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# Measuring Emotional Intelligence

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# Measuring Emotional Intelligence

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## Overview of Measuring Emotional Intelligence

To study emotional intelligence scientifically -- or simply to understand one's own level of EI -- requires measuring it. But can emotional intelligence be measured? And if so, how?

A great number of debates have taken place over the correct way to measure emotional intelligence. This section of the web site examines some of the measurement issues involved in studying emotional intelligence. It features, in particular, a look at the MSCEIT test, one of the new measures of EI.

This area of the site examines how emotional intelligence is measured and a key measure of the concept. To learn more, click on the associated topics (the narrative will appear beneath the menu).

## How Do You Measure Emotional Intelligence?

Emotional intelligence, like other traits such as general intelligence, extraversion, and openness, can be viewed as one of the many parts of personality (for a contemporary overview of personality psychology, see Mayer, 2005; 2016).

Psychologists have developed a variety of methods for assessing individual parts of personality. Generally speaking, a particular method is often developed because of its strengths for measuring a specific class of personality parts; that same method may be less good at measuring other parts of personality. For a journal article discussing the many kinds of data collected by psychological tests, see the article [here](#).

Psychologists tend to employ a particular kind of test when measuring intelligence. The test approach goes by several different names: ability testing, performance testing, or criterion-report testing. Regardless of which name is used, tests of that sort employ items that ask a person to solve a problem, and then evaluate the given response according to its correctness in relation to a criterion. For example, on an intelligence test, a test item might ask what is 70 plus 70. The answer is evaluated according to the correct criterion: an answer of 140.

Such criterion-report testing (ability testing), can be contrasted with self-judgment scales. With self-judgment scales, the individual is asked about his or her own self-perception, without any check as to its correctness. Self-judgment scales are of value for measuring internal experiences such as moods and emotions. In fact, a good argument can be made that people feel whatever they say they feel, assuming they are being honest. In such a case, self-judgments may be the most accurate representation of the feeling that is available. An example of a self-judgment scale of mood can be found on this site [here](#).

Self-judgment scales are of far less value, however, for assessing intelligence, because people tend to be unaware of the intellectual level at which they are functioning. In fact, the statistical relationship

between a person's measured intelligence and their self-judged intelligence is very low, with correlations less than  $r = .30$ . For a further discussion of this, see this article on emotional intelligence, or this one on psychological measurement.

Several sections of the Controversies area of this (the emotional intelligence area) web site include discussions of why ability testing is desirable for testing emotional intelligence, and how self-judgment also can play a supportive role in measuring other variables such as mood and emotion that are related to, but different from, emotional intelligence.

To take the concept of emotional intelligence seriously, therefore, involves constructing a criterion-report scale (ability scale; performance scale) that can measure people's capacity to reason accurately with and about emotions.

## A Person Can Be Highly Successful Without Emotional Intelligence

### Some Common Sense

People can be highly successful without emotional intelligence. Again, here we are talking about emotional intelligence measured as an ability. The idea that low EI is a mark of failure stems from the popularization of the concept; my colleagues and I have never said anything of the sort. (See here for more.)

Emotional intelligence is a discrete and important part of personality -- but it is far from everything in a person's personality. An individual's personality is made up of many abilities and many desirable qualities. Just because a person is high on one doesn't say much about the likelihood of the person's being high or low on others.

### People with Low EI Are Often Successful As Well

There are a large number of people who are highly effective, but who lack emotional intelligence. It makes sense that many people lack emotional intelligence. After all, roughly half the population has to be below average in emotional intelligence. But no one would expect that half of the population to be uniformly unsuccessful -- and that half of the population certainly isn't all unsuccessful -- in fact, nowhere near it.

There are several reasons that people lower in emotional intelligence can still be highly successful:

- Emotional intelligence, though a crucial ability for human beings as a whole, is just one human ability among many. A person can employ many other abilities aside from emotional intelligence.
- Human beings exhibit a marvelous capacity to adapt to their own skills and preferences in the face of a complex environment. That is, a person will compensate for low emotional intelligence by building on other strengths.
- The nature of EI as an ability can be clarified by understanding that many kinds of effective, successful people may score low on ability scales of emotional intelligence. It is also the case that other, less effective people may score high on the test.

## Examples of Highly Effective Low Scorers

It isn't uncommon to hear people ask -- in response to hearing about a successful person's low score -- how someone who is so very successful could have scored in such a way. To explain such an outcome, it helps to begin with the idea that there are many important personality traits that potentially contribute to a person's success. Table 1 shows six such personality traits, including emotional intelligence (as an ability).

Hypothetical profiles are provided for a series of kinds of people who were highly successful but often score low on the test.

Table 1. Hypothetical Profiles for Different Kinds of People on Six Personality Traits Including Emotional Intelligence

Table1. Hypothetical Profiles of Four Different Kinds of People on Six Personality Traits Including Emotional Intelligence							
Trait	Emotional Intelligence	Conscientious	Technically Skilled	Altruistic and Sympathetic	Considerate and Polite	Athletic and Attractive	Overall Perception of Person
<i>Quick Description of Trait</i>	Reasons with and understands emotions	Organized, on time, etc.	Cognitive smart, well-trained	Cares about others well-being	Follows conventional rules of politeness	Appears pleasing	
Six Possible Personalities							
Profile 1	Low	High	High	High	High	High	Very successful business person
Profile 2	Low	Low	High	High	High	High	A "people person"
Profile 3	Low	High	High	Average	Average	Average	Highly effective
Profile 4	Low	High	High	Average	Average	High	A great teacher or coach

## What Would High EI Add?

Many of the types of successful people described in Table 1 have been blessed with a number of positive personality qualities. Many of them are high and conscientiousness, altruism, and politeness. But they are all low in emotional intelligence.

It is worth asking what emotional intelligence would add over and above the already successful profiles in indicated. Intelligences are generally adaptive, and higher emotional intelligence would likely enhance the success of those individuals, but the ingredient, however desirable, is not crucial to the success of any of them, as I see it.

Considering one case in detail—that of the very successful business person. How might emotional intelligence contribute to the person's life?

## A Hypothetical Case of Adding in EI

Originally, a very successful person was observed who has low emotional intelligence. Let's say that the expression "very successful" here refers to the fact that the individual has achieved a high degree of success in the business world. More specifically, imagine the case of a middle-aged man who is a business owner with a high level of income and an apparently happy home life.

If this individual were to have had lowly emotional intelligence, many of the emotional aspects of his life might have been ignored. Although he may look successful on the outside, he may need to contend on a daily basis with the aggravations and frustrations of the fact that his success in life, real though it is, did not extend to dealing with the emotions of those around him, or, for that matter, with his own emotions. This might not matter much to him, and yet it may enter into his life in various ways. For example, because he was not attentive to his own and others' feelings, many of the people around him may be dissatisfied with him, feel that they were treated unfairly, or be angry with him. He, in turn, may not like many of those around him. In other words, he is successful, but his success did not extend into the emotional realm.

If this individual were high in emotional intelligence, he would more likely have attended to the emotional realm both within himself and also as concerned the emotions of those around him. If he were skillful at handling such emotions, he might have surrounded himself with people who he liked much better, and who, in turn, felt better treated by him. To accomplish this may have required some compromises in other areas of his success. Perhaps his business isn't quite as large as it might be in the first case, or perhaps he has had to take on more partners than might ideally have been the case. On the other hand, he and the people around him are happier with one another than they might otherwise be.

Emotional intelligence, in this case, contributes to the emotional well-being of both the individual who possesses it, and those around him.

## What Does This Mean?

Put like this, it may seem that functioning without emotional intelligence would be highly problematic. If we step back, however, it is apparent that if you remove any positive capacity or quality from personality, something will be sacrificed. For that reason, it is probably fair to say that emotional intelligence is very important. And, at the same time, so are many other qualities. Since only a very small and fortunate few might have all the positive qualities desirable in personality, the rest of us must make do with what we have, and work with it as effectively as possible.

## What Kinds of Data Pertain to Emotional Intelligence?

### 1. "Where" and "what" is EI -- And How Should EI Be Measured?

Emotional intelligence is an ability that exists inside of personality. That is, it is a property of the personality system -- internal, mental, and functional.

There are a variety of proposals as to what kinds of data one needs to collect in order to establish someone's emotional intelligence. Some people argue that one should use 360 degree assessments (that is, multiple observers of the target individual). Others use paper-and-pencil tests. Others argue for self-report data. Still others argue for ability testing.

## 2. Problems of Terminology

To address such issues, it helps to have a list of what the possible types of data are, and what terms such as "paper and pencil" and "self-report" actually mean. This is a general issue that extends beyond the field of emotional intelligence itself. Until recently, the system employed for organizing data in personality psychology and psychology more generally (the umbrella disciplines involved) dated back to the 1960's. Since the 1960's, however, many psychologists have developed new sorts of data, and the organizational systems used previously cannot handle those new forms of data.

## 3. An Overview of Contemporary Data in Personality Psychology

Several proposed revisions of data types have recently been advanced. One is in David Funder's personality textbook, *The Personality Puzzle*. This is a convenient-to-use update of the system introduced (by Raymond Cattell) in the 1960's. In one version, it enumerates four types of data:

L—Life data; that is, data about a person's life.

I—Informant data; that is, data about a person from someone who knows the person.

S—Self-Judgment data, that is, data from a person indicating his or her own judgments concerning his or her attributes.

T—Test data; that is, objective tests of a person's qualities from experimental observations or objectively-scored tests.

Funder's system is a system of convenience, and it is excellent for that; that is, it provides a short-hand way to talk about data and to introduce the idea that there are multiple kinds.

For the issue of the best data to use to study EI, however, a slightly more formal system is needed (we are talking about differences of opinions, after all). The added clarity of a formal system can really help facilitate the conversation.

So, a more complete revision is offered in a forthcoming article that reviews historical classification systems and integrates them. This provides a more fully contemporary organization of types of data available (see Mayer, 2004).

In the new system, data is first divided into two categories according to its source. The first category concerns data that has its source in systems outside of the personality system itself. That is, from observers, from institutional records, and from biological brain scans (if such are available). There are four broad classes of such external-source data.

### External Source Data

- **Institutional Data** are data provided by institutional records -- e.g., marriage licenses, school transcripts.
- **Observer and Rating Data** are data concerning a target individual, supplied by someone who knows or observes that individual.
- **Setting Data** are data about the individual's setting: Clothes, props, location.
- **Biological Data** are data about the individual's internal biological processes, including the body and brain.

## Personal Report Data

The second category concerns data that arises from within the personality system itself. Here the data is also first divided into a number of areas. Here are a few kinds of data that are commonly used in personality psychology (for a more complete list, see Mayer, 2016; 2017).

- **Life-Space Data** are reports by the person of his or her surrounding life involvements: What the person does, where the person lives, etc.
- **Self-Judgment Data** are reports by the person involving judgments of him- or herself.
- **Process-Report Data** are reports by the person of her or his internal conscious experiences: Of urges, feelings, thoughts, and social plans.
- **Criterion-Report Data (Ability Data)** are a person's answers to questions—often in regard to problem-solving or general knowledge—that are then checked against criteria of correctness.
- **Thematic-Report Data (Projective Data)** are a person's report of open-ended imaginative responses such as seeing a pattern in a cloud or an inkblot, or telling a story in response to a picture.

## 4. Back to the Measure of EI

So, what kinds of data should one collect to assess EI?

The types of data one would want to collect will vary depending upon whether one wants to measure EI as a mental ability -- or as another part of personality, for that matter -- or as an interpersonal skill, or according to its effects.

- If one wants to measure EI as a mental ability (the approach employed here), then one must measure it with criterion-report data. That is, one poses questions and then evaluates the answers according to the proper criterion of correctness for the given answer.
- If one believes EI is a style of personality, then one could also add in self-report or projective-report measures of EI.
- If one believes EI is not a mental ability, and unrelated to an individual's psychology, but instead is manifest in interpersonal interactions (but then where does EI come from?), then EI should be measured by using "external source" data: Observers watching and evaluating interpersonal interactions.

My colleagues and I are interested in EI and its effects. In this case, it makes sense to measure EI itself—using criterion report (mental ability) data—and then relating it either to interpersonal interactions and other outcomes. In such correlational studies, emotional intelligence is correlated with various outcomes such as personal well-being, performance at school and at work, and in interpersonal outcomes such as relationship satisfaction.

## What Measures of Emotional Intelligence Are There?

A forthcoming review of emotional intelligence (Mayer, Richards & Barsade, 2008) distinguishes two types of generally valid tests for the measure of emotional intelligence:

- Specific ability tests measure a key specific ability related to emotional intelligence such as the capacity to accurately identify emotion in faces.



- General integrative tests measure across a number of specific emotional intelligence skills to provide an overall picture of an individual's emotional intelligence.

The review features a number of tests that appear to tap emotional intelligence ability. The table below contains some representative examples. If there are difficulties with the links, please refer to the 2008 review itself.

### Examples of Specific Ability Tests

- Diagnostic Analysis of Nonverbal Accuracy 2—Adult Facial Expressions (DANVA 2-AF)
- Japanese and Caucasian Brief Affect Recognition Test (JACBART)

### Examples of Integrative Ability Tests

- Assessment of Children's Emotional Skills (ACES)
- Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT)

## Why Measure Emotional Intelligence?

Some people ask whether emotional intelligence should be measured at all. Often, people who take this position equate emotional intelligence with maintaining a sense of sensitivity and respect toward humanity. The idea of assigning a number to a person's quality, and particularly an emotion-related quality such as emotional intelligence seems highly problematic.

For example, Keith Beasley, Director of Pintados Healing,\* discusses the issue of measuring people on his web site. There, he distinguishes between measuring objects and measuring people. He argues:

“When it comes to actual things . . . like buying food or measuring distance then feet or meters have a use. In engineering and technology too there is perhaps a need for fixed units and agreed ways of measuring an array of factors. But humans!? I find the idea that I can be classified like a nut or a bolt and measured like a Volt or Amp offensive. We are all unique human beings. To measure or categorise us is to consider us as any other commodity . . . and pretty much all administrations and marketing folks do that too much already anyway . . . don't they? It's bad enough for our banks, governments and supermarkets to treat us as just another number or category of customer without psychologists getting in on the act!” (Beasley, 2004)

The counter-argument to this begins with the idea that self-knowledge is a core human value. The importance of self-knowledge has been recognized by both Western and Eastern philosophers since antiquity.

One contemporary contribution to self-understanding that arises from psychological research is that it is very difficult for people to understand themselves without some kind of independent feedback.

Psychological tests are among the most impartial, accurate, and efficient means for discovering a person's attributes. Certainly, they can be used in an insensitive way -- used, for example, to treat people as a number. It is also true, however, that, they can be used with respect for the individual, and as an aid to self-understanding and self-discovery.

If you accept learning and scientific progress as another core value, there are still more reasons to use psychological tests. Psychological science cannot proceed without good measures of parts of

personality. Those measures of personality's parts allow scientists to understand what influences personality, and how personality in turn exerts an influence on an individual's life.

\*Keith Beasley also published a 1988 article that used 'EQ' to refer to an emotional quotient -- the earliest such documented use I have seen. (Note that EQ refers to an emotion quotient. EIQ refers to an emotional intelligence quotient; these are different ideas!) – JM

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