ORIGINAL ARTICLE

Perceptions of Gender Differences in Self-Report Measures of Emotional Intelligence

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Published online: 23 April 2014 © Springer Science+Business Media New York 2014

Abstract Emotional Intelligence (EI) refers to the abilities/ competencies that an individual has about emotions and has proven to be related to positive aspects in life. Despite its growing relevance, results about the existence and magnitude of gender differences have been inconclusive, with some studies suggesting that such differences depend on the theoretical approach and type of instrument used. In an effort to better understand these relationships, this study examined the stereotyped nature of self-report instruments of EI from the two main theoretical EI approaches (ability-based and mixed models). Two hundred sixty Spanish undergraduates from a university in the South of Spain indicated the extent to which they considered several EI competences as typical of women/men. Results show that most EI dimensions are biased by gender stereotypes, in terms of being perceived as more characteristic of one gender or the other. An in-group gender bias appeared particularly among female participants whereby they attributed higher scores to women than to men in most EI dimensions. Men also favored men giving higher scores than women did in some of the dimensions. These results suggest that self-report EI measures may be influenced by gender stereotypes, which has relevant implications for EI researchers.

Keywords Emotional Intelligence \cdot Instruments \cdot Gender perceptions \cdot EI models \cdot Self-reports

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Introduction

The existence of gender differences is one important concern among Emotional Intelligence (EI) researchers (see metaanalysis by Joseph and Newman 2010; or Thory 2013). Yet, results to date are contradictory and the underlying explanations for the existence of such differences remain to be understood, especially in relation to self-report measures of EI that stem from different EI approaches (Joseph and Newman 2010). Our study tries to shed light on this area of research by analyzing whether self-report EI measures are affected by gender stereotypes. In doing this, we try to address why results from different researches are contradictory along with the impact gender has on the assessment of EI.

In particular, in order to examine these research questions, we analyze the extent to which EI dimensions from three of the most widely used self-report measures included in the two main EI theoretical approaches, namely, the ability model (Salovey and Mayer 1990 in US) and the mixed model (Bar-On 1997; Petrides and Furnham 2003 in US), are perceived by Spanish undergraduates as typical of men and women. By incorporating this approach, we capture the gendered nature of some of the most widely used self-report EI measures from a novel perspective that accounts for the extent to which they may be biased by gender stereotypes. The confirmation that EI measures are biased by gender stereotypes and a comprehensive analysis about how these stereotypes vary across EI selfreport measures, as will be discussed later, would not only speak to a gender bias in EI measures but may also help to better analyze the gendered nature of EI dimensions and, in particular, of EI self-report measures.

Gender Beliefs About Emotions

Generally speaking, gender stereotypes refer to people's perception that men and women have different characteristics based on their gender in a given category and serve to better explain human behavior in different contexts (i.e. studies by Bosak et al. 2008 with US general population or Lopez-Zafra et al. 2012 with Spanish undergraduates). Furthermore, they serve to better understand gender differences in self-report ratings as these are often biased by gender stereotypes (Beyer 1990, 1999, with U.S. samples). Gender stereotype beliefs attribute specific characteristics to women and men, and have a prescriptive element; determining whether specific behavior is appropriate for a woman or a man (Eagly and Karau 2002 in U.S. or López-Sáez and Lisbona 2009 in Spain). Specifically, attributes such as sensitivity or affection are considered as more typical of women, whereas attributes such as aggression or courage are considered as more typical of men (see Williams and Best 1990, and Williams et al. 1999 studies with a global sample from 25 countries).

Derived from the existence of gender stereotypes in emotion-related attributes (see chapter by Keltner and Lerner 2010), emotional phenomena is often associated with women, rather than with men, given that the concept of emotionality is connected with feminine characteristics such as focusing on one's relations with others, being attentive to other's needs or being intimate with others (see Fischer 1993, or Hall et al. 2000 for a revision). Adherence to such roles would also potentially influence the willingness of individuals to report emotions that are consistent or inconsistent with stereotypic beliefs (Brackett et al. 2006 with US samples). Indeed, previous research has already demonstrated that gender stereotypes affect perceived emotional competencies and the degree to which individuals engage in interpreting the emotional aspects of their experience (see book chapter by Brody and Hall 2000, 2008; or Fischer 1993 for a review). If women were expected to attend to their emotions, they would evaluate themselves as concerned with emotions. Also, other people evaluating women would bias their perceptions in the same way. In sum, there is enough evidence to conclude that emotional competences are directly affected by gender stereotypes about emotions and related emotional phenomena (Brody and Hall 2000, 2008).

Emotional Intelligence from a Gender Perspective

Studies analyzing Emotional Intelligence (EI) have also considered the effect of gender in understanding individual differences in the capacity to process emotional information accurately and efficiently (García-León and Lopez-Zafra 2009 in Spain). In fact, research on EI has grown rapidly over the last 20 years (Fernández-Berrocal and Extremera 2010), with promising results about the predictive power of EI in several aspects of men's and women's lives (e. g. Extremera et al. 2011; Salguero et al. 2012 in Spain). Overall, however, findings about the existence of gender differences seem to be contradictory when taking into account a general score on EI (Bar-On 2006; or Bindu and Thomas 2006 with Canadian samples; Fernández-Berrocal and Extremera 2006; with Spanish samples). Due to these inconsistent results, it has been suggested that gender differences in EI may depend on the instruments and theoretical approaches that are used (see meta-analysis by Joseph and Newman 2010).

Notwithstanding the lack of clear empirical evidence about the gendered nature of EI and the suggestion that gender differences may differ depending on the theoretical approach and the instrument used to analyze it, one particularly promising area of study is to analyze the stereotyped nature of several EI dimensions that may explain the discrepancies among instruments in gender differences results. Indeed, prior research has not investigated whether certain EI dimensions included in EI self-report measures are considered as more typical of women or men. Such an analysis may subsequently help to explain gender differences in such self-report EI measures.

To examine the extent to which EI can be influenced by gender stereotypes and better understand discrepant findings of past studies, it is helpful to rely on the most widely used instruments to measure such intelligence. Overall, there are two main approaches to EI (ability model and mixed model). The first approach is provided by Salovey and Mayer (1990), who first introduced the concept of EI. These authors proposed the ability model, in which EI refers to the way individuals perceive, value and express emotions (i.e., process emotional information) and the analysis of the capabilities that are required for such processing (Brackett and Salovey 2006; Mayer and Salovey 1997; Mayer et al. 1999 in US). This model views overall EI as joining abilities from four areas: (a) accurately perceiving emotion, (b) using emotions to facilitate thought, (c) understanding emotion, and (d) managing emotion (Mayer and Salovey 1997). Under this approach, several instruments are proposed to analyze EI. Two of the most representative self-report instruments are the TMMS (Trait Meta Mood Scale) and the WLEIS (Wong and Law Emotional Intelligence Scale). The TMMS constitutes one of the original measures developed by Salovey and Mayer (Salovey et al. 1995) and measures attention to emotion, emotional clarity and emotional repair. Because it is quite easy to administrate, particularly in its short form, a good amount of studies have used it previously. The WLEIS is also a commonly used scale within the ability-model, which measures self-emotional appraisal, others' emotional appraisal, use of emotion and regulation of emotion. Although both instruments draw from the same theoretical framework (Salovey et al. 2008), in contrast to the WLEIS, the TMMS better captures emotional competences directed toward oneself, rather than toward others. Thus, whereas the TMMS refers to attention, clarity and repair of own emotions, the WLEIS includes many items that refer to the perception, understanding and regulation of others' emotions. As a consequence, the gendered nature of such dimensions may also vary.

Because, in the practice, both the TMMS and the WLEIS constitute the most widely self-report used and widely known instruments to measure EI under the Mayer and Salovey's paradigm, we will consider them as ability-based model measures for the purposes of this paper.

When overall scores are taken into account, studies using instruments from this approach often find differences between men and women in the use, understanding and handling of emotions, with women scoring higher particularly in aspects related to perception of emotions (Brackett and Salovey 2006 in US). However, the results found in relation to some of these dimensions can vary. For example, Ciarrochi et al. (2000) in Australia or McIntyre (2010) in US showed that women scored significantly higher in general EI, including Attention, Clarity and Regulation of emotions as measured with the TMMS. Other results indicate that men are often better at handling negative emotions as measured with the TMMS (eg. Extremera et al. 2006; Fernández-Berrocal and Extremera 2008; Gartzia et al. 2012, all of them in Spain). However, also in Spain with undergraduates' samples, Fernández-Berrocal et al. (2004a) found no significant differences between men and women in the three subscales of the TMMS. Using WLEIS Whitman et al. (2009) found with a U.S. sample that there were no gender differences in global scale as well as in all subscales of the Wong and Law Emotional Intelligence Scale (WLEIS) except for the Use of Emotion scale, in which females scored higher than males. However, Pena et al. (2012) found in Spain using WLEIS, that women teachers scored higher than men in other's emotion appraisal.

The second approach is the mixed model, proposed by Bar-On (1997, 2000). This model combines emotional abilities with other competencies that include social behavior and identify five components closely related to personality domain (Bar-On 1997, 2006). From this approach, EI is a set of competencies and personal cognitive or/and social skills that refer to emotional and social contents (neither cognitive nor abilities), and determine people's efficiency to comprehend and cope with daily problems (García-León and Lopez-Zafra 2009). In particular, the mixed model includes five facets of EI: 1) intrapersonal; 2) interpersonal; 3) adaptability; 4) stress management and 5) humor. Furthermore, there are specific skills within each domain (see Joseph and Newman 2010 or Matthews et al. 2011 for a review of the models). The most important and widely used instrument under this approach is the Bar-On Emotional Quotient Inventory (EQ-i), which has developed different versions. From mixed models (Bar-On 2006; Boyatzis et al. 2000), there are no clear differences between men and women in the general levels of EI. For example, Dawda and Hart (2000) did not find differences between total scores on EQ-i with university Canadian students. Also, Bar-On et al. (2000) or Livingstone and Day (2005) found no statistically significant differences between men and women in samples from U.S. in general EI. Yet, differences did emerge in some specific emotional competences. Women often score higher than men in areas related to appropriately feeling and expressing emotions, whereas men tend to score higher in those concerning the handling of emotions and being optimistic (e.g. Austin et al. 2010 with Canadian undergraduates or Bar-On 2006; Bindu and Thomas 2006; Dawda and Hart 2000 referred above or Parker et al. 2011 with Canadian undergraduates). Other research in countries such as Spain suggests that women have higher interpersonal abilities than men, whereas men are good in stress tolerance and impulse control (eg. Candela et al. 2002).

Taken together, these findings suggest that, although research about gender differences is inconsistent and unclear, there are some EI dimensions in which women seem to show particularly high scores (i.e., those related to emotion perception and understanding), whereas gender differences are less marked or even favor men in those EI dimensions that are related to the handling and repair of one's emotions such as stress. However, it is clear that both ability-based and mixedbased models researchers often rely on self-report measures as a way of evaluating EI competences and/or abilities. Despite their extended presence in EI research, self-report measures of EI have been criticized for representing biased measures of EI and suffering from methodological limitations (Mayer et al. 2008). In particular, self-report measures are considered to be biased in relation to their potential to predict actual abilities and behavior, as they are based on meta-moods and selfreported perceptions about one's emotional competences, and not necessarily about actual competences (Mayer et al. 2001). This concern is especially relevant from a gender perspective. Because self-report measures are influenced by social desirability and stereotypes (Brody and Hall 2008), the fact that observers see these abilities as behaviors more typical of one gender than of the other may subsequently bias individuals' responses to such questionnaires in the direction of gender stereotypes.

Faced with these contradictions, some studies have concluded that it is necessary to explore this field in more detail (e.g. Salovey and Grewal 2005 in US, Siegling et al. 2012 with Canadian samples). In particular, a more in depth examination of the stereotyped nature of self-report EI measures is required. For instance, there is evidence that the dimensions and subdimensions included in self-report measures differ depending on the theoretical model to which the researches adhere (Mayer et al. 2000). Therefore, the way such scores is influenced by gender may vary. Also, Siegling et al. (2012) in a study with Canadian undergraduates suggested that trait EI is more strongly associated with stereotypically masculine identity traits (i.e., agency) than ability EI, whereas ability EI is more strongly associated with stereotypically feminine traits (i.e., communion). Following this rationale, the method of EI assessment might influence the relationships between

gender and EI, which may subsequently be reflected in the direction of gender stereotypes of different EI measures and subdimensions. However, EI studies addressing gender issues rarely consider these concerns and often tend to examine gender differences without taking into account the approach it is based on. Because self-reported EI measures may be especially influenced by stereotypes about gender and emotions, the specific examination of self-report EI measures from this perspective seems particularly valuable.

In particular, we examined whether the items included in the abovementioned most widely used self-report instruments to measure EI, namely the TMMS and the WLEIS (ability model-based measures) and the EQ-I (mixed model-based measure) are biased by gender stereotypes, and whether these stereotypes vary across EI self-report dimensions and scales. These relationships may help to better explain the results found in previous research regarding actual self-reported gender differences in such dimensions. Based on the previous, we propose that:

Hypothesis 1. Women and men will be perceived differently in relation to their specific EI competencies as measured by different instruments and dimensions.

Specifically, following the empirical evidence presented above in relation to gender differences in EI, we expect that EI competences that are related with characteristics that are typical of the feminine stereotype (e.g., emotion perception or attention as measured by the TMMS) will be perceived as more typical of women, whereas EI competences that are usually related with the masculine stereotype (e.g., regulation of emotions as measured by the TMMS or EQ-i) will be perceived as more typical of men.

Because an in-group gender bias has also been found when evaluating others in performance tasks (Nieva and Gutek 1980 in US with employees), we also expect that the gendered perception of EI abilities may be moderated by participant gender. Indeed, social psychology researchers have repeatedly shown that people possess automatic biased attitudes when comparing their own, and their group, abilities, attributes, and attitudes and those of other people (for a review, see Hewston et al. 2002). This in-group favoritism is also present from a gender perspective. Thus, it has been shown that both men and women possess remarkably in-group bias to favor members in their own gender group (e.g., Pratto et al. 1993 or Rudman and Goodwin 2004 both studies conducted in US). Following these studies, we may therefore also expect participant gender to be a predictor of the extent to which stereotypes across EI self-report measures are present. We hypothesize: In particular, in those EI competences that are congruent with masculine roles, we expect find a tendency for male participants to evaluate men more favorably than female participants. In contrast,

in EI competences that are congruent with feminine roles, female participants will evaluate women more favorably than male participants.

Hypothesis 2. In-group favoritism bias will emerge on gender-congruent competences.

In sum, in our study we intend to shed light to the debate around the gendered nature of EI by directly looking at the extent to which several dimensions of self-report EI measures are influenced by gender stereotypes, and consequently considered as more typical of women or men. We focus on self-report EI measures since they are more likely to be influenced by gender stereotypes than performance measures such as the MSCEIT or the MEIS. In particular, we examine the perception of male and female participants about how typical they think each EI dimension is for women and for men in the most widely used self-report EI questionnaires (i.e., the TMMS, the WLEIS and the EQ-I; see Appendix 1). In doing so, we can better understand whether gender differences in self-report measures may indeed be related to the existence of gender stereotypes about specific dimensions included in different EI measures and sub dimensions.

Method

Participants

The participants were 260 undergraduates (135 women and 125 men) from different cities in Spain who studied in a University of the South of Spain, but came from different locations. Participants had a median age of 18.95 years (SD=1.55; range 17–24). Women had a median age of 18.58 years (SD=1.39; range 17–24) whereas men had a median age of 19.35 years (SD=1.62; range 17–24).

Procedure

Students voluntarily completed the questionnaires in classes, and received course credit for their participation. Additionally, other participants were recruited from different university settings (library, hall, restaurant...). A total amount of 302 questionnaires were evenly distributed. Two hundred eighty-six individuals completed the questionnaires, 16 questionnaires were eliminated for being incomplete or outliers and 10 questionnaires were eliminated for being secondary students. The 20-min questionnaire included 63 items corresponding to the three scales from the two EI approaches used in this study (see instruments section below). For each item, participants estimated the extent to

which they thought that it was typical of women and typical of men. Thus, each participant gave a score for each item twice, first for typical women and second for typical men. The resulting factorial design was a 2 by 2: participant gender (female or male) as between subjects with gender of the target (women and men) as within-subjects.

Instruments

All the instruments had been previously adapted and validated in Spanish samples, so we used the Spanish validated versions in all cases. The items were written into third person, whereby individuals answered about their perceptions of typical women and men in each particular item. Dimensions and definitions are shown Appendix 1. Items are shown in Appendix 2.

Trait Meta Mood Scale (TMMS-12, Salguero et al. 2009)

This is an ability-based reduced Spanish version adapted from Salovey et al. (1995). It measures perceived EI, which refers to the knowledge that individuals have about their own emotional abilities. On 5-point scales, participants filled in a 12-item questionnaire that evaluated women and men targets' EI, identifying three interpersonal factors (four items each): emotional clarity refers to the degree an individual comprehends feelings and emotions; emotional regulation refers to an individual's tendency to regulate their own feelings; and emotional attention conveys the degree to which an individual tends to observe and think about her own feelings and moods. The threefactor structure of the TMMS was supported in the Spanish sample and appropriate Cronbach's alpha rates were found in all three components (.77 for emotional attention, .75 for emotional clarity and.70 for emotional repair: Salguero et al. 2009). In our study alphas are .67, .64 and .65. The alpha value for the entire scale was .69

Wong and Law EI Scale (WLEIS, Wong and Law 2002) Spanish version by Fernández-Berrocal et al. (2004b).

This ability-based model trait scale was designed as a short measure for the EI in organizational contexts. It is compound by 16 items that are scored on a 7-points Likert scale and measures four competencies (four items each): intrapersonal perception that refers to the perception of own emotions, interpersonal perception refers to the perception of the emotions of others, assimilation and emotional regulation. Internal consistency is .87, .90, .84 and .83 respectively (Wong and Law 2002).

In our study, alpha of Cronbach yield the following indices .65, .68, .67, and .63 respectively, and a global alpha of .82.

Bar-On Emotional Quotient Inventory (EQ-i) Short Version (Bar-On 2002 Reviewed by Parker et al. 2011; Spanish Version by Lopez-Zafra et al. 2014) Parker et al. (2011) with a Canadian sample analyzed the psychometric characteristics of Bar-On's (2002) instrument. The original scale was compound by 51 items, but Parker et al. eliminated the positive impression scale for being a desirability scale and general humor due to less validity scores. The final version is compound by 35 items that comprises four dimensions: Intrapersonal (refers to the competences for recognizing, comprehend and express our emotions. Also to achieve our goals), interpersonal (refers to empathy, ability to make friends and identification with a group), adaptability (refers to the capacity to manage and solve problems and also to the flexibility to adapt to different conditions) and stress management (that refers to the capacity to control our emotions) with internal consistency ranging from .75 to .82. Internal consistency in our study is .77 for intrapersonal, .82 for interpersonal, .74 for adaptability, and .78 for stress management. The alpha for the entire scale was .84.

We should note here that two of the alpha dimensions reported (i.e., the TMMS emotional clarity and the WLEIS emotional regulation) were below .65. Usually, low alpha values are due to a low internal inconsistency, measurement deficiencies (range of the scale or number of items) or by the homogeneity of the sample (De Vellis 1991; Pike and Hudson 1998). To know whether our low alpha was due to measurement problems (De Vellis 1991; Pike and Hudson 1998), we tested the entire scale alpha, showing acceptable reliability values (all over .69), and therefore an adequate internal consistency of the scales. In general, self- reports measures of EI tend to be associated with a relatively adequate internal consistency reliability (Gignac 2009, p. 21), with alphas usually over .70 (Gardner and Qualter 2010; Parker et al. 2011). Although our study relies on such EI self-report measures, participants refer to a typical woman or man, rather than to themselves, and thus the slight difference found in our study can be considered normal. Therefore, and because we aimed to test the gendered nature of the original scales, we relied on these standardized scales since they are widely used in EI research. Finally, because our design takes into account both scores of female and male participants evaluating women and men's EI (2 by 2 design), we compared the reliability in each dimension for the two independents groups (women and men). Our results showed that there were no statistically significant differences, and therefore the alpha is assumed to be equally reliable for both samples. Accordingly, we only report the global alpha for each dimension and the alpha for the entire instrument (see Lautenschlager and Meade 2008 or Merino and Lautenschlager 2003 for a discussion about the comparability of alphas).

Results

We used IBM SPSS v. 20 for all the analyses. Results for the MANOVA show that women and men participants differ on their perceptions of how is a typical woman in each dimension (all ps<.05), with women always scoring higher than men, but for a typical man, men and women agreed in their perceptions except for TMMS attention and clarity of emotions, and WLEIS interpersonal dimension where significant differences emerged due to higher scores of men. However, these findings are difficult to interpret regarding our hypothesis. Thus, in an effort to ensure that these findings are due to gender bias in evaluating both typical women and men, a series of repeated measures were run for each dimension to capture interactions of gender of participant and gender of target (see means and standard deviations in Table 1).

Correlations for women and men separately are presented in Table 2. Correlations are frequently significant when relating dimensions for the same questionnaire, but there are some absences of correlations when considering dimensions for typical women or men. This may imply target gender differences when assessing EI. Also, there are significant correlations when analyzing different questionnaires but similar concepts (e.g. TMMS regulation of emotions correlates significantly with EQ-I stress management) but this is the case only for female targets.

To further understand this pattern of results, we then analyzed the differences between men and women for all the variables measured in the study. Specifically, to analyze whether women and men were perceived differently in

 Table 1
 Means and standard deviations for gender of the perceived target

 and gender of participant in each EI dimension

	Female targe	et	Male target	
	Women	Men	Women	Men
Attention	4.33 (.49) ^a	4.19 (.49) ^b	2.67 (.64) ^a	3.01 (.63) ^b
Clarity	3.87 (.57) ^a	3.63(.64) ^a	3.63(.64) ^a	3.28 (.59) ^b
Repair	3.40 (.63) ^b	3.07 (.73) ^b	3.66 (.63) ^b	3.57 (.62) ^a
SEA	3.70 (.61) ^a	3.47 (.72) ^b	3.21 (.61) ^a	3.33(.60) ^b
OEA	4.35 (.48) ^a	4.03 (.65) ^a	2.75 (.69) ^a	3.13 (.62) ^b
UOE	3.79 (.54)	3.59 (.65)	3.95 (.59)	3.81 (.61)
ROE	3.36 (.68) ^a	3.09 (.81) ^a	2.88 (.66) ^a	3.02 (.71) ^b
Intrapersonal	3.54 (.47) ^a	3.20 (.51) ^a	3.03 (.52) ^a	2.95 (.49) ^b
Interpersonal	4.31 (.49) ^a	4.05 (.49) ^a	3.43 (.56) ^a	3.40 (.5) ^b
Adaptability	3.79 (.53) ^a	3.54 (.57) ^a	3.18 (.64) ^a	3.20 (.60) ^b
Stress management	2.96 (.68) ^a	$2.66(.63)^{a}$	2.33 (.62) ^b	2.44 (.59) ^b

Predictions were on a scale ranging from 1 to 5. Higher numbers indicate higher estimations. The means that do not share a common subscript differ at the .05 level or lower by Tukey's HSD test

SEA Self-Emotion Appraisal, OEA Other's Emotion Appraisal, UOE Use of emotion, ROE Regulation of Emotion

relation to EI abilities/competencies (H1) and the possible gender bias (H2) we carried out repeated measures ANOVA. The factor variable is the intra- subjects variable (each dimension of each instrument) with two levels (evaluating women and evaluating men on the EI specific dimension) and one between- subjects variable (gender of the participant: female and male), which served to test whether typical women and men are differently perceived in their EI characteristics (H1) and also whether gender of participant had any impact on these perceptions (H2).

For the sake of simplicity and comprehensiveness in explaining our results following the theoretical rationale presented in the introduction, we focus on each instrument (see Table 3 for F, p-value, partial eta-squared and interactions).

Trait Meta Mood Scale

For the TMMS dimensions, results confirmed our prediction that women and men would be perceived differently in relation to their specific EI competencies and that these differences would reflect gender stereotypes about emotions. In particular, women were perceived to pay more attention to their emotions and to have a better comprehension of emotions than men (H1), and the interaction effect with gender showed that there was a gender bias, whereby both men and women scored higher a typical woman but female participants favored women in a greater extent than male participants did (H2). There is an absence of main participants' gender effect, indicating that scores given by female and male participants were similar when evaluating each target.

However, men were perceived to be higher than women in the emotional repair dimension (H1); with female participants scoring men even higher than male participants did (H2). In this case the main gender of participant significant effects indicate that male participants gave lower scores to both women and men than women did, whereas women scores where higher (see Figs. 1, 2 and 3 for interactions effect in the TMMS dimensions).

Wong and Law EI Scale

For the WLEIS dimensions, women were perceived to be higher in Self-Emotion Appraisal (SEA) than men, and also to have a higher Other's Emotion Appraisal (OEA). In both cases, interaction effects show that there is an in-group bias in which female participants score higher women than male participants did and the way around. No main participant gender effect emerged indicating that general scores given to women and men by female and male participants did not differ significantly.

For the WLEIS factor of Use of emotion (UOE), the participants perceived that men were higher than women in their use of emotions but no significant interaction indicates

	TMM	TMMS- 12FEM	W	TMM	TMMS-12MAS		WLEIS-	- FEM			WLEI	WLEIS-MAS			EQ-I-S- FEM	·FEM			EQI-S-MAS	MAS		
	AF	CF	RF	AM	CM	RM	IAF	IPF	EMF	REGF	IAM	MdI	EMM	REGM	INF	IEF	ADF	STF	INM	IEM	ADM	STM
AF	I	.37**	.01**	.21*	0.27**	.28**	.35**	.44	.165	.137	.23**	.01	.20*	.15	.19	.33**	.27	-00	06	.18*	.15	13
CF	.12	I	.12	.08	.16	.24**	.57**	.21**	.04	.32	.10	.05	.27**	.08	.08**	.24	.24	.13	.06	.17	$.16^{**}$	-00
RF	15	.19*	Ι	.08	.11	.10	.25**	.01	.35**	.30**	.14	.01	.01	01	60.	.13	.22	.18*	.20	.21	.15	$.18^{*}$
AM	.17	.20*	.07	I	.41**	.07	60.	06	.13	.20	.35**	.42**	.14	.14	06**	13	13	11	.21	.35	.28*	.04
CM	$.18^{*}$.17	.04	.52**	I	$.10^{**}$.20**	.19**	.08	.15	.52**	.43	.15*	.27	.03**	.17**	.17	.01	.22	.41	.33**	.03
RM	.05	.01	.11	.14	.24	I	.31**	.34*	.20	.11**	.19	.18	.20**	.19	$.10^{**}$.23**	.11	03	00.	.23	.09**	.03
IAF	60.	.58**	.37**	.10	.15	.05**	I	.34	$.10^{**}$.52**	.24	.07	.21	.07	.25**	.37**	.33**	.07	.04**	.24	.07**	10
IPF	.47**	.37**	.03	.08	.28**	.08**	.38	I	.19	.27	.12**	$.10^{**}$.22	.11	.18**	.55*	.35	.04	07	.21	$.16^{**}$	12
EMF	.21*	.39**	.36**	.20*	.21*	05**	.49**	.45*	I	.16	.09**	.07	.18*	.10	.03	.17	.29**	02	.12**	.20	.17	.22
REGF	06	.28**	.55**	00	.05	.25**	.53**	.21	.38	I	.06	.05	.05**	07	.19	.20**	.39**	.36**	.06**	.17	01	17
IAM	.11	.14	.22*	.36**	.60	.22	.16*	.12**	.19	60.	I	.53	.19	.50	08**	.17	08	05	.22	.47**	.38**	$.18^{*}$
IPM	.24**	.06	$.18^{*}$.42	.38**	.16	.17*	.20**	.28**	.10	.44	I	.15	.47	15	.11	.01	04	.23	.55**	.46	.19*
EMM	.16	.20*	.14	.21*	.33	.41*	.21	.25*	.30	.29*	.35	.19*	I	.26	.13*	.32**	.11	04	.26	.38	.46*	.02
REGM	03	.07	.07	.15	.46	.31	.10	.01	.19	.14	.31	.31	.24	I	01	.14	.02	26^{**}	60.	.36	.48	.24**
INF	.12	.17	04	-00	.05*	11	.18	.27**	01^{*}	04	08	16^{**}	06	28	I	$.16^{**}$.19**	$.20^*$.40**	.12	05**	.22*
IEF	.37	.34	.02*	.23*	.24	.16	.41**	.56**	.34**	.18**	.22	.42	.35*	.20	.11**	I	.51	.13	02	.37	.21**	-07
ADF	.27	.41*	.23	.31	.30	.10	.50**	.43	.41**	.41**	.29*	.25*	.27	.16	04*	.57**	I	.19*	02**	.17	.10	03
STF	10	02	.22	.01	05	.02	.17	.17	.05	.30**	14	09	04	15	.33*	05	11.	I	.16	05	19*	.12
INM	02	03^{*}	12	-00	07	18	13^{**}	.02	02^{**}	25**	01*	07*	03	16	.42	01^{*}	18	.17	I	.38	$.30^{*}$.42**
IEM	.07	.15*	.08	.29	.20**	.17	.21	.16	.31*	.11	.34**	.50**	.27*	.28	13	.46	.35	05	.13	I	.54	.25**
ADM	.04	.07	.16	.28	.27*	.05	.14	.01**	$.18^{*}$.06	.24	.41**	.25	.37	32	.24**	.14*	05	06	.52	I	.26**
STM	17	16	13	24	08	08	22*	06	22*	24**	09	17	24**	03	.28**	28**	29^{**}	$.18^{*}$.39**	15	-00	I
Name of	variable	ss. Dime	nsions fo	T the T	VMS ev:	linatino a	tvnical fe	amale 41	7 emotior	nal attentio	JN: CF (Clarity of	emotions	Name of variables: Dimensions for the TMMS evaluating a trutical female <i>AE</i> emotional attention: <i>CE</i> Clarity of emotions: <i>RE</i> regulation of emotions. Dimensions for the TMMS evaluating a trutical male:	tion of en	notions I	Dimension	us for the	TMMSe	valuatins	a tvnica	l male:
AM emoi	tional at	tention, (<i>CM</i> clari	ty of en	notions; <i>K</i>	Mregula	tion of en	notions.	Dimensic	ons for the	wLEI(S evaluati	ing a typic	AM emotional attention, CM clarity of emotions; RM regulation of emotions. Dimensions for the WLEIS evaluating a typical female: IAF Intrapersonal, IPF Interpersonal, EMF Emotional Assimilation, RF	AF Intra	versonal,	IPF Inter	personal,	EMF Em	otional <i>⊦</i>	var y process Assimilati	on, RF
emotion	al regula	ttion. Dimensions	mension	s for the	e WLEIS ev	evaluati	ng a typical m	al male:	<i>IAM</i> inti	apersona	l, <i>IPM</i> ii	nterperso	nal percep	emotional regulation. Dimensions for the WLEIS evaluating a typical male: <i>IAM</i> intrapersonal, <i>IPM</i> interpersonal perception, <i>EMM</i> assimilation RM: emotional regulation. Dimensions for the BARON	MM assimila	tion RM	: emotion	al regulat	tion. Dime	ensions	for the B.	ARON

 Table 2
 Correlations among dimensions for women and men (upper diagonal for women and lower diagonal for men)

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** $p \le .01$, * $p \le .05$

evaluating a typical female: *INF* Intrapersonal, *IEF* interpersonal, *ADF* adaptability, *STF* stress management. Dimensions for the BARON evaluating a typical male: *INM* Intrapersonal, *IEM* interpersonal, *ADM* adaptability, *STM* adaptability, *STM* stress management.

		F (df)	p- value	Partial- η^2
Attention	Target gender	982.72 (1, 255)	.000	.79
	Participant gender	2.96 (1, 255)	.087	.011
	TG*PG	27.76 (1, 255)	.000	.098
Clarity	Target gender	124.25 (1, 251)	.000	.33
	Participant gender	.498 (1, 251)	.48	.002
	TG*PG	14.83 (1, 251)	.000	.056
Repair	Target gender	46.07 (1, 256)	.000	.15
	Participant gender	12.11 (1, 256)	.001	.045
	TG*PG	4.51(1, 256)	.035	.017
SEA	Target gender	38.48 (1, 254)	.000	.132
	Participant gender	.802 (1, 254)	.371	.003
	TG*PG	11.60 (1, 254)	.001	.044
OEA	Target gender	626.64 (1, 256)	.000	.710
	Participant gender	.405 (1, 256)	.525	.002
	TG*PG	48.43 (1, 256)	.000	.159
UOE	Target gender	17.14 (1, 255)	.000	.063
	Participant gender	8.52 (1, 255)	.004	.032
	TG*PG	.530 (1, 255)	.467	.002
ROE	Target gender	20.64 (1, 255)	.000	.075
	Participant gender	8.518 (1, 255)	.004	.032
	TG*PG	10.91 (1, 255)	.001	.041
Intrapersonal	Target gender	115.59 (1, 247)	.000	.319
	Participant gender	15.42 (1, 247)	.000	.059
	TG*PG	14.73 (1,247)	.000	.056
Interpersonal	Target gender	462.90 (1, 254)	.000	.646
	Participant gender	6.857 (1, 254)	.009	.026
	TG*PG	9.30 (1, 254)	.003	.035
Adaptability	Target gender	92.92 (1, 252)	.000	.269
	Participant gender	4.501 (1, 252)	.035	.018
_	TG*PG	7.85 (1, 252)	.005	.030
Stress	Target gender	66.96 (1, 254)	.000	.209
management	Participant gender	2.07 (1, 254)	.151	.008
	TG*PG	15.81 (1, 254)	.000	.059

Table 3 2 (Gender of the perceived target in each dimension of EI: female vs. male) \times 2 (gender of participant: women vs. male) mixed factorial design. Main effects and interactions

Note Significance values p < 0.05, p < 0.01 and p < 0.001 for italic entries *SEA* Self-Emotion Appraisal, *OEA* Other's Emotion Appraisal, *UOE* Use of emotion, *ROE* Regulation of Emotion, *TG* Target Gender, *PG* Participant Gender

that there was no ingroup favoritism. However, main effect of gender of participant significance indicates that female participants' scores were in general higher than those of male

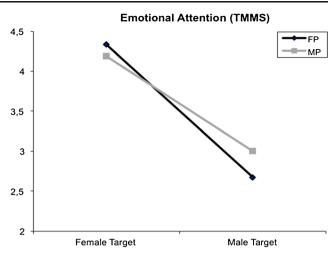


Fig. 1 Interactions effect (gender of participant \times gender of target) in the TMMS Emotional Attention dimension

participants. Finally, for the WEILS factor Regulation of Emotion (ROE) there was a significant interaction in which typical women were considered better than men in regulating emotions with an in-group bias in which female participants scored much higher a typical woman than a man whereas male participants scored higher a typical woman (see Figs. 4, 5 and 6 for interactions effect in the WLEIS dimensions).

Bar-On Emotional Quotient Inventory (EQ-i) Short Version

Finally, for the mixed model instrument (EQ-i), women were perceived as being higher than men in Interpersonal, and in Intrapersonal dimensions. In both cases, the interaction effect indicates an in-group bias of female participants evaluating women and the significant between subjects effects indicate that the trend for female participants is to give higher scores than men do. For the adaptability factor of the EQ-I, both main and interaction significant results show that women were perceived to be more emotionally adaptable than men, with

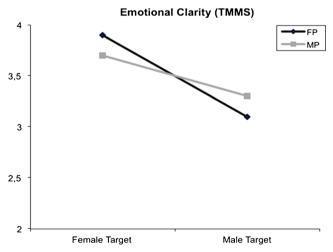


Fig. 2 Interactions effect (gender of participant \times gender of target) in the TMMS Emotional Clarity dimension

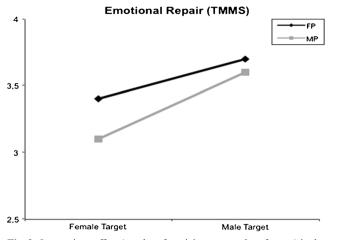


Fig. 3 Interactions effect (gender of participant × gender of target) in the TMMS Emotional Repair dimension

a women in-group bias and higher scores of female participants. In the Stress Management factor, participants perceived women to be higher in their ability to manage their stress with a women in- group bias, favoring women in this dimension more than male participants do. No gender of participant main effect indicates that female and male participants give similar general scores (see Figs. 7, 8, 9, and 10 for interactions effect in the EQ-i dimensions).

Discussion

In recent years, the Emotional Intelligence approach has been developed to explain how emotional competences make individuals have a better adjustment to their environment (García-León and Lopez-Zafra 2009 for a review), and is becoming an important area of research in psychology. As this area of study gains importance, the analysis of gender differences in the endorsement of EI competences attracts increasing attention,

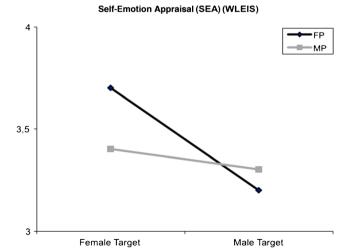


Fig. 4 Interactions effect (gender of participant × gender of target) in the WLEIS Intrapersonal Perception dimension

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Others Emotion Appraisal (OEA) (WLEIS)

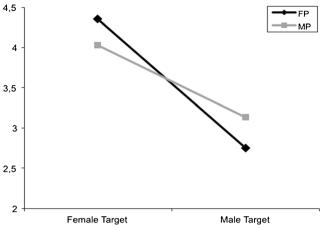


Fig. 5 Interactions effect (gender of participant × gender of target) in the WLEIS Interpersonal Perception dimension

as well as the examination of the underlying causes of such differences. In particular, given that previous studies analyzing gender differences in several EI theoretical dimensions and measures have revealed unclear conclusions, researchers have suggested the need to further clarify what lies behind gender differences in EI, especially in relation to self-reports (e.g. Gartzia et al. 2012 in Spain; meta-analysis by Joseph and Newman 2010; Salovey and Grewal 2005 in US, or Siegling et al. 2012 in Canada).

In this study we tried to respond to this need by incorporating new analyses of the gendered nature of EI. As a novelty, we asked individuals to think about how typical of women and men was each item including information about EI competences and/or abilities. In doing so, the current study sheds light on the debate about gender differences and focuses on the role that gender stereotypes have on EI self-reports scores. In particular, it demonstrates that people evaluating typical men and women could be automatically activating gender

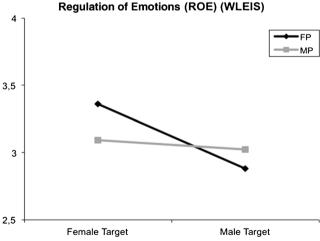


Fig. 6 Interactions effect (gender of participant \times gender of target) in the WLEIS emotional regulation dimension

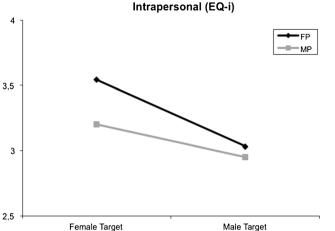


Fig. 7 Interactions effect (gender of participant \times gender of target) in the EQ-i intrapersonal dimension

stereotypes and identity, thereby suggesting that gender differences in self-reported EI measures reflect to a great extent gender stereotypes. In a similar vein, Gartzia et al. (2012) in Spain demonstrated that women's higher scores in certain EI dimensions (i.e., as measured both with self-reports and performance-based measures) were partially explained by men and women's differential identification with communal and agentic traits. Because identification with such traits derives from mental representations about gender and are directly related to gender stereotypes, the existence of gender stereotypes in relation to EI competences may also be an underlying explanation of gender differences in EI.

The current findings also support our prediction that there is an in-group bias in the evaluation of EI dimensions. Thus, although both male and female participants generally present a similar pattern of stereotypicality in their responses and therefore agree on the target to whom they give higher scores (i.e., to women in stereotypically feminine emotional dimensions and to men in stereotypically masculine dimensions), they

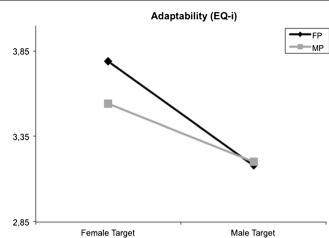


Fig. 9 Interactions effect (gender of participant × gender of target) in the EQ-i adaptability dimension

generally tended to favour their in-group in their evaluations. This result is in line with previous studies showing in-group bias in men's and women's responses (Pratto et al. 1993; Rudman and Goodwin 2004 both with US samples), whereby individuals tended to favour members in their own gender group. We should note here, however, that in our study the ingroup bias emerged more strongly in the case of women evaluating women than in the case of men evaluating men. Thus, although men gave higher scores than women to men when the dimension was male gender-congruent, the extent to which women gave higher scores to women in female gendercongruent dimensions was significantly higher. This resulted in a higher general mean score for female than for male participants. A possible explanation is that, in accordance with the general association between femininity and emotions (see reviews by Brody and Hall 2000, 2008; Fischer 1993; Hall et al. 2000) and the fact that the emotional competences of women tended to be overestimated, the in-group bias is accordingly higher for women. Also, it is likely that women are

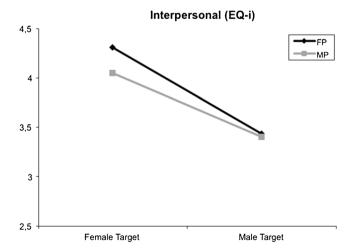


Fig. 8 Interactions effect (gender of participant \times gender of target) in the EQ-i interpersonal dimension

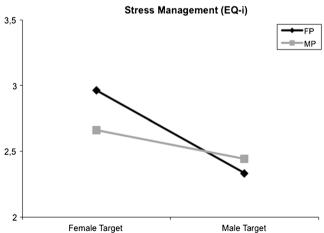


Fig. 10 Interactions effect (gender of participant \times gender of target) in the EQ-i stress management dimension

more aware of the emotional nature of the item content and therefore attribute higher scores to their female counterparts. Finally, although men evaluated female and male targets in a similar way, the difference in such evaluation was smaller, probably due to the fact that men were trying no to conceive other men (their in-group) as emotionally incompetent, thus also a gender bias is shown. Future studies would be necessary to better respond to these questions.

Taken together, these findings have relevant implications for the EI and gender literature. First, there is substantial evidence that gender norms not only describe but also prescribe appropriate behaviors and traits (Eagly et al. 2000; Heilman 2001 in US). Stereotypes may have a marked effect on personality and behavior and may therefore bias scores on EI, especially in the case of self-reports. Social psychologists have repeatedly shown that the way people think of themselves can have a strong influence in their actual behavior. Furthermore, gendered stereotypes are strongly prescriptive in the sense that they entail expectations of the way people should act and therefore exemplify desirable behavior (Heilman 2001 in US; Rudman and Glick 2001; Sczesny 2003 with German management students). For instance, it is well known that women tend to underestimate their abilities in achievement settings, whereas men tend to overestimate them (Lenney 1977; Roberts 1991), especially when performance criteria are unclear (Lenney 1977) or the situation is ambiguous (Robinson et al. 1998). As found by Rueckert et al. (2011), with U.S. samples, this bias may also take place in the case of emotional abilities of men and women. Thus, gender norms in relation to EI competences may be one of the underlying reasons why gender differences are often found in relation to self-reported EI dimensions.

It is also interesting to note that most dimensions of EI were considered more typical of women (i.e., emotional attention, emotional clarity, self-emotion appraisal, other's emotion appraisal, regulation of emotions, interpersonal orientation, intrapersonal orientation, adaptability and stress management), thereby confirming the stereotyped view of gender differences in emotion. In other words, the current findings confirm that, with only some exceptions, women are perceived as more competent than men in EI. We should also note that, as predicted in Hypothesis 1, the stereotyped gendered nature of EI also depended on the specific dimensions and questionnaires that are considered, which include a wide range of emotional information that is very different from a gender perspective. Indeed, our results also indicate that many agentic, intrapersonally oriented competences present in the EI construct, such as the ability to avoid being easily hurt, to be emotionally independent of others or to avoid ruminating on negative emotions, coincide with stereotypically masculine traits and are accordingly attributed to men (i.e., emotion repair as measured with the TMMS and use of emotions as measured with the WLEIS).

This finding is important as a large body of research has associated emotions with "feminine", communal characteristics, (e.g. in interpersonal and romantic relations Keener et al. 2012, found that U.S. undergraduate student women tend to have more communal orientation and interpersonal concerns than men), including emotional awareness and attention, showing commitment and interest in emotions, being sensitive to what others feel, or expressing feelings (Fischer 1993). In line with this viewpoint, women are often attributed greater EI abilities (Joseph and Newman 2010). Whereas this may hold true for many EI dimensions that are inherently communal, our findings suggest that it is a mistake to treat EI as a set of competences that relate only to these characteristics. In fact, researchers have previously associated some of the intrapersonal dimensions of EI with masculine, agentic characteristics (e.g., McIntyre 2010 in US or Siegling et al. 2012 in Canada). As an example of this, some studies have concluded that men are often better than women at handling negative emotions and having an optimistic outlook, both with self-report (e.g., Bar-On 2006; Fernández-Berrocal and Extremera 2008 in Spain; Livingstone and Day 2005 in US) and ability model-based measures (e.g., Livingstone and Day 2005 or McIntyre 2010 both in US).

Extending this basic approach, our findings suggest that the way in which these relationships are established vary across EI measures and dimensions and is therefore problematized by the gendered content of each measure. For instance, the dimensions that were hypothesized to refer to regulation of emotions in different measures and models had different interpretations from a gender perspective. Indeed, only the dimensions of emotional repair as measured with the TMMS and use of emotions as measured with WLEIS were perceived as more typical of men, suggesting that the items included in these dimensions may have a more clearly stereotyped masculine definition than other EI self-report dimensions associated with regulation of emotions, such as Regulation of Emotions (ROE) as measured with the WLEIS, Intrapersonal competences and adaptability as measured with the EQ-I. These dimensions were considered as more typical of women. In general, therefore, these results suggest that gender effects are clearer from ability models, as they focus on personal emotional abilities, than mixed models, which include a wide range of different emotional competences.

In addition to these issues, our results also show that there is a gender bias in female participants' scores for typical women in most EI dimensions, giving partial support to our second hypothesis. Thus, the current findings show that women tend to evaluate the emotional competences of typical women more positively than men do. These findings therefore suggest that the in-group favoritism or bias when evaluating others is present only in female participants. This may be due to the fact that both women and men perceive emotions more

generally as more typical in women than men. Thus, men do not show a gender bias in their own gender group but women emphasize the gender effect and favor women in these EI competencies/abilities. Because our results were limited to some specific scales of EI, future studies looking at other measures will be necessary to further examine in which EI dimensions men are perceived as more competent. Also, it would be necessary to include self-perceptions as well as the perceptions of others. In our study we included only the perceptions of others, so we cannot elucidate the extent to which perceptions of the respondents influence their own selfreported measures. The inclusion of self-reports could therefore provide an interesting comparison, and future studies may compare self-reports of EI on various dimensions with evaluations of typical men/women in such dimensions. In a similar vein, we should note that in two EI dimensions, alpha levels did not meet the .65 standard for internal consistency of scales, probably due to the fact that we changed the original response format of the scales (i.e., we asked participants to rate typical women and men and not themselves). This modification was needed in order to analyze the stereotyped gender nature of EI self-report measures and we therefore maintained their original format. However, the resulting overall dimension presented reduced consistency. Also, due to the complexity of our design and the fact that a MANOVA only gave part of the information, we run a series of repeated measures and thus the many tests done can also be regarded as a limitation.

Another issue to take into account when examining the gender stereotypicality of EI dimensions is the possible priming effect derived from making participants aware of their evaluation of typical men and women. Thus, explicitly comparing females and males on the same EI characteristics might have primed participants on gender stereotypes and led them to provide more stereotypical responses. Although this is a common procedure in experiments using the so-called Goldberg paradigm, which is well established in the literature, and results about gender perceptions are often built on them, future studies considering this limitation and adding other conditions would be valuable (for example, see Gartzia 2013 with Spanish samples where counterstereotypic manipulations were used). Also, it would be valueadded to examine other moderating effects such as age differences. Indeed, studies conducted in different countries show that gender differences in EI vary with age (e.g., Tsaousis and Kazi 2013 in Greece or Fernández-Berrocal et al. 2012 in Spain). Therefore, an interesting area for future research is analyzing to what extent the stereotyped view of EI competences is influenced by information about a target's age.

Finally, the context in which the study was conducted should be also taken into account in future studies. Indeed, emotional dimensions are largely social reactions embedded in cultural meaning systems (Harré 1986; Hareli and Parkinson 2008; Oatley 1998). Our study points to the gender nature of EI dimensions in Spain. Whereas this approach tackles some of the limitations of earlier research that revealed the need to examine more thoroughly the individual differences relating to emotional attention, understanding, and regulation (Mayer and Salovey 1997), further research in other countries is also required. Individuals' responses in self-report scales that measure meta-knowledge of emotional abilities could vary across cultures as a consequence of being reflecting people's willingness to describe themselves in socially desirable terms. Therefore, cross- cultural analyses that analyze gender stereotypes in EI measures in their own culture would be valuable to see whether there are culture differences in such assessments.

Acknowledgments We are grateful to Manuel Miguel Ramos, PhD, for his advice in methodological aspects.

Appendix 1

Model	Instrument	Dimension	Definition
Ability model	Trait Meta Mood Scale	Attention	Ability to attend to moods and emotions
	(Salovey et al. 1995)	Clarity	Ability to discriminate clearly among feelings
		Repair	Ability to regulate moods and to have a positive outlook
	Wong and Law EI Scale (Wong and Law 2002)	Self-Emotion Appraisal (SEA)	Ability to become aware both of their mood and their thoughts concerning that mood.
		Others' Emotion Appraisal (OEA)	Ability to perceive and understand the emotions of others.

Table 4 Instruments, dimensions and definition of each component

Table 4 (continued)

Model	Instrument	Dimension	Definition
		Use of Emotion (UOE)	Ability of the person to utilize his or her emotions by directing them toward constructive endeavors and performance.
		Regulation of Emotion (ROE)	Ability to regulate own emotions; it also includes the ability to change the affective reactions of others.
Mixed model	Bar-On Emotional Quotient Inventory (EQ-i) short version (Bar-On 2002 revised by Parker et al.	Intrapersonal	Includes the competence to recognize and understand own emotions, to express own feelings, beliefs, and the competence to develop one's potential and achieve own goals
	2011)	Interpersonal	Includes empathy (the ability to put yourself in the other); social responsibility (the ability to identify with the social group and to cooperate and manage relationships) and the ability to make and keep friends
		Adaptability	Includes strategies for problem solving, to define and generate alternatives and implement effective solutions and flexibility and the ability to change our thoughts, feelings and behavior depending on the situation
		Stress management	Includes managing relationships or the competence to make and keep friends and the competence to resist the urge to act and control own emotions

Appendix 2

Table 5 Items for the scales used in the study and their translation

	Items in Spanish	Items in English
1	Normalmente se preocupan mucho por lo que sienten	They often think about their feelings.
2	Piensan que merece la pena prestar atención a sus emociones y estado de ánimo	They are often aware of their feelings on a matter.
3	Piensan en su estado de ánimo constantemente	Although they are sometimes sad, they have a mostly optimistic outlook.
4	A menudo piensan en sus sentimientos	They think it's worth paying attention to their emotions or moods.
5	Frecuentemente pueden definir sus sentimientos	They are usually very clear about their feelings.
6	Casi siempre saben cómo se sienten	They try to think good thoughts now matter how badly they feel.
7	Normalmente conocen sus propios sentimientos sobre las personas	They almost always know exactly how they are feeling.
8	Habitualmente se dan cuenta de sus sentimientos en diferentes situaciones	They are rarely confused about what their feelings are.
9	Aunque a veces se sientan tristes, suelen tener una visión optimista	No matter how badly they feel, they try to think about pleasant things.
10	Intentan tener pensamientos positivos aunque se sientan mal	They pay a lot of attention to how they feel.
11	Se preocupan por tener un buen estado de ánimo	They can tell how they feel in different situations.
12	Cuando sienten enfado intentan cambiar su estado de ánimo	When they become upset they remind themselves of all the pleasures in life.
13	La mayoría de las veces saben distinguir por qué tienen ciertos sentimientos.	They have a good sense of why they have certain feelings most of the time.
14	Conocen siempre las emociones de sus amigos/as a través de sus comportamientos.	They always know their friends emotions from their behaviors.
15	Siempre se fijan metas y luego intentan hacerlo lo mejor posible para alcanzarlas.	They always set goals for themselves and then try their best to achieve them.
16	Son capaces de controlar su temperamento y manejar las dificultades de manera racional.	They are able to control their temper and handle difficulties rationally.

Table 5 (continued)

	Items in Spanish	Items in English
17	Tienen una buena comprensión de sus propias emociones.	They have good understanding of their own emotions.
8	Son buenos/as observadores de las emociones de los demás.	They are good observers of others emotions.
9	Siempre se dicen a sí mismos/as que son personas competentes.	They always tell themselves they are competent.
20	Son capaces de controlar sus propias emociones.	They are quite capable of controlling their own emotions.
21	Realmente comprenden lo que sienten.	They really understand what they feel.
22	Son sensibles a los sentimientos y emociones de los demás.	They are sensitive to the feelings and emotions of others.
23	Son personas que se auto-motivan a sí mismas.	They are self-motivated people
4	Pueden calmarse fácilmente cuando se sienten enfadados/as.	They can always calm down quickly when they are very ang
5	Siempre saben si están o no están felices.	They always know whether they are or not happy
6	Tienen una buena comprensión de las emociones de las personas que les rodean.	They have a good understanding of the emotions of people around them.
27	Siempre se animan a sí mismos/as para hacerlo lo mejor que puedan.	They would always encourage themselves to try their best.
8	Tienen un buen control de sus propias emociones.	They have a good control of their own emotions.
9	Suelen afrontar las dificultades yendo paso a paso.	Their approach in overcoming difficulties is to move step by s
0	Tratan de ver las cosas como realmente son, sin fantasear sobre ellas.	They try to see things as they really are, without fantasizing daydreaming about them.
1	Les cuesta mucho controlar su enfado.	It is a problem controlling their anger. ^a
2	Cuando se enfrentan a una situación difícil recopilan toda la información que puedan sobre la misma.	When faced with a difficult situation, they like to collect all information about it that they can.
3	Les gusta ayudar a la gente.	They like helping people.
4	Son incapaces de comprender cómo se sienten otras personas.	They are unable to understand the way other people feel. ^a
5	Son incapaces de expresar a los demás sus ideas.	They are unable to express their ideas to others ^a
6	Les gusta tener una visión general del problema antes de tratar de resolverlo.	They like to get an overview of a problem before trying to so it.
7	Prefieren que los demás tomen decisiones por ellos/as.	They prefer others to make decisions for them. ^a
8	Les cuesta comprender cómo se sienten.	It's hard for them to understand the way they feel. ^a
9	En los últimos años han conseguido pocas cosas.	They think they have accomplished little in their lives ^a
0	Su impulsividad les crea problemas.	Their impulsiveness creates problems. ^a
1	Son buenos/as comprendiendo qué sienten los demás.	They are good at understanding the way other people feel
2	Cuando se enfrentan a un problema, lo primero que hacen es pararse y pensar.	When facing a problem, the first thing they do is stop and the
3	Les cuesta trabajo tomar decisiones por sí mismos/as.	It's hard for them to make decisions on their own. ^a
4	Les es difícil expresar sus sentimientos íntimos.	It's hard for them to express their intimate feelings. ^a
5	Sus amigos/as pueden contarles sus cosas más íntimas.	Their friends can tell them intimate things about themselves.
6	Cuando intentan resolver un problema, primero se fijan en cada posibilidad y luego deciden la mejor forma de resolverlo.	When trying to solve a problem, they look at each possibility then decide on the best way.
17	Sienten que les cuesta controlar su ansiedad.	They feel that it's hard for them to control their anxiety. ^a
8	Se preocupan de lo que les ocurre a los demás.	They care what happens to other people.
9	Sus relaciones sentimentales significan mucho para ellos/as y para sus amigos/as.	Their close relationships mean a lot to them and to their frien
0	Tienen fuertes impulsos que les cuesta controlar.	They have strong impulses that are hard to control. ^a
1	Cuando surgen situaciones difíciles intentan pensar en tantas alternativas como puedan.	In handling situations that arise, they try to think of as many approaches as they can.
2	Son capaces de respetar a los demás.	They are able to respect others.
3	Son más seguidores que líderes.	They are more of followers than leaders. ^a
4	Son sensibles a los sentimientos de los demás.	They are sensitive to the feelings of others.
5	Mantienen buenas relaciones con los demás.	They have good relations with others.
6	Son impulsivos/as.	They are impulsive. ^a
7	Los demás piensan que les falta asertividad.	Others think that they lack assertiveness. ^a
8	La gente cree que son sociables.	People think that they are sociable
~	Les cuesta trabajo describir sus sentimientos.	It's hard for them to describe their feelings. ^a
19	Les cuesta trabajo describir sus sentimentos.	it's hard for them to describe their reenings.

Table 5 (continued)

	Items in Spanish	Items in English
61	Se impacientan	They are impatient. ^a
62	Les es difícil luchar por sus derechos.	It's difficult for them to stand up for their rights. ^a
63	Suelen explotar enfadándose fácilmente.	They tend to explode with anger easily. ^a

^a Indicate that the items are reversed. Items 1 to 12 correspond to the TMMS-12. Items from 13 to 28 correspond to WLEIS and items 29 to 63 correspond to EQ-I short version

References

- Austin, E. J., Saklofske, D. H., & Mastoras, S. M. (2010). Emotional Intelligence, coping, and exam-related stress in Canadian undergraduate students. *Australian Journal of Psychology*, 62, 42–50. doi:10. 1080/00049530903312899.
- Bar-On, R. (1997). The Emotional Quotient Inventory (EQ-i): A test of Emotional Intelligence. Toronto: Multi-Health Systems.
- Bar-On, R. (2000). Emotional and social intelligence: Insights from the emotional quotient inventory. In R. Bar-On & J. D. A. Parker (Eds.), *The handbook of Emotional Intelligence* (pp. 363–388). San Francisco: Jossey-Bass.
- Bar-On, R. (2002). Bar-On Emotional Quotient Short Form (EQ-I: Short): Technical manual. Toronto: Multi-Health Systems.
- Bar-On, R. (2006). The Bar-On model of Emotional-Social Intelligence (ESI). Psicothema, 18, 13–25.
- Bar-On, R., Brown, J. M., Kirkcaldy, B. D., & Thomé, E. P. (2000). Emotional expression and implications for occupational stress: An application of the Emotional Quotient Inventory (EQ-i). *Personality* and Individual Differences, 28, 1107–1118.
- Beyer, S. (1990). Gender differences in the accuracy of self-evaluations of performance. *Journal of Personality and Social Psychology*, 59, 960–970. doi:10.1037/0022-3514.59.5.960.
- Beyer, S. (1999). The accuracy of academic gender stereotypes. *Sex Roles, 40*, 787–813. doi:10.1023/A:1018864803330.
- Bindu, P., & Thomas, I. (2006). Gender differences in Emotional Intelligence. *Psychological Studies*, 51, 261–268.
- Bosak, J., Sczesny, S., & Eagly, A. H. (2008). Communion and agency judgments of women and men as a function of role information and response format. *European Journal of Social Psychology*, 38, 1148– 1155. doi:10.1002/ejsp.538.
- Boyatzis, R. E., Goleman, D., & Rhee, K. (2000). Clustering competence in Emotional Intelligence: Insights from the Emotional Competence Inventory (ECI). In R. Bar-On & J. D. A. Parker (Eds.), *Handbook* of Emotional Intelligence (pp. 343–362). San Francisco: Jossey-Bass.
- Brackett, M. A., & Salovey, P. (2006). Measuring Emotional Intelligence with the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT). *Psicothema*, 18(supl. 1), 34–41.
- Brackett, M. A., Rivers, S. E., Shiffman, S., Lemer, N., & Salovey, P. (2006). Relating emotional abilities to social functioning: A comparison of self-report and performance measures of Emotional Intelligence. *Journal of Personality and Social Psychology*, *91*, 780–795. doi:10.1037/0022-3514.91.4.780.
- Brody, L. R., & Hall, J. A. (2000). Gender, emotion and expression. In M. Lewis & J. M. Haviland-Jones (Eds.), *Handbook of emotions* (pp. 338–349). New York: Guilford Press.
- Brody, L. R., & Hall, J. (2008). Gender and emotion in context. In M. Lewis, J. M. Haviland-Jones, & L. Feldman Barrett (Eds.), *Handbook of emotions* (3rd ed., pp. 395–408). NewYork: Guilford Press.

- Candela, C. Barberá, E., Ramos, A & Sarrió, M. (2002) Inteligencia Emocional y la variable Género [Emotional intelligence and the gender variable]. *Revista electrónica de Motivación y Emoción, 5*, 10, Retrieved from http://reme.uji.es/articulos/acandc2272105102/ texto.html
- Ciarrochi, J. V., Chan, A., & Caputi, P. (2000). A critical evaluation of the emotional intelligence construct. *Personality and Individual Differences*, 28, 539–561. doi:10.1016/S0191-8869(99)00119-1.
- De Vellis, R. F. (1991). Scale development: Theory and applications. Newbury Park: Sage.
- Dawda, D., & Hart, S. (2000). Assessing emotional intelligence: Reliability and validity of the Bar-On Emotional Quotient Inventory (EQ-I) in university students. *Personality and Individual Differences*, 28, 797–812. doi:10.1016/S0191-8869(99)00139-7.
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, 109, 573–598. doi:10. 1037/0033-295X.109.3.573.
- Eagly, A. H., Wood, W., & Diekman, A. B. (2000). Social role theory of sex differences and similarities: A current appraisal. In T. Eckes & H. M. Trautner (Eds.), *The developmental social psychology of gender* (pp. 123–174). Mahwah: Erlbaum.
- Extremera, N., Fernández-Berrocal, P., & Salovey, P. (2006). Spanish version of the Mayer-Salovey-Caruso Emotional Intelligence test (MSCEIT). Version 2.0: Reliabilities, age and gender differences. *Psicothema*, 18, 42–48.
- Extremera, N., Ruiz-Aranda, D., Pineda-Galán, C., & Salguero, J. M. (2011). Emotional intelligence and its relation with hedonic and eudaimonic well-being: A prospective study. *Personality and Individual Differences*, 51, 11–16. doi:10.1016/j.paid.2011.02.029.
- Fernández-Berrocal, P., Cabello, R., Castillo, R., & Extremera, N. (2012). Gender differences in emotional intelligence: The mediating effect of age. *Behavioural Psychology*, 20, 77–89.
- Fernández-Berrocal, P., & Extremera, N. (2006). Emotional intelligence: A theoretical and empirical review of its first 15 years of history. *Psicothema*, 18, 7–12.
- Fernández-Berrocal, P., & Extremera, N. (2008). A review of trait metamood research. In M. C. Alexandra (Ed.), *Advances in psychology research* (pp. 17–45). New York: Nova Publishers.
- Fernández-Berrocal, P., & Extremera, N. (2010). Más Aristóteles y menos Prozac: La inteligencia emocional y el estudio de la felicidad [More Aristotle and less Prozac: Emotional intelligence and the study of happiness]. Encuentros en Psicología Social, 5, 40–51.
- Fernández-Berrocal, P., Extremera, N., & Ramos, N. (2004a). Validity and reliability of the Spanish modified version of the Trait Meta Mood Scale. *Psychological Reports*, 94, 751–755. doi:10.2466/pr0. 94.3.
- Fernández-Berrocal, P., Pérez, J. C., Repetto, E. & Extremera, N. (2004b). Una comparación empírica entre cinco medidas breves de inteligencia emocional percibida [An empirical comparison of five brief measures of perceived emotional intelligence]. *Proceedings of VII European Conference on Psychological Assessment* (p. 61). Malaga: European Association of Psychological Assessment.

- Fischer, A. H. (1993). Sex differences in emotionality: Fact or stereotype? *Feminism and Psychology*, 3, 303–318. doi:10.1177/ 0959353593033002.
- García-León, A. M., & Lopez-Zafra, E. (2009). Una revisión de los modelos e instrumentos de evaluación de la inteligencia emocional [A review of models and instruments for the assessment of emotional intelligence]. In J. Augusto (Ed.), *Estudios en el ámbito de la inteligencia emocional [Studies in the field of emotional intelligence]* (pp. 15–36). Jaén: Servicio de Publicaciones de la Universidad de Jaén.
- Gardner, K. J., & Qualter, P. (2010). Concurrent and incremental validity of three trait emotional intelligence measures. *Australian Journal of Psychology*, 62(1), 5–13. doi:10.1080/00049530903312857.
- Gartzia, L. (2013). La maleabilidad del género: Efectos de la exposición breve a imágenes contraestereotípicas en materia afectivo-sexual [The malleability of gender: Effects of brief exposure to images contraestereotípicas affective-sexual matters]. *Revista de Psicología Social, 28*, 35–46. doi:10.1174/021347413804756005.
- Gartzia, L., Aritzeta, A., Balluerka, N., & Barberá, E. (2012). Inteligencia Emocional y Género: Más allá de las diferencias sexuales [Emotional Intelligence and Gender: Beyond sex differences]. *Anales de Psicología, 28*, 567–575. doi:10.6018/analesps.28.2. 124111.
- Gignac, G. E. (2009). Psychometrics and the measurement of emotional intelligence. In C. Stough, D. H. Saklofske, & J. D. A. Parker (Eds.), *Assessing emotional intelligence: Theory, research, and applications* (pp. 9–40). New York: Springer.
- Hall, J. A., Carter, J. D., & Horgan, T. G. (2000). Gender differences in nonverbal communication of emotion. In A. H. Fischer (Ed.), *Gender and emotion: Social psychological perspectives* (pp. 97– 117). Paris: Cambridge University Press.
- Hareli, S., & Parkinson, B. (2008). What's Social about social emotions? Journal for the Theory of Social Behaviour, 38, 131–156. doi:10. 1111/j.1468-5914.2008.00363.x.
- Harré, R. (1986). The social construction of emotions. Oxford: Blackwell.
- Heilman, M. E. (2001). Description and prescription: How gender stereotypes prevent women's ascent up the organizational ladder. *Journal of Social Issues*, 57, 657–674. doi:10.1111/0022-4537.00234.
- Hewston, M., Rubin, M., & Willis, H. (2002). Intergroup bias. Annual Review of Psychology, 53, 575–604. doi:10.1146/annurev.psych.53. 100901.135109.
- Joseph, D. L., & Newman, D. A. (2010). Emotional intelligence: An integrative meta-analysis and cascading model. *Journal of Applied Psychology*, 95, 54–78. doi:10.1037/a0017286.
- Keener, E., Strough, J., & DiDonato, L. (2012). Gender differences and similarities in strategies for managing conflict with friends and romantic partners. *Sex Roles*, 67, 83–97. doi:10.1007/s11199-012-0131-9.
- Keltner, D., & Lerner, J. S. (2010). Emotion. In D. T. Gilbert, S. T. Fiske, & G. Lindsay (Eds.), *The handbook of social psychology* (5th ed., pp. 312–347). New York: McGraw Hill.
- Lenney, E. (1977). Women's self-confidence in achievement settings. *Psychological Bulletin*, 84, 1–13. doi:10.1037/0033-2909.84.1.1.
- Lautenschlager, G. J., & Meade, A. W. (2008). Alphatest: A windows program for tests of hypotheses about coefficient Alpha. *Applied Psychological Measurement*, 32, 502–503. doi:10.1177/ 0146621607312307.
- Livingstone, H. A., & Day, A. L. (2005). Comparing the construct and criterion-related validity of ability-based and mixed-model measures of emotional intelligence. *Educational and Psychological Measurement*, 5, 757–779. doi:10.1177/0013164405275663.
- López-Sáez, M., & Lisbona, A. (2009). Descriptive and prescriptive features of gender stereotyping. Relationships among its components. *Revista de Psicología Social*, 24, 363–379.
- Lopez-Zafra, E., Pulido, M., & Berrios, M. P. (2014). EQI- versión corta (EQI-C): Adaptación y validación al español del EQ-i (Short

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Form)[EQI-short version (EQI-C): Spanish adaptation and validation of EQ-i (Short Form) in college students]. *Boletín de Psicología*, 110, 21–36.

- Lopez-Zafra, E., Garcia-Retamero, R., & Berrios, M. P. (2012). Relationship between transformational leadership and emotional intelligence from a gender approach. *Psychological Record*, 62, 97–114.
- McIntyre, M. H. (2010). Gender differences in the nature and linkage of higher-order personality factors to trait and ability emotional intelligence. *Personality and Individual Differences*, 48, 617–622. doi: 10.1016/j.paid.2009.12.019.
- Matthews, G., Zeidner, M., & Roberts, R. D. (2011). Emotional intelligence 101. New York: Springer.
- Mayer, J. D., Caruso, D. R., & Salovey, P. (1999). Emotional intelligence meets traditional standards for intelligence. *Intelligence*, 27, 267– 298. doi:10.1016/S0160-2896(99)00016-1.
- Mayer, J., Roberts, R., & Barsade, S. G. (2008). Human abilities: Emotional intelligence. *Annual Review of Psychology*, 59, 507– 536. doi:10.1146/annurev.psych.59.103006.093646.
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (Eds.), *Emotional development and emotional intelligence: Implications for educators* (pp. 3–34). New York: Basic Books.
- Mayer, J. D., Salovey, P., & Caruso, D. (2000). Models of emotional intelligence. In R. J. Sternberg (Ed.), *Handbook of intelligence* (2nd ed., pp. 396–420). New York: Cambridge.
- Mayer, J. D., Salovey, P., Caruso, D. R., & Sitarenios, G. (2001). Emotional intelligence as a standard intelligence. *Emotion*, 1, 232– 242. doi:10.1037/1528-3542.1.3.232.
- Merino, C., & Lautenschlager, G. (2003). Comparación estadística de la confiabilidad alfa de Cronbach: Aplicaciones en la medición educacional y psicológica [Statistical comparisons of Cronbach's coefficient alpha: Applications in educational and psychological measurement]. *Revista de Psicología de la Universidad de Chile*, 12, 127–136.
- Nieva, V. F., & Gutek, B. A. (1980). Sex effects on evaluation. Academy of Management Beview, 5, 267–276. doi:10.5465/AMR.1980. 4288749.
- Oatley, K. (1998). Emotion. The Psychologist, 11, 285-288.
- Parker, J. D. A., Keefer, K. V., & Wood, L. M. (2011). Toward a brief multidimensional assessment of emotional intelligence: Psychometric properties of the Emotional Quotient Inventory—short form. *Psychological Assessment*, 23, 762–777. doi:10.1037/a0023289.
- Pena, M., Rey, L., & Extremera, N. (2012). Life satisfaction and engagement in elementary and primary educators: Differences in emotional intelligence and gender. *Revista de Psicodidáctica*, 17, 341–358. doi:10.1387/Rev.Psicodidact.1220.
- Petrides, K. V., & Furnham, A. (2003). Trait emotional intelligence: Behavioral validation in two studies of emotion recognition and reactivity to mood induction. *European Journal of Personality*, 17, 39–57. doi:10.1002/per.466.
- Pike, C. K., & Hudson, W. W. (1998). Reliability and measurement error in the presence of homogeneity. *Journal of Social Service Research*, 24, 149–163. doi:10.1300/J079v24n01 07.
- Pratto, F., Sidanius, J., & Stallworth, L. M. (1993). Sexual selection and the sexual and ethnic basis of social hierarchy. In L. Ellis (Ed.), *Social stratification and socioeconomic inequality: A comparative biosocial analysis* (pp. 111–136). New York: Praeger.
- Roberts, R. C. (1991). Virtues and rules. *Philosophy and Phenomenological Research*, 51, 325–353. doi:10.2307% 2F2108130.
- Robinson, M. D., Johnson, J. T., & Shields, S. A. (1998). The gender heuristic and the database: Factors affecting the perception of gender-related differences in the experience and display of emotions. *Basic and Applied Social Psychology*, 20, 206–219. doi:10. 1207/s15324834basp2003_3.

- Rudman, L. A., & Glick, P. (2001). Prescriptive gender stereotypes and backlash toward agentic women. *Journal of Social Issues*, 57, 732– 762. doi:10.1111/0022-4537.00239.
- Rudman, L. A., & Goodwin, S. A. (2004). Gender differences in automatic in-group bias: Why do women like women more than men like men? *Journal of Personality and Social Psychology*, 87, 494– 509. doi:10.1037/0022-3514.87.4.494.
- Rueckert, L., Branch, B., & Doan, T. (2011). Are gender differences in empathy due to differences in emotional reactivity? *Psychology*, 2, 574–578. doi:10.4236/psych.2011.26088.
- Salguero, J. M., Extremera, N., & Fernández-Berrocal, P. (2012). Emotional intelligence and depression: The moderator role of gender. *Personality and Individual Differences*, 53, 29–32. doi:10.1016/ j.paid.2012.02.006.
- Salguero, J. M., Fernández-Berrocal, P., Ruíz-Aranda, D., & Cabello, R. (2009). Propiedades psicométricas de la versión reducida de la Trait Meta-Mood Scale: TMMS-12. [Psychometric properties of the reduced version of the Trait Meta-Mood Scale: TMMS-12]. In P. Fernández-Berrocal, P. Fernández-Berrocal, N. Extremera, R. Palomera, D. Ruiz-Aranda, J. M. Salguero, & R. Cabello (Eds.), Avances en el estudio de la Inteligencia Emocional [Advances in the study of Emotional Intelligence] (pp. 129–133). Santander: Fundación Marcelino Botín.
- Salovey, P., Detweiller- Bedell, B. T., Detweiller-Bedell, J. B., & Mayer, J. D. (2008). Emotional Intelligence. In M. Lewis, J. M. Haviland-Jones, & L. Feldman-Barret (Eds.), *Handbook of emotions* (pp. 533–547). New York: Guildford Press.
- Salovey, P., & Grewal, D. (2005). The Science of emotional intelligence. *Currents Directions in Psychological Science*, 14, 281–285. doi:10. 1111/j.0963-7214.2005.00381.x.
- Salovey, P., & Mayer, J. D. (1990). Emotional Intelligence. *Imagination,* Cognition and Personality, 9, 185–211. doi:10.2190/DUGG-P24E-52WK-6CDG.

- Salovey, P., Mayer, J. D., Goldman, S., Turvey, C., & Palfai, T. (1995). Emotional attention, clarity and repair: Exploring emotional intelligence using the trait mood scale. In J. W. Pennebaker (Ed.), *Emotion, disclosure and health* (pp. 125–154). Washington DC: American Psychological Associations.
- Sczesny, S. (2003). A closer look beneath the surface: Various facets of the think-manager-think-male stereotype. Sex Roles, 49, 353–363. doi:10.1023/A:1025112204526.
- Siegling, A. B., Saklofske, D. H., Vesely, A. K., & Nordstokke, D. W. (2012). Relations of emotional intelligence with gender-linked personality: Implications for a refinement of EI constructs. *Personality and Individual Differences*, 52, 776–781. doi:10.1016/j.paid.2012.01.003.
- Thory, K. (2013). A gendered analysis of emotional intelligence in the workplace: Issues and concerns for human resource development. *Human Resource Development Review*, 12, 221–244. doi:10.1177/ 1534484312469100.
- Tsaousis, I., & Kazi, S. (2013). Factorial invariance and latent mean differences of scores on trait emotional intelligence across gender and age. *Personality and Individual Differences*, 54, 169–173. doi: 10.1016/j.paid.2012.08.016.
- Whitman, D. S., Van Rooy, D. L., Viswesvaran, C., & Kraus, E. (2009). Testing the second-order factor structure and measurement equivalence of the Wong and Law Emotional Intelligence Scale across sex and ethnicity. *Educational and Psychological Measurement*, 69, 1059–1074. doi:10.1177/0013164409344498.
- Williams, J. E., & Best, D. L. (1990). Measuring sex stereotypes: A multination study. Beverly Hills: Sage.
- Williams, J. E., Satterwhite, R. C., & Best, D. L. (1999). Pancultural gender stereotypes revisited: The five factor model. *Sex Roles*, 40, 513–525. doi:10.1023/A:1018831928829.
- Wong, C. S., & Law, K. S. (2002). The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. *The Leadership Quarterly*, 13, 243–274. doi:10.1016/S1048-9843(02)00099-1.