

- SELECT
- DEVELOP
- LEAD

# HPI + HDS

COMBINING ASSESSMENTS  
TO PREDICT JOB PERFORMANCE



THE SCIENCE OF PERSONALITY

# HPI + HDS

COMBINING ASSESSMENTS  
TO PREDICT JOB PERFORMANCE



Hogan presents 12 case studies exhibiting how derailing personality measures provide value to human capital initiatives when used in conjunction with more common, everyday personality instruments.

The base rate for bad managers within organizations ranges from 65% to 75%.

- Robert Hogan

Companies spend over \$40 billion annually on their leadership development programs. They do this with two primary objectives in mind: (a) identifying good leaders, and (b) reducing the negative impact of bad leaders.

Although there is little consensus regarding the distinguishing characteristics of good leaders, there is substantial consensus regarding the characteristics associated with bad leadership. There are more bad managers employed today than many people realize. Robert Hogan suggests that the base rate for bad managers within organizations ranges from 65% to 75%. One recent survey of managers and executives suggests that as many as 27% of their subordinates, despite being rated high in potential, are at risk for being demoted or fired for performing below the level expected of them.

Leaders may derail because they lack the key personal characteristics needed for success, but more often, it is because of undesirable qualities such as bad judgment, an inability to build teams, a failure to relate well to others, or an inability to learn from their mistakes.

## THE EVERYDAY PERSONALITY - HPI

R. Hogan, Curphy, and J. Hogan first distinguished between everyday and derailing personality measures. They describe the Five-Factor Model (FFM) dimensions as positive personality characteristics that others see when individuals are at their best. Everyday characteristics describe a person's potential to get along and/or get ahead in their organizations and their lives.

Research supports the validity of everyday personality assessment scales for predicting occupational performance — including leadership and managerial competence. The Hogan Research Division have evaluated the Hogan Personality Inventory (HPI) in over 450 validation studies predicting occupational performance across a wide range of jobs and industries.

The HPI is the first business-related measure of normal personality based on the FFM and designed to predict occupational performance and other real-world outcomes. As such, it is an original and well-known measure of the FFM and used as a marker personality instrument worldwide.

## THE DERAILING PERSONALITY - HDS

Derailing measures of personality have a much shorter history in published, professional research on leadership, management competence, and occupational performance. Derailing characteristics represent flawed behavioral strategies that (a) reflect inaccurate beliefs about others, and (b) may negatively influence an individual's career. These negative tendencies emerge when people let their guard down, find themselves in stressful or novel situations, or relax their social vigilance so “they just become themselves.” These characteristics represent extensions of everyday dimensions—they reflect extreme characteristics of normal personality that can be detrimental to performance.

The Hogan Development Survey (HDS) identifies personality-based performance risks and derailers of interpersonal behavior that are hard to detect during an interview. These 11 characteristics coexist with well-developed social skills, which explains why people with these qualities sometimes ascend to leadership roles. Regardless of talent and social skill, however, these derailers—deeply ingrained in personality—affect an individual's leadership style and actions. If these behaviors are recognized, they can be compensated for by development and coaching.

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### HPI Scales and Definitions

<b>Adjustment</b>	Steady under pressure
<b>Ambition</b>	Leaderlike and achievement-oriented
<b>Sociability</b>	Socially proactive
<b>Interpersonal Sensitivity</b>	Perceptive and tactful
<b>Prudence</b>	Conforming, dependable, and conscientious
<b>Inquisitive</b>	Analytical and imaginative
<b>Learning Approach</b>	Concerned with building job-related knowledge

### HDS Scales and Definitions

<b>Excitable</b>	Moody, inconsistent, and unpredictable
<b>Skeptical</b>	Cynical, distrustful, and fault-finding
<b>Cautious</b>	Reluctant to change, fearful of failure
<b>Reserved</b>	Socially withdrawn, distant, and unapproachable
<b>Leisurely</b>	Indifferent to requests, passively aggressive
<b>Bold</b>	Overly self-confident, stubborn, self-promoting
<b>Mischievous</b>	Risk taking, limit testing, and indifferent to consequences
<b>Colorful</b>	Attention-seeking, dramatic, and socially dominating
<b>Imaginative</b>	Eccentric, excessively creative and impractical
<b>Diligent</b>	Perfectionistic, reluctant to delegate, and micromanaging
<b>Dutiful</b>	Overly eager to please, reliant on others

## Early Incremental Work

The Hogan Research Division examined the HDS and the HPI in hierarchical regression analyses to predict performance. They entered the HPI in Step 1 of their models and measured the incremental validity including the HDS in Step 2. Findings revealed that, although a number of HPI scales were related to leader performance, the HDS Excitable and Leisurely scales predicted leadership ratings beyond the HPI. Across the studies, the addition of the HDS dimensions accounted for over twice as much variance as the HPI alone in four job performance domains: Intrapersonal Skills, Interpersonal Skills, Work Skills, and Leadership Skills.

The Hogan Research Division used a profile approach rather than hierarchical regression to evaluate incremental validity. They developed an everyday profile, a derailing profile, and a combined profile using scales from the HPI and HDS. They then conducted a series of meta-analyses and found that the combined profile was the best predictor of job performance.

These studies provide initial support for the incremental validity of derailing measures. The case studies demonstrate how the HPI and HDS work together, and illustrate ways in which the HDS adds incremental value to an organization's selection process.

## Our Approach

In each case study, organizations used both the HPI and HDS as part of their evaluation process. These studies illustrate the different ways clients apply the two assessments to drive business outcomes ranging from increases in employee productivity to growth in sales revenue.

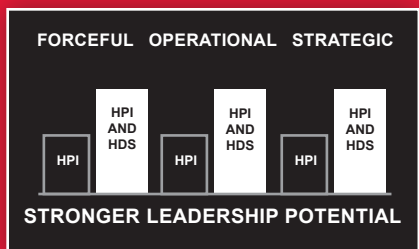
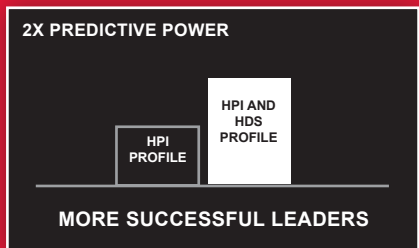
The diverse sample of jobs and industries show the effects of the derailing characteristics throughout an organization. The jobs in these 12 studies range from aircraft pilots to sales representatives and represent a variety of industries (e.g., law enforcement, pharmaceuticals, and finance).

## Study 1: Predicting Leader Success

A large pharmaceutical company wanted to improve their ability to identify high potential candidates by including Hogan assessments in their leadership development program. Over 100 incumbents completed the HPI and HDS. Supervisors rated their advancement potential, leadership, and overall job performance. The HPI Ambition scale was the best predictor of advancement potential. However, the HDS Imaginative scale was the best predictor of overall leadership and project management. In addition, the HPI Adjustment scale was a key predictor of overall job performance, but the HDS Excitable scale accounted for twice the variance in overall job performance when added to the profile.

## Study 2: Stronger Leadership Potential

A management consulting company specializing in executive coaching and team development used the HPI and HDS as part of their 360 degree feedback process. Hogan's tools aided in the identification of positive and negative personality characteristics that drive manager performance. They collected assessment data and peer ratings for 72 managers using the Leadership Versatility Index, which measures performance using a "too little" or "too much" rating scale across three performance metrics: Forceful leadership, Operational leadership, and Strategic leadership. Based on squared multiple regression results, the HPI effectively predicted performance for all three areas, accounting for 23%, 21%, and 15% of the variability in performance in each of the three dimensions. By combining the HDS with the HPI, the percentage of variability in performance accounted for by the two assessments nearly doubled; 44%, 34%, and 36%, respectively.



## Study 3: Increased Annual Sales

An international manufacturer of fragrances used in perfumes and cosmetics wanted to improve the selection of successful sales representatives. Hogan used the HPI and HDS to identify individuals best suited to perform in these challenging sales roles. Our review of sales performance data showed a favorable long-term trend, such that, as profile fit improved, performance increased. Specifically, individuals who did not meet the profile had annual sales revenue of \$875,000, whereas those who did meet the combined HPI and HDS profile delivered much stronger sales (\$4,000,000).

## Study 4: Improved Selection Accuracy

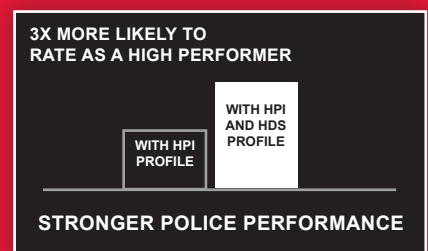
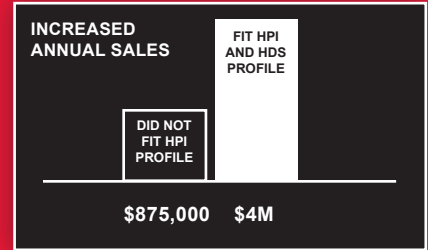
A major cancer research center collaborated with Hogan to improve the selection of security guards. We studied 165 incumbent security guards using the HPI and HDS. Supervisors rated each guard on several critical performance dimensions, including client relations, dependability, and safety awareness. Three HPI scales (i.e., Adjustment, Interpersonal Sensitivity, and Prudence) predicted overall job performance, and five HDS scales also predicted critical work outcomes. Security guards who question others' true intentions (HDS Skeptical), withdraw and are uncommunicative (HDS Reserved), lack follow-through (HDS Colorful), are easily distracted (HDS Imaginative) and are reluctant to take independent action (HDS Dutiful) did not perform at the level required by the research center. The HPI and HDS composite profile correctly classified below-average performers 63% of the time and above-average performers 60% of the time.

## Study 5: Enhanced Hiring Practices

A national building supply company sought to standardize the hiring procedures for their supervisor jobs. Hogan suggested using the HPI and HDS to identify outstanding supervisors in terms of leadership, results orientation, and overall job performance. Supervisors who fit the HPI profile were 1.5 times more likely to be rated as a high performer. When the HPI Adjustment, Ambition, Sociability, and Prudence scales were combined with the HDS Bold and Leisurely scales, supervisors who met this profile were twice as likely to achieve a strong performer evaluation compared to those who did not meet the composite profile. Furthermore, the composite profile predicted overall job performance ( $R = .41, p < .05$ ) better than the HPI profile alone ( $R = .19$ ).

## Study 6: Stronger Police Performance

A municipal police department partnered with Hogan to improve their selection of police officers. Using the HPI, we found that successful officers stay calm under pressure (high Adjustment) and are comfortable with conflict (low - moderate Interpersonal Sensitivity). When these scales were combined with low HDS Skeptical and low HDS Imaginative scores, individuals who met the composite profile were twice as likely to be rated as a strong performer and three times more likely to be requested as a partner for critical police assignments (e.g., apprehend a drunk driver).



## Study 7: Higher Account Sales

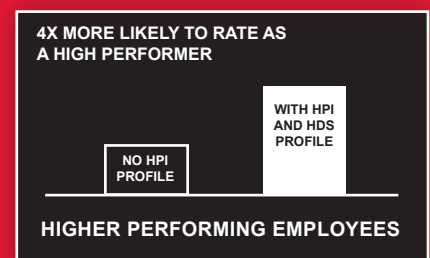
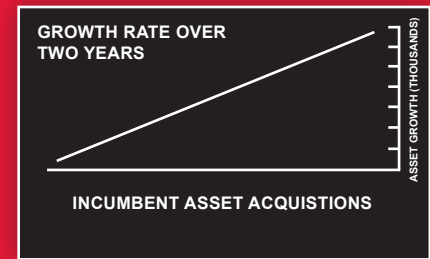
An industry leader in producing and transporting specialized gases committed to a program that enhanced selection of account managers. Hogan matched HPI and HDS data with several indicators of sales performance. Using a composite HPI and HDS profile increased the prediction of overall job performance by 40% when compared to the HPI alone. Including the HDS as part of the selection profile also had a substantial impact on account sales. For example, account managers who fit the combined HPI and HDS profile were more likely to meet their sales goals than those who only fit the HPI profile. The composite profile consisted of HPI Ambition, Sociability, Prudence, Inquisitive, and Learning Approach scales along with the HDS Cautious and Colorful scales. Furthermore, account managers who only met the HPI profile lost, on average, \$10,500 in annual account revenues whereas managers who met the composite profile lost, on average, \$6,000 in revenues.

## Study 8: Substantial Sales Growth

A Fortune 500 financial company selling insurance, annuities, mutual funds, and bank products wanted to improve their process for selecting sales managers. Hogan used the HPI and HDS and collected sales and performance data on 85 incumbent sales managers. Managers who fit the HPI profile were twice as likely to be in the top 20% performance bracket as identified by regional management; those who fit the composite HPI and HDS profile were nearly three times more likely to be in the top performance tier. The composite profile consisted of HPI Adjustment, Ambition, Sociability, and Prudence scales along with the HDS Excitable and Bold scales. In addition, managers who fit the composite profile produced \$25,000 more in annual sales and grew their accounts at a higher rate than those who only fit the HPI profile.

## Study 9: Improved Selection Practices

A Fortune 500 communications services provider wanted to improve their ability to select account representatives. Hogan developed a HPI profile which showed that high performers stay calm under stress (high Adjustment), take initiative (high Ambition), build relationships (high Interpersonal Sensitivity) and attend to details (high Prudence). When three HDS scales (Imaginative, Reserved, and Colorful) were added to the HPI profile, candidates who fit the profile were four times more likely to be rated as a high performer as those who did not meet the composite profile.



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## Study 10: Predicting Interpersonal Skill

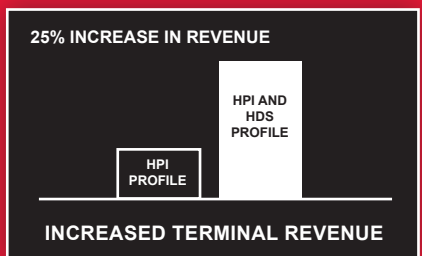
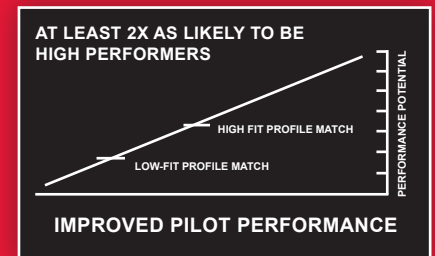
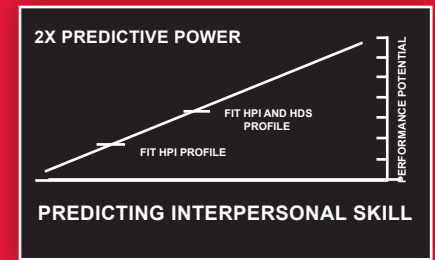
A leading, global beverage company wanted to improve their ability to identify employees with leadership potential and place them in mid-level management positions. The target population included individuals working in the company who had potential for advancement. Potential leaders tended to be outgoing (high HPI Sociability), competitive (high HPI Ambition), and engaging (low HDS Reserved). The best predictor of supervisor ratings of interpersonal skill was the HPI Sociability scale ( $R = .17, p < .05$ ), but the HDS Imaginative, Diligent, and Mischievous scales improved the prediction significantly ( $R = .37, p < .05$ ).

## Study 11: Improved Pilot Performance

A regional U.S. airline wanted to improve their pilot selection process because the demand for service was growing and the company needed to increase the number of flights on their schedule. This was a challenging problem because the company had only 14 incumbent pilots, but this organization wanted a precise process to screen new applicants into the job. Hogan found several HPI scales related to overall job performance. In addition, high performing pilots were emotionally mature (low HDS Excitable), not easily distracted (low HDS Colorful), focused and disciplined (low HDS Imaginative), and self-controlled (low HDS Mischievous). Pilots who fit the composite HPI and HDS profile were twice as likely to be rated as a strong performer than those who did not fit the profile.

## Study 12: Higher Terminal Productivity

A regional freight carrier desired to increase productivity at their shipping terminals by using the HPI and HDS as part of their selection process. Using assessment and objective performance data from 200 incumbent terminal managers, Hogan used the HPI to predict managers with lower operating ratios. By adding the HDS, Hogan found greater reductions in operating costs. Furthermore, a combined HPI and HDS profile increased terminal revenue by 25% and reduced, by one-half, the number of claims resulting from goods damaged at the terminal.



## The Bottom Line

The HDS adds substantial value to the selection process. Derailing tendencies coexist with strong social skills, and are difficult to identify during interviews or with other standard selection methods. The HDS provides an objective method to predict how people will behave when they let down their guard and do not actively manage their public images.

The case studies described in this report provide evidence for using the HDS in combination with the HPI to screen applicants for a variety of jobs. The studies show how the assessments work together to improve the effectiveness of hiring processes. By using the HPI and HDS in combination, companies will yield an enhanced return on investment for the cost of selection procedures.

By combining the HPI and HDS, companies yield an enhanced return on investment.



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