

Test Review: MINT–Measuring Integrity

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Test Information:

- **Official Title of the Test:** MINT-Measuring Integrity
- **Publication Date:** 2017
- **Mental Measurement Yearbook in which the Review Appeared:** 21

Background and Purpose

The MINT-Measuring Integrity test is designed to evaluate the likelihood of prospective employees demonstrating counterproductive work behavior (CWB). To predict if the prospective employee will display disruptive behavior, the test measures Integrity, Task Orientation, and Interpersonal Orientation. Emphasis is placed on the Integrity category which is separated into three subcategories: conscientiousness, agreeableness, and emotional stability. Of the three subcategories, emotional stability holds more weight than conscientiousness and agreeableness. The test includes 60 items from the main categories and subcategories.

History and Development

Dr. Matt Vassar from the Oklahoma State University Center for Health Sciences explains that the test originally contained 206 items that measured emotional stability, agreeableness, conscientiousness, and extraversion. This version of the test was distributed to 650 people in the Swedish population and 300 questionnaires were returned. Based on these results, the extraversion category was removed. The number of items was reduced to 20 items per category for a total of 60 items. In October 2011, the updated version of the test included 22,207 participants in four languages. Finally, in December 2014, the norm group contained 124,499 participants in 13 languages.

Validity

The validity of the MINT test is measured with criterion-related validity because the goal of the test is to determine if higher levels of integrity will reduce the chance of counterproductive work behavior. This can also be described as predictive validity. Dr. Chockalingam Viswesvaran from Florida International University explains that a sample of 44 employees showed a coefficient of $-.28$ for the prediction of counterproductive work behavior. This is a weak negative correlation. Many of the validity results for the MINT are self-reported. For a sample of 47 applicants for a rail traffic controller position in Sweden, the supervisors reported $.25$ correlation between integrity and job performance, which is a weak positive correlation. The self-ratings show a $.48$ correlation between integrity and job performance which is a moderate positive correlation. Dr. Vassar and Dr. Viswesvaran's reviews do not comment on human subjectivity but it could be inferred that human subjectivity may skew the validity of these self-reports from the supervisors and the employees.

It is worth noting the construct validity of the MINT. The MINT strives to measure an immeasurable psychological concern. Integrity is difficult to measure but the categories of conscientiousness, agreeableness, and emotional stability demonstrate convergent validity. Even though the correlations are mainly weak negative or weak positive, it shows the potential of the MINT. Dr. Viswesvaran (2017) closes their review with the following remarks: "...MINT provides a psychometrically sound, construct driven approach to help organizations achieve this objective. Its availability in multiple languages is another asset. The manual, however, should be updated to incorporate all available empirical data." In summary, even though the validity correlations fall in the weak category, there are ways that the validity of the MINT could be improved.

Reliability

The reliability of the MINT is supported in two ways. Dr. Vassar (2017) explains that the reliability is measured using an equation, but it does not use the coefficient alpha.

“The equation sums the true variance and covariance and divides by total variance. This metric was used instead of coefficient alpha because the MINT was operationalized from a congeneric measurement model. In cases of congeneric models, alpha may be underestimated.”

The equation shows correlations ranging from .84 to .94 for the subcategories and .98 for the composite MINT score. These scores show a strong positive correlation. The reliability of the MINT is also supported with test-retest reliability. The correlations of the test-retest reliability show a range of .75 to .87. These numbers fall within the strong positive correlation range of 0.7 to 1.0.

In summary, both the equation and the test-retest reliability show that the MINT is highly reliable. Even though the equation is not a coefficient alpha or a Kuder-Richardson equation, using an equation helps to reduce human subjectivity.

Usability

The test is easy to administer since it is available through an online form. The test only takes 15 minutes to complete. Since the test results are measured with an equation, this automates the interpretation of results. As of January 2021, it appears that the MINT is no longer offered. Assessio, the publisher of the MINT, now offers four tests called MAP, MATRIGMA, MAP-X, and MATCH-V. The MATRIGMA is described as a “world leading ability test that predicts job performance.” (Assessio, 2021). It could be inferred that the MATRIGMA test is more effective than the MINT and could incorporate features of the MINT. The cost of the test is

not readily available on the publisher's website. The publisher must be contacted to obtain pricing.

Overall Impressions

The MINT-Measuring Integrity test is fascinating because the traits of conscientiousness, agreeableness, and emotional stability are important in a workplace environment. Since people spend 40 hours or more per week at their workplace, it is important to make sure that job candidates will be easy to work with (agreeableness), will be reliable in completing their work (conscientious), and will be able to endure difficult situations (emotional stability). As discussed in the Usability section, it appears that the test is no longer available on Assessio.com. If that is the case, it is understandable because the MINT is narrow in only measuring Integrity. The MATRIGMA seems to be broader since it assesses overall job performance. An assessment is more effective when it uses a variety of strategies. It is also interesting how the MINT assessment draws inspiration from The Big Five Personality Test because both the MINT and Big Five contain the categories of conscientiousness, agreeableness, and extraversion (only in the original version of the MINT). Overall, the MINT demonstrates strong reliability and streamlined usability. Although the numbers show weak validity, both Dr. Vassar and Dr. Viswesvaran conclude that the test meets its goal of evaluating integrity. The test has a strong foundation that can be built upon with more data.