

## ESQ in L2 Willingness to Communicate and Communicative Ability

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**Abstract** Individuals are not always willing to communicate in L2 due to different factors. Given the essential role of effective communication in all aspects of life and the vital role of communicative ability in successful communication, this study investigated the role of emo-sensory intelligence (ESQ) in L2 willingness to communicate (L2WTC) and the communicative ability (COA) of Iranian EFL learners. Towards this end, 220 EFL learners took the ESQ and L2WTC scales. Moreover, their last language achievement scores were regarded for the assessment of their COA. The results of the correlational analyses showed that all the sub-constructs of ESQ are significantly correlated with the sub-constructs of L2WTC. Moreover, a significant relationship was found between COA and ESQ's visual and auditory sub-constructs. There was also a positive correlation between COA and all the sub-constructs of L2WTC. Furthermore, structural equation modeling (SEM) results revealed that while ESQ does not directly predict the students' COA, mediated by L2WTC, it is a positive predictor of COA. These findings suggest that improving ESQ can positively affect L2 WTC, leading to improved communicative ability in Iranian EFL learners.

**Keywords:** *Communicative ability, ESQ, Effective communication, Iranian EFL learners, L2 willingness to communicate*

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### 1. Introduction

Willingness to communicate (WTC) in L2 has extensively been studied during the history of language education research (MacIntyre, 2007; MacIntyre et al., 1998; Tabatabaei & Jamshidifar, 2013; Yashima, 2002). Contemporaneous L2 pedagogy significantly impacts communicative interaction in a class context to expand learners' communicative competence. WTC was cultivated from Burgoon's (1976) concept of unwillingness to communicate which was primarily hypothesized as an individual characteristic and a trait-like character to account for personal differences in L1 conversation (MacIntyre et al., 2001). MacIntyre et al. (1998) defined L2WTC as "a learner's readiness to enter into discourse at a particular time with a specific person or persons, using an L2" (p. 547).

L2WTC's significance arises from the interaction's function in language improvement (Molberg, 2010). As Kang (2005) holds, further interaction causes further language improvement and learning. However, learners are not continuously willing to endeavor L2 communication (Tabatabaei & Jamshidifar, 2013). Among certain factors that can reason the problem, learners' EQ is prominent. According to Goleman (1995), success and foreign language achievement depend on numerous bits of intelligence and the mastery of emotion (as cited in Pishghadam et al., 2020). Schutz and Pekrun (2007) also stated that the level of learners' emotions could affect their acquisition processes, performance, and language achievement. As an unquestionable factor in enriching WTC in the second language (L2WTC), emotional intelligence (EQ) has been inquired from different perspectives (Tabatabaei & Jamshidifar, 2013). However, emo-sensory intelligence (ESQ) as a newly developed framework (Pishghadam et al., 2017) that may have a control on EFL learners' WTC has not yet been examined.

Intelligence has generally been a severe bone of belief since traditional times. Digging the history of intelligence began with the works of psychometric intelligence (Binet & Simon, 1904a, 1904b; Galton, 1879) to EQ (Bar-On, 1988; Goleman, 1995) and sensory intelligence (SQ; Lombard, 2007). Psychometric intelligence is considered the cognitive ability that could account for success in education (Binet & Simon, 1904a, 1904b), suggesting that individuals with a high level of intelligence quotient (IQ) could perform better in the classroom (Pishghadam et al., 2020). However, Goleman (1995) claimed that EQ, holding to influence cognitive abilities and guide one's behaviors, is worth more than IQ and plays a more important role. Moreover, Lombard (2007) affirmed that SQ, as the awareness of the primary sensory wiring of our brain, overrules IQ and EQ (Pishghadam et al., 2020). Essentially, SQ mainly concentrates on senses and EQ rests on emotions, and ESQ focuses on an affiliation between senses and emotions and adjoining the two concepts to clear up some unknown aspects of intelligence (Pishghadam et al., 2020).

Concerning the intelligence constructs, Pishghadam (2015) introduced this new type of intelligence (i.e., ESQ), based on the concept of emotioncy. Emotioncy, a recently-introduced concept in psychology, can be completed in language studies (Pishghadam, 2015). Pishghadam, Adamson, et al. (2013) initiated a study undertaking the relationship between senses and emotions. They coined the term emotioncy (a mixture of emotion and frequency) and characterized it as the emotions elicited by sensory inputs that can be interrelated to an individual's cognition (Pishghadam et al., 2016; Pishghadam & Shayesteh, 2016). Emotioncy is a hierarchical order of null, auditory, visual, kinesthetic, inner, and arch emotioncies (Pishghadam, 2015). Therefore, diverse emotions are generated when individuals use their senses to encounter the world, and individuals with a high level of ESQ are good at realizing sense-induced emotions and adjusting their behaviors accordingly (Pishghadam et al., 2020).

Communicative ability (COA) is another factor on which ESQ may have an influence. In this study, COA is operationalized in terms of the outcomes that the foreign language learners achieve at the end of the term. Intelligence has been the key cognitive factor elucidating variations in learners' achievements (Kaya et al., 2015) and the topic of numerous studies investigating how intelligence is associated with success (Pishghadam et al., 2022). While IQ has been used to predict a learner's success, as the world enters the 21st century, investigations show that EQ is an improved predictor of success than the conventional scales of cognitive intelligence (Goleman, 1995). Intelligence may help learners achieve subject knowledge but only EQ can fertilize their learning skills and make them skillful (Shipley et al., 2010). Following the presentation of EQ by Bar-On in 1997 and SQ by Lombard (2007), the importance of emotional elements in academic achievement gained impulse in research (Pishghadam et al., 2022). Despite the lack of unity among early studies, more recent attempts found that the level of EQ can strongly predict and link with how much students can acquire in academic programs (Denny et al., 2019; MacCann et al., 2020; Partido & Stafford, 2018; Sánchez-Álvarez et al., 2020; Suleman et al., 2019). To extra challenge the role of IQ in academic achievement, investigators also found that SQ can outvalue IQ and EQ in indicating desirable performance in the academic setting (Lombard, 2007), and more recently, ESQ has been acknowledged as a broader prospect of intelligence that incorporates EQ with SQ (Pishghadam et al., 2022).

Given that ESQ is regarded as an affective trait of EFL learners and the dearth of research examining the association between ESQ and L2WTC, the present study endeavors to investigate whether significant relationships exist among ESQ, L2WTC, and COA among EFL learners.

## 2. Theoretical Framework

### 2.1. L2WTC

L2WTC, which symbolizes the psychological preparation to use the second language (MacIntyre, 2007) is an important concept across subjects of second language acquisition and conversation (Mahmoodi & Moazam, 2014). McCroskey and Baer (1985) proposed the construct "Willingness to Communicate" in connection to communication in the native language. "Being willing to communicate is part of becoming fluent in a second language, which often is the ultimate goal of L2 learners" (MacIntyre & Doucette, 2010, p. 1).

The origin of WTC can be observed in several related constructs. Burgoon (1976) introduced the construct "unwillingness to communicate" as an unending predisposition of an individual to refrain from communication and to behold the communication circumstances as relatively unrewarding. The WTC's value ascends from the interaction function in language improvement (Molberg, 2010). Kang (2005) supported that further interaction may cause further language development and learning. He as well reported how situational L2WTC could dynamically emerge and vary during a conversation situation (Mahmoodi & Moazam, 2014).

Baghaei's (2012) investigation on the relationship between L2WTC and success in learning EFL, declared that two out of the three subscales of WTC were significantly correlated with prosperity in learning EFL. Moreover, Birjandi and Tabataba'ian (2012) revealed a significant relationship between EQ and WTC. Further, their findings signified that foreign language classroom anxiety (FLCA), EQ, and some of its subscales are significant predictors of WTC.

Additionally, EQ and L2WTC, as two chief variables of personal differences, have been distinguished to be the consistent forecasters of L2 achievement and many studies have tested the effect of EQ on WTC. Tabatabaei and Jamshidifar's (2013) primary goal, for example, was to explore any possible correlation between EQ and WTC amongst 60 EFL learners. Their findings revealed that learners' EQ is significantly correlated with their willingness to take part in L2 communication, and as learners' EQ enhanced, their WTC in L2 increased. The discoveries of an investigation conducted by Alavinia and Alikhani (2014) on the relationship between EQ and WTC also affirmed that the higher the level of learners' EQ is, the more possible they are willing to communicate in L2. In addition, Pishghadam (2016) investigated the role of emotioncy, extraversion, and anxiety in WTC and found that emotioncy and extraversion have a positive effect on WTC, but anxiety affects it negatively. Yet, the relationship between ESQ and L2WTC has not been studied, hence, this study intends to examine this relationship empirically.

### 2.2. ESQ

Intelligence as an elusive concept in psychology has had many debates over the last century and there is little agreement on its definition (Sternberg, 2000). Thus, the evolutionary definition of it has made intelligence a multifaceted concept (Naji Meidani et al., 2022). Generally, intelligence applies to one's mental faculties with a higher emphasis on problem-solving, reasoning, and abstract thinking (Pishghadam et al., 2020). The change of focus in the history of intelligence can be followed by delving into it originating with the works of Binet and Simon (1904a, 1904b) and Galton (1879) on psychometric intelligence to the studies of Bar-On (1988) and Goleman (1995) on EQ and the strive of Lombard's (2007) SQ. Following the studies of intelligence by psychologists, several theories of intelligence, containing IQ, EQ, and SQ, have been introduced to explain different aspects of human abilities (Pishghadam, 2017). One of the new types of intelligence, which may arise from the combination of EQ and SQ, is ESQ. According to Pishghadam and Shayesteh (2017), ESQ is "the ability of an individual to recognize sense-induced emotion, label, monitor, and manage them to guide one's behavior" (p.24). To make a balance between SQ and EQ, Pishghadam et al., (2020) highlighted sensory emotions and mentioned the concept of ESQ as a chief factor in daily life. This study adjusted

a combinatory approach to describe intelligence and presumed that considering intelligence in separation (s factor) or in general (g factor; Spearman, 1923, 1927) loses the point that different combinations of intelligence can give a better picture of reality. While SQ chiefly focuses on senses and EQ is made upon emotions, the proposed ESQ foregrounds a close alliance between senses and emotions and juxtaposes the two conceptions to shed more light on a so-far-hidden prospect of intelligence. ESQ, as the sensitivity to emotions aroused by sensory inputs, originated in the literature of emotioncy (emotion + frequency), which addresses sense-induced emotions (Pishghadam, 2015). Pishghadam believed that various emotions are produced. Individuals use their senses to experience the world. An individual with a high degree of ESQ is good at acknowledging sense-induced emotions and changing their behaviors accordingly.

### 2.3. Purpose of the Study

Focusing on the emo-sensory dimension of intelligence, the purpose of this study is primarily to investigate the possible significant relationships among ESQ, L2WTC, and COA. More specifically, this study addresses the following research questions:

1. Are there any statistically significant relationships among Iranian EFL learners' ESQ, L2WTC, and COA?
2. Is ESQ a significant predictor of the Iranian EFL learners' L2WTC and COA?
3. Concerning the mediating role of L2WTC, is ESQ a significant predictor of Iranian EFL learners' COA?

## 3. Methodology

### 3.1. Participants

Participants of the present study were 220 EFL learners including both genders (153 females and 67 males). Their age ranged from 18 to 54 years ( $M = 26.19$ ,  $SD = 7.76$ ). They were English learners from elementary ( $N = 17$ ) to intermediate ( $N = 145$ ) and advanced proficiency levels ( $N = 58$ ). The participants had various degrees: 130 had BA or BS (Bachelor of Arts or Bachelor of Sciences) degrees, 52 had MA or MS (Master of Arts or Master of Science) degrees, 18 had Ph.D. (Doctor of Philosophy), and 20 had other degrees. The participants' mother tongue was Persian and they were learning English as a foreign language at diverse private schools, institutes, and universities. The participants were selected based on convenience or occasion sampling.

### 3.2. Instruments

In the present study, the ESQ and L2WTC scales were utilized. Additionally, the participants were requested to report their last English lesson scores as a representative of COA.

#### 3.1.1. The ESQ Scale

The 144-item ESQ scale was developed in the participants' native language by Pishghadam et al. (2020) tapping all the traditionally identified senses of hearing, sight, touch, movement, taste, and smell. In this scale, the participants' emotional expressions were reduced to six primary emotions (i.e., happiness, surprise, sadness, disgust, anger, and fear) from which other complex emotions derived (Ekman, 1992). The items targeted to measure the extent to which the participants could recognize the basic emotions triggered by their senses, their ability to express and label these emotions clearly, the degree to which they could monitor and control the induced emotions, and finally their ability to guide and manage the resultant emotions to improve their quality of life (Pishghadam et al., 2020). Therefore, the ESQ scale included four latent variables (i.e., recognition, labeling, monitoring, and management). The items were presented on a five-point Likert scale ranging from very little to very much. To avoid various forms of response bias, some items were negatively worded, which were eventually reverse-scored. In this study, using Cronbach's alpha, the reliability coefficients of .86 (visual), .89 (Taste and touch), .90 (auditory), .91 (kinesthetic), and .92 (olfactory) were yielded for the six senses along with the four underlying components. Furthermore, the total set holds a reliability of .98.

### 3.1.2. The WTC Scale

To assess the WTC of the learners, the 27-item questionnaire, developed by MacIntyre et al. (2001), was used. The items were presented on a five-point Likert scale ranging from almost never willing to almost always willing. The WTC questionnaire examined the students' degree of WTC regarding the four language skills, that is, oral communication was not assumed as the only type of communication. The four skill areas included speaking (8 items), comprehension (5 items), reading (6 items), and writing (8 items). In this study, the alpha reliability coefficients of .91, .85, .91, and .83 were yielded for willingness to speak, read, write, and listen correspondingly. Moreover, the total set held a reliability of .96.

### 3.3. Procedure

After registering in Google Forms, two scales were administered to the EFL learners. The data collection was accomplished from June to December of 2022 and took around twenty minutes for each participant to fill out the scales. Former to the administration of the questionnaires, all participants were notified that their replies would remain nameless and that their participation would not be mandatory. To simplify the data collection process and to guarantee that all the respondents would be conscious of what they would be assumed to do, the scales and the instructions were given in Persian, the participant's mother tongue.

The data were entered into and analyzed with the Statistical Package for Social Sciences (SPSS 23). The internal consistency of the scales was measured by Cronbach's alpha coefficient. To investigate the relationships among the variables and to discover probable correlations among ESQ, L2WTC, and COA, Pearson product-moment correlation was used. In addition, the prediction power of ESQ was examined by using structural equation modeling (SEM) via Amos (version 24) statistical package.

## 4. Results

### 4.1. Descriptive Statistics

Table 1 presents descriptive statistics, including mean and standard deviation, for the ESQ scale, L2WTC scale, and COA. Moreover, as can be seen in Table 1, the skewness and kurtosis estimates are within the range of -2 and +2, which indicates the normality of the distribution.

**Table 1**  
*Descriptive Statistics for the Variables of the Study*

	Min	Max	Mean	SD	Skewness	Kurtosis
<b>ESQ</b>	328	720	534.26	82.26	.06	-.49
Visual	50	120	92.31	13.18	-.19	.03
Auditory	49	120	89.82	15.39	-.01	-.56
Olfactory	36	120	86.41	17.60	-.11	-.51
Taste	46	120	88.56	15.42	-.02	-.54
Touch	50	120	90.13	15.35	.12	-.57
Kinesthetic	31	120	87.03	16.98	-.10	-.22
<b>L2WTC</b>	28	135	101.16	23.73	-.47	-.20
Willingness to Speak	8	40	28.95	8.25	-.52	-.44
Willingness to Read	7	30	23.85	5.20	-.78	.29
Willingness to Write	8	40	29.26	8.20	-.45	-.61
Willingness to Listen	5	25	19.10	4.57	-.36	-.64
<b>COA</b>	13	20	17.78	1.42	-.69	.58



## 4.2. Correlational Analysis

To find probable correlations among COA, ESQ, and L2WTC, Pearson product-moment correlation was used. As Table 3 reveals, some variables are significantly correlated with each other. COA has a significant relationship with the visual ( $r = .16, p < 0.05$ ) and auditory ( $r = .14, p < 0.05$ ) sub-constructs of ESQ. There is also a positive correlation between COA and L2WTC ( $r = .23, p < 0.01$ ) and all its sub-constructs, including willingness to speak ( $r = .16, p < 0.05$ ), willingness to read ( $r = .27, p < 0.01$ ), willingness to write ( $r = .21, p < 0.01$ ), and willingness to listen ( $r = .23, p < 0.01$ ).

Moreover, ESQ has a significant relationship with L2WTC ( $r = .39, p < 0.01$ ) and all its sub-constructs, including willingness to speak ( $r = .34, p < 0.01$ ), willingness to read ( $r = .34, p < 0.01$ ), willingness to write ( $r = .35, p < 0.01$ ), and willingness to listen ( $r = .37, p < 0.01$ ). With regards to the sub-constructs, visual ( $r = .33, p < 0.01$ ), auditory ( $r = .38, p < 0.01$ ), olfactory ( $r = .41, p < 0.01$ ), taste ( $r = .36, p < 0.01$ ), touch ( $r = .29, p < 0.01$ ), and kinesthetic ( $r = .27, p < 0.01$ ) as the sub-constructs for ESQ are significantly correlated with L2WTC. Additionally, all the sub-constructs of the ESQ are significantly correlated with all the sub-constructs of L2WTC (see Table 2).

**Table 2**  
*Correlational Analysis for the Variables*

	1	2	3	4	5	6	7	8	9	10	11	12	13
<b>1. COA</b>	1												
<b>2. ESQ</b>	.10	1											
3. Visual	.16*	.81**	1										
4. Auditory	.14*	.88**	.80**	1									
5. Olfactory	.01	.87**	.59**	.71**	1								
6. Taste	.05	.90**	.61**	.69**	.81**	1							
7. Touch	.08	.91**	.69**	.75**	.72**	.80**	1						
8. Kinesthetic	.12	.88**	.60**	.68**	.70**	.79**	.82**	1					
<b>9. L2WTC</b>	.23**	.39**	.33**	.38**	.41**	.36**	.29**	.27**	1				
10. Willingness to Speak	.16*	.34**	.31**	.36**	.38**	.31**	.22**	.21**	.90**	1			
11. Willingness to Read	.27**	.34**	.26**	.31**	.32**	.33**	.28**	.28**	.85**	.63**	1		
12. Willingness to Write	.21**	.35**	.29**	.35**	.38**	.32**	.26**	.24**	.95**	.79**	.80**	1	
13. Willingness to Listen	.23**	.37**	.31**	.32**	.37**	.35**	.30**	.27**	.89**	.74**	.70**	.82**	1

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

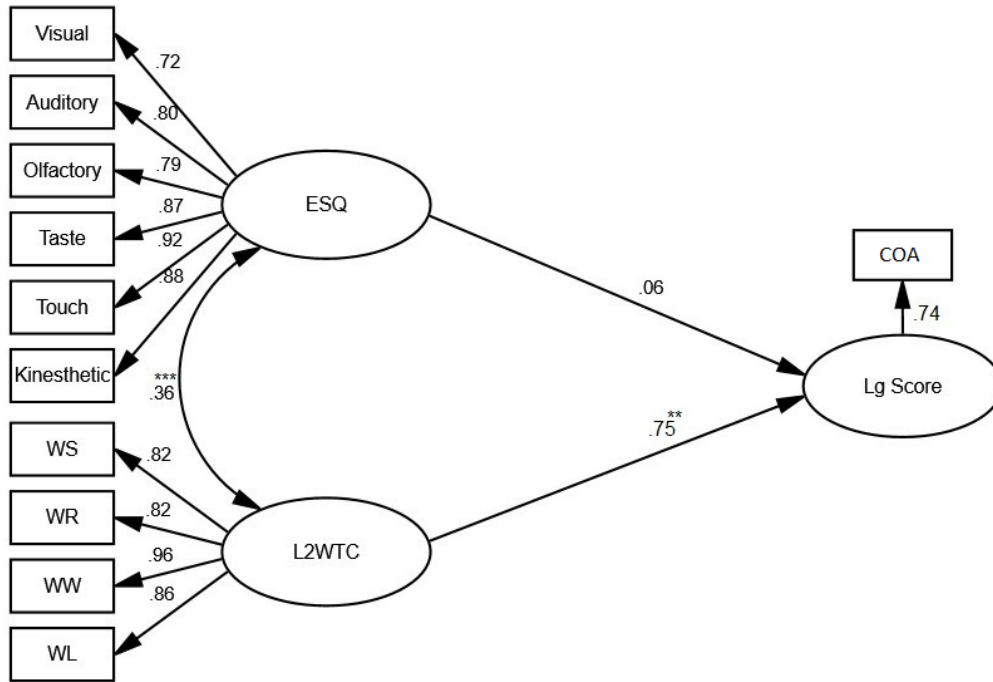
\*\*. Correlation is significant at the 0.01 level (2-tailed).

## 4.3. SEM Analysis

To check the predictive power of ESQ, Structural Equation Modeling (SEM) was conducted using AMOS. Two models were proposed for the prediction of COA (see figures 4 & 5). The bootstrap analysis of mediation was performed for the indirect effects. According to the goodness of fit indices (Table 5), the models fit the data adequately.

### 4.3.1. Model 1

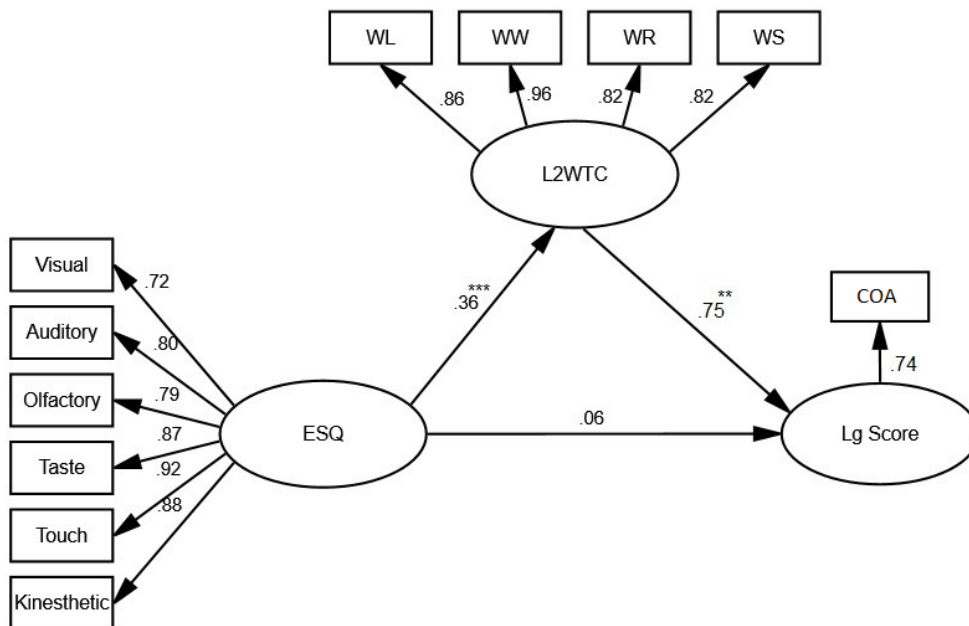
The first model (Figure 4) verifies the power of ESQ and L2WTC in predicting the students' COA. As Figure 4 illustrates, while ESQ does not predict the students' COA, L2WTC is a positive predictor of their COA ( $\beta = .75, p < 0.01$ ).



**Figure 4**  
The Schematic Representation of the Relationships among ESQ, L2WTC & COA

4.3.2. Model 2

The second model (Figure 5) verifies the power of ESQ, mediated by L2WTC, in predicting the students’ COA. As Figure 5 illustrates, While ESQ does not predict the students’ COA directly, mediated by L2WTC, ESQ is a positive predictor of their COA ( $\beta = .27, p < 0.01$ ). ESQ is a positive predictor of L2WTC as well ( $\beta = .36, p < 0.001$ ).



**Figure 5**  
The Schematic Representation of the Relationships among ESQ, L2WTC (Mediator) & COA

To see whether the models fit the data, goodness of fit indices were calculated using Amos. Table 3 shows the relative chi-square (i.e., chi-square index divided by the degrees of freedom ( $\chi^2/df$ )), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Squared Error (SRMR). The criterion for acceptance is different across researchers. In the present study, values for  $\chi^2/df$  should be less than 3 (Ullman, 2001), TLI and CFI were over .90, and RMSEA and SRMR were equal to or less than .08 (Browne & Cudeck, 1993).

**Table 3**  
*Goodness of Fit Indices for the Models*

Models	$\chi^2/df$	Df	CFI	TLI	RMSEA	SRMR
Model 1 (Figure 4)	2.20	39	.98	.97	.07	.05
Model 2 (Figure 5)	2.20	39	.98	.97	.07	.05

## 5. Discussion

In the recent psychological landscape, many diverse theories of intelligence, for instance, IQ, EQ, and SQ have grown (Naji Meidani et al., 2022). Therefore, the researchers struggled to put forward a framework surrounding the dominant theories of intelligence by supplying a well-rounded aspect of the notion. In this regard, ESI has been introduced as the appeasing approach encasing the up-to-date elements of intelligence (Pishghadam et al., 2020). ESQ is a new schema for integrating traditional EQ and SQ conceptions of intelligence, directing to the ability of persons to recognize, label, monitor, and control sense-induced emotions (Akbari & Pishghadam, 2022; Pishghadam et al., 2016). Pishghadam et al. (2020) presented ESQ as a conciliatory theory and a chief factor in daily life, describing it as sensitivity to emotions induced by sensory inputs (Naji Meidani et al., 2022).

Taking into account these concerns, this study intended to examine the role of emo-sensory intelligence in Iranian EFL learners' L2WTC and COA. The results of the Pearson product-moment correlation showed that ESQ has a significant relationship with L2WTC and all its components, including willingness to speak, read, write, and listen. Moreover, visual, auditory, taste, olfactory, kinesthetic, and touch, as the components of ESQ, are significantly associated with L2WTC. Furthermore, all the ESQ sub-constructs are significantly correlated with all the L2WTC sub-constructs, and COA has a significant relationship with ESQ's visual and auditory components. There is also a positive correlation between COA and L2WTC and all its sub-constructs. The probable reason for these findings may be due to the fact that learners with higher levels of ESQ have a better understanding of themselves. They can recognize their senses, label them, monitor their emotions, and manage their sense-induced emotions for themselves and others. Consequently, these learners have more willingness to communicate and could communicate more effectively with others.

Moreover, learners with higher levels of ESQ are more academically successful. That is, learners are going to perform better in the L2 context when they know how to functionally understand and regulate their emotions, monitor them, and manage their stress. The results of this study showed that COA has a significant relationship with the visual and auditory sub-constructs of ESQ. The apparent reason can be that learners in L2 settings concentrate more on these two senses (visual and auditory), mainly due to environmental factors, such as COVID-19 pandemic that gave rise to online learning environments. The findings also showed that learners who were high EFL achievers were more visual- and auditory-oriented. Unavoidably, the senses of visual and auditory seem to be more dynamic in these learners since the educational system in Iran concentrates more on visual and auditory teaching styles and lectures. Accordingly, most of what the learners need to learn come from visual and aural sources.

Consequently, the more active their visual and auditory senses, the better they can study, learn, and perform in academic settings. This study reveals that these two senses and their evoked emotions are well-recognized in the context of Iran, and the educational system has invested in developing this capability of individuals, but other senses need more consideration. Traditional methods center on cognition, learning structures, and words and improving oral skills among individuals with diverse



abilities (Ebrahimi et al., 2022). They do not consider senses and emotions (Pishghadam & Ebrahimi, 2020) as they deserve. At the moment, classrooms must be an effective atmosphere (Pekrun, 2014) in which a learner's emotions can improve motivation, learning, presentation, identity improvement, and health (Schutz & Pekrun, 2007). Thus, teachers and material developers must utilize sense- and emotion-based education methods to stabilize education. Emotions and senses may develop learners' learning and their ability to focus. Using different senses in teaching increases individuals' willingness to learn and assists them in holding information longer (Ebrahimi & Jahani, 2021; Tabatabaee Farani & Pishghadam, 2021).

The literature pertaining to communication exclusively centers on EQ, with no mention of ESQ in any of the articles. Furthermore, no research has assessed the correlation between ESQ and L2WTC. As a result, analogous findings related to EQ are cited.

The results of this study are similar to those of other studies which have indicated that an enhancement in learners' EQ would direct to better WTC (Tabatabaei & Jamshidifar, 2013; Alavinia & Alikhani, 2014). In the same line, a positive correlation has been found between EFL learners' emotioncy and their WTC (Pishghadam, 2016). Hence, it can be figured out that emotional learners are further willing to communicate because of their assertiveness, interpersonal skills, and capability to deal with their stress (Bar-On, 2000).

Regarding the two variables of EQ and COA, preceding attempts discovered moderate correlations (Gottfredson, 2005) to strong correlations (Guez et al., 2018; He et al., 2021; Jensen, 1998; Lohman, 2005) concerning the two variables of EQ and COA. The findings of this study could substantiate the preceding attempts to show the connection between the overall EQ point and educational achievement (Denny et al., 2019; MacCann et al., 2020; Nelson et al., 2002; Oudi et al., 2014; Partido & Stafford, 2018; Pozo-Rico & Sandoval, 2020; Rajendran et al., 2020; Sánchez-Álvarez et al., 2020; Stottlemyer, 2002; Suleman et al., 2019). Nevertheless, this finding is dissimilar to those of Lawrence and Deepa (2013) and Azimifar (2013), who did not locate any significant relationships linking EQ and learning achievement. Moreover, the findings of this study indicating a positive association between COA and L2WTC align with Mahmoodi and Moazam's (2014) research, which documented a significant positive correlation between WTC and foreign language achievement of Arabic language learners.

To provide an answer to the second research question, that is, to verify the predictive power of ESQ, SEM was conducted. The results showed that while ESQ is a positive predictor of L2WTC, it does not predict COA directly. The higher the ESQ, the better the self-awareness of those around him, and the more dominant he is in the classroom, the greater his willingness to communicate. However, this knowledge of ESQ alone is not enough to be able to predict the learners' COA because WTC, whether written, spoken, heard, or read, increases a person's COA and improves their performance in the class as well as the grade at the end of the semester.

As for the third research question, the results showed that mediated by L2WTC, ESQ is a positive predictor of COA. This finding is in line with that of Makiabadi et al. (2019) who showed a significant association between learners' sensory emotioncy types and language achievement. Their model displayed that emotional and cognitive types can predict language achievement significantly. This finding concerning the emotional type is in line with that of Zarezadeh (2013), declaring that emotional intelligence influences learners' achievement positively. Furthermore, the result agrees with the declarations made by Fahim and Pishghadam (2007), who stated that academic achievement has a strong connection with several dimensions of EQ (stress managing, intrapersonal, & general mood competencies).

Although ESQ and WTC are not novel constructs, their interplay and impact on COA constitute a novel research idea. This study enriches the literature on ESQ, WTC, and COA by highlighting that individuals with elevated ESQ levels are more disposed to engage in L2 communication and achieve superior academic outcomes, a phenomenon that our findings corroborate.

Like all studies, the results of the present study should be illustrated in light of some limitations. First of all, though participants in this study were from diverse private language institutes and universities,

they were selected from the context of Iran. Consequently, the results were merely generalizable to this population, and expanding the regional scope may pilot us to different results. Hence, researchers are recommended to replicate this study in different cities or countries to investigate if dissimilar cultures will show differing results. Secondly, the outcomes may not be generalizable to other settings, such as public schools. Therefore, this study is recommended to be replicated in future studies. Finally, the questionnaires will be merely used for data collection, which significantly relies upon participants' self-reports. Thus, qualitative methods like observation and interviews could also be used to have a further inclusive understanding of the concepts.

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