HIGH POTENTIAL TALENT REPORT

TECHNICAL MANUAL

Core competencies for emerging leadership

HOGAN

I. CONCEPTUAL BACKGROUND

1.1 INTRODUCTION

From hunter-gatherer societies to today's high-tech global organizations, the importance of succession planning has always been critical to the success and sustainability of groups and organizations. Hogan's High Potential Talent Report provides information about individual attributes that predict leadership success. This is particularly important when organizations identify individuals as high-potential employees or devote scarce resources to their development. Here we outline the history and theory behind the Hogan High Potential Talent Report and the importance of formal succession planning.

1.2 THE HISTORY OF SUCCESSION PLANNING

Recognizing the lessons offered throughout human history, the pioneers of interpersonal psychology (Carson, 1969; Leary, 1957; Sullivan, 1953; Wiggins, 1979) offered five considerations about human nature: (a) we can best understand personality by considering human evolution, (b) people evolved as group-living and culture-using animals, (c) the most important human motives facilitate group living and enable individual survival, (d) social interaction involves negotiating for acceptance and status, and (e) some people are more effective at these activities than others.

Socioanalytic theory (Hogan, 1983, 1991, 1996) helps to explain individual differences in interpersonal effectiveness and is rooted in the same tradition of interpersonal psychology. This theory rests on two key generalizations: people always live and/or work in groups, and groups are always organized into status hierarchies. As such, these generalizations imply that individuals are fundamentally motivated to get along with others to gain acceptance, and to get ahead or achieve status in the hierarchy. These themes are familiar in personality psychology (Adler, 1939; Bakan, 1966; Rank, 1945; Wiggins & Trapnell, 1996).

Human groups have always used formal and informal mechanisms to identify high-potential individuals and groom them for success. In hunter-gatherer civilizations, elders would identify promising young hunters and develop them into future tribal leaders. When they succeeded, the tribe would continue to flourish. However, when they failed, the tribe would either fracture from the inside or be conquered from the outside.

History highlights the importance of succession planning. In 323 BC, Alexander the Great died in Babylon with several wives but no living heir, leaving behind not only an enormous empire, but also a succession crisis. Because the Macedonian monarchy lacked rules of succession, his death ushered in a period of sustained infighting among key advisers, military leaders, and other political factions. Within ten years, Alexander's empire fragmented from within (Grainger, 2009).

Likewise, for his emancipating greatness and successful efforts to keep the united in United States, Abraham Lincoln committed a leadership error with serious reverberations by selecting Andrew Johnson as his vice president. Certainly Lincoln could not have foreseen his own assassination that would bring Johnson to the presidency, but nonetheless most historians agree that his vice presidential selection was disastrous. President Johnson was ill-suited for the demands of the presidency and his signature accomplishment was narrowly (i.e., by one vote) averting impeachment. The fact that Lincoln, widely regarded as America's greatest president,

made this error shows that even the best leaders can make serious mistakes when identifying and developing future leaders (Strock, 2015).

1.3 SUCCESSION PLANNING IN BUSINESS

Although average CEO tenure is just six years (Boyle, 2009), news reports consistently highlight the struggles of some of the world's largest and most well-known companies to appoint successful new CEOs (George, 2007). Fortunately, other companies take leadership development and CEO succession much more seriously and are more successful in their efforts. For example, The December 21, 2010 Wall Street Journal reported that "…3M rose 97 cents, or 1.1% to 87.34 following reports that the company is working with Chief Executive George Buckley on a succession plan" (Hagerty & Tita, 2010). As these examples illustrate, the marketplace rewards those companies who develop high-potential employees as future leaders and punish those that do not.

Nearly all global companies (i.e., 98%) regard succession planning as a vital piece of overall corporate governance, but far fewer (i.e., 35%) are prepared with a formal succession plan in place (Korn/Ferry Survey, 2010). So why does this disconnect exist? At least in part, it is because many CEOs regard succession planning the same way they do personal estate planning. They love their job, tie it to their identity, and consequently, view building a cohort of future leaders as a route to their own exit. Some may even go so far as to view talented subordinates as threats, working to purge rather than develop them (Ogden & Wood, 2008). In other cases, corporate boards may overlook the development of future organizational leaders when the current CEO accomplishes financial goals and pleases Wall Street (Nocera, 2010). Other dynamics may also inhibit the talent development process, such as poor relationships between CEOs and board members, the lack of a well-defined process, poorly defined ownership over succession planning responsibilities, a scarcity of talent, or an inability to objectively assess potential internal candidates (Cascio, 2011).

Despite these challenges, succession planning is now more important than ever. The 21st century workplace is smaller, faster, and more demanding thanks to factors such as globalization, the ever-increasing pace of technological innovation, and the war for talent. Recognizing these issues, organizations started prioritizing talent identification and development with greater importance to facilitate sustained organizational success (Burke, 1997). One might expect organizations to rely on rigorous assessment-based research to identify and develop high-potential employees as future leaders, but this has not always been the case. The problem is politics.

1.4 THE POLITICS OF POTENTIAL

The succession planning process starts with identifying high-potential employees as candidates for future leadership roles in the organization. The organization then devotes significant time, material, personnel, and financial resources to developing these employees. Unfortunately, these efforts may be doomed from the start if politics guide these decisions. There are several reasons leaders may nominate an individual to participate in a succession plan, but far too often supervisors consider only those employees who are socially skilled, confident, and interested in influencing others and moving up the corporate ladder.

Many organizations have programs in place to identify high-potential employees and accelerate their development for succession planning and other strategic purposes. In some cases, supervisor nominations guide the identification process. Unfortunately, in such instances, this process may closely resemble a pageant or high school popularity contest, with employees nominated because they went to the same alma mater, attend the same church, have a similar demographic background, or interact with the boss outside of work.

However, just because a leader finds an individual rewarding to deal with doesn't necessarily mean they are a future leader. In a meta-analysis on personality and leadership perceptions, Lord, de Vader, and Alliger (1986) noted a problem with using subjective supervisor nominations with identifying high-potential employees. They found that when nominations were based on perceptions of leader emergence, dominant males tended to get the nod, inadvertently stifling racial/ethnic diversity and gender equality. Also, politically charged processes tend to flounder because they identify politicians and overlook otherwise qualified employees who may simply be less successful at getting themselves noticed by senior management. In short, these processes often fail because they devote too much attention to emergence and not enough attention to other critical factors related to foundational issues and leadership effectiveness.

1.4.1 Setting the Foundation First

Before building any permanent structure, architects, engineers, and other professionals work to establish a firm and reliable foundation. Without it, the building will eventually become unstable and collapse. The same is true for future leaders in organizations. For example, working to help high-potential employees develop resource management capabilities without first developing their strategic planning capabilities may result in young leaders who can effectively marshal and deploy organizational resources over the short-term but cannot forecast for the organization's long-term resource needs.

The derailment literature illustrates this point. Although certain personality characteristics may facilitate success in leadership roles, others, such as arrogance, volatility, and distrust, can lead to failure (Dotlich & Cairo, 2003; Judge, Piccolo, & Kosalka, 2009; Resick, Whitman, Weingarden, & Hiller, 2009). Characterized as derailers, these attributes represent normally advantageous strategies leaders may over-use in stressful or ambiguous circumstances (Baumeister, Muraven, & Tice, 2000; McCall & Lombardo, 1983).

As the research literature on personality derailers demonstrates, if a person is unrewarding to deal with, cannot think strategically, or is interested in serving his or her own agenda instead of the organization's, it doesn't matter how intelligent or capable he or she is as a potential future leader. As such, we strongly advocate for developing key foundational capabilities in high-potential employees and using these capabilities as a basis for developing higher-order leadership skills.

1.4.2 Emergence ≠ Effectiveness

People often compare the process of rising through the ranks of an organization to climbing a ladder. We find that analogy appropriate because the skills needed to climb a ladder (e.g., strength) aren't necessarily the same as the skills needed to stay at the top (e.g., balance). The same holds true in climbing the corporate ladder – the skills required to emerge as a leader aren't necessarily the same skills required to perform effectively as one. Even if a high-potential employee has the foundation to get there, he or she may fail by continuing to rely on previous strategies once in a leadership role.

For example, Luthans and colleagues (e.g., Luthans, 1988; Luthans, Hodgetts, & Rosenkrantz, 1988; Luthans, Rosenkrantz, & Hennessey, 1985) compared the work activities of successful managers (i.e., those promoted quickly) versus effective managers (i.e., those with committed subordinates and high performing teams) by studying 437 managers for a year, gathering observations, ratings, and assessment data. They found that the former group spent their time managing up by networking and politicking, whereas the latter group spent their time managing down by guiding subordinates and driving team performance. However, their key observation was that only 10% of these groups overlapped. In other words, only 10% of high-potential employees who excel at networking and leveraging organizational politics are also effective at building and maintaining high-

performing teams. In other words, organizations that rely on emergent leadership to identify high-potential employees may overlook their most effective leaders.

More recently, Collins (2001) compared companies that enjoyed sustained above-average financial performance to those with consistently below-average performance. He identified seven characteristics of companies that made the transition from good to great, with leadership topping the list. As one might expect, Collins described persistence as one characteristic of great leaders. Not as expected, however, was humility. Great leaders not only work tirelessly, but spotlight their employees rather than themselves, persistently doing what benefits the greater good even at their own expense. As related to high-potential employees, one can see how politically charged processes would be unlikely to identify humble leaders who put their people first. As a result, some high-potential processes may actually prevent companies from making the move from good to great.

As the foregoing discussion makes clear, the process of accurately identifying and developing high-potential employees as future leaders has never been more important. However, organizations may fail in these efforts if their processes are based too heavily in politically charged nominations that overlook foundational issues and often identify emergent rather than effective leaders. The good news is that companies can use science to replace politics and increase the effectiveness of their high-potential programs.

1.5 THE SCIENCE OF POTENTIAL

Although the high-potential research literature is still growing and generalizability is limited, some studies suggest political processes are declining and assessment-based procedures are on the rise. In one of the few objective studies of high-potential programs conducted with a large independent sample of organizations, Church and Rotolo (2013) found that 70% of top development companies use assessments to identify and develop key organizational talent, commonly including personality, values/interests, multisource feedback inventories, and engagement surveys.

In a follow-up benchmark study, Church, Rotolo, Ginther, and Levine (2015) investigated the general characteristics, assessment practices, and outcomes of high-potential programs. They noted that, although past and current performance are still too commonly used, assessments are increasingly used to identify high-potential employees, target their development needs, and facilitate succession planning. Most organizations reported that using assessments moderately improved performance within 12 to 18 months. In other words, top development companies use assessments, and the perceived impact of these practices is high. Because assessment of personality and other individual differences (e.g., values & interests) is a key factor in these programs, we discuss the value of these assessments in this context next.

1.5.1 Bright-Side Personality

Decades of research shows that the Five-Factor Model (FFM; Digman, 1990; Goldberg, 1992; John, 1990; McCrae & Costa, 1987) of personality predicts a range of workplace outcomes, including overall performance ratings, objective performance, and task performance across jobs (Barrick, Mount, & Judge, 2001; Dudley, Orvis, Lebiecki, & Cortina, 2006; Hogan & Holland, 2003; Hurtz & Donovan, 2000). Personality variables also predict teamwork and team performance (Barrick, Mount, & Judge, 2001; Hogan & Holland, 2003; Peeters, Van Tuijl, Rutte, & Reymen, 2006), with Agreeableness being the strongest predictor of group performance (Bell, 2007; Mount, Barrick, & Stewart, 1998). Bradley, Baur, Banford, and Postlethwaite (2013) extended this research, finding that highly agreeable teams outperform other teams through increased communication, which facilitates greater cohesion over time.

In high-potential populations, FFM scales predict leader emergence and effectiveness, transformational leadership behavior, overall managerial effectiveness, promotion, and managerial level (Bono & Judge, 2004; Hough, Ones, & Viswesvaran, 1998; Judge, Bono, Ilies, & Gerhardt, 2002).

1.5.2 Personality Derailers

V. Jon Bentz (1967, 1985a, 1985b, 1990) conducted some of the first investigations into personality derailers among managers. In a 30-year study of failed managers at Sears, he observed that otherwise intelligent and skilled managers failed due to "overriding personality defects" including difficulties building teams, delegating to subordinates, dealing with complexity, and maintaining relationships. Other problems concerned failures to learn from experience, being overly reactive, and making emotional decisions. McCall and Lombardo (1983) replicated these findings in interviews contrasting successful versus failed executives across three U.S.-based industrial organizations.

Hogan and colleagues (Arneson, Milliken-Davies, & Hogan, 1993; R. Hogan & Hogan, 2001; R. Hogan, Raskin, & Fazzini, 1990) added empirical rigor to these efforts, finding that scores on personality derailers predicted performance in professional and leadership jobs above and beyond Five-Factor Model scales, but in a negative direction. Others followed their lead, linking personality derailers to negative job performance outcomes. Moscoso and Salgado (2004) investigated relationships between personality derailers and task and contextual performance, finding seven dysfunctional personality styles (i.e. suspicious, shy, sad, pessimistic, sufferer, eccentric, risky) that negatively predicted job performance. Others found a relationship between narcissism and counterproductive work behaviors (Judge, LePine, & Rich, 2006; Lee, Ashton, & Shin, 2005; Penney & Spector, 2002).

Because of the stakes involved in identifying and developing high-potential employees as future organizational leaders, any intervention designed for this population should include assessment of personality derailers. By including these dimensions, professionals can help these talented employees mitigate the significant negative outcomes that follow from personality derailers left unchecked.

1.5.3 Motives, Values, & Preferences

Beyond assessing the bright side and dark side of personality, organizations often include values and interest measures to assess core drivers and motivators with their high-potential employees. Over 80 years of research indicates that interests predict occupational membership (Strong, 1935, 1943), finding high hit rates (i.e., 78%) for using previously collected interest scale scores to predict occupational membership several years later. Other researchers have replicated these findings across a variety of samples and methods (e.g., Bartling & Hood, 1981; Brandt & Hood, 1968; Cairo, 1982; Campbell, 1966; Dolliver, Irvin, & Bigley, 1972; Dolliver & Will, 1977; Gade & Soliah, 1975; Hansen, 1986; Hansen & Swanson, 1983; Lau & Abrahams, 1971; Worthington & Dolliver, 1977; Zytowski, 1976).

Values and interests also predict productivity, job satisfaction, and satisfactoriness, or the degree to which others at work view a person as satisfactory. For example, Barge and Hough (1988) used archival production records to determine the relationships between interests and productivity, finding a median correlation of .33. The authors also cite 18 studies showing a median correlation of .31 between personal interests and job satisfaction and .20 between interests and satisfactoriness.

Finally, high-potential employees may also influence an organization's climate once promoted to leadership positions. Holland (1985) noted that any work environment reflects the characteristics of its members. So if

we know the values and interests of its members, we can predict what type of climate the group will create. Likewise, Schneider (1987) argued that organizations attract, select, and retain particular types of people and that organizational climate is a function of these characteristics. As such, values and interests measures can help determine alignment between individual values and organizational climate, inform how best to address differences when they occur, and forecast the type of culture that high-potential employees are likely to create as future leaders.

1.6 CURRENT STATE OF HIGH-POTENTIAL RESEARCH

To reduce or eliminate the influence of organizational politics when identifying high-potential employees, we recommend that organizations assess employees' normal bright-side personality characteristics, potential derailers, and core values and interests. This comprehensive approach helps build on key strengths and identify development opportunities or gaps in the talent pipeline. Although work by Church and colleagues (Church & Rotolo, 2013; Church, Rotolo, Ginther, & Levine, 2015) demonstrates that companies are increasingly using assessments for these purposes, much room for improvement remains.

For example, these authors note that organizations still too heavily rely on past and current performance to determine potential levels for their employees. As Martin and Schmidt (2010) noted, the old saying "past performance is the best predictor of future performance" may be true for lateral shifts with similar requirements, but not necessarily for upward mobility across positions with very different requirements. Although performance and potential often trend together, in some instances employees may underperform because they are not sufficiently challenged by their current work. In other instances, an employee's excellent work in his or her current role may represent his or her maximum potential, and the employee may fail at higher levels of responsibility. Recognizing this conundrum, researchers now refer to this as the performance-potential paradox (Church & Waclawski, 2009).

Silzer and Church (2009) offered both positive and negative findings about high-potential research. Although organizations are increasingly replacing politically charged supervisor nominations with scientifically valid assessments, they found that concepts of potential still vary widely, defined in various terms based on level, role, mobility, and functional area among others. Components of potential also varied widely, including such constructs as leadership competencies, motivation, learning ability, executive presence, communication skills, and functional/technical skills.

Disagreement also exists on other issues, such as whether to share designations of potential with employees, likely engaging those tapped as high-potential but at the expense of disengaging other employees not designated as such. Some also question the ability to accurately assess a construct that may exist only as possibility, a unique feature of potential relative to other psychological individual differences. Finally, professionals continue to debate about what elements of potential are universal across cultures, industry sectors, organizations, and jobs, versus the elements that may be specific to these.

Although science is increasingly replacing organizational politics as a mechanism for identifying and developing high-potential employees and energy around leveraging this key talent is intensifying across the globe, inconsistencies remain in definitions, frameworks, and approaches. Organizations are battling to acquire and retain these employees and are facing increasing pressure to demonstrate the ROI for their high-potential programs.

A variety of high-potential solutions exist, but determining the best tool for the job requires a great deal of knowledge and skill. What is needed is a rigorous, assessment-based solution to identify employees based on foundational leadership skills, emergent behaviors, and key metrics of leadership effectiveness. Importantly, such a solution should also be flexible to industry-, organization-, or job-specific elements. Organizations can then leverage this information to ensure that future leaders are rewarding to deal with, viewed by others as a natural leader, and able to build and lead teams that can consistently outperform the competition.

2. THE HOGAN HIGH POTENTIAL MODEL

2.1 POTENTIAL FOR WHAT?

Before any organization can identify and develop their high-potential employees for future leadership roles, it must define potential. Is it the potential to perform at one level above an employee's current role? Two levels? Is it the potential to lead a different functional area, to lead the entire organization, or something else? In attempting to answer this question in a manner that satisfies everyone across all departments and job levels, many organizations find themselves with overly complex concepts of potential that satisfy no one.

At Hogan, we simplify things. We define high potential as the ability to build and lead teams that can consistently outperform the competition. This involves a sequence of personal attributes that form the building blocks for career effectiveness. Before people can lead others, they must first demonstrate their ability to contribute to a team and establish a reputation for being dependable and productive. Next, they must cultivate a leader-like impression by standing out, building connections with others, and exercising influence. Finally, once they have emerged as a potential leader, they must be able to attract, retain, and develop talented team members, secure and allocate resources effectively, and drive the team toward achieving strategic business goals. In terms of the Pareto principle, these are the 20% of employees who do 80% of the work.

Recent research (Church & Rotolo, 2013; Church, Rotolo, Ginther, & Levine, 2015; Silzer & Church, 2009) demonstrates the value of using scientific assessment instead of politically charged supervisor nominations to identify employees with leadership potential. This highlights the benefits of assessing individual differences such as normal and derailing personality dimensions, and core motives, values, and interests as part of identifying and developing talent. Because politically based supervisory nominations tend to benefit dominant males and stifle gender equality and racial/ethnic diversity (Lord, de Vader, & Alliger, 1986), replacing politics with assessments also helps level the playing field for all groups and facilitate social justice in high-potential programs.

As a world-leader in personality and values assessment, we leverage decades of research on personality, values, and performance to help clients identify and develop emerging leaders and uncover effective leaders that may otherwise remain hidden in the organization. These efforts start with our Hogan High Potential Model.

2.2 WHAT TO MEASURE

The development of the Hogan High Potential Model began with the question, "What should we measure?" Initial efforts to answer this question started in February 2015 when eight Subject Matter Experts (SMEs) with advanced degrees in Industrial-Organizational Psychology and related fields met for a three-day summit on the topic. These expert judges, who brought a combined 175 years of applied experience, discussed high-potential solutions available to practitioners, gaps in those models, and a tentative Hogan model. They compared current high-potential models to research on high-potential employees and personality, values, and leadership. From this, they identified strengths, weaknesses, and key areas missing from existing high-potential models.

First, most models were missing key capabilities that could be found in the research literature, such as being rewarding to deal with, thinking strategically, and being conscientious and dependable. These elements

represent foundational attributes that help an employee get noticed as a person worth investing in. They represent Leadership Foundations, the first broad component of our model.

Next, many existing models focus on characteristics relating to building professional networks, influencing others, standing out from peers, and leveraging organizational politics. These represent Leadership Emergence, the second broad component of our model.

Finally, many models fail to address actual job performance as a leaders, despite the fact that being successful versus effective as a manager involves different activities (Luthans, 1988; Luthans, Hodgetts, & Rosenkrantz, 1988; Luthans, Rosenkrantz, & Hennessey, 1985). This includes the ability to build and maintain high-performing and committed teams to accomplish key business goals. This represents Leader Effectiveness, the third broad component of our model.

2.3 DEFINING COMPETENCIES

Next, the project team worked to identify competencies under Leadership Foundations, Leadership Emergence, and Leadership Effectiveness. They began by reviewing competencies in the Hogan Competency Model (Hogan Assessment Systems, 2009a) and aligning them with these three broad components. Four experts with advanced degrees in Industrial-Organizational Psychology and a combined 33 years of applied experience independently mapped competencies to each component. Then the entire team met to discuss mappings and reach consensus. Table 2.1 presents the initial competency mappings from the Hogan Competency Model to the Hogan High Potential Model.

Table 2.1 Initial Competency Mappings from Hogan Competency Model

Leadership Foundations	Leadership Emergence	Leadership Effectiveness
Accountability	Competing with Others	Attracting Talent
Caring About People	Displaying Confidence	Decision Making
Dependability	Driving for Results	Delegating
Detail Focus	Influencing Others	Developing People
Flexibility	Negotiating	Driving Change
Handling Stress	Networking	Driving Performance
Leveraging People Skills	Political Savvy	Driving Strategy
Organizational Citizenship	Presenting to Others	Leading Others
Overcoming Obstacles	Relationship Building	Managing Conflict
Positive Attitude	Taking Initiative	Managing Resources
Professionalism	Taking Smart Risks	Planning & Organizing
Rule Compliance		Setting Goals
Self Development		Team Building
Self-Management		
Teamwork		
Working Hard		

Next, the team worked to identify which of these competencies were most critical for successful performance in professional, managerial, and executive jobs. They used information from Hogan's Job Evaluation Tool (JET), which represents one of the most extensively researched, reliable, and valid worker-oriented job analysis tools available (Foster, Gaddis, & Hogan, 2012). The JET data archive includes job analysis data from over 18,000 respondents representing thousands of jobs (Hogan Assessment Systems, 2009b). The JET includes a Competency Evaluation Tool (CET), which contains items representing the 62 competencies in the Hogan Competency Model. The CET asks SMEs to indicate the degree to which each competency relates to successful performance in the job under study. SMEs are typically high-performing incumbents or supervisors who provide a representative sample of occupational and demographic strata. SME ratings provide a basis for comparing competencies across jobs (J. Hogan, Davies, & R. Hogan, 2007). When completing the CET, raters evaluate each competency using a five-point scale ranging from 0 (Not associated with job performance) to 4 (Critical to job performance). Competencies deemed job-critical must receive an average score of at least 3 (Important to performance) across SMEs.

The team aggregated JET data for professional, managerial, and executive jobs to obtain rank-ordered competency ratings from jobs likely to produce high-potential candidates. Because studies used varying numbers of SMEs, we calculated mean ratings for each of the 62 competencies within each study and then aggregated these study-level results. As such, each study contributed only one data point for each competency, ensuring that no single study biased the results. This produced average criticality ratings for all 62 competencies, which we used to identify the most critical competencies for the Leadership Foundations, Leadership Emergence, and Leadership Effectiveness dimensions of our model. Figure 2.1 presents the Hogan High Potential Model, and we explain the broad dimensions and specific competencies in our model in the following sections.

Figure 2.1 – Hogan High Potential Model

2.4 LEADERSHIP FOUNDATIONS

Leadership Foundations concern the degree to which people are able to manage their careers, are rewarding to deal with, and are good organizational citizens. These personal attributes form the building blocks for career effectiveness. Before a person can lead others, he or she must first demonstrate an ability to contribute to a team and establish a reputation as being dependable and productive. These attributes capture the behaviors that get an employee noticed as a promising employee and potential future leader in whom the organization should devote developmental resources.

Low scores on Leadership Foundations do not suggest that an individual cannot lead. Instead, they indicate that a person may have a reputation for being abrasive, rebellious, or overly tactical. In leadership roles, these individuals are likely to have subordinates who do not enjoy working for them because they are difficult to get along with, unpredictable, or they micro-manage others. This suggests they may have difficulty establishing and maintaining relationships with subordinates.

Conversely, high scores suggest a person's underlying attributes may facilitate his or her transition into leadership roles. They likely have a reputation for being easy to talk to, strategic in their thinking and planning, and committed to the organization and its members. In leadership roles, these individuals will find it easier to build teams of highly committed subordinates. But, their subordinates may be more loyal to their supervisor than the organization itself, so these leaders should be careful to maintain proper distance from followers to separate work relationships from friendships.

The three competencies that comprise Leadership Foundations are Getting Along, Thinking Broadly, and Following Process.
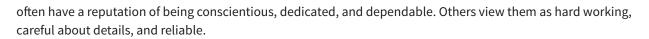
2.4.1 Getting Along

Getting Along concerns being cooperative, pleasant, and rewarding to deal with in interpersonal interactions. People who score low on this competency often have a reputation of being blunt and direct, willing to challenge others, and perhaps even confrontational. Others view these individuals as being candid and willing to speak up and disagree openly with those above them. People with higher scores have a reputation of being friendly, tactful, diplomatic, and savvy in their dealings with others. Others view them as warm and charming.

2.4.2 Thinking Broadly

Thinking Broadly concerns solving a wide range of business-related problems by adopting a strategic perspective and thinking outside the box. People with lower scores often have a reputation of being grounded and pragmatic, but also tactical and less visionary in their thinking and problem-solving. Others view these individuals as action-oriented, with a preference for learning from experience and accomplishing detailed tasks. People with higher scores have a reputation of being inventive, open-minded, strategic, and visionary. Others view them as curious, imaginative, well-informed, and likely to stay up-to-date with new developments in business and technology.

2.4.3 Following Process

Following Process concerns following organizational rules and respecting conventions. People with lower scores often have a reputation as being flexible, fast-moving, limit-testing, and perhaps even impulsive or reckless. Others view them as adaptable and comfortable with ambiguity, but unpredictable. People with higher scores

often have a reputation of being conscientious, dedicated, and dependable. Others view them as hard working, careful about details, and reliable.

Although the Leadership Foundations competencies provide the groundwork on which to build higher-order leadership capabilities, these attributes alone are insufficient to emerge or perform effectively as a leader. Many employees are rewarding to deal with and good organizational citizens, but never ascend to leadership because they either lack the interest or the ability to stand out from their peers. To ascend to leadership, one must first look like a leader at work. This is the essence of Leadership Emergence, our next dimension.

2.5 LEADERSHIP EMERGENCE

Leadership Emergence concerns the degree to which people stand out from their peers, build strategic business relationships and networks, exercise influence, and are viewed by others as a leader. Others are likely to view these employees as candidates for future leadership positions because these attributes capture the behaviors that appear leader-like.

As with Leadership Foundations, low scores on Leadership Emergence competencies do not suggest that an individual cannot lead. Instead, lower scores indicate that a person may have a reputation for keeping their head down, remaining solitary, or lacking a voice in organizational decisions. In leadership roles, these individuals may do best with highly skilled subordinates who can accomplish key results independently. If given the opportunity, these individuals may serve as effective leaders, and in some cases they represent the hidden gems of the organization. However, they require coaching on how to appear like a leader to others.

Conversely, high scores on the Leadership Emergence competencies suggest that others view a person as a potential and natural leader. They may have a reputation for being self-promoting, well-connected, and influential. In leadership roles, these individuals are likely to stand out from the crowd and draw others to them. However, they should be careful to actually accomplish key objectives to avoid becoming known as a loud but empty suit.

The three competencies that comprise Leadership Emergence are Standing Out, Building Connections, and Influencing Others.

2.5.1 Standing Out

Standing Out concerns making others aware of one's contributions. People with lower scores on this competency often have a reputation for being more interested in producing results than in being recognized for doing so. In some cases, these individuals may be reluctant or uncomfortable calling attention to or promoting themselves at work. People with higher scores often have the reputation of being charismatic and comfortable, taking credit for their own – and sometimes others' – work. These individuals are often charming, outgoing, and confident, and will publicize their accomplishments.

2.5.2 Building Connections

Building Connections concerns creating strategic networks and business relationships. People with lower scores often have a reputation for being independent, self-reliant, and reluctant to depend on others. They do not hand out business cards and are uninterested in collecting them from others. They tend to have smaller networks and, despite their talent, may be disadvantaged by keeping a low profile. People with higher scores often have a reputation for being gregarious, outgoing, and concerned about developing and maintaining their network of

strategic business contacts. They hand out their business cards frequently and collect others as though they are trying to complete the whole set.

2.5.3 Influencing Others

Influencing Others concerns persuading co-workers to pursue certain desired outcomes. People with lower scores often have a reputation for being competent and self-reliant, but unable or unwilling to sway others in a particular direction. Others may think these individuals lack a sense of urgency or are reluctant to push others out of their comfort zones when needed. People with higher scores are willing to take charge, make suggestions, and exercise their influence until others are persuaded to their opinion. They may grow impatient with delays and act with purpose and urgency.

As with the Leadership Foundations competencies before them, the Leadership Emergence competencies alone aren't enough for a person to become an effective leader. Many employees appear leader-like but never realize their full potential, either because they are unrewarding to work for or because they cannot accomplish the actual objectives of leadership. To actually lead, one must marshal resources and pursue others to put aside personal agendas in the pursuit and completion of shared goals. These behaviors describe Leadership Effectiveness, our third and final dimension.

2.6 LEADERSHIP EFFECTIVENESS

Leadership Effectiveness concerns the degree to which people are able to build and maintain high-performing teams of committed subordinates and drive those teams toward accomplishing organizational outcomes. Effective leaders attract, retain, develop, and motivate team members, secure and deploy key resources, remove obstacles to success, and achieve strategic business goals. These attributes capture the essence of leadership – the ability to move the business into the future.

Unlike the Leadership Foundations and Leadership Emergence dimensions, low scores on Leadership Effectiveness require urgent development to avoid failure. These individuals may have trouble building effective teams and meeting critical business objectives. Those with high scores may be effective leaders, but may not be given the opportunity if they are not also recognized as high potentials.

High scores on Leadership Effectiveness do not necessarily guarantee success, but suggest that the individual's natural attributes are aligned with accomplishing the key objectives of leadership. They should be good at building teams and likely have a reputation for getting results. However, they should still work to ensure that subordinates view them not only as a natural leader, but as one who is rewarding to work for as well.

The three competencies that comprise Leadership Effectiveness are Leading People, Leading the Business, and Managing Resources.

2.6.1 Leading People

Leading People concerns motivating people to put aside personal agendas and pursue shared goals. People with lower scores on this competency often have a reputation for being independent and task-oriented. They may lack the desire or the ability to galvanize others toward achieving common objectives. Others may view them as brusque and intimidating, but also hard working. People with higher scores often have a reputation for being engaging and patient, and for inspiring commitment and identifying appropriate group goals. They drive accountability and push subordinates for results.

2.6.2 Leading the Business

Leading the Business concerns achieving critical business unit or organizational outcomes. People with lower scores often have a reputation for lacking interest in organizational goals and may be unassertive when trying to sell others on these objectives. Others may view them as unassertive or disinterested in steering the corporate agenda. People with higher scores often have a reputation for wanting to take charge, setting business unit or organizational goals, providing direction, and pushing others to achieve or exceed company goals. Others may view them as action-oriented and competitive with high standards for themselves and others.

2.6.3 Managing Resources

Managing Resources concerns securing, optimizing, and deploying key material, financial, and personnel assets effectively. People with lower scores may have a reputation for seeking to minimize risks, struggling to forecast resource needs, and may be lukewarm in committing to plans. Others may view them as uninterested in planning or reluctant to change when standard methods don't yield desired effects. People with higher scores often have a reputation for being decisive, comfortable taking smart risks, effective in planning for resource needs, but flexible to making changes to these plans as needed to accomplish goals.

2.7 MEASURING THE MODEL

To identify the most predictive personality and values scales for each competency in our model, we used the Hogan research archive (Hogan Assessment Systems, 2010). This archive contains information from over 1,000 research studies conducted since 1981, and each year we update it with evidence from 10 - 15 new criterion studies. These new studies allow Hogan to maintain and continuously improve synthetic validity benchmarks, which we used to identify the best predictors of performance for each competency in the Hogan High Potential Model.

This process involved reviewing prior criterion research predicting each competency in our model and aggregating findings across multiple studies using meta-analysis (J. Hogan, Davies, and R. Hogan, 2007; Scherbaum, 2005). Based on criterion research studies with outcome data for at least one of our nine competencies, we conducted meta-analyses using personality scales from the Hogan Personality Inventory (HPI; R. Hogan & Hogan, 2007), Hogan Development Survey (HDS; R. Hogan & Hogan, 2009), and Motives, Values, Preferences Inventory (MVPI; R. Hogan & Hogan, 2010) as predictors.

The HPI is a well-known and extensively validated measure examining bright-side personality, and was the first such inventory specifically developed for occupational contexts with working adults. It includes seven scales that align with the Five-Factor Model (FFM Digman, 1990; Goldberg, 1992; John, 1990; McCrae & Costa, 1987) of personality. The HPI reflects a person's normal, day-to-day behavior, and is backed by a global archive of criterion research evidence confirming the validity of the HPI in predicting individual, leadership, and team performance.

Setting ourselves apart from all other assessment providers, Hogan also offers the Hogan Development Survey (HDS) to measure the dark side of personality. The HDS is also well-known and extensively validated, but reflects a person's likely behavior under stressful conditions that challenge self-regulation. These characteristics reflect negative tendencies that may inhibit performance or derail success. Like the HPI, the HDS is designed and intended for use in a normal population of working adults, and supported by a global archive of research supporting its validity in predicting workplace outcomes. The HDS includes 11 scales aligned with Horney's (1950) flawed interpersonal strategies of moving away from people, moving against people, and moving toward people in response to stress.

Finally, the Motives, Values, Preferences Inventory (MVPI) assesses "the inside", or a person's core values. Organizations often use this assessment to evaluate person-organization fit, identify individual motivators to serve a variety of organizational functions, and other occupational purposes. Dozens of criterion validation studies have used the MVPI to predict occupational performance across a range of jobs and industries (Shin & Holland, 2004). As with the HPI and HDS, the MVPI is designed and intended for use in a normal population of working adults, and is backed by a global archive of criterion research evidence. The MVPI includes 10 scales that align with previous values and motives taxonomies offered by Spranger (1928), Allport (1961), Murray (1938), Allport, Vernon, and Lindzey (1960), and Holland (1966, 1985).

We used meta-analysis to identify components of the HPI, HDS, and MVPI that predict each competency. Meta-analysis is a statistical method for examining relationships among variables based on data from multiple studies. Meta-analysis controls for error due to sampling, measurement, range restriction, and potential moderating variables (Smith & Glass, 1977). We followed procedures described by (a) Hunter and Schmidt (1990) for correcting range restriction, (b) Barrick and Mount (1991) for correcting criterion unreliability, and (c) Viswesvaran, Ones, and Schmidt (1996) for the mean inter-rater reliability coefficient of .52. In addition, we reverse coded negatively oriented criterion variables to ensure that validity coefficients were consistently interpreted. Hunter and Schmidt (1990) argue that samples should contribute the same number of correlations to meta-analysis results to avoid bias. Thus, we selected one criterion variable per competency per study, ensuring that each sample contributed only one point estimate per predictor scale.

The synthetic validity results from these meta-analyses provide stable estimates of relationships between HPI, HDS, and MVPI scales and our competencies. With predictive personality and values dimensions identified for each competency, we began developing mathematical algorithms to score each competency in our model.

2.8 DEVELOPING COMPETENCY ALGORITHMS

For many work-related outcomes, combinations of predictive variables are more predictive than single scales (Ones, Dilchert, Viswesvaran, & Judge, 2007; Tett & Christiansen, 2007). As such, we used mathematical algorithms to combine personality and values scale scores to maximize prediction of each competency.

Based on the synthetic validation evidence, we first selected the three most empirically predictive scales for each competency from across the HPI, HDS, and MVPI. Project team members then met to review scale selections, making revisions as needed to include scales with rational/theoretical linkages to each competency. They also limited the number of times a scale could be used to ensure that no one would score universally low or high across all competencies because of a score on one predictor scale. The resulting algorithms balanced qualitative expert judgment with quantitative data-driven results. As one example, we score Getting Along as follows:

Getting Along = (Adjustment + Interpersonal Sensitivity + Altruistic)/3

Using scale-based algorithms provides both predictive validity and interpretability. In addition, algorithms are flexible and compensatory, meaning that participants will not "fail" a competency as they would with more traditional profile-based approaches by scoring low or high on any given scale. Scoring for our scale-based algorithms defaults to global normative percentile scores instead of raw scores, which unit weights the scales included in each algorithm and further facilitates interpretation worldwide using a common framework. However, it is worth noting that clients can also score our scale-based algorithms using any local normative percentile ranks, facilitating usage of the Hogan High Potential Talent Report within or across business markets.

Finally, we calculate overall dimension scores for Leadership Foundations, Leadership Emergence, and Leadership Effectiveness by averaging scores across the three competencies under each dimension. Each competency contributes the same weight to the overall dimension score. The dimension scores provide general indicators of a person's strength or development need associated with each broad dimension of leadership potential.

For ease of use and interpretation, we also categorize individual competency and overall dimension scores into four scoring levels (i.e., low, below average, above average, high). We determined these levels by running simulations to equally distribute a global working population of professionals, managers, and executives into quartiles on each competency and dimension. By providing these scoring levels, we further facilitate score interpretation and creation of Individual Development Plans (IDPs) by allowing high-potential employees to play to their greatest strengths and prioritize development according to their greatest needs.

2.9 THE HOGAN DIFFERENCE

Organizations can use any number of solutions to identify and develop their high-potential employees. So why choose Hogan? The answer lies in the rigorous scientific research behind our model and three key differences between our model and others that result from this empirical approach.

First, unlike other high-potential solutions focusing only on leadership capabilities, our model is the first to address the importance of building a solid foundation for leadership. Many otherwise successful leaders are deeply unrewarding to work for and, as a result, often lose talented employees to competitors. By facilitating development of these key capabilities, we help our clients lay the groundwork for future leadership success.

Second, ours is the only high-potential model that lays out a comprehensive leadership development sequence. By helping high-potential employees first set firm foundations for leadership, then emerge as a potential leader, and finally perform the key functions of leadership effectively, the Hogan High Potential Model sets high-potential employees on a road to leadership success.

Finally, many existing high-potential models focus on helping employees develop confidence, social skills, and other capabilities to look more like a leader. Although these attributes are important, they are not the ultimate measure of leadership success. Instead, leaders rise or fall depending on their ability to build and maintain high-performing teams of committed subordinates who can out-perform the competition. Because this is the ultimate litmus test for evaluating leadership, it is also the end goal of the Hogan model. Unlike other models that may help high-potential employees appear more leader-like, the Hogan High Potential Model helps high-potential employees become leaders.

2.10 USING THE HOGAN HIGH POTENTIAL MODEL

The Hogan High Potential Model is beneficial for both high-potential employees and their organizations. Although organizations can use this model to assist with identification of high-potential employees, we advise clients to use our model primarily for development. The process of identifying high-potential employees is delicate and organizationally-specific, involving industry-, organization-, and job-specific information not captured in any off-the-shelf report. Hogan offers a range of scientifically rigorous and organizationally specific research solutions for clients interested in using our assessments to identify high-potential employees.

Hogan's High Potential Model is most useful for developing key organizational talent by helping high-potential employees identify their leadership strengths and most pressing development needs. Through this process,

these future leaders can better prioritize their development activities to focus on the areas of greatest need and the areas with the greatest potential return for their investment of effort. As such, although the Hogan High Potential Talent Report is an off-the-shelf solution, it still facilitates custom and individualized development to meet each high-potential employee's needs.

For example, some high-potential employees may have a reputation for being too tactical for leadership, difficult or unrewarding to deal with, or poor organizational citizens. By providing detailed development recommendations around how to change these attributes, our model can help these individuals build a more solid foundation for future leadership success and mitigate these potentially threatening tendencies before they become career enders. For high-potential employees who already enjoy a reputation for being visionary and strategic, rewarding to work with/for, and excellent corporate citizens, our model provides a sense of confidence in building on these key strengths to facilitate future leadership.

Other high-potential employees may excel at standing out from their peers and influencing others at work, but may have the reputation for not being rewarding to work with/for or not accomplishing important goals valued by the organization. Taken to extremes, such individuals may earn the reputation of being "empty suits" because they appear leader-like but cannot organize or maintain a high-performing team. In such cases, the Hogan model can help these emergent leaders to shore up foundational deficiencies and become more effective as leaders by providing targeted development recommendations in these areas. For these individuals, the Hogan High Potential Model can help them add some substance to their style.

Finally, some individuals may excel at leading high-performing teams but have difficulties standing out from their peers. With traditional high-potential processes, many organizations overlook these employees because others outside their own teams do not view them as natural leaders. To help these leaders emerge and gain recognition from their organizations, we provide detailed development content around how to stand out more effectively, build a network, and exercise influence appropriately at work. This area in particular demonstrates the value of the Hogan High Potential Model for organizations. Every organization has people who can lead if given the opportunity. Unfortunately, many of these high-potential employees often remain hidden because traditional high-potential solutions do not recognize their talents. Hogan does, and our model can help these individuals gain leadership opportunities to the benefit of their organization.

3. PSYCHOMETRIC PROPERTIES OF HOGAN HIGH POTENTIAL MODEL COMPETENCIES & DIMENSIONS

3.1 DESCRIPTIVE STATISTICS

Table 3.1 presents descriptive statistics for each of the competencies and dimensions in the Hogan High Potential Model, including minimum and maximum observed scores, mean scores, standard deviations, and skewness and kurtosis statistics.

Skewness refers to departure from symmetry in a distribution of scores. When a distribution is normal and symmetrical, skewness values are around zero. Positive skewness values indicate that most scores fall at the bottom end of a distribution, and negative skewness values indicate that most scores fall on the top end of a distribution. Skewness values greater than +1.0 or less than -1.0 generally indicate a significant departure from symmetry.

Kurtosis refers to how peaked or flat a score distribution is relative to the normal distribution. When scores are normally distributed, kurtosis values are around zero and we refer to them as mesokurtic. When the distribution is sharper than the normal distribution, kurtosis values are positive and we refer to them as leptokurtic. When the distribution is broader than the normal distribution, kurtosis values are negative and we refer to them as platykurtic. Kurtosis values of more than twice the standard error indicate a significant departure from the normal distribution.

To examine the descriptive statistics for our competencies and dimensions, we obtained data from a global sample of nearly 21,000 professionals, managers, and executives. This group reflected the intended population and use of the report, with most (70.9%) completing the HPI, HDS, and MVPI as part of employee development or leadership coaching efforts, and a smaller number completing the assessments for applicant screening (29.1%) or research (6.6%). On average, participants were 38.98 years old (SD = 8.85), and the sample included 59.9% male participants and 34.7% female participants (5.4% of participants did not indicate their sex).

Table 3.1 Classical Scale Statistics for Hogan High Potential Model Competencies & Dimensions

Competency	Min	Max	M	SD	Skew	Kurt
Getting Along	0	100	52.98	20.78	-.16	-.70
Thinking Broadly	1	100	52.64	20.19	-.05	-.65
Following Process	0	99	52.44	19.10	-.07	-.58
LEADERSHIP FOUNDATIONS	9	94	52.68	13.05	.00	-.30
Standing Out	0	100	52.89	22.99	-.06	-.86
Building Connections	0	99	48.42	22.16	-.09	-.80
Influencing Others	0	91	48.79	22.74	-.19	-.91
LEADERSHIP EMERGENCE	2	95	50.04	17.27	-.16	-.58
Leading People	0	94	48.04	20.82	-.12	-.75
Leading the Business	0	100	53.31	22.17	-.14	-.81
Managing Resources	1	98	47.96	18.91	.06	-.55
LEADERSHIP EFFECTIVENESS	7	86	49.77	11.90	-.11	-.35

Note:: N = 20,828; Competencies listed in Title Case, Dimensions CAPITALIZED; Min = Minimum score; Max = Maximum score; M = Mean; SD = Standard Deviation; Skew = Skewness statistic; Kurt = Kurtosis statistic.

As shown in Table 3.1, minimum and maximum observed scores cover nearly the entire range of possible scores from 0 to 100. All but two competencies and dimensions show score ranges of 90 or more, and only Leadership Effectiveness falls below 80 with a range of 79 points.

Average scores range from 47.96 (Managing Resources) to 53.31 (Leading the Business), averaging 50.83 across all 12 competencies and dimensions in the model. Standard deviations range from 11.90 (Leadership Effectiveness) to 22.99 (Standing Out), with an overall average of 19.34, indicating that all competencies and dimensions in our model contain appropriate variance.

Skewness statistics indicate that score distributions are adequately symmetrical, with results ranging from -.19 (Influencing Others) to .06 (Managing Resources), averaging -.09 across the competencies and dimensions in our model. Most notably, none fall below -1.00 or above +1.00. Kurtosis statistics indicate that score distributions for our competencies and dimensions are not abnormally peaked or flat, with results ranging from -.91 (Influencing Others) to -.30 (Leadership Foundations), averaging -.65 across competencies and dimensions.

3.2 DISTRIBUTION OF HOGAN HIGH POTENTIAL COMPETENCY & DIMENSION SCORES

During development of our model, we used a visual binning function to determine cutoff scores for each competency and dimension to separate distributions into four levels, each containing approximately 25% of our sample of professionals, managers, and executives. Specific cutoff scores varied across competencies and dimensions, but were consistent enough that we arrived at common cutoff scores we could apply to all 12 competencies and dimensions in our model. As a result, we designate scores of 0-35 as low, 36-50 as below average, 51-65 as above average, and 66-100 as high.

Using these common interpretive ranges, we examined score distributions for all competencies and dimensions in our model using the same sample of professionals, managers, and executives previously described. Table 3.2 below presents the results of these analyses.

Table 3.2 Distribution of Hogan High Potential Competency & Dimension Scores across Levels

Competency	Low	Below Average	Above Average	High
Getting Along	22.2%	21.8%	25.7%	30.2%
Thinking Broadly	21.9%	23.8%	25.8%	28.5%
Following Process	20.3%	25.6%	27.5%	26.6%
LEADERSHIP FOUNDATIONS	9.9%	33.8%	39.3%	17.0%
Standing Out	25.2%	21.1%	21.2%	32.5%
Building Connections	29.6%	22.4%	23.0%	25.0%
Influencing Others	29.5%	21.4%	22.2%	26.9%
LEADERSHIP EMERGENCE	21.7%	27.7%	30.3%	20.4%
Leading People	28.6%	23.4%	25.5%	22.4%
Leading the Business	23.7%	20.5%	23.0%	32.7%
Managing Resources	27.3%	28.6%	25.2%	18.9%
LEADERSHIP EFFECTIVENESS	12.5%	39.2%	39.0%	9.4%

Note: N = 20,828; Competencies listed in Title Case, Dimensions CAPITALIZED; Low scores = 0-35; Below Average scores = 36-50; Above Average scores = 51-65; High scores = 66-100.

Score distributions do not significantly depart from expected levels. The percentage of low scores ranged from 9.9% (Leadership Foundations) to 29.6% (Building Connections), with an average of 22.7% across all competencies and dimensions in our model. The percentage of below average scores ranged from 20.5% (Leading the Business) to 39.2% (Leadership Effectiveness), with an average of 25.8% across components of our model. The percentage of above average scores ranged from 21.2% (Standing Out) to 39.3% (Leadership Foundations), with an average of 27.3% across our competencies and dimensions. Finally, the percentage of high scores ranged from 9.4% (Leadership Effectiveness) to 32.7% (Leading the Business), with an average of 24.2% across components of our model.

3.3 TEST-RETEST RELIABILITIES

Professional standards compel assessment providers to supply evidence that a person's results do not vary widely across time. Because we score our competencies and dimensions using scale scores from the HPI, HDS, and MVPI, we obtained this evidence by administering the assessments to the same sample of people twice over time, scoring their results on our model, and correlating scores from the first administration with those from the second administration. Higher correlations indicate that scores are consistent across time; lower correlations reflect inconsistencies that may signal problems with construct measurement.

Table 3.3 provides test-retest reliability estimates for all competencies and dimensions included in our model. We collected these data from a sample of 126 professionals employed by a large global pharmaceutical organization. This sample included 3% Individual Contributors, 2% Entry-Level Supervisors, 43% Middle Managers, and 29% Executives (23% did not report their job level). Most (i.e., 81%) completed the assessments in English, with small percentages of participants completing them in French (5%), Spanish (4%), and Chinese (3%). Ages ranged from 29 to 56, with an average of 41.49 years (SD = 5.81). The interval between assessment administrations ranged from 4.37 to 7.01 months, with an average interval of 6.46 months.

Table 3.3 Test-Retest Reliability Estimates for Hogan High Potential Competency & Dimension Scores

Competency	Test-Retest Reliability
Getting Along	.84
Thinking Broadly	.84
Following Process	.75
LEADERSHIP FOUNDATIONS	.79
Standing Out	.83
Building Connections	.86
Influencing Others	.81
LEADERSHIP EMERGENCE	.88
Leading People	.77
Leading the Business	.81
Managing Resources	.71
LEADERSHIP EFFECTIVENESS	.74

Note: N = 126; Competencies listed in Title Case, Dimensions CAPITALIZED; Test-retest reliabilities computed using Pearson correlations between competency scores based on first and second assessment administrations; average assessment interval = 6.46 months.

Test-retest reliabilities for competencies range from .71 (Managing Resources) to .86 (Building Connections), with an average of .80. Test-retest reliabilities for the broad dimensions in our model range from .74 (Leadership Effectiveness) to .88 (Leadership Emergence), also averaging .80. These results demonstrate that participant scores across components of our model are remarkably stable across time.

3.4 INTERCORRELATIONS BETWEEN HOGAN HIGH POTENTIAL MODEL COMPETENCIES & DIMENSIONS

We computed correlations between the competencies and dimensions of our model using our global sample of professionals, managers, and executives previously described. Table 3.4 presents these results.

Table 3.4 Correlations between Hogan High Potential Model Competencies & Dimensions

Competency	1	2	3	4	5	6	7	8	9	10	11	12
1. Getting Along	1.00	.18**	.28**	.76**	.07**	.45**	.50**	.45**	.75**	.18**	.13**	.62**
2. Thinking Broadly		1.00	-.06**	.58**	.42**	.25**	.26**	.41**	.03**	.37**	-.47**	0.00
3. Following Process			1.00	.61**	-0.01	.02**	-.08**	-.03**	.15**	.03**	.44**	.34**
4. LEADERSHIP FOUNDATIONS				1.00	.25**	.38**	.36**	.43**	.49**	.30**	.04**	.49**
5. Standing Out					1.00	.44**	.25**	.74**	-.08**	.58**	-.40**	.10**
6. Building Connections						1.00	.44**	.81**	.39**	.37**	-.17**	.36**
7. Influencing Others							1.00	.73**	.59**	.56**	-.05**	.67**
8. LEADERSHIP EMERGENCE								1.00	.39**	.66**	-.27**	.49**
9. Leading People									1.00	.05**	.26**	.75**
10. Leading the Business										1.00	-.31**	.48**
11. Managing Resources											1.00	.49**
12. LEADERSHIP EFFECTIVENESS												1.00

Note: N = 20,828; **Correlation is significant at .01 level; Competencies listed in Title Case, Dimensions CAPITALIZED.

Correlations between competencies under the same dimension tell a common story. Correlations range from -.06 to .28 for Leadership Foundations competencies, from .25 to .44 for Leadership Emergence competencies, and from -.31 to .26 for Leadership Effectiveness competencies. These patterns of results suggest that components in our model are conceptually related but empirically distinct within dimensions.

Correlations between competencies across different dimensions of our model provide some interesting insights. First, correlations between Leadership Foundations competencies and Leadership Emergence competencies range from -.08 (Following Process & Influencing Others) to .50 (Getting Along & Influencing Others). Of the nine correlations between these competencies, three are in absolute magnitudes of .40 or greater. However, these results make intuitive sense and illustrate that these constructs are conceptually related but still distinct. For example, Thinking Broadly and Standing Out correlate at .42, suggesting that employees with a strategic vision are likely to separate themselves from their peers as a potential leader. Likewise, Getting Along and Building Connections correlate at .45, illustrating that employees who are rewarding to interact with tend to be more natural at reaching out and building their strategic business networks. Finally, Getting Along and Influencing Others correlate at .50, indicating that being interpersonally skilled can assist a high-potential employee with exercising influence at work, though these constructs remain distinct.

Correlations between Leadership Foundations competencies and Leadership Effectiveness competencies range from -.47 (Thinking Broadly & Managing Resources) to .75 (Getting Along & Leading People). Of the nine

correlations between these competencies, three are in absolute magnitudes of .40 or greater. The correlation of -.47 between Thinking Broadly and Managing Resources indicates that those who are more adept at developing and promoting a strategic vision may have harder time naturally obtaining, optimizing, and deploying key material, financial, and personnel resources to accomplish work tasks. The correlation of .44 between Following Process and Managing Resources indicates that valuing and adhering to existing organizational procedures can facilitate the effective use of organizational resources. Finally, Getting Along and Leading People correlate at .75, representing the highest correlation between competencies in our model. Although this magnitude is high, it is not so strong as to suggest that these constructs are conceptually measuring the same thing. Although being interpersonally skilled and interested in helping people can facilitate the process of attracting, retaining, and motivating people, some effective leaders may still struggle in their ability to get along with their subordinates.

Correlations between Leadership Emergence competencies and Leadership Effectiveness competencies range from -.40 (Standing Out & Managing Resources) to .59 (Influencing Others & Leading People). Of the nine correlations between these competencies, four are in absolute magnitudes of .40 or greater. The correlation of -.40 between Standing Out and Managing Resources illustrates that those who are more adept at emerging from one's peer group as a potential future leader may have a harder time obtaining, optimizing, and deploying key material, financial, and personnel resources to accomplish work tasks. The correlation of .56 between Influencing Others and Leading the Business suggests that the ability to persuade others toward a particular course of action can facilitate the process of driving critical business unit or organizational outcomes. Likewise, the correlation of .58 between Standing Out and Leading the Business indicates that being recognized as a leader relative to one's peers is positively associated with taking charge, providing direction, and pushing toward strategic company objectives. Finally, the correlation of .59 between Influencing Others and Leading People indicates that the ability to persuade employees to pursue certain desired outcomes is naturally associated with the process of motivating people to put aside personal agendas in the pursuit of organizational goals.

Finally, correlations between the overall dimensions in our model indicate that these constructs are conceptually related but empirically distinct from one another. Leadership Foundations and Leadership Emergence correlate at .43, suggesting a moderate positive association between having a firm foundation for leadership and emerging as a potential future leader. However, this correlation also indicates that some employees with a solid groundwork for leadership still will not emerge as leaders, and that some who do emerge may lack some foundational attributes. Leadership Foundations and Leadership Effectiveness correlate at .49, indicating that having a firm foundation for leadership is helpful, though not required, for effective leadership. Not all those who are rewarding to deal with are effective leaders, and some highly effective leaders are not rewarding to work for as employees. Leadership Emergence and Leadership Effectiveness also correlate at .49, suggesting that standing out from one's peers, building key connections, and exercising influence can assist the process of effectively motivating subordinates, marshalling resources, and driving critical business outcomes. However, the magnitude of this correlation still indicates that not all who emerge as leaders will be successful in leadership roles, and that some effective leaders may not effectively stand out from their peers to emerge as leaders.

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