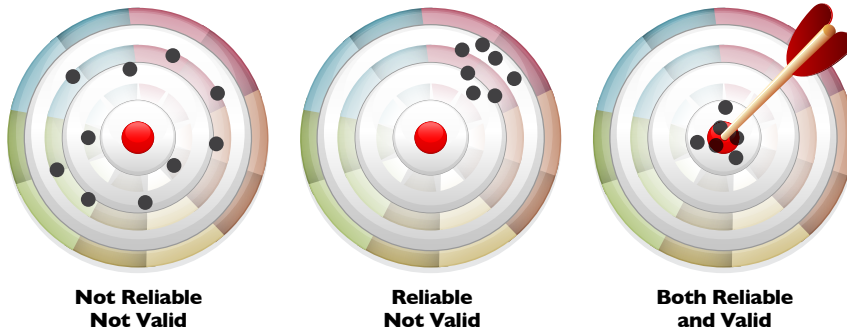


# The Reliability, Validity and Fairness of the EQ-i 2.0®

Reliability, validity, and fairness are important concepts to evaluate when selecting a psychological assessment for your business. What follows is a brief summary of these psychometric principles and evidence of reliability, validity, and fairness for the Emotional Quotient-Inventory 2.0® (EQ-i 2.0).



*Imagine you are attempting to shoot an arrow at a target. Your first set of shots are neither consistent (reliable) nor accurate (valid). Your second set of shots are tightly grouped, meaning you can consistently place them together, but not where you want them (i.e., on the bullseye). Your third set of shots are both consistent and accurate (i.e., reliable and valid).*

*Fairness means that those shots are consistent and accurate, regardless of who shoots the arrow.*

## What is reliability?

The reliability of an assessment is often referred to as its consistency. That is, how consistent it is at measuring what it aims to measure. The two most important types of reliability for assessments are:

- **Internal Consistency:** refers to how well all the items of a certain scale measure the same idea
- **Test-Retest:** refers to how well the assessment can produce the same results over time for the same person

Overall, the EQ-i 2.0 exhibits strong reliability, both in terms of internal consistency and test-retest. These statistics mean that your clients' scores will remain stable over time (unless development efforts are used to improve their scores) and that items measuring a certain subscale all tap into aspects of that subscale (e.g., all Empathy items are measuring the idea of Empathy).

## What is validity?

Validity ensures the accuracy and usefulness of an assessment. Although there are many different types of validity, they all focus on ensuring the assessment is measuring what it was designed to measure and whether it can predict important outcomes. However, it is important to understand that there is no single number to represent the validity of a test, it is assessed through the combination of several different types of validity evidence.

## What is fairness?

Fairness refers to whether an assessment truly measures the same concepts in the same ways for all individuals. Scores should only differ based on the concepts we want to measure; scores should not differ based on things that aren't relevant to this topic, like race or ethnicity. We want to ensure that everyone has an unobstructed opportunity to express themselves on our assessments, and we strive to incorporate Universal Design principles into the assessments we create.

## THE FINE DETAILS...

|  |           |
|--|-----------|
| Internal consistency of Total EI         | .97       |
| Internal consistency of Composite Scales | .88 - .93 |
| Internal consistency of Subscales        | .77 <     |
| Test-Retest (2-4 weeks)                  | .92       |
| Test-Retest (8 weeks)                    | .81       |

\*Values greater than .70 are considered satisfactory; values greater than .80 are considered high, and values greater than .90 are superior..

The EQ-i 2.0 was developed through an extensive process that ensured its content:

- Reflects the model and scope of emotional intelligence (EI)
- Truly measures the concept of EI
- Has a structure that is dependable and applicable to a wide variety of contexts (e.g., development, coaching, leadership, etc.)

### **What validity & fairness evidence is**

The EQ-i 2.0 was originally developed in North America but has been used in all regions of the world. The structure of the test, the consistency and accuracy of the items, and the results produced have been replicated across the globe and continues to enable a wide variety of cultures and languages to use the tool effectively to measure emotional intelligence.

Overall, the EQ-i 2.0 has extensive evidence supporting its validity:

- It has been used to predict job performance (see callout box)
- EQ-i 2.0 skills can be used to predict and improve leadership competencies
- The underlying structure of the EQ-i 2.0 model holds up in different regions across the world
- The EQ-i 2.0 is based on a history of assessment research spanning decades
- The EQ-i 2.0 correlates with similar emotional and social measures (i.e., convergent validity) and has been shown to be unrelated to dissimilar constructs, like intelligence (i.e., discriminant validity)

The EQ-i 2.0 is included in the Nineteenth Mental Measurements Yearbook (MMY), published in 2014 and widely considered an important marker of proper test development. The inclusion of the EQ-i 2.0 in the Buros MMY and its positive review is an important milestone for the assessment and acknowledges the scientific rigor and effort that MHS has put into its development.

Fairness is evaluated in a number of ways and encompasses the entire assessment experience, but regarding the psychometric properties, the EQ-i 2.0 has demonstrated strong evidence of invariance between demographic groups (that is, the assessment does not behave differently for Black, White, or Hispanic individuals, nor for men or women, and average scores for these groups are quite similar to one another). Fairness is also reflected in our diverse and representative normative samples.

### **Why does this matter for you?**

While reliability, validity, and fairness matter greatly from a scientific and statistical perspective, understanding how this translates into practical terms is crucial in order to effectively integrate the EQ-i 2.0 into your business. Knowing that the EQ-i 2.0 can reliably measure EI ensures that you can always count on the consistency of the tool. Further, knowing that the EQ-i 2.0 accurately measures EI for diverse populations of people, your development efforts will have meaningful impact on increasing EI and related outcomes (e.g., job performance, leadership competencies, intrapersonal skills).

*One study conducted by MHS with a large U.S. insurance company found that as much as 34% of Claims Examiner's performance could be explained by differences in EI.*

*For almost 20 years, consultants and organizations have trusted the science that underpins the EQ-i 2.0 (and its predecessor the EQ-i) to help improve human performance. Being the first scientifically validated measure of emotional intelligence (EI), coupled with research from premier organizations, means you can count on the EQ-i 2.0 to add robustness and accuracy to your talent management initiatives.*

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