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Hogan Assessments Whitepaper
Summary Technical Information for Validity & Norm Groups

Hogan Assessments Whitepaper

This whitepaper contains information on the underlying Hogan instruments which drive Reflect Report results—the Hogan Personality Inventory (HPI), Hogan Development Survey (HDS), and the Motives, Values, Preferences Inventory (MVPI). Details include how and what each of the instruments measure. The whitepaper also includes technical information regarding validity studies, reliability information, norm populations, and third party accreditation. Additional information on Hogan instruments can be found through the Buros Institute of Mental Measurements and British Psychological Testing Centre.

Summary Technical Information for Validity & Norm Groups

HPI — Hogan Personality Inventory
- Used in more than 450 validation studies spanning 30 years to predict performance across a range of jobs and industries
- Validated to predict performance in more than 200 occupational categories covering major industries
- Normed on more than 150,000 working adults worldwide

HDS — Hogan Development Survey
- Used in more than 30 criterion-related validation studies to predict performance across a range of jobs and industries
- Validated in more than 50 Fortune 500 organizations
- Normed on more than 109,000 working adults

MVPI — Motives, Values, Preferences Inventory
- Used in more than 45 criterion-related validation studies to predict performance across a range of jobs and industries
- Validated in more than 100 organizations
- Normed on more than 68,000 working adults

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Hogan Assessments: General Information

An Introduction – HPI, HDS, MVPI

Hogan Assessment Systems publishes four assessments, each of which provides insight regarding personal characteristics related to job performance. The HPI, HDS, and MVPI are (a) the result of 56+ cumulative years of development, refinement, and extensive validation research, (b) consistently and significantly related to both subjective and objective indices of job performance as well as measurable organizational outcomes, and (c) the topics peer-reviewed publications. Well over 250 criterion-related validation studies confirm that, regardless of job, job family, or industry, the Hogan tools predict workplace performance without adversely impacting candidates. Because each of the three assessments described below predict unique variance in job performance, when used in combination (versus independently), they yield a highly-accurate and comprehensive picture regarding personal characteristics related to performance. This information can be used to enhance a variety of human resource (HR)-related applications ranging from pre-employment screening to new-hire "on-boarding" to leadership development.

- **Hogan Personality Inventory (HPI):** The HPI is the industry standard for measuring personality as it relates to job performance. The deeply-ingrained personal characteristics measured by the HPI impact how individuals approach work and interaction with others. Based on the Five-Factor Model (FFM) of personality and 30 years of criterion-related validation research and continual refinement, the HPI provides insight regarding the "bright side" of personality – behavioral tendencies that are quickly noticed and capable of enhancing job performance. From a broad selection standpoint, the HPI is the foundation for countless validated selection systems designed to identify candidates whose personal characteristics and competencies correspond with the demands of jobs as diverse as sales manager to teller to bomb disposal technician. From a development standpoint, the HPI can be used to help individuals understand the impression they make on others via their automatic and habitual response tendencies.

- **Hogan Development Survey (HDS):** The HDS provides insight regarding eleven "derailment" tendencies that, when incited by stress, pressure, or boredom, are capable of impeding work relationships, adversely impacting leadership style, hindering productivity, and limiting overall career potential and effectiveness. From a broad selection standpoint, the HDS is often a component of validated processes used to screen candidates into leadership and/or sensitive,

individual contributor positions. From a development standpoint, the HDS is uniquely capable of helping individuals proactively identify "dark side" tendencies (often over-used strengths) capable of negatively impacting their performance -- insight that can be used as a basis for goal setting and seeking accountability.

- **Motives, Values, Preferences Inventory (MVPI):** The MVPI provides insight regarding a person's core values, goals, and interests, information that relates to (a) the environment in which the person will perform best and derive the most motivation and (b) the kind of culture the person will be motivated to create as a leader. From a selection standpoint, organizations often use information yielded by the MVPI to ensure that new hires' values align with those of the organization and the rewards offered by the target job. From a development standpoint, the MVPI highlights an individual's motivators or "drivers" – what he or she desires and, as a result, likely strives to attain. When used in conjunction with the HPI and HDS, individuals can gain insight regarding the degree to which their behavioral tendencies align with their value-laden aspirations – this information can be used as a foundation for behavioral goal setting.

The HPI, HDS, and MVPI each require approximately 15-20 minutes to complete, are available in 40+ non-English languages, and form the basis for a diverse menu of application-specific and general report options, including numerous customized, competency-specific reports. HPI, HDS, and MVPI items are written at the 4th grade reading level, are non-intrusive, and lack face validity – in other words, the assessment items were purposefully written to seem ambiguous and unrelated to work in an effort to minimize respondents' ability to respond to the assessment in a socially desirable manner. Because research consistently demonstrates that the assessment items work
(i.e., when aggregated into scales, the items predict something meaningful – job performance) the degree to which the assessment items seem job-related is inconsequential. Participants are asked to respond to each assessment item via a True/False (HPI & HDS) or Agree/Uncertain/Disagree rating (MVPI). Assessment responses are aggregated into sub- and main scales for interpretation purposes; therefore, item-level assessment responses are irrelevant from a predictive standpoint and inaccessible to assessment end-users.

Sample HPI Items	Sample HDS Items	Sample MVPI Items
I would rather not criticize people, even when they need it.	I am not afraid to make mistakes.	I enjoy reading a good mystery or solving an interesting puzzle.
I always practice what I preach.	I am sure I could get this country moving again.	I try not to let work interfere with my pleasure.

The HPI, HDS, and MVPI will contribute significantly to any HR-related initiative requiring (or enhanced by) accurate, objective, and non-biased information regarding job-related behavioral tendencies and values. The HPI, HDS, and MVPI are multipurpose assessments capable of enhancing a host of employee lifecycle management applications, including but not limited to:

- **Candidate Screening:** When used within the context of a validated selection system, the Hogan tools can help organizations objectively, accurately, and defensibly identify candidates likely to demonstrate strong on-the-job performance within essentially any job or job family.
- **On-Boarding:** Assessment data initially collected during the candidate screening process can be used as a basis for providing new hires and their managers information that will contribute to the new hire's ability to contribute as quickly as possible.
- **Employee & Leadership Development:** When HPI, HDS, and MVPI results are presented in the form of comprehensive, development-focused reports and expanded upon by capable feedback providers, they can help employees gain the self-insight necessary to establish behavioral goals aimed at facilitating personal development.
- **Team Development:** HPI, HDS, and MVPI results presented in aggregate can facilitate a team's ability to understand the implications of salient team-wide behavioral tendencies and values in light of team goals, responsibilities, aspirations, and upcoming challenges
- **High Potential Identification & Succession Management:** HPI, HDS, and MVPI results can be used, in combination with additional data points, to help organizations accurately identify

individuals who possess the characteristics and competencies necessary to move into leadership positions and hit the ground running.

Despite having an ability to enhance numerous HR initiatives, use of the HPI, HDS, and MVPI should be used with the following limitations in mind:

- The HPI, HDS, and MVPI should be used and interpreted solely by individuals qualified to do so, either on the basis of (a) their background and/or education or (b) receipt of Hogan certification training.
- The Hogan tools provide insight regarding stable personal characteristics and were validated based on assessment and job performance collected from employed adults; therefore, the HPI, HDS, and MVPI should not be administered to individuals in their formative years (i.e. individuals under 18 years of age).
- The HPI, HDS, and MVPI were validated specifically to predict job performance; therefore, the predictive validity of the Hogan tools will not necessarily generalize outside of workplace contexts.
- When used for pre-employment screening purposes, three considerations are critical from a legal defensibility standpoint: (a) does a relationship exist between assessment results and job performance?, (b) does the assessment produce adverse impact?, and (c) does the decision-making party treat all applicants the same? Hogan can respond to the first two questions with a resounding "yes" and "no," respectively; however, organizations incapable of ensuring that all candidates eligible to complete the assessments are offered the same opportunity to do so should refrain from using the Hogan tools.

When the Hogan tools are used as a basis for work-related decision making (e.g., pre-employment screening, high-potential identification, succession management), Hogan strongly recommends employing a research-based implementation approach that involves documenting a statistical relationship between the HPI, HDS, and MVPI and performance as defined within the target job or job family. Research-based implementation approaches yield validated, legally-defensible, and objective decision guidelines capable of identifying individuals who possess at least a minimal degree of the personal characteristics and competencies required for successful performance within the target job or job family. The Hogan archive was built (and continues to be augmented) based on criterion-related

validation research. The Hogan archive provides us with an ability to use cutting edge, future-oriented, and expedient validation techniques (e.g., validity generalization) that yield decision guidelines equally as predictive as those resulting from criterion-related approaches.

When used for development-related applications (e.g., on-boarding, career and leadership development, team-based development), participants should always receive some form of debrief, feedback, or coaching. This process will ensure that participants fully understand their assessment results and, are therefore, able to derive maximal benefit from the assessment process. When used for development purposes, the Hogan tools help individuals gain the self-insight necessary to set goals and seek accountability regarding behavioral tendencies to leverage, build, and tone down. In development-focused contexts, the Hogan tools often are used in conjunction with competency based 360 results; in these scenarios, Hogan assessment results help participants better understand the behavioral tendencies and values underlying the competencies and lack of competencies highlighted as a result of the 360 process.

Regardless of the application for which the Hogan tools are being used, Hogan's web-based HALO (Hogan Assessment Link Online) system provides an expedient, secure, and efficient means for administering the HPI, HDS, and MVPI. Upon receipt of a unique Hogan User ID and password, participants can complete the assessment process via the internet. Within 90 seconds of the participant submitting his/her assessment responses, results are processed, scored, and immediately available in the form of one of numerous report templates. Once a participant's HPI, HDS, and MVPI results have been captured by the Hogan online system, any assessment specific report template can be generated upon demand.

For more information regarding the Hogan tools, reports, and related research, please visit Hogan Assessment Systems' website at www.hoganassessments.com.

Overview: The Hogan Personality Inventory (HPI)

Personality assessment is rapidly becoming a best practice for selecting and developing talented employees. The Hogan Personality Inventory (HPI) is the industry standard for measuring normal personality; it has a 30-year history of successfully predicting employee performance and helping companies reduce turnover, absenteeism, shrinkage, and poor customer service. It was the first inventory of normal personality based on the FFM and developed specifically for the business community. The Hogan Personality Inventory identifies the bright side of the personality - what we see when people are at their best.

HPI Basic Facts

- A business-related measure of normal personality designed specifically to predict performance on the job
- Developed exclusively based on research involving working adults
- Normed on more than 150,000 working adults worldwide
- Validated to predict performance in over 200 occupational categories covering all major industries
- No invasive or intrusive items
- No adverse impact
- Fully Internet enabled and available in multiple languages
- Useful reports available for employee selection or development

HPI Technical Facts

- Based on the FFM, development of the HPI began in the late 1970's, with construction and validation conducted in accordance with professional standards and the *Uniform Guidelines* (EEOC, 1978).
- HPI reviews appear in the Buros Institute of Mental Measurements' *The Thirteenth Mental Measurements Yearbook* (Lobello, 1998) and the British Psychological Testing Centre's *Test Reviews* (Creed & Shackleton, 2007; Marshall & Lindley, 2009). Additional objective reviews for the HPI exist with the Oregon Research Institute (Goldberg, 2008).
- Norms are based on over 150,000 working adults and job applicants from a variety of organizations including healthcare, military services, transportation, protective services, retail, manufacturing, and hospitality. This sample is representative of 14 of the 23 U.S. Department of Labor occupational categories.

- The HPI has been used in over 450 validation studies to predict occupational performance across a range of jobs and industries. Jobs studied represent 95% of the industry coverage of the Dictionary of Occupational Titles (U.S. Department of Labor, 1991).

- Meta-analyses of HPI scales indicate that the estimated true scale validities for predicting job performance are as follows: Adjustment (.43), Ambition (.35), Interpersonal Sensitivity (.34), Prudence (.36), Inquisitive (.34), and Learning Approach (.25). These peer-reviewed results appear in the *Journal of Applied Psychology* (J. Hogan & Holland, 2003).

- Recent research indicates that real job applicants who completed the HPI as part of the job application process did not/could not "fake" their scores on a second occasion having been rejected the first time (J. Hogan, Barrett, & R. Hogan, 2007). Further, McGrath, Mitchell, Kim & Hough (2010) found no evidence that participants distort results just for the sake of it.

- To date, research indicates no adverse impact for the HPI on protected racial/ethnic, gender, or age groups.

- The HPI incorporates the FFM with an internal factor structure supporting seven scales. The test-retest reliabilities range from .69 to .87. The *HPI Manual* (R. Hogan & J. Hogan, 2007) documents the background, development, and psychometric properties of the inventory.

Overview: The Hogan Development Survey (HDS)

The Hogan Development Survey (HDS) assesses eleven behavioral tendencies capable of impeding work relationships, hindering productivity, or limiting overall career potential. These career derailers - deeply ingrained in personality traits - affect an individual's leadership style and actions. When under pressure, most people will display certain counterproductive tendencies or risk factors. Under normal circumstances these characteristics may actually be strengths. However, when an individual is tired, pressured, bored, or otherwise distracted, these risk factors may impede effectiveness and erode the quality of relationships with customers and colleagues. The HDS identifies tendencies that are often referred to as the dark side of the personality - what we see when people are stressed. The HDS provides valuable feedback for strategic self-awareness, which is the key to avoiding the negative consequences associated with these tendencies. The HDS is the only business-related inventory that measures these dysfunctional behavioral patterns.

HDS Basic Facts

- Designed to predict barriers to a successful performance
- Concerns characteristics not encompassed by the FFM
- Developed exclusively based on research involving working adults
- Normed on over 109,000 working adults
- Validated in over 50 Fortune 500 organizations
- No invasive or intrusive items
- No adverse impact
- Fully Internet enabled and available in multiple languages
- User-friendly reports available for selection or development

HDS Technical Facts

- HDS norms include data from over 109,000 working adults and job applicants from a variety of organizations. These data include supervisory and non-supervisory personnel and strikes a balance between selection and development cases. Descriptive statistics for HDS scales appear by gender, age, and race/ethnicity in the *HDS Manual* (R. Hogan & J. Hogan, 2009).
- Alpha reliabilities for the scales range from .43 to .68 and short-term test-retest reliabilities, range from .64 to .75 (R. Hogan & J. Hogan, 2009). Nonetheless, despite this stability, a focused development effort can reduce the risk associated with high scores.

- Researchers have used the HDS in over 30 criterion-related validation studies to predict occupational performance across a range of jobs and industries, especially in management and leadership roles (Fleming, 2004; Khoo & Burch, 2008).

- Meta-analytic research involving 5,500+ Executives demonstrates that, across numerous individual research studies involving the HPI and HDS, the HDS predicts a large amount of variance in job performance, above and beyond the variance in job performance predicted by the HPI alone.

- Favorable reviews of the HDS appear in the Buros Institute of Mental Measurements' *The Fourteenth Mental Measurements Yearbook* (Fox & Huebner, 2001), and the British Psychological Society Psychological Testing Centre's *Test Reviews* (Hodgkinson & Robertson, 2007). Additional objective reviews for the HDS exists with the Oregon Research Institute (Goldberg, 2008).

- To date, research indicates no adverse impact for the HDS on protected racial/ethnic, gender, or age groups.

Overview: The Motives, Preferences, Values Inventory (MVPI)

The Motives, Values, Preferences Inventory (MVPI) reveals a person's core values, goals and interests. This is invaluable information for determining the kinds of environments in which the person will perform best, and the kind of culture the person will create as a leader. Organizations can use this information to ensure that a new hire's values are consistent with those of the organization. The MVPI can also help shed light on areas of compatibility and conflict among team members.

These ten core values, goals, and activities are part of a person's identity. Consequently, they are a person's key drivers - they are what a person desires and strive to attain. People's values also influence their choice of jobs and careers. People like others who share their values and prefer to work in jobs that support their values.

MVPI Basic Facts

- Provides a comprehensive, business-based taxonomy of values
- Highlights the fit between a person's values and an organization's culture
- Predicts both occupational success and job satisfaction
- Used for selection or development purposes
- Developed exclusively based on research involving working adults
- Validated in over 100 organizations
- No invasive or intrusive items
- No adverse impact
- Fully Internet enabled
- Available in multiple languages

MVPI Technical Facts

- Data from over 68,000 working adults and job applicants from a variety of organizations make up the MVPI norms. These data include supervisory and non-supervisory personnel. Descriptive statistics for MVPI scales appear by gender, age, and race/ethnicity in the *MVPI Manual* (J. Hogan & R. Hogan, 2010).
- Favorable reviews of the MVPI appear in the Buros Institute of Mental Measurements' *The Fourteenth Mental Measurements Yearbook* (Roberts & Zedeck, 2001) and the British Psychological Society Psychological Testing Centre's *Test Reviews* (Feltham & Loan-Clarke, 2007).

- Researchers have used the MVPI in over 45 criterion-related validation studies to predict occupational performance across a range of jobs and industries (e.g., Shin & Holland, 2004).

- To date in decision-making applications, we have found no adverse impact with the MVPI.

- Alpha reliabilities for the scales range from .70 to .84 and test-retest reliabilities range from .71 to .85. The *MVPI Manual* documents the development and psychometric properties in further detail (J. Hogan & R. Hogan, 2010). In addition, validity evidence - scale correlates with non-test behavior and observer ratings - appear in J. Hogan and R. Hogan (2010).