable learners of a foreign language to begin and continue to communicate with native or other non-native speakers of the target language (Byram, 1994).

The components of intercultural communication competence can also help foreign language learners to mediate and negotiate between the cultures of interlocutors in a way that reflects each other's own culture as a complex, yet

flexible structure or network of specific knowledge, skills and attitudes (Huber & Reynolds, 2014; Kramer, 2002; Kramersch, 2013).

In this context, intercultural communication can be defined as spoken or written communication between people who have significantly different linguistic and cultural backgrounds (Scollon & Scollon, 2001). Intercultural communication is synonymously interchangeable with cross-cultural communication (Shih, 2006). In this regard, Fantini (2006) states that although the most common term used is intercultural communication competence (ICC for short), other common interrelated terms are "cross-cultural awareness, global competitive intelligence, cultural competence, cultural sensitivity, ethno-relativity, international competence" and many more.

Sinicrope, Norris, and Watanabe (2007) indicate that "intercultural competence, intercultural communicative competence, intercultural sensitivity and cross-culture adaptation" are used interchangeably. Whatever the term used, Reichardm et al. (2015) defined a cross-culturally competent person as ...

someone who has achieved a broadened perspective with 1) a lack

of ethnocentrism with positive attitudes toward cultures other than their own and 2) a well-developed cultural intelligence with an ability to adapt in new cultural contexts.

There are a plethora of definitions for intercultural or cross-cultural communication, but there is no consensus on one definition as these definitions have evolved throughout the previous decades based on contexts and dimensions. The contexts may be in education, healthcare, services, management, etc., while the dimensions researchers focused on may be cognitive, affective, behavioral, flexibility, critical thinking, etc. These varied definitions of intercultural communication competence play an emphasis on personal characteristics in human beings, important among which are cultural intelligence, intercultural social knowledge, communication abilities and multicultural and diversity understanding (Mitchell & Benyon, 2018). In addition, Byram's grounded model (1997) views intercultural communication competence as a set of knowledge, attitudes, skills and political education which marks aspects of cognition, behavior, and emotion (Fernández & Pozzo, 2017).

Currently, assessing intercultural competence has become an issue of significance in intercultural language education research (Borghetti, 2017; Sercu, 2004; 2010). In this light, Matveev and Merz (2014) believe that a comprehensive intercultural communication measurement applicable in contexts and disciplines should cover

cognitive, affective and behavioral dimensions.

In a synthesis review by Sinicrope, Norris, and Watanabe (2007), the authors concluded that there are many definitions, theories, and models of ICC, which are based on how researchers approached the development and assessment of intercultural communication competence as an important component of linguistic competence. Some models focus on the nature of communication, some stress the individual's adaptation when introduced to a new culture, and others emphasize the understanding and tolerance of other cultures in performance-oriented paradigms (Arthur, 2001; Byram, 2009; Dearsdorff, 2006; 2009; Fantini, 2009; Feng and Fleming, 2009; Humphrey, 2007; Rea-Dickins, 2004; Spencer-Oatey, 2013).

Byram (1997) describes the building up of a view of ICC is from the existing foreign language theory in addition to adding disciplines to offer a model of ICC which enables discussion of teaching and assessment. These models are defined according to the situation and requirements learners find themselves in. An important model of intercultural communication competence, a performance-oriented model, is that of Balboni & Caon (2014). This model is grounded in Hymes' model of interaction (1972). The model of ICC involves linguistic competence and extra-linguistic competence, including the mental representations of language and its pertinent culture and their

implementation in the social context, governed by the 'grammars' of socio-cultural competence (Balboni & Caon, 2014). According to Balboni & Caon (2014),

Intercultural communication is governed by competence groups, respectively verbal, non-verbal and cultural, and is realized in the context of communicative events governed by grammars which contain both universal elements and local cultural elements. Each of these areas may include IC critical points, to be highlighted in a description of IC among people from culture 'x' and from culture 'y'.

Researchers suggested that assessing intercultural competence in intercultural language education is important because intercultural competence is related to linguistic competence and both are instrumental in language learning and teaching (Borghetti, 2017). In addition, this assessment is integral to overall language assessment because in education, assessing intercultural competence involves assessment of learning and teaching and teaching in itself involves assessment (Rea-Dickins, 2004, 249). Furthermore, IC assessments are instrumental to assessment for autonomy (Lamb, 2010) in the sense that language learners should be taught how to be responsible for their intercultural learning (Borghetti, 2017). In this vein, too, Byram (2009) aptly observed that assessment is "part of the process of passing the values which are fundamental to the society from one

generation to the next" (Byram, 2009: 222).

Therefore, the area of assessing intercultural competence looms large in the literature of intercultural education, which warrants empirical research.

Statement of the Problem

Effective interaction with people of different cultures in addition to communicating in foreign languages has become important and necessary in many professional fields (Arévalo-Guerrero, 2009). Chen (2013) suggests that for foreign language learners, having a good command of vocabulary and grammar does not indicate a good mastery of the foreign language. Chen (2013) observed that Chinese students achieve linguistic competence in any given foreign language as they enter university after 10 to 12 years of studying the target language, but they fail to comprehend the culture and proper ICC of the target language due to the separation of language and culture, which hinders the students' linguistic and communicative competence. Therefore, a learner cannot obtain ICC without good knowledge of the target language's culture.

There are very few studies conducted in the Saudi environment to assess intercultural communicative competence in English as a foreign language (Fageeh, 2011; Mekheimer & Aldosari, 2011; Mekheimer, 2011; Wu & Alrabah, 2014; Zaid, 2011). Assessment tools are as rare as research; ICC assessment studies are not common in this country. This study

was designed to assess the ICC skills in EFL students in several colleges that teach English in Saudi Arabia.

Due to the need for assessing ICC in current practices in EFL pedagogy and curriculum in EFL colleges in Saudi Arabia, and the lack of rigorous research in assessing intercultural competence in Saudi Arabia, the present researchers have set to conduct this ICC evaluation study.

Research Purpose

The purpose of the study is to validate an instrument (the ICC Assessment Survey) specifically designed to tap into the intercultural communicative competence skills as perceived by EFL college learners throughout their language curriculum in several EFL colleges in Saudi Arabia.

Research Questions

The research questions underlying this study are couched below:

- 1- What are the distribution characteristics of the ICC survey scores?
- 2- How reliable are the ICC survey scores?
- 3- Does the internal structure of the test conform to the definition of the target construct?
- 4- Do students with high GPAs score higher on the ICC survey than students with less GPAs?

Literature Review

In this vein, Karolak and Guta (2015)

stated that studies in intercultural communication between Saudi and Western interlocutors are very rare regardless of scholarly interest in the study of language and culture in Saudi Arabia.

Karolak and Guta (2015) conducted a case study of IC in the eastern region of the kingdom with a perception that educational institutions adopt Western models and employ foreign professors. Their study aimed at shedding light on different patterns of communication in the classroom and it required in-depth interviews with the students. Their findings provided recommendations and contributions for improving the educational experience of local students in addition to promoting culturally responsible education through "critical thinking skills, individual creativity, and movement out of comfort zones" which prepare students for future career challenges.

In conclusion, although the main method of communication between Saudis and foreigners is English, however, knowing how to speak the language (i.e., linguistic competence) is not enough. To maintain affective, communicative and comprehensive skills, learners must widen, enhance and develop their intercultural communicative awareness.

Research Method

This research is descriptive nature as it involves a survey validation and survey administration study.

Participants

The participants in this study are 346 (206 males and 140 females) EFL college students from different levels and colleges that prepare learners in English studies. The participants of the study were selected from a large population of EFL students enrolled in a southern Saudi university. The average age was 20.06, ranging from 18 to 21. This nonrandom sample of undergraduate EFL learners was voluntarily invited to participate in this study based on two criteria: 1) participants were learners of EFL in a TEFL, arts, or language and translation program from the departments of English; and 2) participants were familiar with the university context and academia.

Data Collection Procedure

The data were collected through a survey tool developed by researchers based on a rigorous review of pertinent literature and validated in this research. The survey was administered over Blackboard Collaborate made available for all students in different courses and programs in some online courses taught by nine colleagues in the university. Each survey questions comprised eight specific language skill dimensions, including the intensive English program, listening and speaking courses, reading courses, writing courses, multi-skills courses, English Literature courses, and translation studies courses. The survey content items addressed five components of intercultural competence, each of which was rated 1–5 on a Likert scale. The scale moves from

strongly disagree (1) to strongly agree (5) while (3) indicates Neutral.

Statistical Procedure

The survey was distributed online to English majors at King Khalid University. Before entering the data of the survey into SPSS, all the answers were appropriately coded. All data was primarily entered into Excel before being analyzed using SPSS (Vers. 25).

A range of statistical analyses was conducted to investigate internal and external criteria of construct validity. First, descriptive statistics, reliability estimates, and section correlations were computed to address psychometric characteristics and the internal aspect of construct validity. Descriptive statistics provided a general overview of how the test performed, whereas Cronbach's alpha and standard error of measurement for the total and section scores obtained insights into the consistency of the Intercultural communicative competence survey. Correlations among sections were used to obtain preliminary insight into the dimensionality of the measure.

In addition, to investigate the external aspect of construct validity of the survey, an exploratory factor analysis was run to extract the Kaiser-Meyer-Olkin value and Bartlett's Test of Sphericity. In addition, linear regression was also used to analyze the impact of each variable on the participants' overall performance on the raw total score scale and investigated whether this impact is in line with the expectation from the test development stage.

Results

Results of the survey study were reported on the basis of data analysis regarding the internal structure of the intercultural assessment survey and the correlations with external variables.

Psychometric Properties of the Survey

First, descriptive statistics and reliability estimates were calculated to describe the psychometric properties of the ICC assessment survey. The computation of Cronbach's alpha on the reliability of survey data is considered to be a sound alternative to SPSS (Hatcher, 1994). In Section 1 addressing Motivation, the Cronbach's alpha value method, regarding the reliability of the given test,

has been confirmed at 0.942. For Section 2, addressing self-knowledge, the Cronbach's alpha value has been confirmed at 0.956. For Section 3, addressing Other-knowledge, the Cronbach's alpha value has been confirmed at 0.957. For Section four on Mindfulness and Cognitive Flexibility, the Cronbach's alpha value has been confirmed at 0.934. For Section 5 on Tolerance for Uncertainty, the Cronbach's alpha value has been confirmed at 0.989. The method of measurement used has been endorsed, meaning that the scale used in this research is reliable since all values indicate a reliability co-efficient of 0.988, which is an acceptable level of reliability.

Table 1
The reliability of the ICC Survey

Variables	Number of items	Reliability Indicator
Motivation	3	0.942
Self-Knowledge	4	0.956
Other-knowledge	4	0.957
Mindfulness and Cognitive Flexibility	5	0.934
Tolerance for Uncertainty	4	0.989
All	20	0.988

Results of the correlation analysis

A correlation analysis was run to find out about the variables involved in assessing ICC in EFL college students and consider if they tend to indicate

variety or not. The results of the present research variables can be shown in Table (2) where there is significant correlation ($p < 0.001$) between each item in students' perceptions of motivation, and total number of items.

Table 2
Correlation analysis between each item in students' perceptions of their Motivation to ICC, and total number of items

No	Students' perceptions of Motivation	Correlation	significant
1.	I am curious to communicate in English with people from different cultures.	.964**	0.000
2.	I like to speak English with foreigners who come to work in Saudi Arabia.	.932**	0.000
3.	I communicate with expatriates in Saudi Arabia in English because it is easier for me to understand them, make requests or ask for information, etc. when I speak in English.	.946**	0.000

Table 3
Correlation analysis between each item in the students' perceptions of their self-knowledge with regard to ICC, and the total number of items.

No	Students' Perceptions of Self-Knowledge	Correlation	significant
4.	Learning English helps me understand and learn about English-speaking communities.	.945**	0.000
5.	The courses I study in English language, literature, linguistics, etc. help me learn more about how native speakers of English think and behave.	.941**	0.000
6.	The English courses I take at the college develop my knowledge about the cultures, identities, and communication patterns of native speakers of English.	.950**	0.000
7.	Learning English through native speakers of the language helps develop my empathy with people from these countries.	.932**	

Results shown in Table (4) below indicate that there is a significant correlation ($p < 0.001$) between each item in students' perceptions about other-

knowledge, and the total number of items.

Table 4
Correlation analysis between each item in students' perceptions of Other-knowledge, and the total number of items

No	Students' Perceptions about Other-knowledge	Correlation	significant
8.	I learn more about communication behaviors of native speakers of English, which contributes to my other-knowledge.	.954**	0.000
9.	Listening to native speakers of English who are different from us in language and culture is a key component of developing my self-knowledge and my self-awareness about others' cultures.	.955**	0.000
10.	The most effective way to develop other-knowledge and awareness of other-culture is by direct and thoughtful encounters with native speakers in class and outside of the classroom.	.894**	0.000
11.	I learn English because it is an effective way to learn about others' cultures as I can read the news or watch movies in English, which can offer insights that are lost in translation.	.961**	0.000

Results shown in Table (5) below shows that there is a significant correlation ($p < 0.001$) between each item in students' perceptions about Mindfulness

and Cognitive Flexibility, and the total number of items.

Table 5
Correlation analysis between each item in Students' Attitudes towards Mindfulness and Cognitive Flexibility, and the total number of items

No	Students' Perceptions of Mindfulness and Cognitive Flexibility	Correlation	significant
12.	Linguistic competence in English helps me to later reflect on communication interactions with native speakers of English.	.922**	0.000
13.	I can adapt my communication in English with non-speakers of Arabic based on my understanding of the other culture.	.943**	0.000

No	Students' Perceptions of Mindfulness and Cognitive Flexibility	Correlation	significant
	When I fail to understand a communication due to its cultural particularity, I usually ask explanatory questions to my interlocutor(s).	.956**	0.000
14.	I should know more about others and myself to be able to reflect on and adapt my knowledge as I pass through new experiences.	.903**	0.000
15.	The English courses I take enrich my cultural knowledge of others and help me avoid forming stereotypes or prejudiced judgments about others.	.847**	0.000

Results shown in Table (6) below that there is a significant correlation ($p < 0.001$) between each item in students' perceptions

about Tolerance for Uncertainty, and the total number of items.

Table 6
Correlation analysis between each item in students' perceptions about Tolerance for Uncertainty, and the total number of items

No	Students' perceptions about Tolerance for Uncertainty	Correlation	significant
1.	As I learn English, I learn how to tolerate with discomfort in uncertain situations of communication with native speakers.	.982**	0.000
2.	Whether communicating with someone of a different gender, race, or nationality, I often wonder what I should or should not do or say.	.989**	0.000
3.	Situations of uncertainty most often become clearer as I progress in communication with native speakers of English.	.983**	0.000
4.	The more I become worried or feel anxiety speaking English, the more likely I tend to leave a conversation or communicate in a less competent manner.	.985**	0.000

Descriptive Statistics

The demographic part of the ICC survey requested information about the participants' age, gender, and college affiliation. The demographic data is presented below. This comparison enables one to determine whether the sample is demographically similar to the population of study or not.

Part 1: Demographic data:

Participants

Of the total number of participants in this study (N= 346), (206) of these respondents (59.5%) were male EFL students, while 140 (40.5%) were female EFL students. As for their college affiliation, (166) students were from the colleges of Science and Arts (48%), (134) were from colleges of Languages and Translation (38.7%), and (46) were from other colleges (13.3%) (See Table 7 below).

Demographics of the Participants

Table 8: Gender and Affiliation

Variable	Category	Frequency	Percent
Gender	Male	206	59.50%
	Female	140	40.50%
	Total	346	100.00%
College	Science and Arts	166	48.00%
	Languages and Translation	134	38.70%
	Others	46	13.30%
	Total	346	100.00%

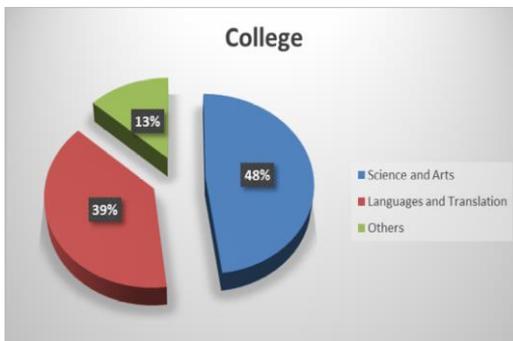
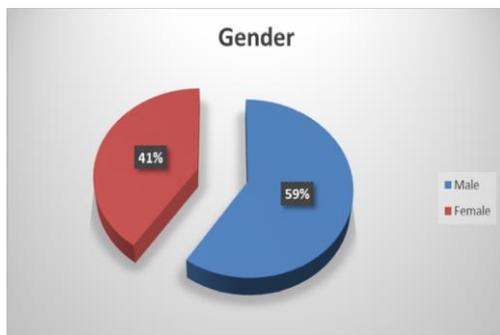


Figure 1. Gender and affiliation

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The descriptive statistics for the key variables in the study are discussed. The means and standard deviations associated with each scale used to measure the Intercultural communicative competence

in EFL College Students are shown in Tables 9, 10, 11, 12 and 13, respectively. The means and standard deviations for the modules comprising the EFL.

A) Motivation Factor

Table 9
Motivation Factor

Motivation Factor	Mean	Std. Deviation	Percent	sort
I am curious to communicate in English with people from different cultures.	4.42	0.633	88.3%	2
I like to speak English with foreigners who come to work in Saudi Arabia.	4.29	0.626	85.8%	3
I communicate with expatriates in Saudi Arabia in English because it is easier for me to understand them, make requests or ask for information, etc. when I speak English.	4.46	0.685	89.2%	1
Overall mean	4.39	0.65	87.8%	

Table 10 shows the means, standard deviations, Percent and order of the variables used in this factor. The overall mean (Mean 4.39, SD = 0.65, %=87.8%) for Motivation Factor was reasonably high. The respondents reported Motivation Factor high levels performance (I communicate with expatriates in Saudi Arabia in English because it is easier for me to understand them, make requests or

ask for information, etc. when I speak in English) (Mean = 4.46, SD = 0.685, 89.2%). The second-high mean is (I am curious to communicate in English with people from different cultures) (Mean = 4.42, SD = 0.633, 88.3%). The third-high mean is (I like to speak English with foreigners who come to work in Saudi Arabia) (Mean = 4.29, SD = 0.626, 85.8%) as shown in Figure 2.

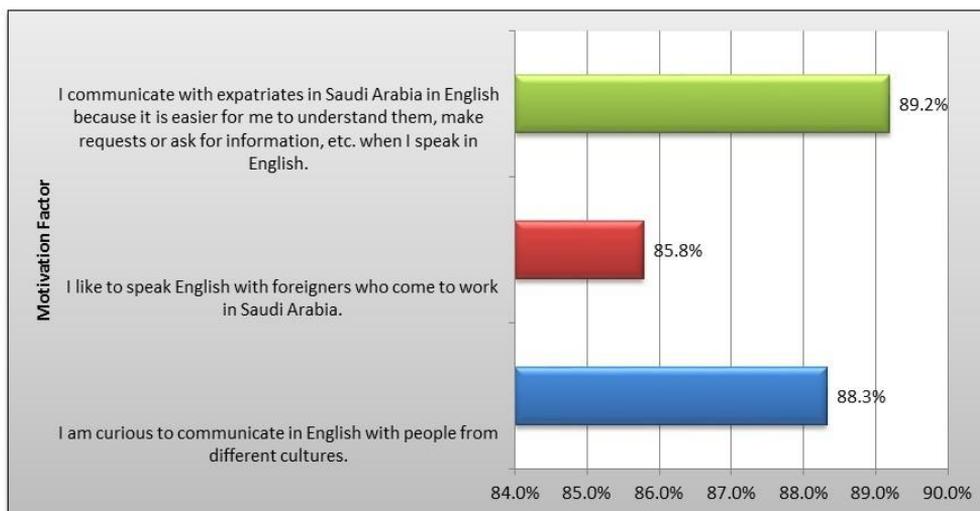


Figure 2. Motivation Factor

B) Self-Knowledge Factor

**Table 10
Self-Knowledge Factor**

Self-Knowledge Factor	Mean	Std. Deviation	Percent	sort
Learning English helps me understand and learn about English-speaking communities.	4.51	0.751	90.0%	2
The courses I study in English language, literature, linguistics, etc. help me learn more about how native speakers of English think and behave.	4.14	0.8	83.0%	3
The English courses I take at the college develop my knowledge about the cultures, identities, and communication patterns of native speakers of English.	4.12	0.86	82.0%	4
Learning English through native speakers of the language helps develop my empathy with people from these countries.	4.57	0.704	91.0%	1
Overall mean	4.33	0.78	87.0%	

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Table 10 shows the means, standard deviations, percent and order of the variables used to assess ICC in this dimension. The overall mean (Mean 4.33, SD = 0.78, %=87.0%) for Self-Knowledge Factor was reasonably high. The respondents reported Self-Knowledge Factor high levels performance (Learning English through native speakers of the language helps develop my empathy with people from these countries) (Mean = 4.57, SD = 0.70, 91.1%). The second-high mean is (Learning English helps me understand

and learn about English-speaking communities) (Mean = 4.51, SD = 0.75, 90.0%). The third-high mean is (The courses I study in English language, literature, linguistics, etc. help me learn more about how native speakers of English think and behave) (Mean = 4.14, SD = 0.80, 83.0%) The fourth-high mean is (The English courses I take at the college develop my knowledge about the cultures, identities, and communication patterns of native speakers of English) (Mean = 4.12, SD = 0.86, 82.0%) as show in Figure 3.

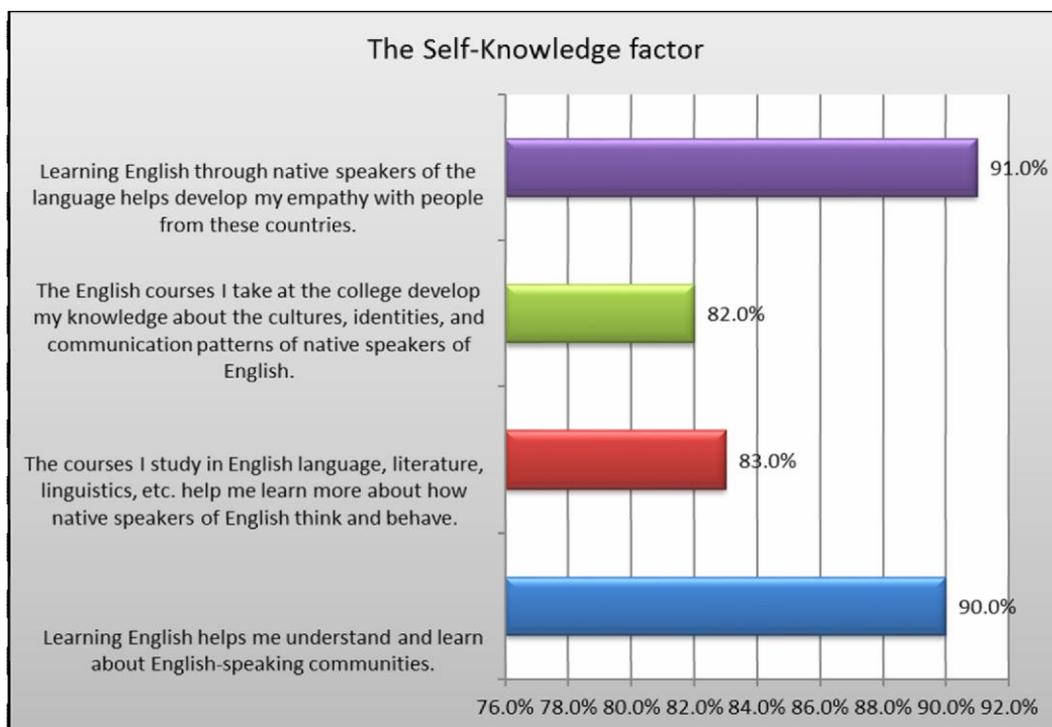


Figure 3: Self-Knowledge Factor

C) Other-knowledge Factor

Table 11
Other-knowledge Factor

Other-knowledge Factor	Mean	Std. Deviation	Percent	sort
I learn more about communication behaviors of native speakers of English, which contributes to my other-knowledge.	4.41	0.768	88.2%	2
Listening to native speakers of English who are different from us in language and culture is a key component of developing my self-knowledge and my self-awareness about others' cultures.	4.27	0.707	85.4%	3
The most effective way to develop other-knowledge and awareness of other-culture is by direct and thoughtful encounters with native speakers in class and outside of the classroom.	4.26	0.635	85.3%	4
I learn English because it is an effective way to learn about others' cultures as I can read the news or watch movies in English, which can offer insights that are lost in translation.	4.44	0.737	88.8%	1
Overall mean	4.35	0.71	86.9%	

Table 11 shows the means, standard deviations, percents and order of the variables used in this factor. The overall mean (Mean 4.35, SD = 0.71, %=86.9%) for Other-Knowledge Factor was reasonably high. The respondents reported Other-Knowledge Factor high levels performance (I learn English because it is an effective way to learn about others' cultures as I can read the news or watch movies in English, which

can offer insights that are lost in translation) (Mean = 4.44, SD = 0.737, 88.8%). The second-high mean is (I learn more about communication behaviors of native speakers of English, which contributes to my other-knowledge) (Mean = 4.41, SD = 0.768, 88.2%). The third-high mean is (Listening to native speakers of English who are different from us in language and culture is a key component of developing my self-

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knowledge and my self-awareness about others' cultures) (Mean = 4.27, SD = 0.707, 85.4%) The fourth-high mean is (The most effective way to develop other-knowledge and awareness of other-

culture is by direct and thoughtful encounters with native speakers in class and outside of the classroom) (Mean = 4.26, SD = 0.635, 85.3%) as show in Figure 4.

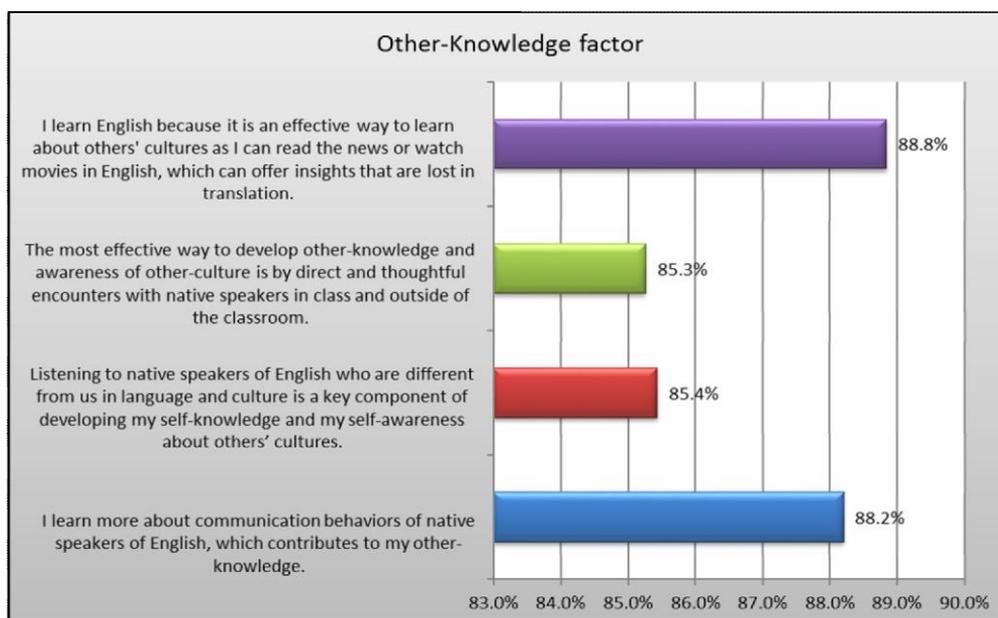


Figure 4: Other-Knowledge Factor

D) Mindfulness and Cognitive Flexibility Factor

Table 12
Mindfulness and Cognitive Flexibility Factor

Mindfulness and Cognitive Flexibility	Mean	Std. Deviation	Percent	sort
Linguistic competence in English helps me to later reflect on communication interactions with native speakers of English.	4.40	.772	88.1%	1
I can adapt my communication in English with non-speakers of Arabic based on my understanding of the other culture.	4.14	.824	82.8%	3

Mindfulness and Cognitive Flexibility	Mean	Std. Deviation	Percent	sort
When I fail to understand a communication due to its cultural particularity, I usually ask explanatory questions to my interlocutor(s).	4.25	.811	85.0%	2
I should know more about others and myself to be able to reflect on and adapt my knowledge as I pass through new experiences.	4.01	.841	80.2%	4
The English courses I take enrich my cultural knowledge of others and help me avoid forming stereotypes or prejudiced judgments about others.	3.97	1.274	79.4%	5
Overall mean	4.16	0.90	81.9%	

Table 12 shows the means, standard deviations, Percent and order of the variables used in this factor. The overall mean (Mean 4.16, SD = 0.90, %=81.9%) for Mindfulness and Cognitive Flexibility Factor was reasonably high. The respondents reported high levels performance (Linguistic competence in English helps me to later reflect on communication interactions with native speakers of English) (Mean = 4.40, SD = 0.772, 88.1%). The second-high mean is (When I fail to understand a communication due to its cultural particularity, I usually ask explanatory questions to my interlocutor(s).) (Mean =

4.25, SD = 0.811, 85.0%). The third-high mean is (I can adapt my communication in English with non-speakers of Arabic based on my understanding of the other culture) (Mean = 4.14, SD = 0.824, 82.8%). The fourth-high mean is (I should know more about others and myself to be able to reflect on and adapt my knowledge as I pass through new experiences) (Mean = 4.01, SD = 0.841, 80.2%) The fifth high mean is (The English courses I take enrich my cultural knowledge of others and help me avoid forming stereotypes or prejudiced judgements about others) (Mean = 3.97, SD = 1.274, 79.4%) as show in Figure 5.

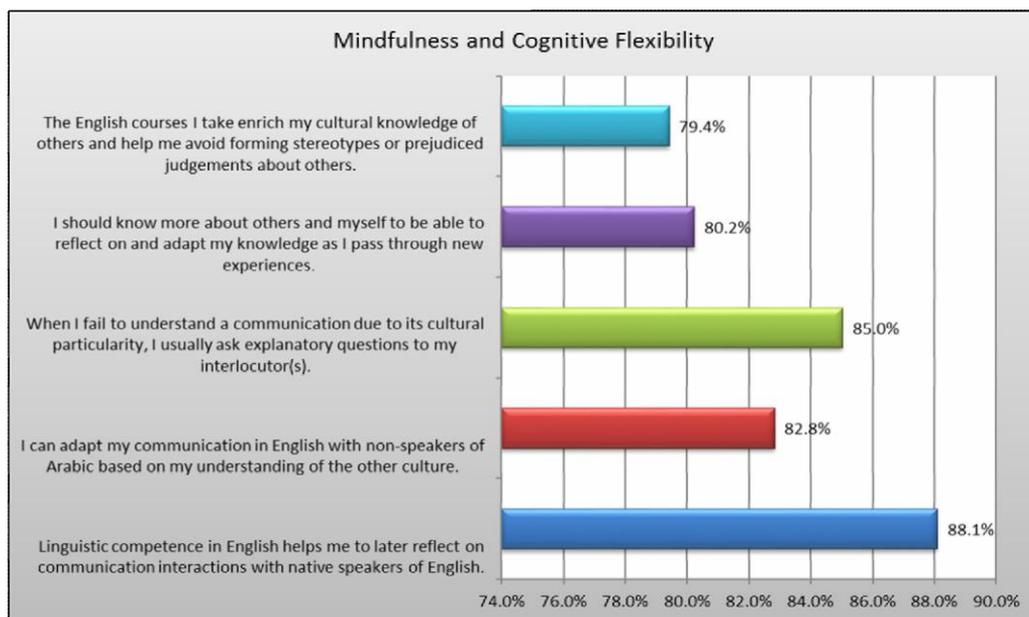


Figure 5: Mindfulness and Cognitive Flexibility Factor

**Table 13
Tolerance for Uncertainty Factor**

Tolerance for Uncertainty Factor	Mean	Std. Deviation	Percent	sort
As I learn English, I learn how to tolerate with discomfort in uncertain situations of communication with native speakers.	4.20	.728	83.9%	1
Whether communicating with someone of a different gender, race, or nationality, I often wonder what I should or should not do or say.	4.16	.737	83.1%	3
Situations of uncertainty most often become clearer as I progress in communication with native speakers of English.	4.19	.763	83.8%	2
The more I become worried or feel anxiety speaking English, the more likely I tend to leave a conversation or communicate in a less competent manner.	4.13	.761	82.7%	4
Overall mean	4.17	0.75	83.4%	

Table 13 shows the means, standard deviations, Percent and order of the variables used in this factor. The overall mean (Mean 4.17, SD = 0.75, %=83.4%) for Tolerance for Uncertainty Factor was reasonably high. The respondents reported high levels performance (As I learn English, I learn how to tolerate with discomfort in uncertain situations of communication with native speakers) (Mean = 4.20, SD = 0.728, 83.9%). The second-high mean is (Situations of uncertainty most often become clearer as I progress in communication with native

speakers of English) (Mean = 4.19, SD = .763, 83.8%). The third-high mean is (Whether communicating with someone of a different gender, race, or nationality, I often wonder what I should or should not do or say) (Mean = 4.16, SD = 0.737, 83.1%). The fourth-high mean is (The more I become worried or feel anxiety speaking English, the more likely I tend to leave a conversation or communicate in a less competent manner) (Mean = 4.13, SD = .761, 82.7%) as shown in Figure 6.

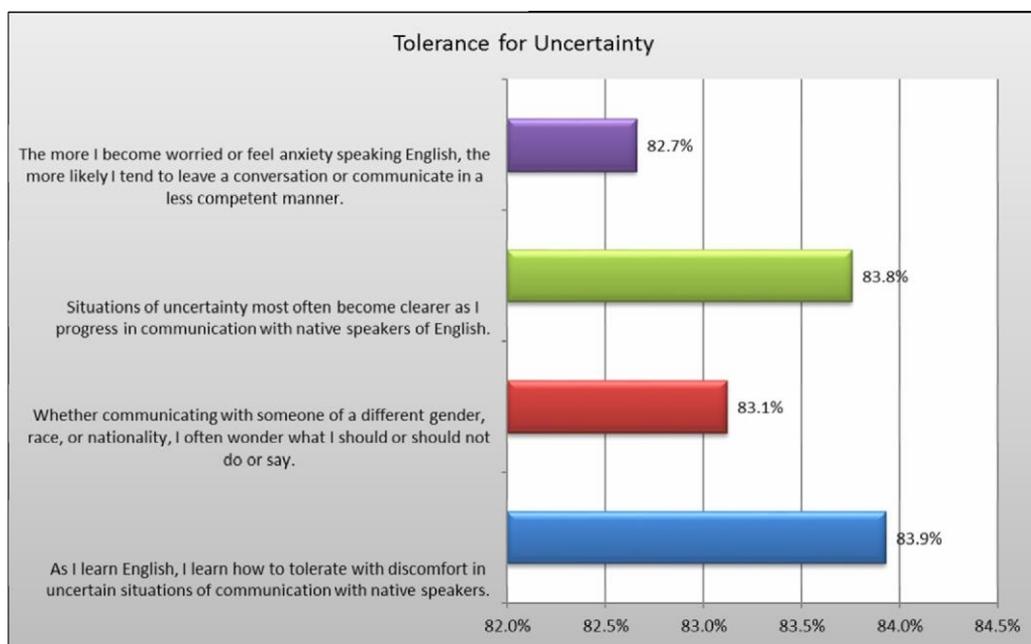


Figure 6: Tolerance for Uncertainty Factor

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To check the construct validity of the questionnaire, an exploratory factor analysis was run. The 20 items of the Intercultural communicative competence in EFL College Students questionnaire were subjected to principal components analysis (PCA) using SPSS version 25. Before performing PCA, the suitability of the data for the factor analysis was

assessed (see Table 15). The Kaiser-Meyer-Olkin value was (0.679) that was higher than the recommended value of $KMO \geq 0.6$ (Kaiser, 1974) and Bartlett's Test of Sphericity (Bartlett, 1954) reached statistical significance, supporting the factorability of the correlation matrix.

Table 14
The KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.679
Bartlett's Test of Sphericity	Approx. Chi-Square	1839.64
	df	190
	Sig.	0.000

As Table 15 below indicates, the 'Total Variance Explained' was used to determine the number of components (factors) to extract. Based on Kaiser's criterion components that had an eigenvalue of 1 or more were selected.

The findings showed that only the first three components recorded eigenvalues above 1 (2.912, 2.576, 2.255, 1.900, 1.603 and 1.044). These six components explained (61.456%) of the variance.

Table 15
Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.912	14.560	14.560	2.912	14.560	14.560	2.525	12.626	12.626
2	2.576	12.881	27.441	2.576	12.881	27.441	2.329	11.643	24.269
3	2.255	11.276	38.717	2.255	11.276	38.717	2.267	11.336	35.605
4	1.900	9.502	48.219	1.900	9.502	48.219	2.156	10.782	46.387
5	1.603	8.016	56.234	1.603	8.016	56.234	1.956	9.779	56.166
6	1.044	5.221	61.456	1.044	5.221	61.456	1.058	5.289	61.456

An inspection of the scree plot (see Figure 8 below) and the results of Parallel Analysis also confirmed the presence of three components. Concerning parallel analysis, the size of the eigenvalues was compared with those obtained from a randomly generated data

set of the same size, and only those eigenvalues that exceeded the corresponding values from the random data set were retained (Pallant, 2010). In the present study, six components with eigenvalues exceeding the similar criterion values.

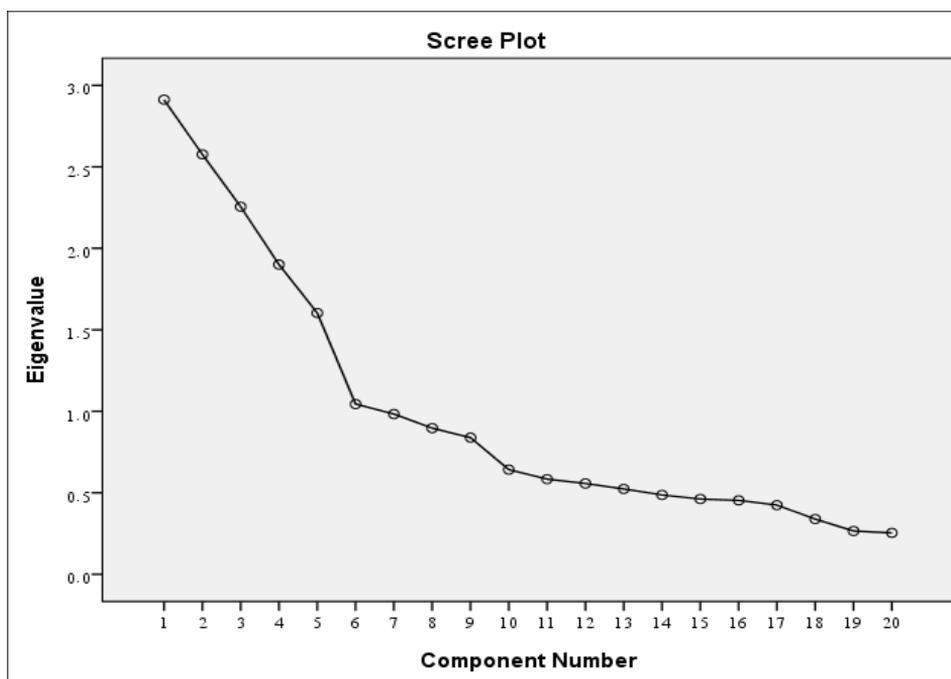


Figure 7: plot of the Eigenvalues and the items of ‘ICC’ Assessment Scale

The Component Matrix was used to show the un-rotated loadings of each of the items on the six components. Kaiser's criterion was used, and all components with eigenvalues above one were retained. Most of the items loaded quite strongly ($\geq .4$) on the 6 components of the ICC survey.

The rotated component Matrix (see Table 16 below) shows the items loadings on the sex factors with 4 items loading above .7 on Component 1, 3 items loading on Component 2, four items on Component 3, 3 items loading on Component 4, 4 items loading on Component 5 and two items on Component 6.

Table 16
Rotated Component Matrix of the Factor Analysis
of the Items in the 'ICC' Scale

item	Component					
	1	2	3	4	5	6
Learning English through native speakers of the language helps develop my empathy with people from these countries.	.788					
The English courses I take at the college develop my knowledge about the cultures, identities, and communication patterns of native speakers of English.	.784					
Learning English helps me understand and learn about English-speaking communities.	.766					
The courses I study in English language, literature, linguistics, etc. help me learn more about how native speakers of English think and behave.	.711					
I like to speak English with foreigners who come to work in Saudi Arabia.		.879				
I am curious to communicate in English with people from different cultures.		.860				
I communicate with expatriates in Saudi Arabia in English because it is easier for me to understand them, make requests or ask for information, etc. when I speak in English.		.812				
The more I become worried or feel anxiety speaking English, the more likely I tend to leave a conversation or communicate in a less competent manner.			.832			
Situations of uncertainty most often become clearer as I progress in communication with native speakers of English.			.815			
Whether communicating with someone of a different gender, race, or nationality, I often wonder what I should or should not do or say.			.794			

item	Component					
	1	2	3	4	5	6
As I learn English, I learn how to tolerate with discomfort in uncertain situations of communication with native speakers.			.504			
I can adapt my communication in English with non-speakers of Arabic based on my understanding of the other culture.				.802		
When I fail to understand a communication due to its cultural particularity, I usually ask explanatory questions to my interlocutor(s).				.795		
Linguistic competence in English helps me to later reflect on communication interactions with native speakers of English.				.747		
I learn more about communication behaviors of native speakers of English, which contributes to my other-knowledge.					.743	
Listening to native speakers of English who are different from us in language and culture is a key component of developing my self-knowledge and my self-awareness about others' cultures.					.733	
The most effective way to develop other-knowledge and awareness of other-culture is by direct and thoughtful encounters with native speakers in class and outside of the classroom.					.696	
I learn English because it is an effective way to learn about others' cultures as I can read the news or watch movies in English, which can offer insights that are lost in translation.					.419	
The English courses I take enrich my cultural knowledge of others and help me avoid forming stereotypes or prejudiced judgments about others.						.776
I should know more about others and myself to be able to reflect on and adapt my knowledge as I pass through new experiences.						-.574

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Based on these findings, the final 'ICC' Assessment scale includes the following 6 sub-scales and related items:

(1) Sub-scale one: "EFL' in Intercultural communicative competence in EFL College Students", which accounted for 2.91% of the total variance. This factor includes 20 items (Learning English through native speakers of the language helps develop my empathy with people from these countries., The English courses I take at the college develop my knowledge about the cultures, identities, and communication patterns of native speakers of English., Learning English helps me understand and learn about English-speaking communities, and The courses I study in English language, literature, linguistics, etc. help me learn more about how native speakers of English think and behave.

(2) Sub-scale two: "EFL' in Intercultural communicative competence in EFL College Students" accounted for 2.58 % of the total variance and includes 3 items (1 I like to speak English with foreigners who come to work in Saudi Arabia., I am curious to communicate in English with people from different cultures., and I communicate with expatriates in Saudi Arabia in English because it is easier for me to understand them, make requests or ask for information, etc. when I speak in English.

(3) Sub-scale three: "EFL' in Intercultural communicative competence in EFL College Students. This factor

including just four items (The more I become worried or feel anxiety speaking English, the more likely I tend to leave a conversation or communicate in a less competent manner., Situations of uncertainty most often become clearer as I progress in communication with native speakers of English., Whether communicating with someone of a different gender, race, or nationality, I often wonder what I should or should not do or say., and As I learn English, I learn how to tolerate with discomfort in uncertain situations of communication with native speakers.)

(4) Sub-scale four: "EFL' in Intercultural communicative competence in EFL College Students. This factor including just three items (I can adapt my communication in English with non-speakers of Arabic based on my understanding of the other culture., When I fail to understand a communication due to its cultural particularity, I usually ask explanatory questions to my interlocutor(s), and Linguistic competence in English helps me to later reflect on communication interactions with native speakers of English.

5) Sub-scale five: "EFL' in Intercultural communicative competence in EFL College Students. This factor including just four items "I learn more about communication behaviors of native speakers of English, which contributes to my other-knowledge", "Listening to native speakers of English who are different from us in language and culture is a key component of developing my

self-knowledge and my self-awareness about others' cultures". "The most effective way to develop other-knowledge and awareness of other-culture is by direct and thoughtful encounters with native speakers in class and outside of the classroom", and "".

6) Sub-scale sex: ""'EFL' in Intercultural communicative competence in EFL College Students. This factor

including just two items (The English courses I take enrich my cultural knowledge of others and help me avoid forming stereotypes or prejudiced judgments about others.", and I should know more about others and myself to be able to reflect on and adapt my knowledge as I pass through new experiences.

Regression Analysis

Table 17
Regression coefficients for Intercultural communicative competence in EFL College Students

Model	R	R Square	Adjusted R Square	F TEST	T TEST	
college	.937 ^a	.878	.877	2468.153	-49.68	0.000
Gender	.947 ^b	.897	.896	1488.094	-7.938	0.000

Table (17) shows that there are significant statistical differences at the significance level ($\alpha \leq 0.05$) among Gender and college in the sample of the study as the (t) value is (-7.938) and the level of significance is (0.000). and college as the (t) value is (-49.68) and the level of significance is (0.000).

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Appendix A

Intercultural communicative competence in EFL College Students

The purpose of this survey is to understand more about whether and how culture is conveyed and used as a learning medium by students of EFL in the Saudi King Khalid University. Researchers sincerely appreciate your help in filling out this form. The scale moves from strongly disagree (5) to strongly agree (1) while (3) indicates Neutral. You may add more detail or comments in the space below:

Demographic information

Age: _____

Institution (circle one)

- University _____
- college _____
- Department _____

Number of years learning English -----

- Main skill focus(es) of the courses I learn (circle a maximum of three)
Intensive English program - Speaking - Listening – Reading – Writing - Multi-skills courses – English Literature – Translation Studies
- GPA: _____

Motivation	5	4	3	2	1
1. I am curious to communicate in English with people from different cultures.					
2. I like to speak English with foreigners who come to work in Saudi Arabia.					
3. I communicate with expatriates in Saudi Arabia in English because it is easier for me to understand them, make requests or ask for information, etc. when I speak in English.					

Motivation	5	4	3	2	1
Self-Knowledge					
4. Learning English helps me understand and learn about English-speaking communities.					
5. The courses I study in English language, literature, linguistics, etc. help me learn more about how native speakers of English think and behave.					
6. The English courses I take at the college develop my knowledge about the cultures, identities, and communication patterns of native speakers of English.					
7. Learning English through native speakers of the language helps develop my empathy with people from these countries.					
Other-knowledge					
8. I learn more about communication behaviors of native speakers of English, which contributes to my other-knowledge.					
9. Listening to native speakers of English who are different from us in language and culture is a key component of developing my self-knowledge and my self-awareness about others' cultures.					
10. The most effective way to develop other-knowledge and awareness of other-culture is by direct and thoughtful encounters with native speakers in class and outside of the classroom.					
11. I learn English because it is an effective way to learn about others' cultures as I can read the news or watch movies in English, which can offer insights that are lost in translation.					
Mindfulness and Cognitive Flexibility					
12. Linguistic competence in English helps me to later reflect on communication interactions with native speakers of English.					
13. I can adapt my communication in English with non-speakers of Arabic based on my understanding of the other culture.					

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Motivation	5	4	3	2	1
14. When I fail to understand a communication due to its cultural particularity, I usually ask explanatory questions to my interlocutor(s).					
15. I should know more about others and myself to be able to reflect on and adapt my knowledge as I pass through new experiences.					
16. The English courses I take enrich my cultural knowledge of others and help me avoid forming stereotypes or prejudiced judgments about others.					
Tolerance for Uncertainty					
17. As I learn English, I learn how to tolerate with discomfort in uncertain situations of communication with native speakers.					
18. Whether communicating with someone of a different gender, race, or nationality, I often wonder what I should or should not do or say.					
19. Situations of uncertainty most often become clearer as I progress in communication with native speakers of English.					
20. The more I become worried or feel anxiety speaking English, the more likely I tend to leave a conversation or communicate in a less competent manner.					

Comments:

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Thank you