

# EISA

## EMOTIONAL INTELLIGENCE skills assessment: **technical report**

[ Comprehensive | Derek Mann ]



To accompany the *Emotional Intelligence Skills Assessment (EISA)* by Steven J. Stein, Derek Mann, Peter Papadogiannis, and Wendy Gordon



# Emotional Intelligence Skills Assessment (EISA): Technical Report

June 2010

In this paper, we discuss the meaning of Emotional Intelligence (EI) and the methods of quantifying EI in individuals. The first section of the paper explores in detail the five contributing factors used to measure EI, while the second section addresses the statistical strategies used in creating the Emotional Intelligence Skills Assessment (EISA).

---

## Why EISA?

To succeed in today's marketplace, organizations worldwide are looking for ways to differentiate themselves and leverage their assets. Technology, strategy, financing, and branding can each offer an important competitive edge, but people will always be any organization's greatest asset. Employees are the foundational building blocks of business success, yet the effective management of talent can prove complex and elusive. How can companies assess talent accurately, develop it optimally, and channel it toward its most productive ends? At best, judging and nurturing talent has remained an uncertain art, when it should be a rigorous and reliable science.

The accurate evaluation of performance potential is an essential business function, affecting leadership development, job alignment and the design of training programs. Current measurement methods are demonstrably inexact. How often do individuals perform, or fail to perform, to expectations? How often do judgments formed on the basis of an employee's academic achievement, formal qualifications, and technical savvy fail to provide the complete picture of his or her success?

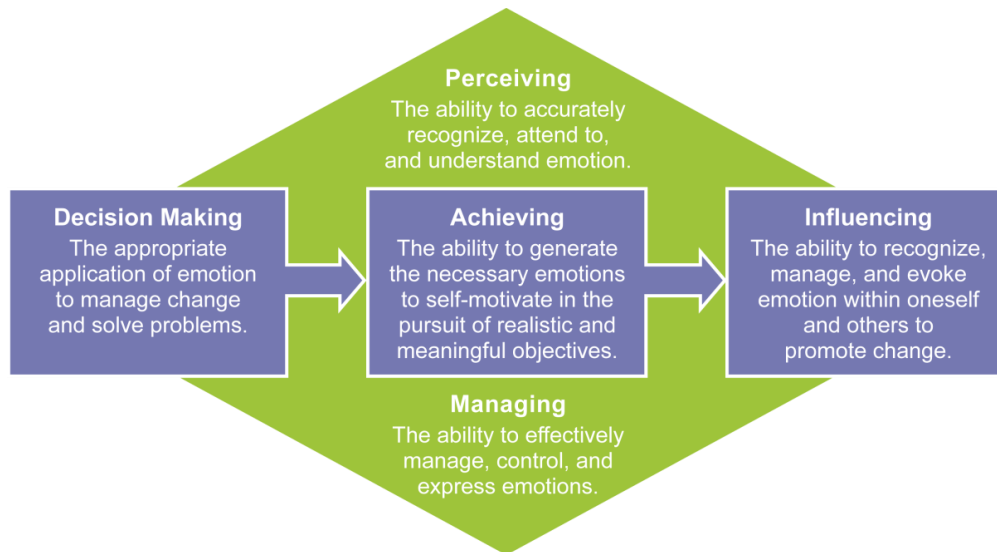
The most commonly considered performance predictors—intelligence, education, experience, and personality—are not enough. The key predictor missing from this list, long regarded as an intangible "*something*," has now been identified by a large and growing body of international social research as *emotional intelligence*.

Distinct from cognitive intelligence or IQ, emotional intelligence (EI) is at the root of our ability to unravel social complexities by perceiving, generating, and managing emotions in ourselves and others. Sometimes referred to as "street smarts" or "common sense", EI embodies skills required to understand and manage our own interior emotional lives, and to negotiate the shoals of social interactions. Emotionally intelligent people communicate effectively, form strong relationships, and create powerful coping strategies both at work and in their personal lives.

Emotional intelligence drives workplace performance like no other determinant, and it can be measured with reliable and valid instruments. Emotional intelligence is elastic. Those who lack it can acquire it; those who have it can enhance it. The Emotional Intelligence Skills Assessment (EISA) identifies areas of strength and opportunity and provides a framework for understanding and improving individual emotional and social functioning. The EISA yields accurate and intuitive results crucial in addressing organizational needs such as leadership development, talent development and retention, change management, conflict resolution, and negotiation. This document is intended to provide you with behind the scenes insights into the conceptualization and development of the Emotional Intelligence Skills Assessment.

### The Five Factors of EISA

Emotional and social functioning play a key role in professional success. The EISA efficiently and effectively assesses individual emotional intelligence along five core factors, which can in turn be developed to maximize emotional and social functioning. These five factors—*Perceiving*, *Managing*, *Decision Making*, *Achieving*, and *Influencing*—are shown and briefly defined in the illustration below (Figure 1).



Perceiving and Managing are shown in the middle of the figure because these two factors are central to effectively utilizing emotional intelligence. An individual who cannot perceive and manage emotions appropriately, will have some difficulty with the remaining three factors. Although Decision Making, Achieving, and Influencing are shown in the model in a linear fashion, in fact, these factors are all used at varying times when applying emotional intelligence.

### PERCEIVING

The Perceiving factor of the EISA deals with how individuals use feelings and mood to guide their behavior. Possibly rephrase as: The ability and willingness to notice and follow social cues can significantly improve production and a sense of wellbeing and community in the workplace. Individuals who are sufficiently able to appraise and describe their own emotions are less likely to exhibit non-verbal anger, experience more positive emotion, and appear more socially receptive to others.

People skilled in emotional perception are successful because they:

- *Recognize different emotions and discern the degrees of intensity.* This skill allows individuals to better manage their relationships with others, and is especially important in environments that are constantly changing or are emotionally charged.
- *Have the ability to identify and describe emotions.* This provides individuals with more opportunities to influence others. People who are able to sufficiently appraise and describe their own emotions are more likely to exhibit more positive emotions and less non-verbal anger. This ability projects an approachable, socially appealing image to others.
- *Exhibit the capacity to perceive and respond appropriately to the emotions of others.* Understanding other people's feelings and reacting appropriately is important to a person's overall performance. Being able to consciously interpret a group's tone, body language, and degree of eye contact gives a person a higher sense of awareness. For example, if a group that you belong to is fearful of making a change, this skill makes you more likely to recognize the need for an empathic or motivational conversation.
- *Behave authentically and predictably.* Honesty and straight forward behavior in the expression of emotions is a key to success when interacting in groups. Highly perceptive individuals often obtain commitment and support because they are aware of how positive and negative emotions can increase or decrease individual and group morale.
- *Recognize emotional triggers.* Emotionally perceptive people are often more successful because they are aware of emotional triggers. Avoiding these triggers helps people stay calm, producing a higher level of trust and cooperation from others.

This ability to understand our own emotions and those of people around us can serve a vital role in daily functioning. For example, misperceiving the tone of a conversation, can lead to a misinterpretation of the speaker's mood or intent. Someone who lacks perception may not detect reluctance or anger. Tone of voice, body language, and the intensity of the words being used are critical elements to every conversation.

The more accurate we are at perceiving our own emotions and the emotions of others, the more successful we will be at managing our intra- and interpersonal interactions.

### **MANAGING**

Managing skills expand on the awareness of emotions (perceiving) to include the ability and willingness to evaluate and adequately control the emotions necessary for effective functioning. Emotions play an active role in directing our attention, attitudes, expressions, and actions. Leading emotion researchers use the term “*emotional regulation*” to express the ability to manage emotional experiences in order to attain and/or maintain a desired mood. An individual’s ability to manage their own emotions can directly impact the frequency and quality of interpersonal relationships, social encounters, and emotional well-being. For these reasons, the ability to effectively manage, control, and express emotions is perhaps the most important factor of emotional intelligence.

Emotional experience is often the result of how individuals notice and understand their surroundings, experiences, encounters with others, and their own general state of well-being. In this way, the ability to manage emotion is intimately tied to the ability to accurately perceive an emotional environment. As a result, it is the perception of emotions, combined with the ability to effectively manage those emotions that directly impacts behavior. Research has demonstrated that moods are as infectious as viruses in social interactions. The emotional tone of a social encounter is easily transmitted, eliciting favorable attraction or aversive withdrawal from the interaction.

People skilled in emotional management are successful because they:

- *Accurately interpret emotion.* The ability to manage emotions translates into a strong understanding of emotions. Skilled emotional managers understand both their own feelings and those of other people, making them better equipped to express themselves. This level of ability is vital to the quality of interpersonal interactions.
- *Can sustain motivation, cope with stress, and make decisions more easily.*
- *Let emotional cues guide their actions.* People are often faced with situations in which family members, friends, clients, or colleagues become emotionally charged, allowing their emotional experience to overly influence thoughts, decisions, and actions. Using emotional skills (attending to body language, tone of voice, etc.) to understand and react to others helps emotionally intelligent people manage the situation and put others at ease, which can help productivity and long-term success.

- *Manage emotions and expressions.* The ability to manage your own emotions and the manner in which you present your emotions to others can lead to the development of more meaningful interpersonal relationships. For example, preventing emotional outbursts due to insignificant or trivial concerns, or empathizing with someone who has had a bad day, can lead to deeper emotional connections and greater interpersonal satisfaction.
- *Project an image of sympathy and steadiness to others.* Individuals who recognize when they feel frustrated, sad, or irritable, and can perceive how these feelings alter their behavior are often viewed as empathic, composed, and socially attractive, which can lead to greater personal and professional opportunities.

Individual emotions can color situations in ways that lead to misunderstandings, inaccuracies and ineffective decision making. For example, someone who experiences anxiety each time they are invited into the manager's office may misinterpret the message their manager is trying to convey. An employee who can manage their own feelings is more likely to get an accurate idea the boss' emotions and motivations, and come away with a clearer understanding of the conversation.

### **DECISION MAKING**

The process of Decision Making requires individuals to notice and process cues drawn from the environment, their own emotions and their perception of the feelings of others. The mood of the individual coupled with the individual's ability to attend to cues can have a profound impact on the outcomes of his or her decisions. An emotionally intelligent individual recognizes the need to engage specific emotions in order to process relevant sources of information. In other words, the ability to manage change and solve problems depends upon the ability to match emotions with the demands of a specific situation.

Psychologists explain that our emotions dictates the intensity of our mood, which in turn directly influences thoughts and behaviors. Emotions have been shown to have differing effects on the decision-making process. Positive and negative emotions (i.e., happy versus sad) directly influence the cognitive and physical resources allocated to the decision-making process required for task completion. For example, positive emotions, such as happiness, elation, and exuberance, tend to be associated with an overestimation of the likelihood for positive outcomes and an underestimation of the probability for a negative outcome. The converse of this relationship is also true: the ability to manage change and solve problems of a personal and interpersonal nature can best be mediated by a grounded individual.

The emotionally intelligent individual possesses the ability to successfully

distinguish the emotions relevant to a particular situation from those associated with other parts of daily life and employ these emotions to facilitate the decision-making process. For example, a task, personal encounter, or problem that evokes emotions with a negative tone may signal the presence of a problem in the current situation. The subdued mood that accompanies such emotions is often best suited to effectively manage this situation, permitting a more detail-oriented approach to the problem. On the other hand, the experience of positive emotions has been linked to the acceptance of a safe, non-threatening environment. As a result, the positive affective experience permits greater creativity and quicker decision making that is often based on previous experience. Subdued emotions are best suited for detailed information processing, while positive emotions are best suited for enhancing creativity, rapid thoughts, and decisions based on previous experience. People skilled in emotional decision making are successful because they:

- *Possess the ability to successfully recognize when it is necessary to activate an emotion compatible with task demands.* For example, decision making in which considerable attention must be given to the details of the existing environment requires a more subdued emotional state.
- *Are able to manage change and solve problems of a personal and interpersonal nature based on their emotional state.* For example, decision making with a reliance on pre-existing knowledge structures accompanies a positive mood state; the “gut reaction” approach to decision making often applies in such cases.
- *Have an astute awareness of the “problem” and the appropriate emotional response.* Emotions can impact our decisions in an infinite number of ways including, for example, consumer behavior. Often the excitement of a new purchase and all of the positive emotions that go along with it can overshadow the detailed processing of a savvy purchase, resulting in buyer’s remorse. However, the consumer who can manage his or her emotion is likely to ask better questions and make more informed decisions.

### **ACHIEVING**

People skilled in Achieving experience more pleasure in success, take greater responsibility for the outcomes of their own actions, enjoy activities with moderate levels of risk, and prefer feedback. From a psychological perspective, elevated levels of intrinsic motivation result in a happy or well-balanced mood. Intrinsic motivation has been linked with satisfaction, enjoyment, and interest and has a negative relationship with maladjustment and burnout. As a result, confident, task-oriented individuals report better moods and higher social and emotional adjustment.

People skilled in emotional achievement are successful because they:

- *Experience more pleasure in success.*
- *Take greater responsibility for the outcomes of their own actions.*
- *Prefer to know about the level of their success and/or failures immediately.*
- *Enjoy moderate levels of risk.*
- *Demonstrate fewer and weaker physiological symptoms of arousal (such as rising heart rate and blood pressure).*
- *Naturally find ways to make most tasks personally relevant and meaningful.* This intrinsic motivation results in the experience of positive emotions that often result in increased optimism and effective decision making.

People who use their emotions to achieve their goals are often motivated to succeed and spend less emotional energy and time thinking about failure. This intrinsic motivation results in the experience of positive emotions that often result in increased optimism and self-confidence. Understanding how emotion influences motivation is the key to evoking the right emotions for a given situation.

### **INFLUENCING**

Emotions play an enormous role in the creation and maintenance of social relationships. An individual's emotions can shape the behaviors, thoughts, and emotions of others. Emotional cues such as facial expression, verbal expression and posture provide social signals that provoke various interpersonal processes. Empirically and anecdotally, emotions can influence perceptions of power, competence, and credibility. Emotion impacts the social and physical space between individuals and social connectedness.

Emotions that people witness in one another may influence current, as well as future, relationships. Researchers argue that emotions operate in a circular system that involves multiple people in a process of reciprocal influence. The dynamic of a social group is an ever-changing milieu of responses and counter responses to the emotions expressed, relative to the appropriateness of the expression in the group context. For example, positive emotions are linked to approach behaviors, while negative emotions are linked to disengaging behaviors. When an individual expresses positive emotions, the probability that people will desire a future relationship with that person increases. The individual's ability to handle personal emotions *and* the emotions of others has also been shown to impact the perceived leadership potential of an individual and, again, predict the likelihood of a future



collaboration.

Since the expression of emotions plays an important role in the creation of social relationships, the emotions an individual projects can inspire others to strive for greater goals, think creatively, or collaborate more effectively. In fact, research has found that individuals who are perceived as credible, socially attractive, assertive, and expressive are effective influencers.

People skilled in influencing others are successful because they:

- *Understand their own strengths and take more opportunities to influence others.* Consistently putting oneself in an influential position allows others to know what you bring to the table. People are attracted to and motivated to work with someone who believes that he or she can make things happen.
- *Assert themselves.* An appropriate level of assertiveness often allows people to manage others effectively. Skilled influencers are able to describe what needs to be done, which helps when setting proper direction and tone.
- *Use positive emotions to enhance their influence.* Skilled influencers often use positive emotions or the expression of a positive emotion (for example, happiness, optimism, a smile) to engage others, which leads to increased approachability and a desire for future relationships. This increases personal networks and beneficial alliances.
- *Exhibit a positive and confident disposition.* A pleasant attitude increases the likelihood of influencing others. Others generally perceive a positive and confident disposition as energizing and motivating.

The expression of appropriate emotions can have a tremendous impact on the formulation and maintenance of interpersonal relationships. Consider the coach who can, with a pre-game speech, unite a team to achieve a common goal. Or the impact an expression of disapproval can have on the mood and creativity of a young child. Our emotions are impactful and can have a positive or negative effect on those around us.

**The Assessment** The Emotional Intelligence Skills Assessment is a brief yet comprehensive assessment of emotional intelligence. The five factor model includes a 50-item self assessment and a corresponding, matched item, 360° assessment. The EISA utilizes a 5-point Likert scale ranging from “Very Seldom or Not True of Me” to “Very Often True or True of Me” and is generally completed within 10 minutes.

**Rationale** The evolution of the EISA is deeply rooted in both the cognitive and emotional sciences. Our goal was to develop a model of emotional intelligence that distinctly assesses the critical emotional and social components related to performance excellence.

**EISA Development** The development of the Emotional Intelligence Skills Assessment involved several methodological steps designed to quantify what are believed to be the emotional intelligence factors related to performance excellence. Stemming from the previous work of BarOn (1997), Mayer, Salovey, and Caruso (1997), and Goleman (1998), the EISA measures the interconnected components of emotional intelligence directly tied to emotional and social functioning.

The general methodological approach included:

- i. Theoretically Derived Factors
- ii. Item development
- iii. Item assignment
- iv. Item analysis & reduction
- v. Exploratory factor analysis & partial confirmatory factor analysis
- vi. Reliability analysis

Greater detail and explanation of each of these steps is provided in the sections to follow.

**Norming EISA** The development of a normative sample or comparison group is an important component of test development. By obtaining a comparison group, we are attempting to capture what the average respondent “looks like”, thereby creating a baseline for comparison. In turn, all subsequent results can be compared to the established baseline which provides a benchmark for determining whether or not an individual’s results are above average, below average, or average.

The current norms are based on the results of more than 600 participants that can be deemed top performers (i.e., Law Enforcement, Corporate Executives, Athletes, MBA students, and undergraduate students from top institutions).

**Table 1.**  
**Number of Participants in Comparison Sample by Age Group.**  
**Age by Gender in the Normative Sample**

Age	Male		Female	
	Self	360	Self	360
Under 25	91	4	150	22
25-29	14	20	37	52
30-34	15	45	35	75
35-39	8	51	43	53
40-44	13	64	52	86
45-49	13	59	46	162
50-54	14	65	38	119
55-59	14	110	18	144
Total	182	419	419	713

### Means & Standard Deviations

Table 2 provides means and standard deviations for each EISA scale based on the normative sample for the Self and 360 assessments. Higher scores on a particular scale indicate a greater frequency of use and enhanced emotional and social functioning. Conversely, lower scores are indicative of lesser developed skills and warrant a need for development. Table 3 provides means and standard deviations for each group in our comparison group. Table 4 means and standard deviations broken down by gender.

**Table 2.**  
**Raw Scores for the Normative Sample (Self and 360)**

Scale	Self		360	
	Mean	SD	Mean	SD
Perceiving	43.14	7.28	49.42	7.31
Managing	33.90	6.13	43.48	5.41
Decision Making	34.14	3.83	36.67	5.14
Achieving	28.46	5.68	38.74	4.56
Influencing	32.01	7.40	43.32	4.99

**Table 3.**  
**Raw Scores by Group for the Normative Sample (Self and 360)**

<b>Group</b>	<b>Perc</b>	<b>Man</b>	<b>DM</b>	<b>Ach</b>	<b>Inf</b>
Undergraduate Students	45.35 (7.33)	34.41 (5.91)	32.78 (4.09)	29.12 (5.11)	34.47 (6.88)
MBA Students	38.37 (3.03)	31.1 (2.92)	32.60 (3.09)	25.07 (2.60)	27.30 (2.58)
Athletes	38.22 (2.69)	30.22 (2.64)	33.42 (3.28)	24.97 (2.28)	26.50 (2.67)
Corporate	37.80 (2.97)	30.31 (2.22)	33.93 (2.65)	24.81 (1.87)	27.44 (2.61)
Law Enforcement	45.42 (3.97)	35.60 (3.82)	35.37 (3.72)	30.23 (3.28)	33.43 (4.16)

**Table 4.**  
**Average EISA Self Raw Scores by Gender**

<b>Scale</b>	<b>Males</b>		<b>Females</b>	
	<b>Mean</b>	<b>SD</b>	<b>Mean</b>	<b>SD</b>
Perceiving	40.32	4.84	44.37	7.8
Managing	31.70	4.30	34.85	6.55
Decision Making	33.75	3.31	34.32	4.03
Achieving	25.98	3.83	29.53	6.00
Influencing	28.52	5.56	33.53	7.59

### **Standard Scoring**

Scores on the EISA tend to fall in the range between 2 and 8 (+/- 3 standard deviations from the mean). That is, according to the laws of the normal distribution, it is expected that 99 percent of the population will fall within plus or minus 3 standard deviations from the mean. As a result, extreme scores are deemed unlikely; consequently most respondents will score around 5. The EISA uses a standard score transformation for presenting results to the user which simplifies interpretation while permitting a meaningful comparison of results across scales.

Several steps were undertaken to achieve a standard score. The first includes calculating a raw score for each scale (i.e., the sum of each item). The higher the score, the better. However, some items have a negative valence and thus must be reverse scored. Raw scores for each scale are based on the sum of each item for each respective scale.

On their own, raw scores fail to provide a yardstick for comparison and

render scale to scale comparisons nearly impossible. Because the EISA scales consist of varying number of items per scale, the total number of points per scale varies. If we simply compare the total raw score from two scales, we might get values of 45 and 50. On the surface, we can argue that 50 is a better score, because it is greater than 45. However, let's consider the conclusion we would make if we had additional information.

Perceiving Raw Score = 45	and	Managing Raw Score = 50
Mean = 30		Mean = 60
SD = 5		SD = 10

If we now consider that a score of 45 on Perceiving is considered to be 3 standard deviations above the mean and a score of 50 for Managing is considered to be 1 standard deviation below the mean, we can now see that a score of 45 is in fact better than a score of 50. Therefore, by standardizing scores we are able to make “apples to apples” comparisons.

In sum, by converting raw scores to standard scores we ensure that each scale of the EISA has the same mean (5) and standard deviation (1). As a result, if a respondent scores a 5 on any of the scales, we can conclude that the respondents score is average relative to the comparison group and should a respondent score a 6 or 4, the respondent is deemed to be 1 standard deviation above and below the mean respectively.

### **Reliability of the EISA**

Reliability is a measure of an instrument's ability to consistently measure a given construct; in this case the five factors of emotional intelligence. There are two basic types of reliability that any assessment should consider. Internal consistency refers to the degree to which all of the items on a given assessment and scale measure the same construct and test-retest reliability the ability to remain consistent over time.

Table 5 presents the internal consistency coefficients for both the EISA Self and the EISA-360. The internal consistency of the EISA was measured using the Cronbach alpha. It is generally accepted that alpha scores above .70 represent acceptable reliability. The average Cronbach alpha coefficients for all EISA and EISA-360 scales are well above the acceptable range with values ranging from .76 to .91.

**Table 5.**  
**Reliability Coefficient for the EISA (Self and 360)**

<b>Scale</b>	<b>Self Mean</b>	<b>360 Mean</b>
Perceiving	.86	.91
Managing	.84	.86
Decision Making	.82	.86
Achieving	.76	.79
Influencing	.85	.82

Test-retest reliability refers to the stability of an assessment over time. The EISA was completed by 63 university students across a 4-6 week period, which was deemed appropriate since it was not too long, such that extraneous factors (e.g., development) would have an impact on retest scores. Yet this period was just long enough to eliminate the potential for results being influenced by memory. The average test-retest reliability was .76 after a 4-6 week interval.

#### **Validation of the EISA**

Assessing the validity of an assessment refers to the process of determining how well an assessment measures what it is intended to measure. Validity can be determined in a number of ways including content, face, construct, and factorial validity.

Both content and face validity are an indication of how well the items on each scale are thought to represent the construct of emotional intelligence and how easily understood these items are by each participant. Face validity is often provided by means of direct feedback by content related experts who verify the degree to which the items represent emotional intelligence. Several emotional intelligence experts and leaders in the coaching domain reported that the items on the EISA have excellent content and face validity.

The empirical validation of the EISA was undertaken to determine whether or not the items on the assessment measured a common theme. The results from exploratory and partial confirmatory factor analyses support the theoretically and practically driven five factor model that is the foundation of the EISA.

In an effort to empirically (i.e., objectively) determine the appropriate number of factors necessary to develop the EISA construct, an exploratory factor analysis was conducted. A total of six factors were extracted from the 50 items with an eigenvalue greater than 1.0 accounting for nearly 60% of the variance. Of these six factors, all were meaningful, with the first factor representing a composite scale comprised of 50 items. This is not altogether surprising given that the five factors associated with the EISA are believed to

capture the intricacies of emotional intelligence which inherently share some commonalities. As a result, the remaining five factors were concluded to represent the subscales of emotional intelligence and more specifically, the Perceiving, Managing, Decision Making, Achieving, and Influencing scales of the EISA.

In addition to the exploratory factor analysis, a partial confirmatory factor analysis was completed on an independent sample to verify the factor structure of the EISA. This intermediary step to a confirmatory factor analysis provided adequate empirical support of the existing factor structure (NFI = .86, TLI = .91, CFI, .93, RMSEA = .05).

A final step in the validation of the EISA was to determine how well it measures what it is designed to measure. To determine the construct validity of the EISA, data was collected using the “gold standard” of emotional intelligence assessments and the EISA. Correlation analyses indicate positive relationships between the two measures of EI, confirming that the EISA does in fact measure emotional intelligence.

### **Conclusions**

The EISA has evolved from the extensive research underpinning the field of emotional intelligence. The five factor model maintains a solid empirical foundation with practical emotional and social implications on human performance. As a result, the EISA is considered to be a valid and reliable tool used to springboard emotional intelligence development.

To purchase this assessment please visit  
[www.hrdqstore.com](http://www.hrdqstore.com) or call 800.633.4533