

MEIA-R

MULTIDIMENSIONAL EMOTIONAL INTELLIGENCE ASSESSMENT – REVISED



Multidimensional Emotional Intelligence Assessment – Revised (MEIA-R) A Psychometric Summary

The MEIA-R is a personality-based assessment of emotional intelligence (EI) that measures the tendency to perceive, understand, regulate, and express emotions in the self and others. Since the original version of the MEIA was published in 2006, thousands of individuals have used the assessment to enhance their awareness and understanding of EI and develop their EI capabilities. The MEIA-W-R tailors the content of the MEIA-R to assess EI in a work setting.

Summary of What Has Changed

Click on a heading to go to that section.

Dimensions of EI	The MEIA-R and MEIA-W-R cover 11 components of EI – 6 core dimensions and 5 proximal outcomes.
Item Content	Scales have been revised to strengthen their measurement properties.
Administration	The MEIA-R and MEIA-W-R can be administered in just 15 minutes.
Norms	Test-takers' results are compared to a norm group of 363 individuals for the MEIA-R, and to a norm group of 940 individuals for the MEIA-W-R.
Report Offerings	The MEIA-R Report includes easy-to-understand results and dimensions descriptions. The MEIA-W-R Development Report also includes development advice.
Construct Validity	Evidence for construct validity supports the MEIA-W-R as a valid measure of EI.
Criterion Validity	The MEIA-W-R dimensions are significantly related to work-relevant outcomes.



MEIA-R



Dimensions of EI

The MEIA-R and MEIA-W-R cover 6 core dimensions of EI. These core dimensions can be considered the fundamental building blocks of EI. The MEIA-R and MEIA-W-R also assess 5 proximal outcomes, which reflect behaviors that are likely to be impacted by the core dimensions. The MEIA-R and MEIA-W-R build upon the original MEIA and MEIA-W by adding Delayed Gratification as a proximal outcome. In addition, the names of some dimensions were modified slightly to enhance interpretability. Each of these changes is reflected in Table 1.

Table 1. Dimensions of EI Measured by the MEIA-R and MEIA-W-R

	Dimension of EI	Previous Name	Definition
Core EI	Recognition of Emotion in the Self	-	Being in touch with your feelings and describing those feelings in words.
	Regulation of Emotion in the Self	-	Controlling your emotional states, particularly in emotionally charged situations.
	Recognition of Emotion in Others	-	Attending to others' nonverbal emotional cues, such as facial expressions and body language.
	Regulation of Emotion in Others	-	Managing others' emotional states, including motivating, persuading, or calming them down.
	Expressive Control	Nonverbal Emotional Expression	Controlling the way your emotions are expressed nonverbally.
	Empathy	-	Being affected by others' emotions as though you were in their situation.
Proximal Outcomes	Trust in Intuition	Intuition vs. Reason	Using emotions in making important decisions.
	Creative Thinking	-	Generating original ideas and innovative solutions.
	Mood Redirected Attention	-	Interpreting negative experiences in a positive light.
	Motivation	Motivating Emotions	Pursuing goals with drive and perseverance.
	Delayed Gratification	New	Staying focused on long-term goals without getting distracted by immediate rewards or instant gratifications.

MEIA-R



Item Content

Items for the MEIA-R and MEIA-W-R were developed based on Salovey and Mayer's (1990) multidimensional conceptualization of EI. For the MEIA-W-R, item content was tailored to measure EI as expressed in the workplace. Following data collection from multiple samples and extensive analyses, the item content of the original MEIA and MEIA-W was optimized and refined for inclusion in the MEIA-R and MEIA-W-R to minimize response bias. Moreover, additional items were developed specifically to measure dimensions of EI not adequately covered by existing scales. Each dimension of the MEIA-R and MEIA-W-R is measured by six items, with a balance between positive- and reverse-keyed items.

Table 2 shows the descriptive statistics and Cronbach alpha reliability coefficients for each dimension of the MEIA-R and MEIA-W-R. These values were computed using the corresponding norm samples for each assessment, which are described in greater detail below. Respondents were instructed to respond to each item using a 5-point Likert scale (Strongly Disagree to Strongly Agree). Scale scores were computed by averaging responses across items. The average reliability was .84 (minimum of .81) for the MEIA-R scales and .91 (minimum of .87) for the MEIA-W-R scales, indicating very high internal consistency.

Intercorrelations between the MEIA-W-R dimensions are reported in Table 3. As evident in Table 3, dimensions of EI tended to be significantly positively correlated with each other (average $r = .31$). Many of these correlations were moderate in strength, suggesting that each dimension captures a relatively unique aspect of EI. It is important to note that some dimensions displayed non-significant or even negative correlations with certain dimensions. For example, Regulation of Emotion in the Self, Expressive Control, and Delayed Gratification each demonstrated small negative correlations with Trust in Intuition. One potential reason for this is that Trust in Intuition involves drawing upon emotions as a source of information, which may be at odds with dimensions that relate to emotional self-control.

The overall pattern of positive intercorrelations among the MEIA-W-R EI dimensions is similar to those observed in the EI literature. Wong and Law (2002) reported strong positive correlations between their EI dimensions in a sample of leaders and their direct reports. Pekaar, Bakker, van Der Linden, and Born (2018), who also developed a measure of EI, reported more modest intercorrelations in their sample of employees. The correlations observed among the dimensions of the MEIA-W-R fall within the range observed by other EI scales based on the Salovey and Mayer (1990) model.

Administration

The MEIA-R and MEIA-W-R can each be completed in 15 minutes on SIGMA's online platform—SIGMATesting.com, making them quick and convenient to administer.

MEIA-R



Table 2. Descriptive Statistics for the MEIA-R and MEIA-W-R

Dimension	MEIA-R			MEIA-W-R			
	Mean	Standard Deviation	Cronbach Alpha Reliability	Mean	Standard Deviation	Cronbach Alpha Reliability	
Core EI	Recognition of Emotion in the Self	3.89	0.71	.83	3.95	0.67	.91
	Regulation of Emotion in the Self	3.19	0.95	.87	3.53	0.88	.89
	Recognition of Emotion in Others	3.59	0.77	.87	3.64	0.80	.93
	Regulation of Emotion in Others	3.42	0.85	.87	3.53	0.88	.94
	Expressive Control	2.97	0.80	.81	3.01	0.86	.90
	Empathy	3.58	0.79	.84	3.37	0.92	.92
Proximal Outcomes	Trust in Intuition	2.89	0.86	.85	2.78	0.88	.92
	Creative Thinking	3.57	0.77	.85	3.51	0.82	.93
	Mood Redirected Attention	3.47	0.83	.85	3.39	0.89	.87
	Motivation	3.64	0.75	.81	3.68	0.79	.89
	Delayed Gratification	3.50	0.80	.82	3.56	0.83	.91

Note: MEIA-R and MEIA-W-R items are rated using the following scale: 1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree. Scale scores are averages of responses to items. Descriptive statistics were computed using the norm samples for the MEIA-R ($N = 363$) and the MEIA-W-R ($N = 940$).

Table 3. Intercorrelations between MEIA-R and MEIA-W-R Dimensions

Dimension	1	2	3	4	5	6	7	8	9	10	11
1. Recognition of Emotion in the Self	-	.42***	.41***	.39***	-.01	.22***	-.10	.41***	.40***	.44***	.30***
2. Regulation of Emotion in the Self	.42***	-	.20***	.44***	.34***	-.03	-.17**	.33***	.67***	.67***	.40***
3. Recognition of Emotion in Others	.50***	.26***	-	.53***	.06	.32***	.27***	.40***	.32***	.26***	.17**
4. Regulation of Emotion in Others	.50***	.51***	.64***	-	.22***	.33***	.20***	.53***	.53***	.54***	.22***
5. Expressive Control	.04	.37***	.03	.13***	-	-.21***	-.07	.14*	.21***	.22***	.07
6. Empathy	.30***	.11***	.43***	.54***	-.25***	-	.22***	.20***	.18***	.12*	.08
7. Trust in Intuition	.00	-.12***	.25***	.20***	-.16***	.29***	-	.07	.00	-.10	-.22***
8. Creative Thinking	.35***	.38***	.39***	.59***	.10**	.30***	.13***	-	.45***	.48***	.30***
9. Mood Redirected Attention	.40***	.62***	.38***	.63***	.16***	.41***	.13***	.52***	-	.67***	.40***
10. Motivation	.47***	.62***	.41***	.63***	.18***	.29***	-.01	.53***	.68***	-	.54***
11. Delayed Gratification	.34***	.45***	.25***	.37***	.09**	.21***	-.18***	.35***	.45***	.59***	-

Note: Coefficients above the diagonal represent correlations between MEIA-R dimensions, computed using the MEIA-R norm sample ($N = 363$). Coefficients below the diagonal reflect correlations between MEIA-W-R dimensions, computed using the MEIA-W-R norm sample ($N = 940$). * $p < .05$, ** $p < .01$, *** $p < .001$.

MEIA-R

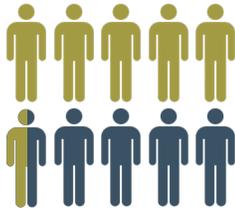


Norms

MEIA-R Norms. The norms for the MEIA-R were derived from the responses of $N = 363$ individuals recruited from Amazon's Mechanical Turk (MTurk). The norm sample was 55.6% male, with an average age of 38.96 years ($SD = 11.41$). In the sample, 74.7% self-identified as Caucasian, 10.7% as Black, 7.4% as Asian, and 5.2% as Hispanic.

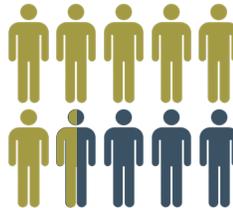
55.6% of the sample was male

gender



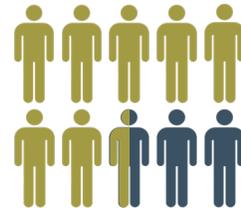
65.2% of the sample was under age 40

age



74.7% of the sample was Caucasian

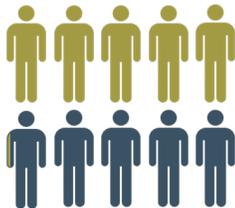
identify as



MEIA-W-R Norms. The norms for the MEIA-W-R were derived from the responses of two MTurk studies (total $N = 940$). The norm sample was 50.7% male, with an average age of 39.34 years ($SD = 11.21$). In the sample, 77.4% self-identified as Caucasian, 7.9% as Black, and 3.1% as Hispanic.

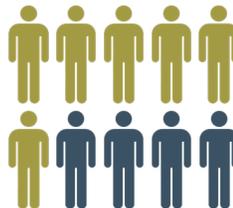
50.7% of the sample was male

gender



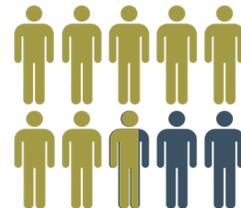
60.2% of the sample was under age 40

age



77.4% of the sample was Caucasian

identify as



Report Offerings

MEIA-R Report. The MEIA-R Report provides an overview of an individual's score on each of the 11 dimensions of EI as well as one validation metric to assess for careless responding. Scores on each of the EI dimensions are generated by comparing test-takers' results to the MEIA-R norm group. These percentiles indicate an individual's score relative to the norm sample on a given dimension. For example, a score at the 80th percentile for Expressive Control would indicate that the individual scored higher than 80% of the norm sample. To facilitate interpretation, percentile scores on each dimension are categorized according to three development levels reflecting tendencies to engage in that dimension: Develop (weak to low tendency), Enhance (moderate tendency), or Refine (strong to high tendency). In addition to illustrating the breakdown of Core EI vs. Proximal Outcome dimensions, the summary table also provides a brief description of each EI dimension. The MEIA-R Report also describes the importance of each dimension and describes what each dimension may look like in the extreme (i.e., underutilization versus overutilization).

MEIA-W-R Development Report. The MEIA-W-R Development Report provides a snapshot of an individual's score on each of the 11 dimensions of EI in a workplace setting. Scores are generated by comparing test-takers' results to the MEIA-W-R norm group.

As with the MEIA-R Report, the MEIA-W-R Development Report illustrates the breakdown of Core EI vs. Proximal Outcome dimensions. In addition, the summary table of the Development Report briefly describes each EI dimension and reports an individual's percentile scores. As with the MEIA-R Report, test takers' percentile scores on each dimension of EI are categorized according to three development levels reflecting tendencies to engage in that dimension in the workplace: Develop, Enhance, or Refine. The remainder of the MEIA-W-R Development Report highlights the contribution of each dimension to performance in the workplace and describes what each dimension may look like in the extreme (i.e., underutilization versus overutilization). Development advice is also provided as a function of the individual's scores.

MEIA-R



Construct Validity

The validation evidence below was obtained from the norm sample and a separate sample of 220 adults recruited through Amazon MTurk, who completed the MEIA-W-R, as well as a wider range of measures. As described in the following sections, evidence of construct validity for the MEIA-W-R was evaluated by examining correlations with other measures of trait EI, measures of personality, and measures of cognitive ability. All analyses were computed in this MTurk sample ($N = 220$), except correlations with the PRF-R, which used the norm sample ($N = 940$).

Convergent Validity with Other Trait EI Measures

Evidence of convergent validity for the MEIA-W-R was evaluated by examining correlations with several popular measures of EI. In particular, relations were examined with the Wong and Law Emotional Intelligence Scale (WLEIS; Wong & Law, 2002), the Trait Emotional Intelligence Questionnaire (TEIQue; Petrides, 2009), the EI scale from the International Personality Item Pool (EI-IPIP; Barchard, 2001a), the Brief Emotional Intelligence Test (BEIS-10; Davies, Lane, Devonport, & Scott, 2010), the Rotterdam Emotional Intelligence Scale (REIS; Pekaar et al., 2018), and the Self-Report Emotional Intelligence Test (Schutte et al., 1998). Tables 4-8 present the correlations between the MEIA-W-R dimensions and the dimensions of each of these scales. In each table, converging subscales are presented in bold. To summarize, the MEIA-W-R demonstrates convergent validity with other popular measures of trait EI. Additional details regarding relations with specific measures are provided below.

Convergence with the WLEIS. The WLEIS (Wong & Law, 2002) is based on Salovey and Mayer's (1990) model of EI and contains 16 items spanning four facets: Appraisal and Expression of Emotion in the Self, Appraisal and Recognition of Emotion in Others, Regulation of Emotion in the Self, and Use of Emotion to Facilitate Performance (i.e., goal-setting, self-efficacy, and motivation). These facets correspond to the MEIA-W-R dimensions Recognition of Emotion in the Self, Recognition of Emotion in Others, Regulation of Emotion in the Self, and Motivation, as supported by the strong positive correlations observed in Table 4.

Table 4. Correlations between the MEIA-W-R and the WLEIS

MEIA-W-R		WLEIS			
		Emotions Appraisal Self	Emotions Appraisal Others	Regulation of Emotion	Use of Emotion
Core EI	Recognition of Emotion in the Self	.82***	.49***	.49***	.51***
	Regulation of Emotion in the Self	.46***	.20**	.83***	.57***
	Recognition of Emotion in Others	.42***	.83***	.33***	.39***
	Regulation of Emotion in Others	.35***	.64***	.47***	.51***
	Expressive Control	.19**	.12	.48***	.25***
	Empathy	.22**	.53***	.16*	.21**
Proximal Outcomes	Trust in Intuition	.00	.21**	-.13	-.06
	Creative Thinking	.30***	.33***	.40***	.52***
	Mood Redirected Attention	.43***	.43***	.56***	.57***
	Motivation	.46***	.29***	.65***	.80***
	Delayed Gratification	.21**	.24***	.41***	.52***

Note: WLEIS = Wong and Law Emotional Intelligence Scale. Emotions Appraisal – Self = Appraisal and Expression of Emotion in the Self. Emotions Appraisal – Others = Appraisal and Recognition of Emotion in Others. Regulation of Emotion = Regulation of Emotion in the Self. Use of Emotion = Use of Emotion to Facilitate Performance. Correlations were computed on a sample of $N = 220$ MTurk participants. Converging subscales are presented in bold. * $p < .05$, ** $p < .01$, *** $p < .001$.

MEIA-R



Convergence with the TEIQue. The TEIQue (Petrides, 2009) is a 153-item measure of trait EI that divides global EI into 15 facets split across four factors. Except for Trust in Intuition, the MEIA-W-R dimensions of EI have at least one strong correlation with a facet of the TEIQue, as shown in Table 5. The strongest convergence was seen between Regulation of Emotions in the Self and the TEIQue facets Emotion Regulation and Stress Management, and between the Motivation subscales of both the MEIA-W-R and the TEIQue. Strong convergence was also observed between Recognition of Emotion in the Self (MEIA-W-R) and Emotion Perception (TEIQue), and between Regulation of Emotions in Others (MEIA-W-R) and Emotion Management (TEIQue).

Table 5. Correlations between the MEIA-W-R and the TEIQue

MEIA-W-R	TEIQue															
	Well-Being			Self-Control			Emotionality			Sociability			Independent Facets			
	Hap	Opt	Self-Esteem	Emo Reg	Imp Con	Stress Man	Emp	Emo Per	Emo Exp	Relation	Emo Man	Assert	Soc Aware	Adapt	Mot	
Core EI	Rec Slf	.49***	.41***	.53***	.42***	.44***	.53***	.46***	.80***	.64***	.51***	.51***	.49***	.58***	.44***	.55***
	Reg Slf	.54***	.64***	.57***	.85***	.54***	.88***	.26***	.39***	.45***	.43***	.37***	.44***	.52***	.65***	.61***
	Rec Oth	.26***	.30***	.38***	.24***	.19**	.33***	.56***	.74***	.52***	.37***	.63***	.41***	.62***	.37***	.38***
	Reg Oth	.51***	.47***	.56***	.46***	.24***	.50***	.53***	.58***	.63***	.48***	.81***	.57***	.82***	.53***	.55***
	Ex Ctrl	.17*	.25***	.27***	.52***	.22**	.45***	.08	.20**	.12	.09	.39***	.35***	.39***	.34***	.26***
	Emp	.37***	.32***	.21**	.09	.13	.20**	.66***	.39***	.45***	.63***	.29***	-.02	.35***	.29***	.32***
Proximal Outcomes	Tr In	.10	.07	.07	-.13	-.35***	-.16*	.03	.13	.14*	.07	.17*	-.02	.09	.05	-.14*
	Cr Th	.37***	.35***	.55***	.33***	.14*	.45***	.37***	.38***	.34***	.26***	.51***	.52***	.56***	.60***	.47***
	MRA	.64***	.71***	.61***	.55***	.34***	.61***	.51***	.53***	.57***	.55***	.49***	.42***	.60***	.63***	.60***
	Mot	.58***	.59***	.68***	.59***	.60***	.67***	.34***	.43***	.51***	.44***	.47***	.61***	.59***	.55***	.87***
	De Gr	.23**	.22**	.34***	.32***	.70***	.35***	.27***	.23**	.25***	.26***	.18**	.27***	.28***	.20**	.56***

Note: TEIQue = Trait Emotional Intelligence Questionnaire. Hap = Happiness, Opt = Optimism. Emo Reg = Emotion Regulation. Imp Con = Impulse Control. Stress Man = Stress Management. Emp = Empathy. Emo Per = Emotion Perception. Emo Exp = Emotional Expression. Relation = Relationships. Emo Man = Emotion Management. Assert = Assertiveness. Soc Aware = Social Awareness. Adapt = Adaptability. Mot = Motivation. Rec Slf = Recognition of Emotion in the Self. Reg Slf = Regulation of Emotion in the Self. Rec Oth = Recognition of Emotion in Others. Reg Oth = Regulation of Emotion in Others. Ex Ctrl = Expressive Control. Emp = Empathy. Tr In = Trust in Intuition. Cr Th = Creative Thinking. MRA = Mood Redirected Attention. Mot = Motivation. De Gr = Delayed Gratification. Correlations were computed on a sample of $N = 220$ MTurk participants. Converging subscales are presented in bold. * $p < .05$, ** $p < .01$, *** $p < .001$.

Convergence with the EI-IPIP. The EI-IPIP (Barchard, 2001a) is based on seven of the components of EI identified by Barchard (2001b), drawing upon 70 items from the International Personality Item Pool (IPIP). Three of these components correlate strongly with the MEIA-W-R dimension Empathy, which involves reacting to others' emotional states. These components involve expressing warmth and concern for others, and responding to their emotional states (Distress, Empathic Concern). Both the MEIA-W-R dimension Empathy and Mood-Redirected Attention were strongly correlated with Positive Expressivity, reflecting the demonstration of joy and warmth towards others. The MEIA-W-R dimension Expressive Control was negatively correlated with Negative Expressivity, but uncorrelated with Positive Expressivity, suggesting that individuals with expressive control may limit the display of negative emotions to others. Emotional-Based Decision Making converged with the MEIA-W-R dimension Trust in Intuition, which also involves using emotions to make decisions. Finally, Attending to Emotions involves analyzing one's internal state, which was reflected by a strong correlation with Recognition of Emotions in the Self. It was also strongly correlated with Recognition of Emotions in Others.

MEIA-R



Table 6. Correlations between the MEIA-W-R and the EI-IPIP

MEIA-W-R	EI-IPIP							
	Positive Expressivity	Negative Expressivity	Attending to Emotions	Emotional-Based Decision Making	Responsive Joy	Responsive Distress	Empathic Concern	
Core EI	RecSlf	.41***	.06	.51***	-.01	.35***	-.03	.22**
	RegSlf	.24***	-.41***	.03	-.22***	.20**	-.43***	.08
	RecOth	.37***	.03	.55***	.18**	.38***	.15*	.32***
	RegOth	.49***	.05	.38***	.18**	.48***	.05	.32***
	ExCtrl	-.09	-.64***	.04	-.18**	-.05	-.39***	.04
	Emp	.58***	.16	.41***	.22**	.69***	.59***	.67***
Proximal Outcomes	TrIn	.25***	.21**	.16*	.80***	.23**	.18**	.06
	CrTh	.31***	-.08	.30***	.03	.33***	-.06	.29***
	MRA	.50***	-.07	.39***	.07	.45***	-.04	.31***
	Mot	.33***	-.19**	.20**	-.24***	.27***	-.26***	.05
	DeGr	.03	-.18**	.16*	-.43***	.04	-.12	.07

Note: EI-IPIP = EI Scale from the International Personality Item Pool. RecSlf = Recognition of Emotion in the Self. RegSlf = Regulation of Emotion in the Self. RecOth = Recognition of Emotion in Others. RegOth = Regulation of Emotion in Others. ExCtrl = Expressive Control. Emp = Empathy. TrIn = Trust in Intuition. CrTh = Creative Thinking. MRA = Mood Redirected Attention. Mot = Motivation. DeGr = Delayed Gratification. Correlations computed on a sample of $N = 220$ MTurk participants. Converging subscales are presented in bold. * $p < .05$, ** $p < .01$, *** $p < .001$.

Convergence with the BEIS-10. The BEIS-10 (Davies et al., 2010) is a 10-item scale of EI based on Salovey and Meyer's (1990) model. Four of the BEIS-10 dimensions (i.e., Appraisal of Own Emotions, Regulation of Own Emotions, Appraisal of Others' Emotions, Regulation of Others' Emotions) converged with their corresponding MEIA-W-R dimensions (i.e., Recognition of Emotion in the Self, Regulation of Emotion in the Self, Recognition of Emotion in Others, Regulation of Emotion in Others), as illustrated in Table 7. The final BEIS-10 dimension, Utilization of Emotions, focuses on using positive emotions to generate new ideas, solve problems, and stay motivated. It corresponds with Creative Thinking and Motivation from the MEIA-W-R.

Table 7. Correlations between the MEIA-W-R and the BEIS-10

MEIA-W-R	BEIS-10					
	Appraisal of Own Emotions	Regulation of Own Emotions	Appraisal of Others' Emotions	Regulation of Others' Emotions	Utilization of Emotions	
Core EI	Recognition of Emotion in the Self	.71***	.50***	.51***	.40***	.44***
	Regulation of Emotion in the Self	.32***	.58***	.19**	.32***	.35***
	Recognition of Emotion in Others	.43***	.30***	.74***	.58***	.40***
	Regulation of Emotion in Others	.31***	.37***	.51***	.71***	.56***
	Expressive Control	.11	.28***	.17*	.17*	.15*
	Empathy	.21**	.19**	.40***	.53***	.40***
Proximal Outcomes	Trust in Intuition	.06	.00	.12	.24***	.16*
	Creative Thinking	.24***	.38***	.33***	.40***	.66***
	Mood Redirected Attention	.35***	.47***	.39***	.45***	.46***
	Motivation	.35***	.50***	.30***	.45***	.48***
	Delayed Gratification	.15*	.23***	.22**	.21**	.21**

Note: BEIS-10 = Brief Emotional Intelligence Scale. Correlations computed on a sample of $N = 220$ MTurk participants. Converging subscales are presented in bold. * $p < .05$, ** $p < .01$, *** $p < .001$.

MEIA-R



Convergence with the REIS. The REIS (Pekaar et al., 2018) is a 28-item scale based on Salovey and Meyer’s (1990) model of EI, and assesses four dimensions: Self-Focused Emotion Appraisal, Self-Focused Emotion Regulation, Other-Focused Emotion Appraisal, and Other-Focused Emotion Regulation. As observed in Table 8, the REIS dimensions demonstrate strong convergence with their respective MEIA-W-R facets: Recognition of Emotion in the Self, Regulation of Emotion in the Self, Recognition of Emotion in Others, and Regulation of Emotion in Others.

Convergence with the SREIT. The SREIT (Schutte et al., 1998) is a 33-item scale based on Salovey and Meyer’s (1990) model of EI. Although the scale is unidimensional, it contains items that reflect recognizing and expressing emotion in the self and others, regulating of emotion in the self and others, and using emotions to solve problems. As observed in Table 8, the SREIT correlated strongly with most of the MEIA-W-R dimensions.

Table 8. Correlations between the MEIA-W-R, the REIS, and the SREIT

MEIA-W-R	REIS				SREIT	
	Self-Focused Emotion Appraisal	Self-Focused Emotion Regulation	Other-Focused Emotion Appraisal	Other-Focused Emotion Regulation	Global EI	
Core EI	Recognition of Emotion in the Self	.80***	.41***	.52***	.47***	.64***
	Regulation of Emotion in the Self	.37***	.71***	.18**	.36***	.47***
	Recognition of Emotion in Others	.48***	.32***	.78***	.62***	.70***
	Regulation of Emotion in Others	.36***	.44***	.58***	.81***	.72***
	Expressive Control	.15*	.67***	.11	.34***	.23***
	Empathy	.23***	.06	.51***	.36***	.55***
Proximal Outcomes	Trust in Intuition	.04	-.17*	.14*	.18**	.18**
	Creative Thinking	.30***	.40***	.34***	.42***	.56***
	Mood Redirected Attention	.41***	.48***	.43***	.44***	.65***
	Motivation	.39***	.55***	.32***	.43***	.60***
	Delayed Gratification	.19**	.39***	.22**	.17*	.29***

Note: REIS = Rotterdam Emotional Intelligence Test. SREIT = Self-Report Emotional Intelligence Test. Correlations were computed on a sample of $N = 220$ MTurk participants. Converging subscales are presented in bold. * $p < .05$, ** $p < .01$, *** $p < .001$.

Construct Validity with Personality Measures

As illustrated in Tables 9-11, the MEIA-W-R demonstrates convergent validity with other broad measures of personality, including the NEO-PI-3 (McCrae, Costa, & Martin, 2005), the Personality Research Form – Revised (PRF-R), and the HEXACO-100 (Lee & Ashton, 2018).

In general, the MEIA-W-R dimensions show the strongest pattern of correlations with Extraversion, Neuroticism, and Conscientiousness dimensions of the NEO-PI-3 (Table 9). These findings are consistent with previous research on trait EI with the Big Five traits (e.g., Siegling, Furnham, & Petrides, 2015). Correlations between the MEIA-W-R dimensions and the HEXACO traits (Table 11) demonstrated the strongest patterns of correlations with Extraversion and Conscientiousness, followed by Emotionality and Agreeableness. These correlations are also consistent with previous research (e.g., Austin & Vahle, 2016).

Extraversion is associated with confidence, sociability, and enthusiasm, as such, it was expected to demonstrate strong correlations with EI dimensions that involve positivity and influencing others’ emotions. Conversely, Neuroticism (NEO-PI-3) and Emotionality (HEXACO-100) reflect a sensitivity to negative emotional states. Because EI involves better emotion regulation, we would expect negative correlations with these personality traits, but positive correlations with Emotional Stability (PRF-R), which reflects the ability to handle stress and accept criticism. Conscientiousness is associated with self-discipline, dutifulness, and persistence in pursuing goals. On the PRF-R, this trait is divided between Industriousness (persistence, achievement-orientation) and Methodicalness (organization, self-discipline). The dimensions of EI related to motivation and controlling one’s impulses and emotions overlap with these elements of Conscientiousness (see Table 10).

MEIA-R



Table 9. Correlations between the MEIA-W-R and the NEO-PI-3

MEIA-W-R		NEO-PI-3				
		Extraversion	Conscientiousness	Agreeableness	Neuroticism	Openness
Core EI	Rec Slf	.42***	.47***	.17*	-.52***	.18**
	Reg Slf	.45***	.54***	.27***	-.80***	.12
	Rec Oth	.50***	.33***	.04	-.29***	.37***
	Reg Oth	.70***	.43***	.12	-.48***	.36***
	Ex Ctrl	.27***	.25***	-.09	-.37***	.15*
	Emp	.42***	.17*	.57***	-.13	.36***
Proximal Outcomes	Tr In	.17*	-.22**	-.04	.16*	.12
	Cr Th	.53***	.33***	-.01	-.42***	.60***
	MRA	.66***	.48***	.22**	-.59***	.36***
	Mot	.58***	.81***	.11	-.69***	.24***
	De Gr	.19**	.69***	.08	-.40***	.11

Note: Openness = Openness to Experience. Rec Slf = Recognition of Emotion in the Self. Reg Slf = Regulation of Emotion in the Self. Rec Oth = Recognition of Emotion in Others. Reg Oth = Regulation of Emotion in Others. Ex Ctrl = Expressive Control. Emp = Empathy. Tr In = Trust in Intuition. Cr Th = Creative Thinking. MRA = Mood Redirected Attention. Mot = Motivation. De Gr = Delayed Gratification. Correlations were computed on a sample of $N = 220$ MTurk participants. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 10. Correlations between the MEIA-W-R and the PRF-R Broad Factors

MEIA-W-R		PRF-R						
		Extraversion	Industriousness	Methodicalness	Honesty / Humility	Openness	Agreeableness	Emotional Stability
Core EI	Rec Slf	.26***	.28***	.35***	.18***	.32***	.28***	.38***
	Reg Slf	.36***	.38***	.40***	.08*	.25***	.30***	.72***
	Rec Oth	.37***	.32***	.22***	.03	.33***	.30***	.29***
	Reg Oth	.56***	.50**	.30***	-.01	.44***	.44***	.54***
	Ex Ctrl	.22***	.16***	.11***	-.19***	.06	-.10**	.27***
	Emp	.16***	.19***	.15***	.24***	.34***	.63***	.16***
Proximal Outcomes	Tr In	.10**	.02	-.23***	-.14***	.08*	.16***	-.06
	Cr Th	.46***	.48***	.16***	-.13***	.67***	.24***	.44***
	MRA	.38***	.48***	.29***	.00	.38***	.37***	.57***
	Mot	.50***	.71***	.52***	.05	.40***	.31***	.62***
	De Gr	.20***	.40***	.55***	.19***	.25***	.17***	.42***

Note: PRF-R = Personality Research Form - Revised. Openness = Openness to Experience. Rec Slf = Recognition of Emotion in the Self. Reg Slf = Regulation of Emotion in the Self. Rec Oth = Recognition of Emotion in Others. Reg Oth = Regulation of Emotion in Others. Ex Ctrl = Expressive Control. Emp = Empathy. Tr In = Trust in Intuition. Cr Th = Creative Thinking. MRA = Mood Redirected Attention. Mot = Motivation. De Gr = Delayed Gratification. Correlations were computed using the norm sample ($N = 940$). * $p < .05$, ** $p < .01$, *** $p < .001$.

MEIA-R



Table 11. Correlations between the MEIA-W-R and the HEXACO-100

	MEIA-W-R	HEXACO-100					
		Honesty-Humility	Emotionality	Extraversion	Agreeableness	Conscientiousness	Openness to Experience
Core EI	RecSlf	.03	-.13	.49***	.24***	.39***	.17*
	RegSlf	.14*	-.55***	.59***	.56***	.39***	.11
	RecOth	-.09	-.01	.46***	.17*	.28***	.32***
	RegOth	-.08	-.13	.69***	.29***	.34***	.35***
	ExCtrl	-.07	-.47***	.30***	.17	.20**	.27***
	Emp	.19**	.34***	.34***	.47***	.15	.20**
Proximal Outcomes	TrIn	-.19**	.20***	.07	-.05	-.27***	.03
	CrTh	-.04	-.25***	.51***	.25***	.27***	.63***
	MRA	.02	-.22**	.68***	.51***	.35***	.24***
	Mot	.04	-.37***	.64***	.33***	.71***	.24***
	DeGr	.07	-.17*	.27***	.26***	.70***	.11

Note: RegSlf = Regulation of Emotion in the Self. RecOth = Recognition of Emotion in Others. RegOth = Regulation of Emotion in Others. ExCtrl = Expressive Control. Emp = Empathy. TrIn = Trust in Intuition. CrTh = Creative Thinking. MRA = Mood Redirected Attention. Mot = Motivation. DeGr = Delayed Gratification. Correlations were computed on a sample of $N = 220$ MTurk participants. * $p < .05$, ** $p < .01$, *** $p < .001$.

Discriminant Validity with Cognitive Ability Measures

The absence of strong correlations presented in Table 12 suggest that the MEIA-W-R is largely independent of measures of cognitive ability, including the Multidimensional Aptitude Battery - II (MAB-II), the Personnel Assessment Form (PAF) and the Wonderlic Personnel Test (WPT; Wonderlic, 1992). These analyses were conducted on the sample of 220 Amazon MTurk workers. These results are consistent with the non-significant correlations found in previous research on trait EI and cognitive ability, supporting EI as a distinct construct (e.g., Fox, Spector, Fisher, & Ashkanasy, 2000, Newsome, Day, & Catano, 2000; Siegling, Nielsen, & Petrides, 2014).

Table 12. Correlations between the MEIA-W-R and Measure of Cognitive Ability

	MEIA-W-R	MAB-II			PAF-A		WPT	
		Overall	Performance	Verbal	Overall	Quantitative	Verbal	IQ
Core EI	Recognition of Emotion in the Self	-.05	-.07	-.01	-.02	-.02	-.03	-.08
	Regulation of Emotion in the Self	-.04	-.05	-.02	.02	.06	-.04	-.09
	Recognition of Emotion in Others	-.17*	-.15*	-.15*	-.11	-.10	-.09	-.10
	Regulation of Emotion in Others	-.14*	-.13	-.11	-.11	-.10	-.09	-.11
	Expressive Control	.06	.06	.04	.11	.05	.05	.07
	Empathy	-.10	-.12	-.04	-.07	-.09	-.03	-.11
Proximal Outcomes	Trust in Intuition	-.15*	-.09	-.19**	-.20**	-.18**	-.15*	-.06
	Creative Thinking	.07	-.05	.07	.01	.05	-.04	.07
	Mood Redirected Attention	-.13	-.09	-.15*	-.13	-.08	-.15*	-.14*
	Motivation	-.10	-.08	-.10	-.08	-.03	-.13	-.16*
	Delayed Gratification	.02	.02	.02	.04	.07	-.01	.00

Note: MAB-II = Multidimensional Aptitude Battery - II; PAF-A = Personnel Assessment Form A; WPT = Wonderlic Personnel Test. Correlations were computed on a sample of $N = 220$ MTurk participants. * $p < .05$, ** $p < .01$, *** $p < .001$.

MEIA-R



Criterion Validity

As shown in Table 13, the dimensions of the MEIA-W-R were positively related to the broad leadership competencies measured by SIGMA's Leadership Skills Profile-Revised (LSP-R). The LSP-R is a validated, personality-based assessment of expected performance on leadership competencies. Except for Trust in Intuition and Expressive Control, the MEIA-W-R dimensions were moderately related to multiple leadership competencies.

The positive correlations observed are consistent with theoretical frameworks that link EI to components of transformational leadership. Conceptually, individuals engaged in transformational leadership should demonstrate self-control, inspire their followers, show empathy, recognize their follower's emotions, and remain optimistic in the face of setbacks (Megeerian & Sosik, 1996). Previous research has also found that individuals in leadership positions have higher trait EI than non-leaders, suggesting that EI is important for leadership roles (Siegling et al., 2014).

We were also able to demonstrate that MEIA-W-R dimensions are significantly related to workplace-relevant outcomes supported by scientific literature, including job satisfaction, well-being, work engagement, and turnover intentions (Brunetto, Teo, Shacklock, & Farr-Wharton, 2012; Miao et al., 2017). As presented in Table 14, the MEIA-W-R dimensions were positively correlated with job satisfaction, work involvement, and patience, and negatively correlated with time urgency, as measured by the Survey of Work Styles – Revised (SWS-R). Table 15 summarizes the correlations of workplace-relevant outcomes from other scales.

In general, the pattern of correlations supports EI as a predictor of positive workplace outcomes, including job satisfaction (as measured by a modified version of the Job Diagnostic Survey [JDS]; Hackman & Oldham, 1975), work engagement (as measured by 9-item Utrecht Work Engagement Scale [UWES-9]; Schaufeli, Bakker, & Salanova, 2006), and organizational citizenship behavior (as measured by the Organizational Citizenship Behavior Checklist [OCB-C]; Fox & Spector, 2011). Additionally, our results support EI as a buffer or resilience factor against negative workplace outcomes, including burnout (as measured by the Oldenburg Burnout Inventory [OLBI]; Demerouti, 1999), turnover intention (as measured by a modified version of Chalykoff and Kochan (1989)'s measure of turnover propensity), and counterproductive workplace behavior (as measured by a modified version of Bennett and Robinson's (2000) measure of workplace deviance). Taken together, these relationships provide additional support for the validity of the MEIA-W-R.

Table 13. Correlations between the MEIA-W-R and LSP-R Competencies

MEIA-W-R	LSP-R Summary Scores							
	Overall Leader Performance	Task Orientation	Interpersonal	Cognitive Leadership Skills	Interpersonal Leadership Skills	Personal Leadership Qualities	Senior Leadership Skills	
Core EI	Rec Sif	.44***	.41***	.42***	.41***	.39***	.45***	.42***
	Reg Sif	.43***	.49***	.48***	.52***	.44***	.58***	.43***
	Rec Oth	.44***	.39***	.47***	.35***	.47***	.44***	.44***
	Reg Oth	.62***	.55***	.67***	.52***	.66***	.62***	.62***
	Ex Ctrl	.09**	.17***	.16***	.19***	.20***	.09**	.09**
	Emp	.46***	.25***	.44***	.22***	.33***	.46***	.46***
Proximal Outcomes	Tr In	-.05	-.08*	.08*	-.11**	.08*	-.05	.00
	Cr Th	.55***	.52***	.54***	.56***	.54***	.52***	.51***
	MRA	.54***	.50***	.54***	.50***	.50***	.55***	.51***
	Mot	.70***	.73***	.62***	.70***	.62***	.71***	.66***
	De Gr	.48***	.54***	.37***	.54***	.34***	.51***	.47***

Note: Rec Sif = Recognition of Emotion in the Self. Reg Sif = Regulation of Emotion in the Self. Rec Oth = Recognition of Emotion in Others. Reg Oth = Regulation of Emotion in Others. Ex Ctrl = Expressive Control. Emp = Empathy. Tr In = Trust in Intuition. Cr Th = Creative Thinking. MRA = Mood Redirected Attention. Mot = Motivation. De Gr = Delayed Gratification. Correlations were computed using the norm sample ($N = 940$). * $p < .05$, ** $p < .01$, *** $p < .001$.

MEIA-R



Table 14. Correlations between the MEIA-W-R and SWS-R Subscales

MEIA-W-R		SWS-R			
		Job Satisfaction	Patience	Time Urgency	Work Involvement
Core EI	Recognition of Emotion in the Self	.26***	.23***	-.27***	.02
	Regulation of Emotion in the Self	.35***	.35***	-.36***	.03
	Recognition of Emotion in Others	.26***	.08*	-.10**	.15***
	Regulation of Emotion in Others	.45***	.20***	-.18***	.22***
	Expressive Control	.05	.05	-.09**	.07*
	Empathy	.30***	.28***	-.15***	.11**
Proximal Outcomes	Trust in Intuition	.09**	-.08*	.08*	.01
	Creative Thinking	.35***	.14***	-.14***	.22***
	Mood Redirected Attention	.46***	.27***	-.27***	.21***
	Motivation	.53***	.23***	-.25***	.36***
	Delayed Gratification	.31***	.20***	-.25***	.18***

Note: SWS = Survey of Work Styles - Revised. Correlations were calculated using the norm sample ($N = 940$). * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 15. Correlations between MEIA-W-R Dimensions and Workplace Outcomes

MEIA-W-R		Workplace Outcomes					
		OCB	Job Satisfaction	Work Engagement	CWB	Turnover Intentions	Burnout
Core EI	Recognition of Emotion in the Self	.30***	.33***	.39***	-.24***	-.20**	-.42***
	Regulation of Emotion in the Self	.18**	.38***	.40***	-.40***	-.29***	-.55***
	Recognition of Emotion in Others	.47***	.18*	.33***	-.09	-.07	-.24***
	Regulation of Emotion in Others	.63***	.33***	.44***	-.09	-.16*	-.36***
	Expressive Control	.14*	.07	.12	-.08	-.04	-.19**
	Empathy	.44***	.30***	.34***	-.13	-.19**	-.29***
Proximal Outcomes	Trust in Intuition	.06	.05	.01	.17***	-.02	.04
	Creative Thinking	.40***	.22**	.46***	-.03	-.07	-.36***
	Mood Redirected Attention	.33***	.50***	.54***	-.25***	-.27***	-.57***
	Motivation	.38***	.48***	.63***	-.37***	-.33***	-.63***
	Delayed Gratification	.24***	.19**	.33***	-.28***	-.19**	-.23***

Note: OCB = Organizational citizenship behavior. CWB = Counterproductive workplace behavior. Correlations were computed on a sample of $N = 220$ MTurk participants. * $p < .05$, ** $p < .01$, *** $p < .001$.

Summary

The MEIA-R and MEIA-W-R each provide a comprehensive assessment of EI, covering a broad range of core EI dimensions as well as proximal outcomes strongly related to EI. The MEIA-R and MEIA-W-R offer a shorter administration time with updated items, revised labels, and expanded content that minimizes response bias. In addition, the MEIA-W-R measures EI in a workplace context, which maximizes the prediction of job performance and other workplace-relevant outcomes.



References

- Austin, E., & Vahle, N. (2016). Associations of the Managing the Emotions of Others Scale (MEOS) with HEXACO personality and with trait emotional intelligence at the factor and facet level. *Personality and Individual Differences, 94*, 348–353. doi:10.1016/j.paid.2016.01.047
- Barchard, K. A. (2001a). Seven components potentially related to emotional intelligence. Retrieved from. <https://ipip.ori.org/newEmotionalIntelligenceKey.htm>
- Barchard, K. A. (2001b). Emotional and social intelligence: Examining its place in the nomological network [Unpublished doctoral dissertation]. University of British Columbia.
- Bennett, R., & Robinson, S. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology, 85*, 349–360. doi:10.1037/0021-9010.85.3.349
- Brunetto, Y., Teo, S., Shacklock, K., & Farr-Wharton, R. (2012). Emotional intelligence, job satisfaction, well-being and engagement: explaining organisational commitment and turnover intentions in policing. *Human Resource Management Journal, 22*, 428–441. doi:10.1111/j.1748-8583.2012.00198.x
- Chalykoff, J., & Kochan, T. (1989). Computer-aided monitoring: Its influence on employee job satisfaction and turnover. *Personnel Psychology, 42*, 807–834. doi: 10.1111/j.1744-6570.1989.tb00676.x
- Davies, K., Lane, A., Devonport, T., & Scott, J. (2010). Validity and reliability of a Brief Emotional Intelligence Scale (BEIS-10). *Journal of Individual Differences, 31*, 198–208. doi:10.1027/1614-0001/a000028
- Demerouti, E. (1999). Burnout: Eine Folge Konkreter Arbeitsbedingungen bei Dienstleistungen und Produktionstätigkeiten. (Burnout: A consequence of specific working conditions among human service and production tasks). Frankfurt/Main: Lang
- Fox, S., Spector, P., Fisher, C., & Ashkanasy, N. (2000). Relations of emotional intelligence, practical intelligence, general intelligence, and trait affectivity with interview outcomes: It's not all just "G." *Journal of Organizational Behavior, 21*, 203–220. doi:10.1002/(SICI)1099-1379(200003)21:2<203::AID-JOB38>3.0.CO;2-Z
- Fox, S., & Spector, P. (2011). Organizational Citizenship Behavior Checklist OCB-C. Unpublished scale. Available from <http://paulspector.com/scales/our-assessments/organizational-citizenship-behavior-checklist-ocb-c/>
- Hackman, J., & Oldham, G. (1975). Development of the Job Diagnostic Survey. *Journal of Applied Psychology, 60*, 159–170. doi.org:10.1037/h0076546
- Lee, K., & Ashton, M. (2018). Psychometric properties of the HEXACO-100. *Assessment, 25*, 543–556. doi:10.1177/1073191116659134
- McCrae, R., Costa, J., & Martin, T. (2005). The NEO-PI-3: A more readable Revised NEO Personality Inventory. *Journal of Personality Assessment, 84*, 261–270. doi:10.1207/s15327752jpa8403_05
- Megerian, L., & Sosik, J. (1996). An affair of the heart: Emotional intelligence and transformational leadership. *Journal of Leadership & Organizational Studies, 3*, 31–48. doi:10.1177/107179199700300305
- Miao, C., Humphrey, R., & Qian, S. (2017). A meta-analysis of emotional intelligence and work attitudes. *Journal of Occupational and Organizational Psychology, 90*, 177–202. <https://doi.org/10.1111/joop.12167>
- Newsome, S., Day, A., & Catano, V. (2000). Assessing the predictive validity of emotional intelligence. *Personality and Individual Differences, 29*, 1005–1016. doi:10.1016/S0191-8869(99)00250-0
- Pekaar, K., Bakker, A., van Der Linden, D., & Born, M. (2018). Self- and other-focused emotional intelligence: Development and validation of the Rotterdam Emotional Intelligence Scale (REIS). *Personality and Individual Differences, 120*, 222–233. doi:10.1016/j.paid.2017.08.045
- Petrides, K. V. (2009). Technical manual for the Trait Emotional Intelligence Questionnaires (TEIQue). London: London Psychometric Laboratory.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality, 9*, 185–211. doi:10.2190/DUGG-P24E-52WK-6CDG
- Schaufeli, W., Bakker, A., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement, 66*, 701–716. doi:10.1177/0013164405282471
- Schutte, N., Malouff, J., Hall, L., Haggerty, D., Cooper, J., Golden, C., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences, 25*, 167–177. doi:10.1016/S0191-8869(98)00001-4
- Siegling, A., Nielsen, C., & Petrides, K. (2014). Trait emotional intelligence and leadership in a European multinational company. *Personality and Individual Differences, 65*, 65–68. doi:10.1016/j.paid.2014.01.049
- Siegling, A. B., Furnham, A., & Petrides, K. V. (2015). Trait emotional intelligence and personality: Gender-invariant linkages across different measures of the Big Five. *Journal of Psychoeducational Assessment, 33*, 57–67. doi:10.1177/0734282914550385
- Wong, C., & Law, K. (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
- Wonderlic, E. F. (1992). Manual of the Wonderlic Personnel Test and Scholastic Level Exam II. Libertyville: Wonderlic Personnel Test.



US: SIGMA Assessment Systems, Inc. • PO Box 610757 • Port Huron MI • 48061-0757 • P: 800-265-1285 • E: support@sigmahr.com
Canada: SIGMA Assessment Systems, Ltd. • PO Box 3292 Stn. B • London ON • N6A 4K3 • P: 800-401-4480 • E: support@sigmahr.com
www.SIGMAAssessmentSystems.com