

Technical Report

Universal

Behavioral EQ[®]

Multi-Rater Profile



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Facilitator



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Introduction

Throughout its history, TRACOM has been committed to research and development. All of our products are based on up-to-date research from fields as varied as psychology and neuroscience. We developed the Behavioral EQ® program because we saw an opportunity to improve the field of emotional intelligence (EQ) while creating a program that would provide more benefits to people at work than existing EQ programs.

This Technical Report provides research evidence for the reliability and validity of the Behavioral EQ Model™ and questionnaire. The questionnaire is used as the input to generate various profiles, including the Behavioral EQ Multi-Rater Profile and Self-Perception Profile.

This report is intended to be a companion to other facilitator materials, notably the *Developing Behavioral EQ™ Facilitator Guide*. By reviewing this report, you will understand the important role that research plays in the model. More importantly, you will gain an understanding of exactly how TRACOM ensures that our profiles are accurate and dependable.

We begin with a glossary of common terms, followed by a brief history of emotional intelligence, along with the development of the Behavioral EQ questionnaire. By understanding the history of emotional intelligence and how this influenced TRACOM's research, you will recognize the benefits of the Behavioral EQ Model. We then describe the research evidence for the reliability and validity of the questionnaire, followed by norm descriptions.

Glossary

This report is written to be understandable for people who will be facilitating and using Behavioral EQ programs. There are some key technical terms that are used frequently throughout the report, and it is helpful to define these upfront. Further clarification of these terms is given in the body of the report.

- *Reliability* – This determines whether a measurement instrument is consistent and dependable.
- *Validity* – This determines whether an instrument measures accurately. In other words, does it truly measure the concepts that it proposes to measure?
- *Correlation* – A correlation coefficient determines the extent to which two variables are related to each other. Values range from 0.0 (no relationship) to 1.0 (perfect relationship). For example, height and weight are proportional to each other and should be highly correlated. In fact, the correlation between height and weight among adults is 0.44, a strong relationship (Meyer et al., 2001).
- *Item* – An item is a behavioral statement on the survey, sometimes called a “survey question.” An example of an item is “Approaches new situations with an open mind.”
- *Scale* – A scale is a collection of survey items that measure a single construct. For example, Emotion Awareness is a scale. It is measured by a group of items that are all related to the Emotion Awareness construct.
- *Profile* – A profile is the actual report that is given to each participant. It includes interpretations of each scale.

- *Norms* – Normative scores, or norms, are necessary for interpreting scores on scales. Norms provide context to an individual's scores by comparing them to a meaningful group, such as one's country. Based on this, norms make it possible for us to determine a person's position on the various scales.

Let's now review the history of emotional intelligence research and practice.



A Brief History of Emotional Intelligence

When you think of an intelligent person, what comes to mind? People often say things like “the ability to solve problems, and think quickly and rationally.” This is understandable since psychologists have traditionally focused on cognitive aspects of intelligence. At some point in your life, maybe you have undergone an IQ test. “IQ” stands for “intellectual quotient,” the numeric measurement of intelligence. These tests provide a general IQ score as well as scores on specific abilities related to verbal, mathematical, and visual/spatial reasoning.

Even though common definitions of intelligence focus on cognitive abilities, the role of emotional and social abilities has historic roots in science. In the mid-19th century Charles Darwin (1872) wrote about the importance that emotions have for survival and adaptation. For example, he believed that fear evolved because it helped people to act in ways that increased their chances of survival. He also believed that facial expressions of emotion are innate, allowing people to quickly judge someone’s mood and to communicate intentions to others.

In the early 20th century the psychologist Edward Thorndike (1920) coined the term “social intelligence” and defined it as “the ability to understand and manage men and women, boys and girls; to act wisely in human relations.” He believed that social intelligence is exclusive to humans and represents our ability to effectively navigate complex social relationships and environments.

However, by the mid-20th century, research on intelligence focused almost exclusively on cognitive abilities, though a handful of researchers were writing about social and

emotional intelligence. For instance, David Wechsler (1940), an important developer of IQ measures, discussed the role of emotions as part of general intelligence. He argued that the “nonintellective aspects of general intelligence” are important and that models of intelligence would not be complete until researchers could adequately describe these factors.

It was not until the 1980s that the importance of non-cognitive intelligence once again began to be recognized. Howard Gardner’s (1983) theory of “multiple intelligences” included both *interpersonal* ability (the capacity to understand the intentions, motivations and desires of other people) and *intrapersonal* ability (the capacity to understand oneself, to appreciate one’s feelings, fears and motivations). Building on Gardner and others’ research, Peter Salovey and John Mayer (1990) wrote the seminal paper that introduced the concept of emotional intelligence, or EQ. They defined EQ as “the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and actions” (p. 189). In other words, they felt that EQ includes four basic abilities: Perceiving, using, understanding, and managing emotion. Importantly, they believed that this was a form of intelligence that could be measured in a similar way as IQ is measured.

While research into EQ was still in its infancy, the concept itself achieved almost overnight recognition and popularity with the publication, in 1995, of the book *Emotional Intelligence: Why it Can Matter More Than IQ* by Daniel Goleman. Goleman is a Harvard-trained psychologist who, at the time, was writing articles for the New York Times on science and behavior. He collected

research results from a variety of researchers in areas related to EQ and developed his own model that was different from that of Salovey and Mayer. His 1998 book, *Working with Emotional Intelligence*, helped solidify interest in EQ within the business community.

Throughout the 1990s and into the early 21st century, research on EQ has been amassing, and this has led to new insights and models. While we do not provide an exhaustive discussion of all research and models, the next section describes major advances in EQ theory and practice.

Advances in Emotional Intelligence

There have been several generations of EQ models and their associated measures. The first generation grew out of the work of Salovey and Mayer, who hypothesized that EQ is an ability that can be measured just as IQ is measured, through responses to questions and observation of ability. This generation is referred to as “ability-based models” of EQ. The most well-known ability-based measure, the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT; 2002), requires individuals to solve a series of problems related to emotional understanding. For example, a person might be presented with a scenario involving characters who are arguing with one another. The person is given a list of possible responses to the scenario and must decide which choice is best. Like all ability measures, the MSCEIT contains right and wrong choices to problems; it is a multiple-choice test. This is problematic because, unlike cognitive intelligence tests, “correct” responses are not objectively known. And, even if participants intellectually know the right answer, that doesn’t mean that they will behave that way in the real world. The criteria for correct responses are typically based on the consensus of subject matter experts. Though measurement problems are well known,

the model is theoretically sound. The problem for the business community is that ability-based models have been found to have poor predictive validity, meaning they do not do a good job of predicting job performance (Joseph & Newman, 2010; O’Boyle, Humphrey, Pollack, Hawver & Story, 2011). Therefore, while academically interesting, the practical value of ability-based models are limited.

The second generation EQ model grew out of the writings of Goleman and other researchers, such as Reuven Bar-On (2004), and is referred to as the “competency-based” approach. Measures such as the Emotional and Social Competence Inventory (ESCI) and the Emotional Quotient Inventory (EQ-i; Bar-On, 1997) are competency-based approaches. These models have been criticized for lacking theoretical rigor; they often measure a grab-bag of competencies that were chosen without theoretical rationale or research justification. Also, each particular assessment – and there are many – measures a unique set of competencies. Thus it is not surprising that the ability of competency-based models to predict job performance has been mixed. Some competencies have been found to be related to performance while others have not, and prediction varies across job types (Joseph & Newman, 2010). In comparison to the ability-based models, however, these models are superior in their ability to predict performance (O’Boyle et al., 2011). For practical business purposes, the drawbacks of these models are that it is unclear which of the competencies should be the focus for personal development, and even whether working on these competencies will affect performance.

A newer but related concept of emotional intelligence has emerged from research conducted at University College, London. This is known as “trait emotional intelligence” and is formally defined as a “constellation of emotional



self-perceptions located at the lower levels of personality hierarchies” (Petrides, Pita, & Kokkinaki, 2007). Trait EQ concerns people’s self-perceptions of their emotional abilities, which are considered to be aspects of personality. It is measured by the Trait Emotional Intelligence Questionnaire (TEIQue), developed by K. V. Petrides (2009). Trait EQ is theoretically sounder than competency-based approaches and is distinct in that it treats emotional intelligence as a fixed aspect of personality. In this regard, it is also unlike the ability-based models, which treat EQ as a form of intelligence. The trait EQ approach is an academically-oriented model that is being proposed as an alternative to the two previous approaches. Both theoretically and in measurement properties, initial research shows that it is a sounder approach (Petrides, 2009). A limitation for people who are interested in benefitting from EQ, though, is that the model treats EQ as a fixed trait; there is not a personal development program connected to the trait EQ model.

The history of EQ highlights a significant problem that has plagued the field – there has not been a single unified concept of what exactly EQ *is*. Some have defined it as an intelligence, others as a set of competencies, and others as an aspect of personality; and each school has attempted to measure its version of EQ in its own unique way. Worse yet, outside of these academic models, there are multitudes of programs that purport to measure EQ with promises of dramatic personal improvement and enhanced business performance; yet many of these are simply fly-by-night programs that do not have any basis in research, theory, or measurement.

As often happens with newer concepts such as EQ, over time the field becomes more coherent. The studies of cognitive intelligence and human personality both went through

decades of research and heated disagreement before cohering into theoretically sound models with wide-spread agreement on measurement approaches. Emotional intelligence has followed a similar pattern and is beginning to achieve a more stable foundation.

The next section describes how recent research has contributed to our understanding of EQ, and how this has helped in the development of the Behavioral EQ Model.

Theoretical Rationale for Behavioral EQ

Emotional intelligence has been shown to help people in multiple aspects of their lives, from parenting to simply leading a more fulfilled life (visit www.eiconsortium.org for related research). We developed the Behavioral EQ Model specifically for the workplace and, therefore, the research we review here is specific to that purpose.

The Behavioral EQ Model was developed to align with four principles, each of them guided by research findings:

- First, EQ is an important construct that relates to job performance and leadership effectiveness; therefore, it is worthy of being measured and developed.
- Second, behavioral skills are critical and distinct from emotional skills; therefore, it is important to measure emotional and behavioral abilities separately and to design training programs that clearly distinguish these abilities from one another.
- Third, research clearly shows that existing EQ models are too broad and unfocused; therefore, it was critical to develop a model that focuses only on abilities that clearly relate to performance effectiveness.
- Finally, self-perception of EQ abilities has a low correlation with others' perceptions of these same abilities; therefore, it is especially important to develop a measure that incorporates multi-rater feedback.

In the following paragraphs, we describe the research that led to these guiding principles.

Principle One: Emotional Intelligence Predicts Performance

While much of the early research showed mixed, and often contradictory, results for the practical utility of EQ, more recent research has been clearer. Meta-analyses – quantitative analyses that combine data from multiple research studies – have shed light on the mixed results from previous research. These studies have helped us to understand which aspects of EQ are most important. The most comprehensive meta-analyses (Joseph & Newman, 2010; O'Boyle, et. al., 2011) have shown that EQ predicts job performance above and beyond IQ and personality. In technical terms, EQ has “incremental validity” beyond these other constructs. Of the different EQ models, competency-based models have the best incremental validity. This is because competency-based models have used such a broad approach, measuring a grab-bag of skills; it was almost certain that some of these competencies would be related to job performance. This finding – that EQ adds a unique contribution to performance effectiveness – is important, since a meta-analysis shows that IQ only accounts for 7% of the variance in leadership effectiveness (Judge, Colbert, & Ilies, 2004). This research led to our first conclusion that EQ is important for job performance and is worthy of being measured and learned by people in the workplace.

Principle Two: Emotional Intelligence is Different from Behavioral Intelligence

One of the largest problems with older EQ models is that they are inconsistent – they do not measure the same construct (Cherniss, 2010; O'Boyle et. al., 2011). The root cause of this inconsistency is



that they fail to clarify the distinction between emotional skills and behavioral skills. The competency-based models, in particular, mix these skills together in the same pot, resulting in a stew with too many ingredients but inadequate sustenance. A better model is one that separates emotional skills, such as emotion awareness and self-insight, from behavioral skills, such as self-control and influence. These two sets of skills are distinct, and learners should get feedback on their abilities in these areas as a means for improvement. While both are important, research shows that the behavioral skills are most clearly predictive of job performance (O'Boyle et. al., 2011). For this reason alone, it is imperative to separate emotional and behavioral skills and measure them as unique abilities. The Behavioral EQ Model was designed to do this.

Principle Three: Emotional Intelligence Models need Greater Focus

Related to principle two, older EQ models have been criticized for their lack of focus (Joseph & Newman, 2010), making them unwieldy and difficult for business people to use. EQ models are only useful if they can be understood and practically utilized by people. The competency-based models, in particular, have violated this standard. Research shows that many of the skills measured in these models are not meaningfully related to job performance (O'Boyle et. al., 2011); therefore, they should not be included in future models. Further, more narrowly focused models are more amenable to training and development efforts (Cherniss, 2010). The Behavioral EQ Model measures only those skills shown to be predictive of job performance.

Principle Four: Multi-rater Feedback is Critical

Human beings have distorted views of themselves. This affects our beliefs about our physical appearance, our golf games, and our job performance. This self-perception bias is well known and widely researched (Herbert, 2010). Generally, people have overinflated perceptions of their own talents, abilities, and character – they see themselves as better than they actually are (Dunning, D., Heath, C., & Suls, J., 2004; Mabe, P.A. III, & West, S.G., 1982). For example, of all of the engineers in one company, 42% thought they ranked in the top 5% among their peers (Zenger, T. R., 1992). While a survey of college professors showed that 94% consider their work “above average,” which is statistically impossible (Cross, P., 1977). For EQ, it's well known that people are often poor judges of their own abilities, especially when those abilities are highly valued in the workplace (Cherniss, 2010), and self-ratings of EQ have a low correlation with co-workers' ratings (O'Boyle et. al., 2011). It's clear that multi-rater feedback is valuable, particularly with EQ skills; therefore, the Behavioral EQ Model provides for feedback from co-workers.

The Behavioral EQ Model was designed to align with these four principles. Next, we discuss the model's development and research.

Behavioral EQ Model Development

The Behavioral EQ Model is the culmination of research in the field of EQ, followed by TRACOM’s research to refine and validate the model. We thoroughly reviewed over twenty years’ worth of research in the field, relying heavily on recent meta-analyses for our conclusions, as described in the previous section. We concluded that fifteen skills met our criteria for inclusion in the model. Six of these are emotional skills and the remainder are behavioral skills.

Emotional Skills	Behavioral Skills
Emotion Awareness	Self-Control
Self-Insight	Stress Management
Self-Confidence	Conscientiousness
Emotion Perception	Optimism
Empathy	Building Relationships
Listening	Influencing Others
	Motivating Others
	Flexibility
	Innovativeness

The next step was to develop items to measure each skill and test these. Behavioral items were written to measure these skills – or scales as we’ll often refer to them in a measurement sense. Initially, 173 items were written to exhaustively measure all attributes of the scales. Three industrial/organizational psychologists, all experts in EQ, were involved in the item development process.

For the initial round of testing, the items were administered to 1,415 adults – the vast majority of whom (over 98%) were currently working either full- or part-time. This administration presented the items in a self-rating only format; that is, people rated themselves on each item. This format was ideal for generating the first version of the model prior to further testing.

Problematic items were identified based on reliability analyses, factor analysis, item-total

correlations, item correlations, subgroup differences, and extreme means. These analyses yielded a 75-item scale for further testing.

As an initial test of the validity of the model, we conducted factor analysis (maximum likelihood with direct oblimin rotation). Factor analysis is a statistical procedure used to identify the underlying structure of a set of items. If we can show that items are fitting well within each scale, it supports the validity of the measurement instrument. This analysis verified that the 15 scales were being independently measured.

In the next section, we describe the reliability and validity testing done to generate the final version of the Behavioral EQ Model. This round of testing was done in a multi-rater format to align with the intended use of the model.



Demographics

For the second round of testing, we administered the 75-item version of the questionnaire to 124 employed individuals, along with their rater groups – each person had at least three raters. These individuals were existing clients of TRACOM and were solicited to participate through email requests. Demographic characteristics of the sample were as follows in Table 1.

Based on reliability analyses, factor analysis, item-total correlations, item correlations, subgroup differences, and extreme means, we found these 75 items were reliable and valid. To create an efficient final measure, while still maintaining reliability and validity, we were able to reduce the number of items to 60 (four items measuring each of the 15 scales). The reliability and validity analyses described later in this report are based on these final 60 items.

Next, we provide descriptive statistics for each scale.

Table 1. Descriptive Statistics (N = 124)

Gender	Female	79 (63.7%)
	Male	45 (36.3%)
Age	21 to 30	26 (21.0%)
	31 to 40	38 (30.6%)
	41 to 50	28 (22.6%)
	51 to 60	31 (25.0%)
	61 and older	1 (0.8%)
Organization Level	Individual Contributor	16 (12.9%)
	Supervisor or Manager	66 (53.2%)
	Department Head or Director	18 (14.5%)
	Executive	18 (14.5%)
	No response	6 (4.8%)
Industry	Accounting	40 (32.3%)
	Insurance	20 (16.1%)
	Consulting services	14 (11.3%)
	Business services	13 (10.5%)
	Other (12 industries)	37 (29.8%)
Country	United States	43 (34.7%)
	United Kingdom	14 (11.3%)
	Australia	12 (9.7%)
	Other (26 countries)	55 (44.4%)

Descriptive Statistics

The Behavioral EQ assessment uses behavioral statements that are rated on a five-point frequency scale where:

1 = Never/Almost Never

2 = Seldom

3 = Sometimes

4 = Often

5 = Always/Almost Always

Descriptive statistics were calculated for each of the 15 scales (See Table 2). The mean is the average score for each scale and the standard deviation indicates the variability in the distribution of scores. For example, if the standard deviation is 0.50, this means that 68% of people's scores fall within 0.50 points from the mean. Means range from 3.79 to 4.59, while standard deviations range from 0.30 to 0.48.

Next, we provide an overview of reliability and validity evidence.

Table 2. Descriptive Statistics (N = 124)

Scale	Mean	Standard Deviation
Emotion Awareness	3.79	0.46
Self-Insight	4.00	0.39
Self-Confidence	4.31	0.40
Self-Control	4.12	0.48
Stress Management	3.95	0.46
Conscientiousness	4.59	0.30
Optimism	4.14	0.45
Emotion Perception	3.84	0.48
Empathy/Openness	4.14	0.39
Listening	4.29	0.42
Building Relationships	4.32	0.36
Influencing Others	3.80	0.47
Motivating Others	4.06	0.47
Flexibility	4.13	0.41
Innovativeness	3.94	0.44



Reliability and Validity

The Behavioral EQ assessment measures emotional and behavioral skills. These abilities are different from things that can be easily and accurately measured in the physical world, such as weight and height. So how do we know that we are accurately measuring Behavioral EQ? In order to make this claim, the instrument has to adhere to standards that have been set forth by the scientific community. In particular, research evidence should correspond to criteria set forth in the “Standards for Educational and Psychological Testing” (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 1999), which provides benchmarks for developing psychological measurement instruments. This evidence comes in two primary forms: reliability and validity.

Reliability determines whether an instrument measures in a way that is *consistent and dependable*.

Validity determines whether an instrument measures *accurately*. In other words, does it measure what it proposes to measure?

Regarding reliability and validity, there are several points worth mentioning. First, a measurement instrument can be reliable, but not valid. One way to think of this is to imagine a scale. If you weigh yourself every hour and consistently get the same result of 145 lbs., the scale would be reliable. However, the scale may not be accurate (valid) because you actually weigh 160 lbs. Similarly, an assessment might measure in a very precise, stable way, but instead of measuring the construct it is intended to measure – conscientiousness – it might measure something else, such as problem-solving. Second, no psychological assessment is perfectly reliable or perfectly valid, since assessments are affected

by various sources of error. Psychologists speak about the *degree to which* an instrument is reliable or valid. The quality of the instrument is determined by accumulating evidence over time.

Reliability Evidence

The most common and established method for establishing reliability evidence is *internal consistency*. Internal consistency measures the relationship among survey items that are written to measure the same thing. If all items on a scale are truly measuring the same thing, then they should correlate with one another to a certain degree – they should be internally consistent. This relationship is measured by a correlation coefficient, called alpha (Cronbach, 1951). Alpha values range from 0.0 (no relationship among the scale items) to 1.0 (perfect internal consistency).

The appropriate value for alpha depends on the type of assessment, and there is much debate around this issue. A comprehensive review (Charter, 2003) found that personality scales have an average alpha value of .77. Alpha values that are too high can indicate items that are redundant with one another, in which case they are not contributing uniquely to measurement of the behavioral scale. Thus, perfect internal consistency is not desirable.

Although there is disagreement about appropriate alpha values, general guidelines for evaluating the quality of a scale's internal consistency are helpful (Cicchetti, 1994):

- Satisfactory: Alpha > .70
- Good: Alpha > .80
- Excellent: Alpha > .90

Table 3 displays the alpha coefficients for the Behavioral EQ assessment scales. Values range from .86 to .95.

In addition to internal consistency, additional types of reliability evidence can also be examined. In particular, inter-rater reliability is important to show for multi-rater assessments. Due to the limited data collected so far on the Behavioral EQ assessment, inter-rater reliability cannot yet be tested. This type of reliability will be tested as the assessment is administered to larger populations. Next, we describe the validity evidence for the assessment.

Table 3. Alpha Reliability Coefficients for Behavioral EQ assessment Scales (N = 124; 4 items per scale)

Dimension	Scale	Alpha Coefficient
Emotional Intelligence - Self	Emotion Awareness	.86
	Self-Insight	.86
	Self-Confidence	.92
Behavioral Intelligence - Self	Self-Control	.95
	Stress Management	.94
	Conscientiousness	.88
	Optimism	.94
Emotional Intelligence - Others	Emotion Perception	.95
	Empathy/Openness	.93
	Listening	.95
Behavioral Intelligence - Others	Building Relationships	.92
	Influencing Others	.94
	Motivating Others	.92
	Flexibility	.94
	Innovativeness	.93



Validity Evidence

Validity refers to the extent to which an instrument measures what it is supposed to measure, and also the interpretation of scores and the appropriateness of inferences drawn from those scores. Factorial validity is one of the primary forms of validity evidence and is described next.

Factorial Validity

Factor analysis is a statistical procedure that serves to uncover the underlying dimensions from a set of items. It is used as one form of evidence that items are measuring the constructs they are intended to measure. Factor analysis is similar to internal consistency reliability in that it indicates how closely items are clustering. However, unlike internal consistency reliability, which is conducted on an established set of scale items, factor analysis does not impose a priori assumptions or restrictions on the factor structure of the data. The output of factor analysis is unknown ahead of time.

The Behavioral EQ assessment was designed to measure 15 constructs. Analyses supported the overall structure of the questionnaire.

Exploratory factor analysis (Maximum Likelihood with oblimin rotation) with 15 fixed factors produced item clustering that was in line with our expectations, accounting for 82% of the variance in the data set. Each of the 15 factors clearly delineated a particular scale, with four items loading on each factor. There was minimal cross-loading, meaning very few items fit under multiple dimensions. The only scales that cross-loaded were empathy and self-insight, with two self-insight items cross-loading on the empathy factor, meaning they are potentially measuring similar constructs. In future analyses, we will continue to examine the factorial validity of the model and make adjustments as necessary.

Scale Intercorrelations

Another form of validity evidence comes from examining the relationships of the scales *within* the Behavioral EQ assessment. Scale intercorrelations indicate the extent to which different dimensions are related to one another. This supports validity by displaying that similar dimensions are more closely related to one another than dissimilar dimensions. The Behavioral EQ measure is designed to measure related skills and, therefore, we do not expect the scales to be independent of one another. On the contrary, we expect the scales to be related to some degree.

According to Dancey and Reidy's (2004) categorization:

- Strong correlation: $r = 0.7$ to 0.9
- Moderate correlation: $r = 0.4$ to 0.6
- Weak correlation: $r = 0.1$ to 0.3

Table 4 displays the intercorrelations among the Behavioral EQ assessment scales. As expected, most scales are moderately correlated with one another.

Table 4. Intercorrelations of Behavioral EQ assessment Scales (N = 124)

Scale	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1 Emotion Awareness	1.00	0.30	0.41	0.01**	0.10**	0.28	0.36	0.44	0.35	0.24	0.36	0.36	0.38	0.33	0.47
2 Self-Insight		1.00	0.55	0.47	0.49	0.60	0.55	0.48	0.61	0.53	0.55	0.46	0.61	0.57	0.63
3 Self-Confidence			1.00	0.38	0.55	0.52	0.56	0.32	0.37	0.34	0.43	0.67	0.64	0.56	0.57
4 Self-Control				1.00	0.67	0.55	0.45	0.58	0.61	0.58	0.53	0.20*	0.40	0.55	0.39
5 Stress Management					1.00	0.39	0.63	0.39	0.45	0.36	0.52	0.42	0.49	0.60	0.44
6 Conscientiousness						1.00	0.34	0.49	0.54	0.62	0.54	0.38	0.56	0.57	0.45
7 Optimism							1.00	0.46	0.50	0.31	0.60	0.50	0.55	0.54	0.58
8 Emotion Perception								1.00	0.75	0.67	0.63	0.23	0.48	0.58	0.57
9 Empathy/Openness									1.00	0.69	0.64	0.17**	0.46	0.67	0.52
10 Listening										1.00	0.54	0.15**	0.38	0.56	0.36
11 Building Relationships											1.00	0.42	0.57	0.66	0.58
12 Influencing												1.00	0.74	0.49	0.64
13 Motivating													1.00	0.69	0.73
14 Flexibility														1.00	0.69
15 Innovativeness															1.00
All coefficients significant (p < .01, 2-tail), except:															
* Significant (p < .05, 2-tail)															
** Non-significant															

Face Validity

Face validity is the degree to which an assessment instrument appears to have relevance for a particular purpose, such as emotional intelligence at work. Face validity is most relevant for individuals who do not have training in the development of assessments, but who are the ultimate users of assessments and who are affected by assessment scores and interpretations. It is not necessary for an instrument to have face validity, but it makes its use much more acceptable to those who receive feedback from the instrument.

The Behavioral EQ assessment has good face validity for its intended audience. The items and profile scales are clear descriptions of work-related emotions and behavior that people can recognize as relevant to interpersonal effectiveness. This behavioral perspective was a central aspect of the design philosophy for the instrument. This is not to say that all of the items are transparent to respondents, or that respondents would in any way know how the items are combined into the various scales.



Norms

Normative scores, or norms, are important for interpreting scores. Norms provide context to an individual's scores by comparing them to a meaningful group, such as others from one's country or occupation. Based on this, norms make it possible for us to distinguish scores that range from low to high. Norms are developed by dividing the raw scale scores into quartiles (25% of the sample falls within each score range). These quartiles are used to create scale scores ranging from Challenges to Clear Strengths.

Table 5 shows the norms for the global population. As we gather more data, we will create country-specific norms.

Table 5. Behavioral EQ Norms (N = 124)

Scale	Number of Items	Challenge	Growth Area	Strength	Clear Strength
Emotion Awareness	4	4.00 to 13.99	14.00 to 14.99	15.00 to 16.68	16.69 to 20.00
Self-Insight	4	4.00 to 15.05	15.06 to 15.99	16.00 to 16.99	17.00 to 20.00
Self-Confidence	4	4.00 to 16.42	16.43 to 17.49	17.50 to 18.29	18.30 to 20.00
Self-Control	4	4.00 to 15.22	15.23 to 16.66	16.67 to 17.76	17.77 to 20.00
Stress Management	4	4.00 to 14.78	14.79 to 15.99	16.00 to 17.16	17.17 to 20.00
Conscientiousness	4	4.00 to 17.49	17.50 to 18.52	18.53 to 19.28	19.29 to 20.00
Optimism	4	4.00 to 15.49	15.50 to 16.49	16.50 to 17.82	17.83 to 20.00
Emotion Perception	4	4.00 to 13.99	14.00 to 15.49	15.50 to 16.75	16.76 to 20.00
Empathy/ Openness	4	4.00 to 15.49	15.50 to 16.70	16.71 to 17.79	17.80 to 20.00
Listening	4	4.00 to 16.39	16.40 to 17.39	17.40 to 18.37	18.38 to 20.00
Building Relationships	4	4.00 to 16.28	16.29 to 17.39	17.40 to 18.32	18.33 to 20.00
Influencing Others	4	4.00 to 14.25	14.26 to 15.32	15.33 to 16.55	16.56 to 20.00
Motivating Others	4	4.00 to 14.99	15.00 to 16.44	16.45 to 17.75	17.76 to 20.00
Flexibility	4	4.00 to 15.25	15.26 to 16.52	16.53 to 17.79	17.80 to 20.00
Innovativeness	4	4.00 to 14.49	14.50 to 15.77	15.78 to 16.99	17.00 to 20.00

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