

# **Emo-Sensory Communication, Emo-Sensory Intelligence and Gender**

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**Abstract** The evolutionary definition of intelligence has made it a multifaceted concept. Emo-sensory intelligence (ESQ), as integration of emotional intelligence (EQ) and sensory intelligence (SQ) is the sensitivity to the emotions evoked by sensory inputs. It puts emphasis on individuals' ability to recognize, label, monitor, and manage sense-induced emotions to guide one's behavior and establish emo-sensory communication. Among the studies done on different types of intelligence and effective communication, gender differences have been a recurring theme. The purpose of this study was to investigate the role of gender in emo-sensory intelligence and emo-sensory communication. To this aim, the emosensory intelligence scale (ESIS) was distributed to 1500 participants. The results revealed significant differences between the two genders in ESO for visual, olfactory, and tactile senses, demonstrating the superiority of females over males. Moreover, a significant difference was found between the two genders in their ability to identify the basic emotions triggered by their senses, and use them in their communications, with females being better than males.

**Keywords:** Emo-sensory intelligence; ESQ; Emo-sensory communication; Gender; Senses

## 1. Introduction

rom the very onset of the 20th century, the issue of the importance of gender differences in intelligence and communicative skills has intrigued many researchers (Liu & Lynn, 2015). The question of whether males or females are the smarter sex has had a long and turbulent history, the answer of which is deeply rooted in sociopolitical agendas defining appropriate roles for them in society (Bocar & Joscon, 2022; Halpern & LaMay, 2000; Miller & Halpern, 2014; Pishghadam et al., 2021). The reply to this question, however, is culture-bound and varies over centuries, as the definition of intelligence has shifted over paradigms. In fact, the answer to this question relies heavily on the way intelligence is conceptualized and measured (Halpern & LaMay, 2000).

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Intelligence was initially put forth in the form of a single factor (known as "g"), and was indicative of an individual's ability to solve problems he or she has not met before, as well as the ability to process information. Intelligence was thus seen as a means of predicting health, job performance, educational prowess, and other indices of real life (Jensen, 1998). It was traditionally measured through psychometric intelligence scales (Binet & Simon, 1905a, 1905b; Terman, 1916; Wechsler, 1981, 1987), which were devised in such a way to ensure the equality of average scores for males and females (Halpern & LaMay, 2000). Despite contradictory findings of Lynn (1994) and Ellis et al. (2013) emphasizing the supremacy of men over women in the g factor, an almost unanimous consensus has revealed no significant differences between genders with regard to their overall score, although their performance on specific abilities differs, that is to say, females perform better in some cognitive functions while males excel at others, and they arrive at an eventual equilibrium (Brody, 1992; Jensen, 1998).

Thereafter, with quickening interest in emotional (Bar-On, 1988; Goleman, 1995; Salovey & Mayer, 1990) and embodied (Lakoff & Johnson, 1980) movements in the 20<sup>th</sup> century, spilling over into the cognitive paradigm of psychological studies, the same shift of approach was also applied to historical studies on intelligence, resulting in an unwitting surrender of psychometric intelligence scales (Binet & Simon, 1905a, 1905b; Galton, 1879) to *emotional intelligence* (EI) (Bar-On, 1988; Goleman, 1995) and *sensory intelligence* (SI) (Lombard, 2007) in time. Although the results of gender differences in EI varied across cultures, it was generally reported that females scored higher than males on social skills. They were reported to be more perceptive, empathic, and adaptable than males (Petrides & Furnham, 2000). Similarly, men were reported to be more sensitive to the stimulations of vision, while women were more sensitive in tactile, olfactory, gustatory, and, to some extent, auditory senses (Velle, 1987, 1992).

The proposed theories of intelligence ceded pride over one another as a result of the relentless pressure of studies endorsing the usefulness of their sources for years. Meanwhile, seeking to redress the imbalance between the three theories and believing that there is a permeable membrane among cognition, sense, and emotion, Pishghadam and Shayesteh (2017) introduced *emo-sensory intelligence* (ESI) as a conciliatory approach, suggesting that intelligence can also be defined as sensitivity to emotions evoked by sensory inputs, which can facilitate everyday communication. This opened up new and hitherto unexplored territories of the past theories of intelligence and enabled a closer examination of this phenomenon by integrating cognition, sense, and emotion into one whole picture which is called *emo-sensory quotient* (ESQ). Forth putting of this concept sparked new interest in gender differences studies of intelligence and communicative skills and made the researchers carry out a comparative analysis of the probable differences between males and females in a 1500-participant sample in the context of Iran.

#### 2. Theoretical Framework

## 2.1. Gender Differences in General Intelligence

Who is more intelligent? Men or women? Who is a better communicator? Men or women? The answer to this question can be reflected in and influenced by traditional beliefs, political agendas, economic issues, feminism, historical trends, and even the size of the brain. However, according to Halpern and LaMay (2000), answering these questions depends on how we measure and conceptualize intelligence and communicative ability. This debate is better to be considered as a draw since prior literature sometimes supports women's superiority and sometimes men's. However, the idea that there are gender differences in intelligence and the way individuals communicate has a long history in the world of science and psychology (e.g., Bennet, 2011; Colom et al., 2010; Halpern & LaMay, 2000) and has been examined in different contexts such as sports (e.g., Spierer et al., 2010), education (Budrina, 2017; Gras et al., 2010), politics (Rindermann, 2008), and work (Gondal & Husain, 2013).

Numerous studies have been done regarding gender differences in general intelligence (e.g., Bennet, 2011; Colom et al., 2010; Halpern & LaMay, 2000; Lynn, 1998; Nyborg, 2005). Most researchers in the field have asserted that gender makes no difference in general intelligence (e.g., Brody, 1992; Colom, 1998; Halpern & LaMay, 2000).

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On the other hand, in a number of studies, it was revealed that there is a significant difference in general intelligence favoring women (e.g., Keith et al., 2008; Reynolds et al., 2008), while some others have shown that men are slightly better in intellectual and communicative abilities (e.g., Irwing & Lynn, 2005; Lynn, 1994, 1998; Nyborg, 2005). The reason beyond such a difference, according to Ankey (1992), is men's larger brain size. Similarly, Jackson and Rushton (2006) and Lynn (1994) found a difference of exactly 4 IQ points favoring men.

While it is not clear whether gender plays a role in general intelligence and communication, what seems evident is that men and women perform differently in different areas of intelligence. For instance, women may be better in verbal abilities and communicative skills (Ankey, 1992), while men are better in spatial abilities (Benet, 2011; Linn & Petersen, 1985).

## 2.2. Gender Differences in Emotional Intelligence

It was in 1988 that the term Emotional Quotient (EQ) was coined by Bar-On. EQ, as a counterpart to IQ, refers to a series of emotional and social abilities required to overcome challenges in life. Emotional Intelligence (EI) and defined it as the "ability to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and action" (Salovey & Mayer, 1999, p. 281). Following the same trends, Goleman (1998) defined emotional intelligence as having five dimensions, including self-awareness, self-motivation, self-management, social awareness, and social skills, that can all be classified into two broad categories of personal competence and social competence.

Generally, the stereotype that women are more emotional than men is still widely held (Grewal & Salovey, 2006). Considering gender differences in emotional intelligence, prior studies often support women's superiority (e.g., Harrod & Scheer, 2005; Wing & Love, 2001). However, it does not mean that men cannot regulate or control their emotions. For instance, the literature has shown that women, on average, express more empathy and are more aware of their emotions, while men can control stress better and are more adaptable, self-confident, and optimistic (Ahmad et al., 2009; Pishghadam, Al Abdwani, et al., 2022). Women are also better at dealing with their emotions and can comprehend them better, while men perform better in handling and bearing stress (Fernández-Berrocal et al., 1999).

Concerning gender differences in EI, two major assessment tools have been often used; self-reports that measure one's EI based on his/her answers to a series of questions through which the level of emotional skills are measured, and ability tests such as Mayer et al.'s (2002) Emotional Intelligence Test (MSCEIT), and Multifactor Emotional Intelligence Scale (MEIS) which measure one's EI through analyzing how he/she solves emotional problems. A number of studies examining how men and women perceive EQ among themselves and others showed no significant gender difference in self-reported emotional intelligence (e.g., Bar-On, 1997; Brackett & Mayer, 2003; Tiwari & Srivastava, 2004), while other studies have revealed that men are more skillful in regulating emotions and that women are better in empathy and emotional attention (e.g., Austin et al., 2005; Brackett et al., 2005; Petrides et al., 2004).

When it comes to emotional intelligence tests like MSCEIT and MEIS, a significant difference in emotional intelligence is found favoring women (e.g., Brackett & Mayer, 2003; Mayer et al., 2002). Keeping this in mind, Arteche et al. (2008) concluded that there is no significant sex difference in overall EQ; however, when it comes to facets of EQ, a significant gender difference can be found. For instance, females score higher on interpersonal facets, or they can decode facial expressions more accurately than men. Likewise, Craig et al. (2009) hold the view that women are generally better in emotional-related perceptions or, in other words, emotional skills. They also argue that women outscore men in empathy. In addition, a previous meta-analysis on gender differences in EI shows women's advantage in all emotional intelligence dimensions (Joseph & Newman, 2010). In brief, studies support the superiority of women in EI and thus their communication.

#### 2.3. Gender Differences in Sensory Sensitivity

As stated earlier, there is no significant gender difference in general intelligence; however, when it comes to specific perceptual and cognitive abilities, differences between both genders become clearer. Generally, it is presupposed that men and women differ in their perceptions. According to Rowe (1983),

some differences exist between males and females in sensory sensitivity and sensory communication, and they are likely to be originally due to biological factors and, in some cases, socio-cultural factors. As Velle (1987) states, men have more sensory sensitivity in vision while women show sensory sensitivity in tactile, olfactory, gustatory, and, to some extent, auditory senses.

Regarding gender differences in the tactile sense, a number of researchers have demonstrated that men's and women's expectations, evaluations, and reactions to tactile stimulation are different (Burgoon et al., 1992; Floyd, 1999). Long ago, researchers reported women's superiority in sensitivity to tactile stimulation and pain (Bell & Costello, 1964), and, specifically, sensitivity in the hands and fingers (Axelrod, 1959). Regarding the role of touch in communication and interaction, and based on the results obtained from the Same-Sex Touch Scale (Larsen & LeRoux, 1984), and the Touch Avoidance Measure (Andersen & Leibowitz, 1978), it was found that women have more negative attitudes towards opposite-sex touch (Guerrero & Andersen, 1994), and that men have greater avoidance of same-sex touch (Willis & Rawdon, 1994). Having compared men's and women's reactions toward tactile stimulation, Fisher et al. (1976) discovered that, compared to men, women felt more positive affect and emotions and evaluated the environment and the touch initiator more favorably.

Gender plays an important role in determining smelling capabilities, too, and prior literature gives evidence of women's superiority in and sensitivity to olfaction (e.g., Brand & Millot, 2001). This superiority and sensitivity of women are biological (Maccoby, 1974), and goes back to the first few days after birth (Doty, 1991). Maccoby (1974) takes the stance that "changes in estrogen levels during the normal fluctuations of these hormones in women are associated with changes in the acuity of the sense of smell"; hence, "there ought to be sex differences in smell sensitivity" (p. 19). Moreover, compared to men, women pay more attention to olfaction (Herz & Inzlicht, 2002), and at the same time they are more intolerant to odors than men (Nordin et al., 2004). In terms of gender differences in emotional response to odors, women recall more emotional memories and experience more happiness, sadness, and reduction of stress when they smell an odor (Martin et al., 2001).

Given the important role of sex hormones discussed in the previous section, there are differences in gustation capabilities between men and women, too. According to Velle (1992), women are superior in chemical senses (i.e., olfaction and gustation) as they can distinguish various tastes and odors. Having examined both age and gender differences in taste sensitivity of four basic tastes, Yoshinaka et al. (2016) found that, firstly, such differences did exist; secondly, the sweetness was more rigorous and stronger than other senses; and thirdly, men exhibited higher detection thresholds than women for bitter, sour, and salty tastes while no gender difference was found in the sweet taste. Likewise, Roura et al. (2015) reported no significant sex difference in bitter taste intensity ratings between men and women. Considering that there are gender differences in salt perception (Hayes et al., 2010), Mitchell et al. (2013) reported that men tend to prefer salty foods more than women.

According to Garai and Scheinfeld (1968), "One might postulate a visual stimulus hunger of the boys and an auditory stimulus hunger of girls" (p. 193). What can be implied from this quotation is that men perceive things better from the visual system, and women perceive things better from the auditory system. Generally, the visual system works better for men; they possess keener vision and can perceive an object embedded between bulks of other objects better than women (Geary, 2010). Men's superiority in visuospatial abilities has been put forward by many researchers (e.g., Bennet, 2011; Geary, 2010; Linn & Petersen, 1985; Velle, 1987).

On the other hand, concerning the auditory modality, many researchers insist on women's advantage and superiority in the auditory sense (e.g., Chung, et al., 1983; Rowe, 1983; Melynyte et al., 2018). Furthermore, Barker and Watson (2000) hold the view that men and women have different listening styles; men and women are considered to be action-oriented and people-oriented listeners, respectively. While the latter means women like the occurrence of conversation itself and focus on the emotional connection with the message, the former means men only focus on listening to necessary details.

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Having its root in the fundamental assumptions of emotional quotient (EQ) and sensory quotient (SQ), emo-sensory quotient (ESQ) is the ability to recognize, label, monitor, and manage sense-induced emotions to guide one's behavior and establish emo-sensory communication (Pishghadam & Shayesteh, 2017; Pishghadam, Faribi, et al., 2022). In light of the theoretical background presented above and the empirical studies reviewed, the present study seeks to find out the role of gender in emo-sensory intelligence and emo-sensory communication. More specifically, the study addresses the following questions:

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- 1. Is there a significant difference between males and females in their emo-sensory intelligence, and thus emo-sensory communication, in terms of senses (visual, auditory, gustatory, kinesthetic, olfactory, and tactile)?
- 2. Is there a significant difference between males and females in their emo-sensory intelligence in terms of its components (recognition, labeling, monitoring, and management)?

## 3. Methodology

### 3.1. Participants

The participants in the current study comprised 1500 individuals from approximately ten cities belonging to variegated classes in Iran. In our convenience sampling, there were 1092 females and 408 males whose age ranged from 10 to 80 (M = 25.2, SD = 8.1), and they all spoke Persian as their mother tongue. The reason behind recruiting individuals from all walks of life with different socioeconomic and sociocultural backgrounds was to ensure a representative sample of individuals and consequently to warrant the probability of generalization. Prior to initiating the study, which was approved by the Ferdowsi University of Mashhad Ethics Committee, the participants gave written informed consent in accordance with the Declaration of Helsinki after having been ensured of the confidentiality of their responses.

#### 3.2. Instrumentation

To measure the individuals' level of awareness of their emotions and emo-sensory communicative skills induced by the sensory inputs, the emo-sensory intelligence scale (ESIS) was used (Pishghadam et al., 2020, Pishghadam, Faribi, et al., 2022). This scale, which is in the respondents' native language, consists of 144 items developed to measure the six traditionally well-known senses of hearing, sight, touch, movement, taste, and smell on a five-point Likert-type scale ranging from 1 (very little) to 5 (very much). In accordance with Ekman's (1992) model, the participants' displays of emotion were taken into account regarding the six major emotions of happiness, surprise, sadness, disgust, anger, and fear from which other emotions evoke. The items were written based on a four-component framework aiming to examine the extent to which the participants could identify the basic emotions triggered by their senses: (Recognition, e.g., I know images that make me feel sad), their ability to clearly express and label these emotions: (Labeling, e.g., expressing my feelings toward sounds that are enraging is hard for me), the degree to which they could monitor and control the induced emotions: (Monitoring, e.g., I can control and monitor the sorts of tastes that have disgusted me in the past), and finally their ability to guide and manage the resultant emotions to improve their quality of life: (Management, e.g., refraining from smelling things that frighten me is hard for me). Using Cronbach's alpha, the reliability coefficients of .80 (gustatory), .81 (tactile), .84 (kinesthetic), .90 (visual), and .91 (auditory and olfactory) were yielded for the six senses along with the four underlying components.

#### 3.3. Procedure

To evaluate the participants' ESI, the ESIS was administered to various individuals living in different cities in Iran. Participants were informed that their participation was not obligatory, and they could withdraw from the study at any time they wanted. The researchers employed both paper and documented online using Google Docs to administer the scale, and it took almost 40 minutes for the participants to fill out the scale.

As for data analysis, the data gathered from the scale were analyzed using Statistical Package for Social Sciences (SPSS 22) program. To explore the role of gender in each construct along with its subconstructs, independent samples t-tests were run.

#### 4. Results

To answer the first research question aiming at examining whether ESQ and emo-sensory communicative skills differ significantly between males and females, independent samples t-tests were run. Table 1 demonstrates the descriptive statistics of males' and females' scores in ESQ (visual, auditory, olfactory, gustatory, tactile, and kinesthetic).

**Table 1**Descriptive Statistics of ESQ for Senses across Males and Females

	Gender	N	Mean	Std. Deviation	Std. Error Mean
ESQ Visual	male	404	3.11	.63	.03
	female	1079	3.22	.61	.01
ESQ Auditory	male	404	3.12	.67	.03
ESQ Auditory	female	10	3.18	.61	.01
ESQ Olfactory	male	406	3.10	.76	.03
	female	1078	3.20	.76	.02
ESQ Gustatory	male	407	3.18	.80	.03
	female	1080	3.21	.72	.02
ESQ Tactile	male	404	3.21	.78	.03
	female	1082	3.3055	.72	.02
ESQ Kinesthetic	male	400	3.1201	.78	.03
	female	1078	3.1017	.71	.02
ESO	male	393	3.15	.65	.03
ESQ	female	1058	3.20	.60	.01

To see if these observed differences are statistically significant, independent samples t-tests were run. The results shown in Table 2 indicated that Iranian males and females do not differ in their ESQ auditory (t= -1.50, p= .13), ESQ gustatory (t= -.64, t= .51), and ESQ kinesthetic (t= .42, t= .66), while they do significantly differ in their ESQ visual (t= -2.96, t= .003), ESQ olfactory (t= -2.25, t= .02), and ESQ tactile (t= -1.99, t= .04).

 Table 2

 The Results of Independent Samples t-test for Determining the Role of Gender in ESQ for Senses

	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Std. Error Difference	
ESQ Visual	.007	.93	-2.96	1481	.003	.03	
Log visual ——			-2.93	707	.003	.03	
ESQ	3.49	.06	-1.50	1484	.13	.03	
Auditory			-1.43	663	.15	.03	
ESQ	.31	.57	-2.25	1482	.02	.04	
Olfactory			-2.24	723	.02	.04	
ESQ	6.76	.009	64	1485	.51	.04	
Gustatory			61	670	.53	.04	
ESQ	7.90	.005	-1.99	1484	.04	.04	
Tactile			-1.92	674	.04	.04	
ESQ	5.07	.02	.42	1476	.66	.04	
Kinesthetic			.41	662	.68	.04	

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ESQ —	5.80	.01	-1.37	1449	.17	.03
			-1.31	649	.18	.03

The next research question concerned the potential differences between Iranian males and females with regard to the four components (recognition, labeling, monitoring, and management) of ESQ. Table 3 depicts the descriptive statistics of these four components.

**Table 3**Descriptive Statistics of ESQ Components across Males and Females

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	Gender	N	Mean	Std. Deviation	Std. Error Mean
D :::	male	401	3.40	.82	.04
Recognition	female	1075	3.54	.78	.02
Labeling	male	402	2.93	.59	.02
	female	1074	2.93	.52	.01
Monitoring	male	403	3.20	.86	.04
	female	1076	3.29	.86	.02
Management	male	403	3.04	.68	.03
	female	1075	3.04	.59	.01

As indicated in Table 4, independent samples t-tests were conducted to compare the four components of ESQ for males and females. The results indicated that there was no gender difference in labeling (t= .09, p= 0.92), monitoring (t= -1.90, p= .05), and management (t=.17, p=.86), whereas the recognition component differs across males and females (t= -2.97, t= .003).

 Table 4

 The Results of Independent Samples t-test for Determining the Role of Gender in each Component of ESQ

	Levene's Test for Equality of Variances		t-test for Equality of Means			
_	F	Sig.	t	df	Sig. (2-tailed)	Std. Error Difference
Pagagnition	3.86	.05	-2.97	1474	.003	.04
Recognition ——			-2.90	685	.004	.04
T -1 -1'	2.46	.11	.09	1474	.92	.03
Labeling			.09	646	.92	.03
Manitorina	.007	.93	-1.90	1477	.05	.05
Monitoring ——			-1.90	721	.05	.05
Managamant	7.36	.007	.17	1476	.86	.03
Management —			.16	639	.87	.03

#### 5. Discussion

In today's psychological landscape, many different theories of intelligence, such as IQ, EQ, and SQ, have been developed. ESQ is a new framework for integrating classical EQ and SQ conceptions of intelligence, referring to the ability of individuals to recognize, label, monitor, and manage sense-induced emotions and establish emo-sensory communication (Akbari & Pishghadam, 2022; Pishghadam et al., 2016; Pishghadam & Shayesteh, 2017). Pishghadam et al. (2020) introduced ESI as a conciliatory approach and a leading factor in daily life, defining it as sensitivity to emotions evoked by sensory inputs. Figure 1 illustrates the levels and major components of ESI.



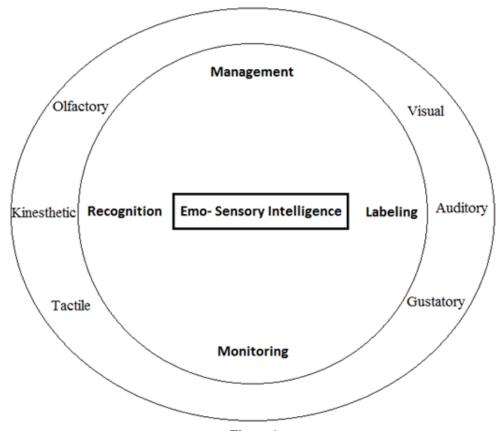


Figure 1
The Levels and Major Components of ESI

The first objective of this study was to compare ESQ for senses and emo-sensory communicative abilities between males and females. The results exhibited no significant differences between males and females in their ESQ auditory, ESQ gustatory, and ESQ kinesthetic. However, they did significantly differ in their ESQ visual, ESQ olfactory, and ESQ tactile. In the case of the auditory modality, these findings are in contrast with those of Chung et al. (1983) and Melynyte et al. (2018), who insisted on women's advantage and superiority in auditory senses. Moreover, the findings seem to contradict Velle's (1987, 1992), in which women were reported to be more sensitive to gustatory stimulations. Considering visual abilities, the related results are in contrast with that of Garai and Scheinfeld (1968), which postulate a visual stimulus hunger for boys. As for the olfactory system, the findings are in line with those of Wysocki and Gilbert (1989), who claim that women have higher olfactory capabilities compared to men. Also, the results confirm the superiority of women's sensory sensitivity in the tactile sense. This is in line with Velle (1987), illustrating that men's and women's expectations, evaluations, and reactions to tactile stimulation are different (Burgoon et al., 1992; Floyd, 1999). Finally, as Jensen (1998) suggested, there is no significant gender difference in general intelligence; however, when we come to specific perceptual and cognitive abilities, differences between both genders become clearer.

Regarding the second goal, comparing the four components of ESQ between males and females, no significant gender differences in labeling (the ability of individuals to clearly express and label their emotions), monitoring (the degree to which individuals can monitor and control the induced emotions), and management (the individuals' ability to guide and manage the resultant emotions to improve their quality of life) were observed, whereas the results demonstrated significant differences between males and females with regard to the recognition component (the ability to recognize the basic emotions triggered by individuals' senses). Consistent with what was found in Schneevogt and Paggio (2016) and Krems, Neuberg, et al. (2015), the obtained results have shown that there are gender differences in recognition of emotions. Previous studies on the exploration of gender differences in recognition of emotional facial expressions have demonstrated that females are more accurate decoders and

recognizers of emotional expressions than males (Biele & Grabowska, 2006; Hall, 1978; Hall et al., 1999; Mancini et al., 2013; McClure, 2000; Montagne et al., 2005). In addition, several studies on gender differences in this field have revealed a female advantage in recognizing and decoding expressions of emotions. Hall and Matsumoto (2004) found that women are more accurate at identifying the correct pattern when rating emotions on a multiscalar rating scale, while this gender difference could not be observed for single-choice tasks (Hall & Matsumoto, 2004). Moreover, women are believed to express sadness and fear more often than men, while men are believed to express anger more frequently (Fabes & Martin, 1991). Most recently, Krems et al. (2015) showed that women are biased to see anger in neutral female faces, whereas no such effect could be found for male faces or other emotions. One possible line of explanation for women's better recognition ability can be related to their effort to compensate for their weaker physical power (Brand & Millot, 2001). Analyzing individual emotions, it becomes clear that this pattern reflects a slight female advantage in recognition of happiness, surprise, disgust, and anger but not in recognition of fearful or sad faces. However, this small but significant female advantage has not been replicated in all studies (e.g., Hall & Matsumoto, 2004), which may relate to differences in methodologies employed together with the sample sizes and age ranges used.

In short, the results of the current study confirmed that ESQ as a kind of intellectual and communicative ability could be considered as one of the determinants influencing and guiding genders' behavior. Taken together, ESQ as a newly-developed theory requires future research endeavors. The present study took a step in gender differences studies of intelligence and communication by comparing differences between Iranian males and females with regard to ESQ. It is recommended that the findings of this study be confirmed through a qualitative study as well. Moreover, further studies can be planned to probe the relationship between individual's ESQ profile and other psychological, social, and socioeconomic variables such as personality types, social class, and age in other contexts and cultures. Another line of future endeavors could deal with the difference between individual's ESQ between individualist and collectivist cultures. The relationship between ESQ and other types of intelligence can also be investigated. Overall, ESI is a new area awaiting further research.

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