Spanish version of the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT). Version 2.0: Reliabilities, age and gender differences

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This study examined the reliability of the Spanish version of the MSCEIT, with a sample of 946 college and high school students (426 males, 520 females) ranging from 16 to 58 years old. After the translation and back-translation process, the objectives of this study were: 1) to examine the reliability of the Spanish version of the MSCEIT v.2.0 at the total scale, area, branch and subscale levels; 2) to analyze the correlations between the methods of scoring in the Spanish version of the MSCEIT v.2.0 at the total scale, area, branch and subscale levels; 3) to examine possible gender differences on MSCEIT scores; and 4) to examine the relationship between age and MSCEIT scores. These analyses revealed good reliability and internal consistency for the Spanish version of the MSCEIT; a high level of convergence between scoring methods; and higher scores obtained by women on overall scale and branches scores than scores obtained by men. A positive correlation between the scores on MSCEIT and age was found. Finally, these results are discussed in light of the limitations of the present study, the implications of the use of this new instrument, and the need for future research on emotional intelligence.

Versión española del Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT). Versión 2.0: fiabilidad y diferencias de edad y género. Este estudio examinó la fiabilidad de la versión española del MSCEIT, con una muestra de 946 estudiantes de enseñanza media y universitaria (426 hombres y 520 mujeres) en un rango de edad de 16 a 58 años. Tras el proceso de traducción y traducción inversa, los objetivos de este estudio fueron: 1) examinar la fiabilidad de la versión española del MSCEIT v.2.0 en los niveles de escala completa, área, rama y subescalas; 2) analizar las correlaciones entre los métodos de corrección de la versión española del MSCEIT v.2.0 en los niveles de escala completa, área, rama y subescalas; 3) examinar posibles diferencias de género en las puntuaciones del MSCEIT; y 4) examinar la relación entre la edad y la puntuación en el MSCEIT. Estos análisis revelaron buena fiabilidad y consistencia interna y alta convergencia entre los dos métodos de corrección en la versión española del MSCEIT. Las mujeres obtuvieron puntuaciones más altas que los hombres en la escala total y en las ramas del test. Se encontró una correlación positiva entre las puntuaciones en el MSCEIT y la edad. Finalmente, se consideran las limitaciones de este estudio, las implicaciones de los resultados para el uso de este nuevo instrumento y la necesidad de futuras investigaciones en inteligencia emocional.

Research on individual differences has shown renewed interest on the influence of emotional abilities as personal resources of individuals. Emotional Intelligence (EI), as a new psychological construct, is partly responsible for this, bringing a new sphere of studies to explain human behavior. In the last 15 years, a cumulus of assorted experimental, correlational, and in a small measure, longitudinal studies, has contributed to this interest throwing some light on the benefits of being emotionally intelligent in areas as diverse as: physical health and physiological reactivity (Woolery & Salovey, 2004; Salovey, Stroud, Woolery, & Epel, 2002), mental health (Ciarrochi, Deane, & Anderson, 2002; Tsaousis & Nikolaou, 2005; Extremera & Fernández-Berrocal, 2002),

substance abuse (Trinidad & Johnson, 2002; Trinidad, Unger, Chou, Azen, & Johnson, 2004; Bracket & Mayer, 2003), well-being (Extremera & Fernández-Berrocal, 2005), relationships (Brackett, Warner, & Bosco, 2005), moral dilemmas (Fernández-Berrocal & Extremera, 2005), academic performance (Gil-Olarte, Palomera, & Brackett, 2006; Parker, Summerfeldt, Hogan, & Majeski, 2004), disruptive behavior (Moriarty, Stough, Tidmarsh, Eger, & Dennison, 2001; Petrides, Frederickson, & Furnham, 2004; Hemmati, Mills, & Kroner, 2004), interpersonal relationships (Schutte, Malouff, Bobik, Coston, Greeson, Jedlicka, & Wendorf, 2001; Lopes, Salovey, & Straus, 2003), and job performance (Gerits, Derksen, Verbruggen, & Katzko, 2005; Lopes, Grewal, Kadis, Gall, & Salovey, 2006), among others.

Scarcely fifteen years of existence in the international level and still in its infancy as a research construct in Spain, EI has become a prolific field of research, for its detractors and for its defenders, who are participants in a vigorous debate about its discriminant, predictive, incremental, and construct validity (Matthews, Zeidner, & Roberts, 2002; Geher, 2004). Mayer (2001) proposes

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that the concept has gone through three well-defined periods within the last ten years: the first period was dedicated to the development of the theory and to the conceptualization of models of EI; during the second period most efforts were dedicated to the creation and improvement of instruments for the assessment and measurement of EI; the third period brought an exponential development of experimental studies, most of them conducted in English-speaking countries (United States, Great Britain, Australia, Canada). The next essential stage must assess the adaptation and validation of the instruments to other cultures and languages to verify the generalization of the research findings reported during the past ten years from English-speaking cultures (Lopes, Brackett, Nezlek, Schütz, Sellin, & Salovey, 2004). In Spanish-speaking countries in general, and in Spain in particular, literature regarding the measurement of EI is still relatively sparse. In spite of this, there is a vibrant interest in validating the Spanish versions of the EI instruments and in using them for basic and applied research. However, all these validation efforts have focused on self-report measures (for a Spanish review, see Extremera, Fernández-Berrocal, Mestre, & Guil, 2004). For example, Fernández-Berrocal, Alcaide, Domínguez, Fernández-McNally, Ramos and Ravira (1998) adapted the original version of the Trait-Meta Mood Scale (TMMS), a meta-knowledge scale that evaluates three basic dimensions of beliefs about one's moods and emotions. From the 48-items original scale, an adapted abbreviated Spanish version of the TMMS has been elaborated (Fernández-Berrocal, Extremera, & Ramos, 2004). Pérez (2003) adapted the extended version of the TEIQue v.1.0 (Petrides & Furnham, 2003). Also, the Emotional Quotient Inventory (EQ-i; Bar-On, 1997) and the Emotional Competence Inventory (ICE; Boyatzis & Burckle 1999) have been adapted by their original distributors, Multi-Health Systems and the Hay Group, respectively.

All these instruments are self-report measures, and rely on the person's perception of their own emotional abilities. These instruments are easily and inexpensively administered but present also some disadvantages (i.e. overlap with personality variables, shared method variance with criteria variables, and social desirability problems, among others) (Mayer, Caruso, & Salovey, 2000; Brackett & Mayer, 2003; Brackett & Salovey, 2006).

From Mayer and Salovey's (1997) model, the use of ability-based scales is encouraged, following the traditional methods used to assess analytical intelligence (Mayer et al., 2000; Mayer, Salovey, Caruso, & Sitarenios, 2003; Brackett & Salovey, 2006). Earlier research found that these measures present psychometric limitations and problems related to the scoring criteria (expert and consensus) (Roberts, Zeidner, & Matthews, 2001). However, new versions of these scales try to eliminate, or at least to reduce, these concerns (Mayer et al., 2003), and their discriminant validity relative to existing constructs has been confirmed (Brackett & Mayer, 2003; Lopes et al., 2003).

Since 1990 (Salovey & Mayer, 1990), there have been different attempts to create a more objective assessment of emotional abilites (Mayer, DiPaulo, & Salovey 1990; Mayer & Geher, 1996; Mayer, Caruso, & Salovey, 1999). From this point of view, two ability-based scales to assess EI have been developed: the MEIS (Multifactor Emotional Intelligence Scale; Mayer et al., 1999) and the MSCEIT (MSCEIT v.1.1; Mayer Salovey Caruso Emotional Intelligence Test; research version, Mayer, Salovey, & Caruso, 2000), and its improved and shortened version: MSCEIT v.2.0

(Mayer, Salovey, & Caruso, 2002). The MSCEIT, as well as its predecessors, covers the four branches of EI proposed by Mayer and Salovey: a) perceiving emotions effectively, b) using emotions to facilitate reasoning, c) understanding emotions, and d) managing emotions (Mayer & Salovey, 1997). The MEIS was created as a previous attempt to show the capacity of developing a reliable measure of the four factors comprising EI as ability. Problems regarding the length of the scale (402 items), and some psychometric problems, more specifically, problems concerning the validity of the scoring methods (expert and consensus), the low levels of internal consistency for some of the subscales as well as the facture structure of the MEIS (Robert et al., 2001; Ciarrochi, Chan, & Caputi, 2000), led to the development of the MSCEIT (Mayer et al., 2002). In general, the MSCEIT can be scored at three levels: (1) an Overall EI score reflecting a general level of EI; (2) two area scores, Experiencing EI and Strategic EI; and (3) four branches scores (each measured by two subtests) that assess the four primary abilities of the Mayer and Salovey model. Each one of these scores is obtained through two scoring criteria: expert scoring criterion and consensus scoring criterion. The expert scoring criterion is based on responses to the test items from 21 members of the International Society for Research on Emotion. The consensus scoring criterion is based on the responses to the test items from a large and heterogeneous standardization sample of over 5,000 individuals.

Regarding the Experiencing and the Strategic areas, the former reflects the ability to identify emotions and to assimilate emotions in thought, comprising the first two branches of the model (perception and facilitation). Thus, the perception branch refers to the ability to perceive other's emotions, and the facilitation branch refers to the ability to use emotions to improve reasoning. On the other hand, the understanding and managing emotions branches comprise the Strategic area, because they refer to the ability to evaluate and arrange actions based on the information given by feelings and emotions. Thus, the understanding branch refers to the ability to understand the meaning of emotions and how our own emotions and other's emotions change, and also how emotions change people and people's behaviour across time. The regulation branch refers to the ability to integrate logic and emotions to make effective decisions.

The MSCEIT v.2.0 comprises 8 subscales; each branch is evaluated through two different subscales. The ability to perceive emotions (Perceiving) is evaluated by the Faces and Pictures subscales; the ability to use emotions to facilitate thought (Facilitation) is assessed through the Sensations and Facilitations subscales; the ability to understand emotions (Understanding Emotions) is measured by the Blends and Changes subscales, the Blends test asks participants to identify emotions that combine to form more complex feelings, while the Changes test asks participants to identify emotions that result from the intensification of certain feelings. Finally, the ability to manage emotions (Managing Emotions) is assessed through the Emotional Management and the Emotional Relationships subtests.

Several studies using different versions of the MSCEIT have found that its areas, branches and subscale scores replicate a factor structure consistent with the original theoretical model (Mayer et al., 2002; Mayer, Salovey, Caruso, & Sitarenios, 2001; Mayer et al., 2003; Palmer, Gignac, Manocha, & Stough, 2005). Moreover, studies conducted with the MSCEIT v.2.0 have found that the expert group showed higher inter-rater reliability in identifying

correct answers, indicating that the expert criterion is superior to the consensus criterion in terms of determining more and less correct test answers (at least in the areas where research has possibly established clear criteria for answers, i.e.. perceiving and understanding emotions). Likewise, there is a higher reliability at the full-scale (Overall EI), area, and branch level, while a lower reliability is found at the subscale level. Similarly, the 3-week test-retest reliability was .86 (Brackett & Mayer, 2003). Studies using ability-based scales show that women usually score higher than men (Brackett, Mayer, & Warner, 2004; Mayer et al., 2002; Mayer et al., 1999; Ciarrochi et al., 2000; Palmer et al., 2005; Kafetsios, 2004; Day & Carroll, 2003). Findings concerning age show that abilities develop chronologically. Older persons usually score higher in ability-based scales (Kafetsios, 2004; Mayer et al., 1999; Mayer et al., 2002).

Given the absence of EI ability-based scales adapted to Spanish-speakers, this study examined the psychometric properties of the Spanish version of the MSCEIT with a relatively broad sample of high school and college students. For this purpose, we investigated the Spanish MSCEIT's reliability, factor structure, correlations between subscales, branches, and areas, as well as differences in MSCEIT scores by gender, and the relationship between scores on the MSCEIT and age. On the basis of previous studies using this scale and other ability-based measures from English-speaking populations (Mayer et al., 1999; Mayer et al., 2003; Palmer et al., 2005), it is hypothesised that; 1) The Spanish version of the MSCEIT v.2.0 will exhibit high internal consistency reliability at the subscale, branch and area level; 2) there will be a high correlation between the different scoring methods of the Spanish version of the MSCEIT v.2.0; 3) females will obtain significantly higher Overall EI and branch scores than men; 4) there will be a positive relationship between scores on the Spanish version of the MSCEIT v.2.0 and age, demonstrating age and experience differences in EI.

Method

Participants and procedure

The sample consisted of 946 college and high school students (426 males, 520 females), ranging in age from 16 to 58 years (M= 19,78 ; S.D.= 5,6). Participants were first given a set of written and brief verbal instructions and were informed of their anonymity. Next, the MSCEIT v.2.0 was administered to the participants in groups of 30 to 50. Finally, the participants were debriefed and thanked for their participation.

Measures

MSCEIT v. 2.0. The Spanish version of Mayer Salovey Caruso Emotional Intelligence Test v. 2.0 (Mayer et al., 2002; Extremera & Fernández-Berrocal, 2002) was administered. The instrument was translated into Spanish and then back-translated. Authors of this study and an English language philologist translated the instrument from English into Spanish, and later, one of the authors of the original MSCEIT v.2.0 and two bilingual Ph.D. students from Yale University back-translated the instrument. Next, the comparison of the original version and the back translation of the provisional forward version was made and, where necessary, a review of any discrepancies among original authors of MSCEIT

v.2.0 and Spanish authors was conducted by modifying the provisional forward version to ensure accuracy and understanding of all items. The MSCEIT v.2.0 was scored using both expert and consensus norms. Further information on the scoring, the structure and reliability can be found in the technical manual (Mayer et al., 2002; Brackett & Salovey, 2006; Mayer, Salovey, Caruso, & Sitarenios, 2003).

Results

Descriptive Statistics and Reliabilities

Descriptive statistics including means and standard deviations, along with reliabilities for the Spanish MSCEIT v.2.0 using both General and Expert Scoring are presented in table 1. Overall MSCEIT full-scale, area, and branch split-half reliabilities were adequate, and even slightly superior to those reported by Mayer et al. (2003) and Palmer et al. (2005) for the English language version. Similarly, Individual tasks such as Changes or Blends showed lower reliabilities than branch, area, or overall MSCEIT scores, as earlier studies have reported (Mayer et al., 2003; Palmer et al., 2005) suggesting the use of overall, area, and branch scores rather than individual tasks as indices of EI.

Mayer et al. (2003) reported higher expert-based test score reliabilities in comparison to consensus-based test scores in areas where the expert group have been previously found to demonstrate higher inter-rater reliability in identifying correct answers. The expert criterion may be the scoring criterion of choice for ability tests, at least in the areas where research has possibly established a clear basis for the answers suggested by the experts.

MSCEIT Intercorrelations

In order to examine hypothesis 1, Pearson product-moment correlations were computed based on both expert and consensus scoring for MSCEIT branch, area and overall emotional intelligence scores. As shown in table 2, all branch, area and overall scores were positively and significantly correlated using both expert (above the diagonal) and consensus scoring (below the diagonal). As can be seen in the boldface diagonal, there was a strong correlation between the score based on the two different scoring methods, supporting hypothesis 2, ranging from r= .97 to r= .98 and indicating a high degree of correspondence between scores based on the two criteria.

EI and gender

In order to examine hypothesis 3, related to potential gender differences in emotional intelligence (e.g., Kaftesios, 2004; Mayer et al., 1999), we examined the MSCEIT scores of male and female participants separately. Consistent with findings from previous research, there were significant differences on total EI, area, and MSCEIT branch scores; females systematically scored significantly higher than male for both criteria. These findings are similar to those reported in previous studies using the English version of the MEIS (Mayer et al., 1999; Ciarrochi et al., 2000) and the MSCEIT (Mayer et al., 2002; Palmer et al., 2005). Table 4 presents descriptive statistics for MSCEIT branches and Overall EI scores by gender.

Table 1
Unstandardized score means and standard deviations, reliabilities and intercorrelations for the Spanish MSCEIT V2.0 for general and expert scoring

| Area score | Branch score | Subtest score | Descriptive statistic | | | | Reliability | |
| | | | Consensus | | Expert | | | |
			M	SD	M	SD	Consensus	Expert
Experiential			.40	.09	.40	..09	.94	.93
	Perceiving		.44	.12	.47	.14	.93	.92
		Faces	.48	.13	.53	.18	.80	.80
		Pictures	.42	.14	.44	.15	.90	.89
	Facilitating		.36	.09	.36	.08	.82	.82
		Facilitation	.37	.10	.35	.09	.70	.63
		Sensation	.35	.11	.37	.12	.70	.69
Strategic			.36	.08	.36	.08	.89	.87
	Understanding		.40	.10	.45	.13	.82	.80
		Changes	.41	.11	.45	.14	.69	.65
		Blends	.38	.12	.46	.19	.69	.69
	Managing		.33	.09	.34	.09	.85	.81
		Emotional management	.33	.09	.34	.09	.72	.67
		Emotional relationships	.32	.12	.33	.14	.75	.69
Overall MSCEIT			.38	.08	.38	.08	.95	.94

Note: Split-half reliabilities are reported at the total test, area and branch score levels due to item heterogeneity.
Coefficient alpha reliabilities are reported at the subtest level due to item homogeneity.

Table 2
Intercorrelations among expert (above the diagonal) and consensus (below the diagonal) MSCEIT branches, areas and total scores

	Branch2	Branch3	Branch4	Strategic	Experiential	Overall
Branch1: Perceiving	**.98****	,43	,36	,38	,89	,40	,70
Branch2: Facilitating	.47	**.97****	,54	,56	,76	,61	,75
Branch3: Understanding	.40	.54	**.97****	,57	,50	,91	,81
Branch4: Managing	.40	.56	.58	**.97****	,53	,83	,78
Strategic	.86	.82	.54	.55	**.97****	,57	,85
Experiential	.43	.62	.88	.87	.60	**.97****	,89
Overall MSCEIT	.71	.78	.79	.80	.87	.88	**.98****

Note: All correlations in the table are statistically significant at the p<.01 level. The correlation between consensus and expert-based scores for each branch is presented in boldface down the main diagonal of the table respectively.

Table 3
Descriptive statistics for MSCEIT branches and overall EI scores by gender

| | Consensus scores | | | Expert scores | | |
	M	SD	F	M	SD	
Branch 1: Perceiving						
Males	.42	.13	28.13**	.45	.15	31.45**
Females	.46	.11		.50	.13	
Branch 2: Facilitating						
Males	.35	.09	22.26**	.35	.09	22.24**
Females	.38	.09		.37	.09	
Branch 3: Understanding						
Males	.38	.10	29.72**	.43	.14	27.33**
Females	.42	.10		.48	.14	
Branch 4: Managing						
Males	.32	.09	24.71**	.32	.10	23.99**
Females	.34	.09		.35	.10	
Experiencial area						
Males	.39	.10	36.80**	.40	.10	37.64**
Females	.42	.09		.44	.09	
Strategic area						
Males	.35	.09	32.01**	.38	.10	30.52**
Females	.38	.09		.42	.11	
Overall MSCEIT						
Males	.37	.08	48.06**	.39	.09	48.76**
Females	.40	.08		.43	.09	

Note: N= 945; **p<.01

EI and age

To examine hypothesis 4, the relationship between MSCEIT scores and age, we calculated Pearson product-moment correlations. Using either scoring criteria, significant relationships between total MSCEIT scores, area scores, branch scores, and age were found. For scores based on the consensus criterion, there were significant and positive relationships with age for all branches (ranging from r=.07; p<.05 for branch 2 to r= .25; p<0.1 for branch 4); areas and total scores also showed a positive relationship with age (r= .13; p<0.1 for Experiential; r= .21; p<0.1 for Strategic; and r= .20; p<0.1 for Overall score). Similar results were found when scores based on the expert criterion were correlated with age. All correlations between branches and age were significant and positive (ranging from r= .08; p<.05 for branch 2 to r= .25; p<0.1 for branch 4); areas and overall scores also showed a positive relationship with age (r= .13; p<0.1 for Experiential; r= .21; p<0.1 for Strategic; and r= .20; p<0.1 for Overall scores).

Conclusion

This study presents the psychometric properties of the Spanish version of MSCEIT v.2.0 with a large sample of males and females covering a wide age range. In general, the results here are

consistent with and support recent findings with the English version of the MSCEIT (Mayer et al., 2003; Palmer et al., 2005), suggesting that the Spanish version of the MSCEIT v.2.0 is suitable to use with Spanish-speaking samples. Moreover, the expert scoring criterion and the consensus scoring criterion produce highly correlated scores with Spanish samples. This, together with its demonstrated good psychometric properties, indicates that use of the Spanish version of the MSCEIT in transcultural studies can be recommended.

The Spanish version of the MSCEIT exhibited adequate reliability at the full-scale, area, and branch levels. The reliabilities coefficients reported in the present study were slightly higher than those reported by Mayer et al. (2003) and Palmer et al. (2005), demonstrating the appropriateness of this version of the MSCEIT v. 2.0 in Spanish. Mayer et al. (2003) do not recommend scoring the MSCEIT at the level of the the eight task subscales due to lower reliability at this level. With the Spanish version of the MSCEIT the reliability coefficients for the individual tasks ranged from .63 to .90. The Facilitating subscale presented the lowest internal consistency coefficient (.63) using the expert scoring criterion, although this coefficient is similar to that reported in the English version (Mayer et al., 2003). Thus, as Mayer et al. (2003) suggest, we recommend using scores from the full scale, the area and branch levels, but to be especially cautious interpreting scores obtained from the individual task subscales. Some subscales such as those that comprise the Understanding and Facilitating branches could benefit from the inclusion of additional items that increase their individual reliability.

Mayer et al. (1999) proposed that for EI to be considered an «intelligence», measures of the construct should meet three traditional criteria. The results from the present study have been examined for two of these criteria, and they fulfil these requirements: 1) the abilities measured must exhibit significant intercorrelations; 2) there should be age related differences, thus, abilities should increase with age. Previous studies also demonstrated the suitability of the four branches of the model as basic emotional abilities, which comprises the third criterion (Mayer et al., 1999; Roberts et al., 2001). The current study found highly significant positive relationships between branch, area and overall scores, using both of the two scoring criteria. Moreover, these correlations were moderate, which provides evidence that each ability exhibits appropriate discriminant and convergent validity with respect to others; there is no excessive conceptual overlap. Finally, we found significant positive relationships between age and MSCEIT scores for full-scale, area and branch scores using the two scoring criteria. The inclusion of adolescents in our sample, and in the sample studied in Mayer et al. (1999), or the inclusion of quiet heterogeneous groups of age (Kafetsios, 2004), allowed for a higher degree of variability than in Palmer et al. (2005) study, and this could be the reason why some studies find age related differences on EI scores and others do not.

Future studies should take into account the age range of recruited samples, and try to include participants of various ages, avoiding exclusively college student samples. It is important to note, however, that our Spanish participants' scores were based on a predominantly North American normative sample that was older than the sample recruited here. Therefore, future studies might be conducted using consensus scores determined with a Spanish population sample with a wide range of age. Also, it is necessary to examine the relationship between the consensus normative scoring methods determined with Mayer et al.'s. standardization data and consensual norms determined with Spanish general population sample, and their respective relationships with age and other criteria, as Palmer reported with Australian sample (Palmer et al., 2005). Developmental questions might be best addressed by using the newly created Mayer-Salovey-Caruso Emotional Intelligence Test: Youth Version (MSCEIT:YV; Mayer, Salovey, & Caruso, 2004), designed to assess emotional intelligence among pre-adolescents and adolescents (suitable for 12 to 18-year-olds), although unfortunately it has not been adapted and validated in a Spanish context yet.

Findings from the present study show significant gender differences on all MSCEIT scores, consistently across the two scoring methods, as in many previous studies (Brackett et al., 2004; Mayer, Salovey, & Caruso, 2002; Mayer et al., 1999; Ciarrochi et al., 2000; Palmer et al., 2005). This finding throws some light on the debate about whether self-report measures and ability-based scales measure different constructs as the correlations between self-report and ability measures of EI are rather low (Brackett & Mayer, 2003; O'Connor & Little, 2003). Studies assessing gender differences on EI assessed through self-report measures do not generally find significant differences (Fernández-Berrocal et al., 2004) or, in other cases, males were found to score slightly higher on intrapersonal dimensions than women (Bar-On, Brown, Kirkcaldy, & Thomé; 2000; Petrides & Furhman, 2000). A possible explanation might be that men perceive themselves more emotionally intelligent, as has been observed for other self-reported attributes such as self-esteem. Conversely, women may underestimate their perceived emotional abilities, evaluated through self-report measures, while they actually perform better than men in ability-based scales such as the MSCEIT. This hypothesis might explain the results described by Gohm and Clore (2002), who found a greater variance on the MSCEIT scores among those who scored lower on the self-report measures. Participants who thought themselves emotionally intelligent (measured by the TMMS) obtained high scores on the MSCEIT, but many participants who thought themselves less emotionally intelligent also obtained high scores on the MSCEIT. Future research should evaluate perceived and performed EI, and examine gender differences from both perspectives. This would help to better understand the meaning of gender differences in EI and suggest appropriate interventions for raising emotional intelligence in men versus women.

In conclusion, the Spanish version of the MSCEIT v.2.0 was demonstrated to have good reliability and appears suitable to be used in Spanish-speakers samples. As Mayer et al. (1999) postulated this instrument evaluates four factors that may be considered basic emotional abilities; these factors intercorrelate moderately and improve with age. Futures studies should demonstrate the predictive and incremental validity of the Spanish version of the MSCEIT v. 2.0 to predict life outcomes variables. Although the data are preliminary, some empirical studies have found that the Spanish MSCEIT correlated positively with teacher ratings of academic achievement and adaptation for both genders even after controlling for IQ and the Big Five personality traits (Mestre Guil, Lopes, Salovey, & Gil-Olarte, 2006). The Spanish MSCEIT is moderately related to social competence and predicted students' final grades above and beyond personality and academic intelligence (Gil-Olarte et al., 2006). Moreover, this instrument has explained unique variance in depression (measured by the Beck Depression Inventory), even after controlling for rumination and perceived EI

(Fernández-Berrocal & Extremera, in preparation). Finally, in a sample of high-school teachers, the Spanish MSCEIT showed incremental validity in predicting burnout, these associations remained significant even controlling for the Big Five personality factors and perceived mood repair abilities (Extremera, Fernández-Berrocal, Lopes, & Salovey, in preparation). However, research conducted with Spanish-speaking samples is still just beginning and needs to be extended to different life criteria related to mental health, work, and interpersonal relationships. The Spanish version of the MSCEIT allows as well for exploration of basic theoretical issues related to cultural differences in emotional intelligence.

Author note

The Spanish version of Mayer-Salovey-Caruso Emotional Intelligence Test, Version 2.0 (MSCEIT V2.0) is available from Multi-Health Systems (MHS) of Toronto, Ontario, Canada. MHS scores the test on the basis of the standardization sample and expert criteria; researchers have the further option of developing their own independent norms. Researchers can obtain the MSCEIT through special arrangements with MHS, which has various programs to accommodate their needs. For more information about how to obtain the MSCEIT, please contact with MHS: www.mhs.com.

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