

Research Q&A **Validity**

FOUNDATION

Q: What is the theoretical basis for the Hogan assessments?

A: The Hogan assessments are based on socioanalytic theory, a view of personality that combines evolutionary theory, sociology, and classic psychoanalysis. Socioanalytic theory suggests that humans are social creatures by nature and are driven by three needs: to gain acceptance from others, to achieve status and power, and to make sense out of the environment. As people interact, they create reputations for themselves. Their reputations describe the way they generally interact with others at work and in private. The Hogan tools predict reputation, which reflects the stable patterns of behavior individuals demonstrate while attempting to get along, get ahead, and find meaning.

For more information, please read Robert Hogan and Ryne Sherman's blog post on socioanalytic theory or Robert Hogan's Rethinking Personality paper.

Q: Why are the Hogan assessments not considered "self report" measures?

A: Our answer to this question differs from all other test providers in three ways. First, when people respond to questions on our assessments, we do not believe they are reporting on their behavior, but are presenting themselves in the manner they want us to regard them - exactly as they would do in any conversation. Second, we don't care as much about how people respond to items as much as we care about what their responses predict. Consider the item "I take a different way home from work every night." People who answer "Agree" or "Strongly Agree" tend to be creative and adventurous, and that is the important point. We don't care whether they really take a different way home from work each night; we care about what it means to say that they do. Third, we are not trying to measure anything per se; we are trying to predict performance at work.

Q: How do the Hogan assessments mitigate "faking good" strategies?

A. The topic of faking is important for people who argue that personality can't predict occupational performance. They base their conclusions on poor-quality research (e.g., small student samples instead of large samples of real job applicants) and inconsistent definitions (e.g., people intentionally and effectively fake response patterns). Nevertheless, to deal with these critics, Hogan consultants monitor the response patterns of individuals on several subscales of the HPI to ensure that they do not match a faking good strategy.

For more information, please see Hogan research articles (e.g., Hogan, Barrett, & Hogan, 2007) and papers by Robert Hogan (e.g., How Faking Impacts Personality Assessment Results, Rethinking Personality) that challenge the faking argument and show faking is not an issue for real job applicants taking the Hogan assessments. Also, for more information on impression management subscales, reference this Impression Management Q&A.

NORMS

Q: How many people are in the norms for each assessment?

A: Unlike other assessments that are normed on samples of a few hundred cases, Hogan collects comprehensive normative data to ensure our assessments accurately represent the intended populations. The group sizes for each assessment in the Hogan Global Norm are

- Hogan Personality Inventory: N = 171,071
- Hogan Development Survey: N = 83,580
- Motives, Values, Preferences Inventory: N = 81,376

For more information on the Hogan Global Norm, please see the Hogan Global Norm Technical Manual.

Q: What is the composition/size/basis of the norm groups?

A: For all assessments, Hogan conducts stratified random sampling to ensure assessment norms represent the intended populations. To create representative norms, Hogan uses workforce estimates from relevant sources (e.g., national census organizations, the International Labour Organization) and builds normative samples to match these estimates. In this way, Hogan ensures norms apply across occupational (e.g., job family, industry sector), demographic (e.g., age, gender, race/ethnicity), and other (e.g., assessment purpose) categories.

RELIABILITY

Q: Do scale scores change over time? If so, which ones? How often should one retake the inventories to capture "current functioning?"

A: Research shows that, within individuals, personality is relatively stable. Although an individual's scores may fluctuate slightly over time, significant shifts in HPI and HDS scores are rare and may result from careless responding or increased self-awareness about Hogan scores. Because personality is stable, and because Hogan maintains norms to reflect current functioning, individuals need not retake inventories.

Q: Are there age-related or generational changes in scale scores?

A: Collaborative research between Hogan Assessment Systems and Peter Berry Consultancy examined differences in scale scores between different countries, as well as between different generations. The "Research on Australia's Workforce DNA" white paper details the results of this research. However, to briefly summarize, researchers examined scale score differences between Baby Boomers (born 1946 – 1964), Generation X (born 1965 – 1977), and Generation Y (born 1978 - 1994). Although research revealed small generational differences in scale scores, these differences are not significant in practice. At an individual level, these results indicate that one cannot assume anything about a person's personality or values simply by knowing when they were born.

For more information, please see the Research on Australia's Workforce DNA whitepaper. Additional generational research findings are further defined in the Generational and Cultural Effects on Personality using the HPI and HDS whitepaper as well as in the Generational and Cultural Effects on Values using the MVPI whitepaper.

Q: Can you provide any specific reliability figures?

A: The HPI scales' internal consistencies (McDonald's omega) range between .72 and .85 (average = .80). One-year test-retest reliabilities range between .59 and .75 (average = .68). The HDS scales' internal consistencies range

between .65 and .77 (average = .73). One-year test-retest reliabilities range between .56 and .74 (average = .67). The MVPI scales' internal consistencies range between .72 and .86 (average = .80). One-year test-retest reliabilities range between .64 and .75 (average = .71).

INTERNATIONAL ISSUES

Q: What are (if any) the cultural differences in scale scores? What variables are associated with what cultural environments?

A: With the globalization of business, questions regarding cross-cultural similarities and differences are becoming more frequent. We find some small differences across languages. Scores from multiple translations of a personality assessment can differ for reasons other than cultural sources (see Meyer & Foster, 2008 for a review). Consequently, Hogan avoids making strong assertions about cultural differences when comparing results across multiple translations of the assessments. Some research studying differences ("Research on Australia's Workforce DNA" white paper) between Australia, New Zealand, the United States, and the United Kingdom shows that minor differences exist on certain personality and values scales. However, these differences are small in magnitude. This research concludes that the effects of culture on personality and values are hard to define – we are more alike than we are different.

Q: How can Hogan ensure that scores mean the same thing across cultures?

A: "Equivalence" refers to the comparability of assessments used across different cultural groups. However, methods for establishing equivalence vary widely, and no universally accepted standards exist. Hogan uses two sets of analyses to determine functional equivalence of translated assessments using the U.S. English forms as benchmarks. We use classical test theory to examine functioning at both the item and scale levels and to identify content that may need further review. We also use Procrustes analyses to determine factor equivalence between the translated and U.S. English forms.

Q: How reliable/valid are the Hogan assessments internationally?

A: Hogan works diligently with our global network of distributors and clients to gather local data to support both the reliability and validity of Hogan assessments in predicting important work-related outcomes. For reliability, we provide evidence for the internal consistency and temporal stability of our assessments when sufficient local data are available. To obtain local validation evidence for our assessments, we work with distributors and clients to gather matched assessment and job performance data. These data allow Hogan to demonstrate the predictive validity of our assessments in local contexts.