

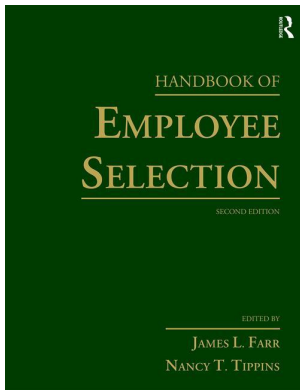
This article was downloaded by: 10.2.97.136

On: 26 Sep 2023

Access details: *subscription number*

Publisher: *Routledge*

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: 5 Howick Place, London SW1P 1WG, UK



Handbook of Employee Selection

James L. Farr, Nancy T. Tippins, Walter C. Borman, David Chan, Michael D. Coovert, Rick Jacobs, P. Richard Jeanneret, Jerard F. Kehoe, Filip Lievens, S. Morton McPhail, Kevin R. Murphy, Robert E. Ployhart, Elaine D. Pulakos, Douglas H. Reynolds, Ann Marie Ryan, Neal Schmitt, Benjamin Schneider

Selection Methods and Desired Outcomes

Publication details

<https://test.routledgehandbooks.com/doi/10.4324/9781315690193-33>

Scott C. Erker, Charles J. Cosentino, Kevin B. Tamanini

Published online on: 22 Mar 2017

How to cite :- Scott C. Erker, Charles J. Cosentino, Kevin B. Tamanini. 22 Mar 2017, *Selection Methods and Desired Outcomes from: Handbook of Employee Selection* Routledge

Accessed on: 26 Sep 2023

<https://test.routledgehandbooks.com/doi/10.4324/9781315690193-33>

PLEASE SCROLL DOWN FOR DOCUMENT

Full terms and conditions of use: <https://test.routledgehandbooks.com/legal-notices/terms>

This Document PDF may be used for research, teaching and private study purposes. Any substantial or systematic reproductions, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The publisher shall not be liable for an loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

SELECTION METHODS AND DESIRED OUTCOMES

Improving Entry- and Mid-level Leadership Performance Through the Use of Assessment Technologies

SCOTT C. ERKER, CHARLES J. COSENTINO, AND KEVIN B. TAMANINI

The importance of effective leadership selection to modern organizations cannot be overstated. By now, it is safe to assume that most private organizations use some form of structured selection tool, method, or process to make decisions about people—who to hire, promote, and/or accelerate toward future leadership roles. Organizations have paid the price for unstructured selection procedures. Lack of consistency in selection of leaders can lead to poor motivational and skills fit between the individual and the job, as well as ineffective leader to follower relationships resulting in low performance, unmet expectations, and high unwanted turnover. This ultimately leads to sub-optimized organizational productivity, inconsistent customer service, low employee engagement, and disengaged leaders lacking confidence in their skills.

As modern organizations must frequently respond to new market demands, emerging competitors, and rapidly advancing technologies, unstructured selection methods that rely on “gut feel” of hiring managers pose great risk to organizational growth and survival. The requirements for leaders and the selection methods used to identify those who are the most likely to excel in these demanding roles must keep up with the rapid change in business. Indeed, Johansen (2009) identified 10 leadership skills that are needed for an uncertain world. The term ‘VUCA world’ was first used by the U.S. military to discuss preparedness, but Johansen popularized this phrase when describing the environment that organizations face (volatility, uncertainty, complexity, and ambiguity). Today, organizations benefit from decades of science and practice that provide guidance for how to maximize leader selection decision effectiveness about whom to hire/promote for a leadership role. When you consider the direct costs (e.g., hiring and training costs, compensation, and benefits) of employing an individual across their potential tenure in an organization and the indirect cost associated with a poor leader managing a sub-optimized team, each hire/promotion can be an investment in the millions of dollars. When looked at from an aggregate level, the cumulative effect of effective selection decisions can lead to extraordinary business performance and becomes a true competitive advantage.

Personnel selection has been one of the central topics in the study of work behavior (Guion, 1998) and ultimately aims to identify the individuals who will constitute the workforce in any given organization (Salgado, Viswesvaran, & Ones, 2001). As noted by Howard (2006),

effective systems boost organizational performance and allow individuals to excel by engaging in work they enjoy because the organization gets the right people into the right jobs. Although much of the research literature has focused on selection issues associated with entry-level jobs (e.g., Campbell, McHenry, & Wise, 1990), the selection systems at higher levels within organizations are just as, if not more, critical. In a recent report by Mitchell, Ray, and van Ark (2014), 4 of the top 10 strategies CEOs prioritized for human capital management focused specifically on improving the effectiveness of both front-line and senior managers, along with a focus on improving succession planning for current and future needs. Getting the right leaders into the top positions who can deal with the dynamics of an ever-changing business landscape will stimulate organizations to grow and prosper (Howard, 2006; Mitchell, Ray, & van Ark, 2014). Indeed, the financial health of an organization is predicated on the optimal selection and placement of employees. From a utility perspective, selecting a superior manager will result in 48% more output than an average manager (as compared to 32% for skilled workers and 19% for lower-level jobs; Hunter, Schmidt, & Judiesch, 1990). The bottom line is that it pays to have dynamic and effective selection systems, especially when dealing with leader-level positions.

This chapter focuses on the selection of entry- and mid-level leaders within private sector organizations. Selection is defined as the processes used to select new hires, promote internal candidates, and select individuals into developmental acceleration pools. From this point forward, the authors refer to this as the selection of leaders or leadership selection. A review of contemporary organizational challenges unique to entry- and mid-level leadership sets the stage for a discussion of themes and strategies for enhancing leadership effectiveness and bench strength through improved leadership selection practices. Next, a comprehensive set of leadership assessment tools and procedures is described. Real-world case studies are used to illustrate the application and results achieved from enhanced selection programs. We conclude this chapter by overviewing common business scenarios in which assessment is used to guide leadership selection in the private sector.

Recently, Development Dimensions International (DDI), a consulting firm focused on improving leadership insight and growth, conducted a global leadership forecast study in conjunction with The Conference Board. Survey participation included 13,124 leaders, 1,528 global human resource (HR) executives, from 2,031 participating organizations. In this landmark study, researchers examined findings spanning leaders across 4 levels, 48 countries, and 32 major industries (Sinar, Wellins, Ray, Abel, & Neal, 2014). They found that compared to previous studies, the number of leaders who expressed confidence in the overall quality of leadership in their organization increased slightly; 40% of leaders rated current quality as high in 2014 as compared to 37% in 2009 and 38% in 2011. Interestingly, only one in four organizations evaluated their leader performance as effective.

This research also showed that those organizations that are in an aggressive-growth mode have a significantly higher proportion of Millennials (30%) in leadership positions as compared to those organizations that are focused on cautious growth (25%) or moderate growth (21%). These younger leaders are also more likely to intend to leave within the next 12 months as compared to other generational groups. This poses unique challenges for organizations when determining both how to continually fill leadership roles and also how to effectively consider longer-term leadership succession. Indeed, only 15% of organizations rated their future bench strength as strong, which is in alignment with a similar trend from previous research (Bernthal & Erker, 2005), showing that most organizations are not confident that they have the leadership to address current and future needs. As Bernthal and Erker (2005) noted, 52% of respondents expected to have problems filling mid-level leadership positions with qualified candidates and 28% anticipated problems filling first-level leader positions with qualified candidates.

The cumulative impact of poor selection at entry and mid-level can have a debilitating impact on strategy, execution, and culture—especially given the volume of leader job changes that might be required to manage growth or turnover. As Sinar et al. (2014) noted, in order for organizations to mitigate the risk of poor selection, they need to prepare internal leader candidates by providing accelerated development programs for people who are in the leadership pipeline. Organizations that seek external leader candidates can attract new leaders from nontraditional

Scott C. Erker et al.

external sources. These organizations can consider expanding the pool of candidates to attract leaders from other industries and then subsequently provide intense onboarding experiences (e.g., coaching, mentoring, networking opportunities) to facilitate their socialization into the organization.

CURRENT BUSINESS TRENDS AFFECTING LEADERSHIP SELECTION AND DEVELOPMENT

Some current business trends have exacerbated the difficulty organizations have in selecting and proactively preparing individuals for leadership positions.

Trend 1. Flatter and Leaner Organizations Have Limited Critical On-the-Job Development Experiences to Prepare Leaders for High-Level Assignments

The delayering of organizations has diminished the number of opportunities people have to develop and practice their leadership skills. In the 1980s and earlier, extensive management trainee programs, with development opportunities and exposure to more senior leaders while occupying lower-level positions (e.g., assistant managers), were effective means for identifying and developing future leaders. Since then, organizations have reduced leadership levels and eliminated assistant manager positions. This has diminished organizations' ability to identify and develop those individuals with the greatest leadership potential. Reduced organizational levels have made each transition into a new level of leadership responsibility more difficult for newly promoted leaders. This has increased the importance of other strategies to identify, select, and accelerate the development of leaders and leadership capability. Given this trend, measures of potential have become more important than past performance and achievement in evaluating candidates (Tormala, Jia, Norton, 2012). In addition, many indicators of success at an individual contributor level, such as technical skills, dedication, and loyalty, are only marginally related to leadership potential and talent.

Trend 2. New Business Realities and Retiring Baby Boomers Have Challenged Organizations to Find New Ways to Define Leader Requirements and Attract, Identify, and Accelerate Leader Development

When organizations have long-tenured employees, they have the benefit of an experienced workforce, but they are at risk of large-scale retirements. Many organizations that we work with, from chemical processing to transportation companies to financial service organizations, expect up to 70% of their senior team to retire over the next five years. New business realities have made the leadership strategies, approach, and behaviors used by leaders, in part, less relevant. These factors work together to create a "perfect storm." Succession planning, especially at the first and mid-level is largely absent as a strategy for managing these tremendous changes. Unmotivated and unprepared leaders can be faced with an impossible situation. Organizations do not have the time they had in the past to grow leaders through a series of developmental assignments. It has become increasingly important for organizations to have pre-promotion acceleration programs to help leaders with key transitional leadership positions.

Rapidly evolving business realities related to technology advancement, increased buyer sophistication (through social networking and better access to information), and comparable products/services among competitors has increased the pressure on leaders to drive change within their teams. Traditional methods of leading and/or managing are challenged by this pace of change. As a result, practitioners are using more visionary job analysis methods that study the

new leadership challenges facing the organization and select competencies most closely associated with addressing those changes. Observations of leaders and focus groups with job content experts are not adequate to define these rapidly changing job requirements. Incumbent leader judgment is seen as skewed by behaviors and skills that were important in the past.

Trend 3. Globalization Has Impacted Leadership Requirements and Turnover

Whether leaders are working in their home countries or are taking an assignment in another part of the world, the effect of globalization over the last decade has been profound. Plans for international growth are on the rise, with 69% of organizations intending to add offices or facilities outside of their home country (Sinar et al., 2014). Globalization in the matrixed organization has made the leader's job of diversity management, creating a culture of trust and development, managing, and decision making much more complex. The ability to adapt one's leadership behaviors to individuals from different cultures and a more diverse workforce is a considerable challenge for leaders at the first and second levels.

Organizations that attempt to tackle these challenges struggle to balance the implementation of local versus centralized talent programs. In a survey conducted by Mitchell, Bolling, Phang, and Schott (2013), more than 1,500 HR professionals evaluated the effectiveness of leader-focused talent management programs, and they found that corporate-owned programs were the most effective when selecting both front-line and mid-level leaders, but a balance between corporate and locally owned programs were most effective for the ongoing development of these leaders. This study demonstrates that having a consistent set of talent management practices (i.e., tools/processes) that are scalable and allow for alignment across the organization, while still providing flexibility for local market nuance, are the best combination for selecting and developing successful leaders.

For those who choose to take an extended assignment in another country, the job challenges are compounded by challenges with adapting to a different culture. It has been reported that 28% of expatriate leaders leave their assignment early because of family concerns (Society for Human Resource Management, 2009). In addition, the attrition rate among expatriates once they have returned to their home country is significant (27% leave within the first year compared with 13% attrition for leaders who do not take an expatriate assignment; Society for Human Resource Management, 2009) because they are challenged with reassimilating into their companies as organizations struggle to fully utilize and recognize these leaders' newfound skills.

Trend 4. Organizational Commitment Is Declining

Frequent downsizing, mergers and acquisition, and conservative investment in employee incentives over the last few decades have reduced employees' commitment and trust in organizations (Burke & Cooper, 2000; Kramer, 1999; Modern Survey, 2016). As a result, individuals are more focused on managing their own careers rather than relying on employers. Employees no longer have a strong belief that the company will develop them in ways aligned to their career interests. Both managers and employees cite lack of concrete career plans as a significant reason for turnover (Chakraborty & Rudbeck, 2014). This trend has substantial impact on Millennials, who commonly have even lower trust in large companies' development and promotion practices and their companies' long-term viability in the marketplace (Marston, 2007). Millennials seek work that they find meaningful with a good balance between personal and work time. They are more willing and able to find new career opportunities that enable them to achieve those goals more quickly.

The advent of social media and web-based search make it easier to find new opportunities. When employees become dissatisfied with their current job and have no sanctioned career plans, the likelihood of turnover is high (Oracle, 2012). Exit interviews with high-performing employees have shown that a lack of career advancement is more important than pay and benefits as

Scott C. Erker et al.

the predominant reason for turnover (Spencer, 2014). More employees are engaging in job-hopping and commonly capitalize on their current company's brand to enhance their value to lesser-known companies with whom they seek employment. This change in employee views creates a dilemma for organizations in that they must balance the need to take action and accelerate the development of employees with the risk associated with the newly developed leaders becoming a retention problem if they are not rewarded (e.g., greater responsibility and compensation desired almost immediately). Organizations need to follow through on raised expectations and explicit or implicit promises made to leaders or risk their investment in development because it can be quickly lost through turnover. Candidates' easy access to online information about a company culture and networking give greater knowledge about the company's true culture, making recruiting new talent more difficult (Bersin, 2015). Well-thought-out and planned leadership identification and development programs communicated clearly through explicit career planning processes are critical to the engagement and retention of highly talented leaders.

Trend 5. Leader Readiness for Promotion Is Low, and Programs Designed to Increase "Speed to Productivity" Are Being Defined as a Critical Business Process

When new leaders do not have the skills to engage their team, the impact is damaging at two levels. First, senior leaders fail to realize the results they had planned in terms of goals being achieved, and second, the employees managed by these ineffective leaders become frustrated and lose focus, resulting in lost workforce productivity and turnover. The complexity and rapid growth of business today, and truncated efforts to prepare leaders for new roles, leaves leaders with far less time and support to achieve mastery in their roles. Leadership mistakes are costly at a personal and organizational level. Lack of confidence in leading a new team can result in apprehension or avoidance in handling difficult leader challenges, requests to return to former positions, or micromanagement of direct reports. These effects are very apparent in various organizational settings and industries. For example, it affects the newly promoted leaders in a service industry who ask to return to the crew because they lacked the confidence, motivation, or skills to manage former peers' performance. Ineffective leader behaviors are also apparent in technology and financial companies when new leaders focus on directing others' technical activities rather than coaching and building a successful team.

This behavior is shaped by their "comfort zone"—that is, their greater confidence in their technical rather than leadership skills. It impacts the new sales manager whose "coaching" consisted of expounding upon what has worked for him or her in the past. This often results in sales associates working around their leaders and developing their own, often unproductive, strategy to address a new competitor or market reality. There is growing recognition that speed to productivity, enhanced through effective new leader selection, onboarding, and development programs, is an important lead measure of success in meeting and exceeding goals.

In summary, the five trends outlined above have contributed to a laser-like focus on entry- and mid-level leader positions. Although this trend list is not exhaustive, it does highlight some of the more severe contextual challenges that must be taken into account when designing a sustainable leadership selection program. Our contention is that those organizations that can best anticipate the impact of these trends and then take action to implement programs that select the right leaders will be prepared with the right people in place to meet future business challenges.

ASSESSMENT PRINCIPLES FOR LEADERSHIP READINESS

To make the best possible entry- and mid-level leadership decisions, many organizations turn to various forms of assessment. Assessment helps organizations gather and organize information about their current and potential future leaders. When applied in the context of hiring, promotion, or development, better decisions are made when assessments are used. The best

assessment techniques are not only aligned with leaders' job challenges but also with business and cultural strategies. Specifically, effective leadership assessment (a) increases the probability that an individual who is chosen for a target position has the behaviors, experience, knowledge, and skills needed to succeed in the leadership position and to drive business success; and (b) provides insights into leadership potential and readiness that can accelerate an individual's development in the role. To build selection criteria and tools that will assess individuals accurately, we believe it is important to understand the role the leader will play as well as the specific business context in which he/she will play it. Understanding the leader's role from this perspective shapes the selection criteria and approach needed to make accurate predictions of candidates' potential and readiness. Fundamentally, from a psychological perspective, leaders maintain group cohesiveness, manage conflicts, sustain the group's value to the broader organization, and, most importantly, manage external events that may threaten the group's value to the organization or customers it serves. Leaders provide the structure through which priorities are set and norms are established to ensure the group's value to a broader organization is sustained (Katz & Kahn, 1978).

Leadership in this deeper sense cannot be bestowed on an individual by an organization. Although formal leaders can be given status and authority, leaders need to earn the role described above. If leaders fail to gain personal influence, their role is limited to becoming the "enforcer" who monitors compliance with rules. To add value, leaders need to provide more value/benefits than others. According to Hollander (2006, 2008), this gives leaders idiosyncrasy credits. This bank of earned credit, or perceived greater value, gives leaders the influence to change established procedures, behaviors, or decisions that do not add value to internal or external customers. This enhanced power and credibility of leaders enables greater control of decisions, greater receptivity to their ideas, and various forms of rewards in the form of greater respect and monetary incentives. Leaders need strong skills in influencing and engaging others to achieve important business and people objectives and in making sound decisions and plans. In private sector organizations, the value that leaders bring to the organization is translated into higher productivity, customer satisfaction, and the effective management of competitive threats. Leaders ensure that for every member, the benefits and costs of staying with the group outweigh the benefits and costs associated with leaving (Bandura, 2006; Hollander, 2008).

To truly maximize the predictive power of entry- and mid-level leadership selection, a number of important assessment principles should be taken into account.

Assessment Principle 1. Multiple Selection Techniques and Multiple Evaluators Create Better Prediction and Mitigate the Risk of Selection Error

Past performance and results achieved as an individual contributor have limited power for predicting future leadership performance when the uniqueness and complexity of the leadership role is significant and when there are substantial differences in skill sets required between leaders and individual contributors. Screening assessments of various types (e.g., basic qualifications, experience and knowledge reviews, biographical questions, and inventories) are very effective when used to screen out the less qualified. For the remaining candidates, multiple selection methods (e.g., situational, personality and cognitive ability tests, which more comprehensively assess candidates on dispositions and abilities, as well as interviews and behavioral simulations) provide a more comprehensive view of potential and readiness. Simulations and tests are particularly important when entry-level leader candidates have little previous leadership experience. There are no silver bullets in leadership selection. When practitioners are trying to mitigate the risk of selection error, comprehensiveness through multiple measures for critical assessment targets is critically important. Given all of the sources of error variance (e.g., methods and evaluators) and the rather low correlations between many selection tools and job performance, it is beneficial to have multiple processes in place. Similar to the mindset of an engineer who is designing a fail-safe system, a multiple-hurdle selection process is helpful in ensuring that only

Scott C. Erker et al.

the best candidates are selected. Multiple evaluators involved in collecting selection data adds to the reliability of the process. It is important that a selection panel has access to all data collected through the selection process so that all relevant data is considered when making selection decisions.

Assessment Principle 2. Leadership Selection and Development, When Leveraged Together, Can Have Significant Impact

In a well-designed and implemented leadership succession process (hiring, promotion, and succession management), assessment should focus on all elements of the job requirements, whereas development focuses on trainable elements. Not all leader requirements are equally developable. A well-designed assessment program will examine both non-trainable and trainable dimensions of success. Especially for behavioral competencies, a well-designed behavioral diagnostic can build awareness of the need for development and provide focus for development planning that is very useful to learners and facilitators. The value and impact of an assessment program is greatly enhanced when followed by a well-designed and actionable learning process well aligned with the assessment results. The assessment results provide insights into relevant and focused learning paths for participants and can help the organization make the best initial placement decisions.

Assessment Principle 3. Transparency About Assessment Results and Their Impact on Careers is Particularly Important When Selecting Leaders

The best candidates for entry-level leadership positions are (a) often the best and most valued individual contributors, as well as (b) external candidates who are often highly sought after by other companies. Most individuals are resistant to evaluation, especially when they are uncertain of how it will impact their employment possibilities or careers. Explaining the importance of the role of leadership and the importance of objective assessment to the company and the candidates' own career development reduces the natural resistance to be evaluated and produces greater acceptance of the process and its results. Internal candidates also should know who will review the results and how the results will be used and impact their career. Having alternative career paths for these valued employees who are not successful in the leadership selection process is critical to reduce the potential negative impact of failure.

ASSESSMENT TOOLS AND TECHNIQUES

An ideal selection (and onboarding) process for leadership positions will consist of multiple hurdles. Multiple assessment methods arrayed across multiple hurdles is a common method to create efficient screening out of less qualified candidates and a more in-depth evaluation of the most qualified. The process often begins with a screening of candidates on the basis of an evaluation of relevant knowledge and experience, and then tests and inventories are used to provide more information about skills, potential, and attributes. Remaining candidates can be put through more in-depth assessments that can include simulations and interviews. Once candidates are hired, development plans are built upon their selection results and are incorporated into the onboarding process. This ensures that new hires are brought up to speed quickly, thereby reducing time to meaningful contributions.

Various tools may be utilized to effectively evaluate candidates' capabilities for each of the success profile components. Some methods (i.e., tests) assess basic psychological constructs or job knowledge, whereas other methods (e.g., work samples, simulations, and interviews) are more contextual and directly measure critical job challenges and behavioral competencies. These methods may also be placed along a continuum that ranges from measuring signs of behavior to

samples of behavior (Wernimont & Campbell, 1968). Signs of behavior include an individual's personality or dispositions and motivations related to job success, whereas samples of behavior refer to the demonstration of behaviors related to job success. Thus, methods may also be categorized as those that provide inferences about behavior (e.g., personality tests, cognitive tests), assess descriptions of work behavior (e.g., biodata, interviews), or demonstrate behavior (e.g., job simulations) (Howard, 2006). This is an important difference for organizations because the use of different methods requires different validation strategies. Effective entry- and mid-level leadership assessment programs use multiple assessment tools.

Whether selection methods measure constructs or focus on job content—that is, depict signs (inferences) of behavior or samples (descriptions or demonstrations of behavior)—some have been shown to be better predictors of leader performance than others. Although there is an abundance of literature on the validity of selection predictors across jobs (mainly relying on entry-level jobs; e.g., Hunter & Hunter, 1984), much less has focused primarily on entry- and mid-level leader selection. The unique nature of these leadership positions demand targeted study, and more research should be conducted in this area.

Screening Methods

Biographical Data

Biographical data or biodata measures are empirically developed and quantify descriptions of past activities and accomplishments, such as life experiences, hobbies, and other pursuits. As Mumford, Stokes, and Owens (1990) noted over 25 years ago, studying patterns of life history sheds light on the ecology of human individuality. Indeed, more recent research has shown biodata to be one of the best predictors of employee performance (Breugh et al., 2014; Schmidt & Hunter, 1998; Schmitt & Golubovich, 2013; Zibarras & Woods, 2010). Although this might be true, recent reviews have noted that the use of biodata has not been extensively leveraged by organizations for making employment decisions (Gatewood, Field, & Barrick, 2011), nor has there been much research over the last few decades (Cortina & Luchman, 2013; for a more thorough review of biodata research, see Mumford, Barrett, & Hester, 2012).

As evidence of this apparent lack of use within organizations, Furnham (2008) surveyed 255 Human Resource (HR) professionals concerning their views on 12 selection methods (e.g., references, interviews, etc.) and they ranked biodata 10th in terms of its perceived validity, 9th in terms of its practicality, and 10th in terms of its perceived legality. Although Furnham (2008) did not gather data to determine why these HR professionals felt that biodata was not a practical measure to include in the selection process, others have postulated that one possible explanation for these results could be attributed to the use of incumbent samples rather than applicant samples in most of the empirical studies (Breugh et al., 2014; Stokes et al., 1993).

While it seems there is minimal use of biodata within organizations, it's important to note that it has been shown to predict performance with greater accuracy (when used in an appropriate structured format) than many other commonly used selection tools (e.g., Schmidt & Hunter, 1998) and has also been shown to have incremental validity when used in combination with cognitive or personality measures (Mount, Witt, & Barrick, 2000). Although there has been relatively little attention from researchers on the issue of adverse impact, studies have indicated that biodata has minimal adverse impact in terms of gender (Becton, Matthews, Hartley, Whitaker, 2009), while studies on race have been mixed (e.g., Becton et al., 2009; Van Iddekinge et al., 2003).

Clearly, the research has shown that there can be benefits to the use of biodata as a part of the selection process, but there is still relatively little empirical research that focuses on the use of this type of tool for entry- and mid-level leader selection. Much of the more recent research has focused on the development of biodata scales as well as the process for effectively structuring the use of those measures. Those studies that do exist that target leader-level roles, albeit older, do provide support for the use of these types of measures for selecting manager positions

(e.g., Carlson et al., 1999), front-line leaders (e.g., Rothstein et al., 1990), and in predicting leadership potential (Stricker & Rock, 1998). Considering the new dynamics that leaders face in the “VUCA” world, it is clear that further research on the predictive validity of life experiences for early success as a leader is needed to substantiate these dated findings. Gathering additional data from HR professionals around why they have not incorporated biodata more fully into their process could help expand and explain the findings from Furnham (2008). It is very possible that many are using biodata in an unstructured way and are therefore questioning the utility of such tools regardless of the empirical support.

Behavioral Consistency Method

The behavioral consistency method of evaluating training and experience is a type of biodata evaluation. Although some have categorized the behavioral consistency method as biodata (i.e., Hough & Oswald, 2000), most others have differentiated the two types of measures (e.g., Howard, 2006; Robertson & Smith, 2001; Schmidt & Hunter, 1998). Also called individual achievement records/career achievement records/career achievement profiles, this method is based on the well-established principle that the best predictor of future performance is past performance, and according to Howard (2006) is a useful tool for leader selection. Applicants are asked to describe their past achievements or experiences, either in writing or orally. Managers, with the aid of scales that are anchored, then score these achievements. This works well for mid-level leadership selection but is problematic when individuals have no formal leadership experience and are applying for an entry-level leadership job. There are few relevant past behaviors to document giving this method limited practical utility. Research has also shown that contemporary items (current or ongoing behaviors/experiences) tend to be more valid than hypothetical/future (potential behaviors) or historical items (past experiences), and items that ask respondents about other’s opinions of them are more valid than direct self-report items (Lefkowitz, Gebbia, Balsam, & Dunn, 1999). Although the behavioral consistency method is time-consuming and costly to construct, Schmidt and Hunter (1998) noted that the method is well worth the cost and effort for higher-level jobs, such as entry- and mid-level leaders. Indeed, an aspect of this method for selecting leaders that many practitioners would likely find appealing is the flexibility of this process for developing a highly engaging and job-relevant assessment experience for candidates. By adapting this approach to align with the job-specific competency profile for any leader-level position, the organization will be able to gather data that is aligned to the unique facets of a leader-level role within their unique context. Although there can be challenges with the calibration of raters and consistency of the scoring process, the opportunities the behavioral consistency method provides to practitioners should not be overlooked. Certainly, an opportunity for entry- and mid-level leadership research is to directly examine the predictive validity of achievement profiles for entry- to mid-level leaders.

Tests and Inventories

Cognitive Ability Tests

Since the earliest research on personnel selection, cognitive ability measures have been one of the major methods used when attempting to discriminate among candidates. Specifically, various cognitive ability tests (e.g., verbal, numerical, and spatial tests) intercorrelate, and the common variance often operationalizes a general cognitive ability factor, often called g (e.g., Sackett & Lievens, 2008; Schmitt, 2014). Among the various measures that might be used for personnel selection, cognitive ability (g) is one predictor that has demonstrated strong validity across most jobs. Interestingly, the main factor that moderates the validity of g as a predictor of performance is the complexity of the job. Hence, tests that measure g have their highest validity for complex jobs. General cognitive ability is an excellent predictor of academic achievements and

professional expertise. It may not predict interpersonal leadership complexity related to operating in a business setting.

Complexity in leadership positions often focuses on mastering ambiguous business situations and dealing with difficult social interaction and persuasion. The complexity is somewhat different from that found in other professional positions such as engineering and finance. Indeed, Schmidt and Hunter (1998) reported an adjusted correlation of .58 with performance for managers. Similarly, in Aberdeen's 2013 Human Capital Management Trends study, Lombardi (2013) reviewed best-in-class companies and found critical thinking and cognitive ability assessments to be more valuable than any other assessment method for identifying high-potential talent.

Although cognitive ability tests are unquestionably valid, they are commonly found to demonstrate considerably large group differences that often result in adverse impact across levels of job complexity (e.g., Berry, Clark, & McClure, 2011), and they do not measure all of the elements of leadership success. For this reason, many practitioners (in the United States) have avoided using cognitive tests as the sole screening tool early in the selection process (Sackett & Wilk, 1994). Sinar (2013) also noted that, for executive selection, it is increasingly important to determine the best way to fold cognitive skills assessments into a broader selection process. Because there is likely to be a restriction of range in cognitive ability as leaders move up the management hierarchy (Howard, 2006), determining what aspects of success as an executive cognitive ability links to can help organizations develop a comprehensive selection strategy that appropriately incorporates cognitive ability measures. Based on a data set of 857 senior executives across 22 companies, Sinar (2013) was able to show what key executive competencies were most linked to cognitive ability. He found that certain behaviors were driven by cognitive ability, some that were influenced by cognitive ability, and some that were completely distinct from cognitive ability. Clearly, cognitive ability is a key component for leader selection, and determining what the right balance is with other predictive measures is an important aspect for ensuring adequate coverage of the complexities of leader-level roles.

Personality Measures

Personality measurement has been extensively researched, and practitioners continue to explore the practical value of personality for predicting leadership success. Within personnel selection, personality predictors can be roughly divided into two categories: (a) general measures of adult personality (e.g., NEO-PI, 16PF, HPI) that are intended to provide a comprehensive measure of the full range of personality and (b) more narrow measures of personality (such as integrity tests, violence scales, drug and alcohol scales, etc.) that are used to predict individual differences in specific categories of behavior such as theft and absenteeism (Salgado et al., 2001). Despite the extensive research on the Big Five for predicting job performance (e.g., Barrick & Mount, 1991) and relatively high validity coefficients for both conscientiousness (.31; Schmidt & Hunter, 1998) and integrity tests (.41; Ones, Viswesvaran, & Schmidt, 1993) for entry-level and professional jobs, these measures may have low validity for management jobs depending upon how the construct (e.g., conscientiousness) is defined (Hough & Oswald, 2000). For example, Hogan and Ones (1997) defined conscientiousness as conformity and socially prescribed impulse control. On the basis of this definition, Hough and Oswald believed that conscientiousness would not predict performance, in which creativity and innovation are highly important (characteristics that are aspects of many leadership positions). Although Ones and Viswesvaran (1996) argued that broad personality domains are better than narrow domains for predicting performance across job levels, others have shown that conscientiousness was not a valid predictor of managerial performance (Robertson, Barron, Gibbons, MacIver, & Nyfield, 2000).

In contrast to Robertson et al. (2000), Bartram (2004) indicated that scores on scales of the Occupational Personality Questionnaire (OPQ) (SHL, 2015) and ratings of work behavior on the Inventory of Management Competencies showed an average uncorrected validity of .48, with a range of .29 to .69 (zero-order correlations). Additionally, personality measures have also been shown to predict leadership style (Hogan & Kaiser, 2005). More recently, Hogan, Davies,

and Hogan (2007) proposed a conceptual model that links certain personality variables to workplace behaviors. They outlined various strategies for utilizing the validity evidence from prior research to apply to other positions, and they used research from managerial jobs as examples.

Although there is some debate as to the level of analysis that should be used (e.g., Robertson & Smith, 2001), and there have been some conflicting findings regarding the validity for leader selection, personality measures (whether conscientiousness or integrity) add a degree of validity (i.e., incremental validity) over and beyond cognitive ability. An advantage of personality measures over cognitive ability measures is that personality measures do not demonstrate large group differences that can drive adverse impact to the same extent as other measures (Hogan & Hogan, 1995). As with cognitive ability tests, various group differences tend to be associated with personality measures; however, these differences tend to focus on sex differences rather than racial differences. Indeed, as noted previously, personality tests tend to not show significant group differences (i.e., potential for adverse impact) in regards to racial groups. For example, Ones and Viswesvaran (1998) compared the scores of African Americans, Hispanics, Native Americans, Asians, and Whites and found trivial differences. They went on to note that group differences with these “trivial magnitudes” are not likely to cause any discernible adverse impact. In regards to sex differences and the Big Five facet of conscientiousness, women tend to score higher than men (Feingold, 1994). Hough, Oswald, and Ployhart (2001) note that women tend to score higher on “dependability” scales, whereas men tend to score higher on “achievement” scales. Similarly, Ones and Viswesvaran (1998) found that women tended to score higher than men on overt integrity tests. Overall, the use of personality measures for making employment decisions is accepted, and the validity evidence for certain scales is growing (Hogan, Hogan, & Roberts, 1996), especially for use in entry- and mid-level leader selection. Indeed, Bergner, Neubauer, and Kreuzthalerand (2010) found that narrow traits added incremental validity to the Big Five to the prediction of managerial success (both salary progression and supervisory ratings).

Construct-Based Assessments (e.g., Situational Judgment Tests)

Situational judgment tests (SJTs) are characterized by items that provide a work-related scenario and then ask test takers to choose among a list of actions that respond to the scenario. These tests of decision making and judgment in work settings can be constructed as a low-fidelity job simulation (Salgado et al., 2001) and are used primarily at lower levels of management (Howard, 2006; Weekly, Ployhart, & Holtz, 2006). Indeed, McDaniel, Morgeson, Finnegan, Campion, and Braverman (2001) estimated the population validity of SJTs at .34 with job performance for leader and non-leader jobs. They have also been shown to provide incremental validity over personality, cognitive ability, and experience measures (Chan & Schmitt, 2002; Clevenger, Pereira, Wiechmann, Schmitt, & Harvey, 2001; McDaniel et al., 2001), and applicants (as well as employers) tend to react positively to SJTs due to the face validity of the content and the perception of the test as job-related (Kluger & Rothstein, 1993; Ployhart & Ryan, 1998). Indeed, recent meta-analytic results also showed that the reduced fidelity of SJTs (as compared to high-fidelity Assessment Centers) did not impact their criterion-related validity (Christian, Edwards, & Bradley, 2010).

Despite widespread research on and applied use of SJTs, there is still limited consensus on what might be considered best practice in the writing, scoring, and use of SJTs (Weekley, Ployhart, & Holtz, 2006). Indeed, some have called for more construct-based SJTs (e.g., Ployhart, 2006; Schmitt & Chan, 2006), while some consulting organizations (e.g., DDI) have already leveraged a variation on developing SJT items in which respondents are presented with a leadership situation that is based on well-defined competency constructs and asked to evaluate action statements (e.g., very effective to very ineffective).

Another related, although different, construct that has raised considerable attention is emotional intelligence. Specifically, emotional intelligence (Goldman, 1996) refers to the ways in which people perceive, understand, and manage emotion. Sackett and Lievens (2008) noted that construct has received the greatest attention in both practitioner and academic literature;

however, ambiguity of the definition, dimensions, and how to operationalize has led to considerable scrutiny. This criticism is also the result of questionable claims of validity and incremental validity (e.g., Landy, 2005; Mathews, Roberts, & Zeidner, 2004; Mayer, Roberts, & Barsade, 2008). While consistently defining the construct has presented challenges for researchers, practitioners (and organizations) have noted a clear link of this construct to success as a leader. Adele Lynn (2005), in her book titled *The EQ Difference*, highlights how people's behavior can affect feelings, how feelings can influence performance, and how performance on the job can be enhanced through positive behaviors. While important, Lynn also notes that emotional intelligence is certainly not the only factor that will determine success as a leader, but blending it with other critical criteria is important. Van Rooy and Viswesvaran (2004) found that, generally, emotional intelligence measures produce a meta-analytic mean correlation of .23 with performance; however, this included measures of performance in many domains beyond just job performance. Advances in measuring emotional intelligence as a construct can expand our ability to effectively predict success as an entry- or mid-level leader.

Assessment Centers

Assessment centers (ACs) have a long and varied history in both the selection and development of leaders within organizations. Assessment center refers to an evaluation method or process that includes multiple exercises, designed to assess both dimensions (i.e., competencies) and categories of behaviors associated with success or failure in the target position and to simulate critical managerial job activities (Bray, 1982; Kuncel & Sackett, 2014; Thornton, Rupp, & Hoffman, 2014). An AC simulates critical and representative job challenges. It may include written simulations (e.g., in-basket, fact finding, analysis, and planning exercises) and interactive simulations (e.g., role-plays, presentation, group discussion, and business game; Howard, 2006; Kuncel & Sackett, 2014; Thornton, Rupp, Hoffman, 2014). The groundbreaking work with ACs was the Management Progress Study at AT&T, which led to the use of ACs as an aid in selecting first-line supervisors (Bray & Howard, 1983). In contemporary virtual ACs, participants interact with a diverse set of trained assessors who role-play direct reports, peers, and customers. In some implementations, role players are replaced by highly engaging virtual interactions, giving participants 24/7 access to the assessment experience. Participants working online engage in a series of activities that simulate those commonly faced by front-line and mid-level managers on the job. They get information from a corporate intranet, video clips, and e-mails. Innovative online tools help participants coach and lead their teams, investigate problems, plan and prioritize work activities, and deploy resources to meet deadlines. Performance in this process helps predict who will succeed in meeting these new leadership challenges. Participants are given detailed feedback on the likely impact of leadership and managerial behaviors on direct reports, peers, and managers with whom they currently work or will work with in the future.

ACs have been shown to demonstrate an impressive record of predictive validity (.37; Schmidt & Hunter, 1998) for managerial selection. Thornton and Rupp (2006) indicated that the estimates of the relationship between AC ratings and management success range from .31 to .43, and Gaugler, Rosenthal, Thornton, and Bentson (1987) found in their meta-analysis that there was an upper bound of .63 under "optimal" conditions. AC researchers and practitioners are in conflict about the appropriate means to approach AC research. Most practitioners agree that competencies are categories of behavior related to job success and not psychological constructs. Most research treats competencies as constructs in which factor-analytic studies indicate that the key factors that emerge from an analysis of AC data are related to exercises rather than the competencies that are the assessment target (Robertson & Smith, 2001).

This issue around the construct validity of AC ratings has been an issue for nearly 30 years, influenced heavily by Sackett and Dreher (1982). Their observations lead to numerous studies that almost universally confirmed the notion that the scoring of AC exercises was more appropriate than the scoring of dimensions (i.e., competencies) overall (e.g., Lance, 2008). This general concept in turn lead to additional research that focused on the development of design

Scott C. Erker et al.

and training techniques, which did help increase the reliability of dimension-oriented construct validity, but still left the exercises as the dominant factor (e.g., Bowler & Woehr, 2006; note a full review of the AC construct validity issue can be found in detail in Duncan, Jackson, Lance, & Hoffman, 2012.)

Thornton & Rupp (2012) continued to argue that dimension ratings should be the primary focus because of their critical role for prediction, diagnosis, and development purposes. Indeed, recently, Kuncel and Sackett (2014) developed a framework where multiple exercise ratings were aggregated into an overall dimension rating, and this eliminated the finding that exercise variance dominates dimension variance. With this framework, they showed that dimension scoring can be psychometrically appropriate under many conditions and that the dimension scoring approach can lead to dimension variance dominating the dimension score. The findings from this research essentially presented an end to the three-decade-long debate and justified the shift in focus from the construct validity of the exercises to the construct validity of the overall dimension ratings. Particular attention has been given to group differences associated with ACs. The findings from this research have generally been mixed and noted a relatively even split between studies indicating that women scored somewhat higher than men and those showing no significant differences (Anderson, Lievens, van Dam, & Born, 2006). Anderson and colleagues (2006) presented an overview of the gender differences research over a 20-year period. From a leadership perspective, Bobrow and Leonards (1997) developed an AC for first-line supervisors in a customer service division (i.e., requiring substantial interpersonal skills) and found no differences between Whites and minorities. Similarly, Hoffman and Thornton (1997) have reported that, although Whites tend to score higher for overall AC ratings, the differences are typically lower than those found with cognitive ability. More recently, Anderson and colleagues (2006) examined gender differences for ACs for officer entry in the British Army, and they found that women were rated higher on interpersonally oriented leadership constructs (e.g., communication, interaction skills) as well as on drive and determination. It is generally agreed that these racial differences appear to be associated with measuring cognitive components (Hough, Oswald, & Ployhart, 2001; Ryan & Ployhart, 2014).

Interviews

Interviews are the most frequently used procedures in personnel selection across all countries, jobs, and levels (McDaniel, Whetzel, Schmidt, & Maurer, 1994; Salgado et al., 2001) and likely the most frequently utilized method for leadership selection. It is estimated that practically 100% of selection processes use one or more interviews, although not all types of interviews are considered as valid, or even as useful as others. The employment interview has been the target of significant research (e.g., McDaniel et al., 1994). Krajewski and colleagues (2006) compared the validity of situational versus past experience interviews for predicting managerial performance. Using a sample of 157 applicants to managerial positions, they found that the experience-based interview significantly predicted overall performance (.32), whereas the situational interview did not (.09). Additionally, in an examination of the construct differences between the two interview types, Krajewski and colleagues also showed that the experience-based interviews were highly related to manager-relevant work sample measures (i.e., AC exercises), cognitive ability facets, and personality traits.

Another interviewing trend that many practitioners encounter is around the use of a panel or team-based interviews, especially for use when selecting leaders into an organization. Stakeholders often have perceptions around panel interviews versus one-on-one interviews, and while there can be some advantages, there are also some disadvantages. Some of the perceived advantages of panel interviews include that they (a) indicate to the candidate that collaboration is an important value in the organization; (b) provide an opportunity for more people to meet and/or collect data about the candidate; (c) reduce time; and (d) provide those who are not asking the questions an opportunity to observe the candidate and refine their own follow-up questions.

While many practitioners believe these advantages outweigh any disadvantages, there is the potential for challenges with this approach as a best practice. In particular, even though each interviewer spends an allotted amount of time with the candidate, it is less than if he/she were conducting a one-on-one interview, which ultimately translates into an inefficient use of each interviewer's time and limits the opportunity to gather more comprehensive data. An independent interviewer brings unique data to data integration sessions, and that can get lost with panel interviews. Finally, a key potential disadvantage revolves around the candidate experience. Panel interviews can be intimidating, which could impact the candidate's performance during the data gathering. While Sackett and Lievens (2008) noted that there was a focus on interview structure and construct measures, more recent research has shifted to impression management during the interview (e.g., Kleinmann & Klehe, 2011; Stewart, Darnold, Barrick, & Dustin, 2008).

Ultimately, the most effective selection system will use various methods, and this is especially true for entry- and mid-level leadership jobs in which the job requires balance among experience, knowledge, interpersonal competencies, leadership motivation, and personality. On the basis of Schmidt and Hunter (1998), "incremental validity" can be translated into increases in utility (i.e., practical value). The issue of the incremental validity provided by different methods is useful for assessing the extent to which combinations of methods are useful or, by contrast, overly redundant. For example, personality tests and assessment simulations measure different job requirements. Using both methods together should produce incremental validity, thereby leading to a stronger relationship with leader performance.

CASE STUDIES OF LEADERSHIP SELECTION

The final section of this chapter will examine common, high-stakes organizational contexts in which selection systems are likely to be deployed. Two cases are described: one that illustrates high-velocity hiring of leaders for an organization start-up and a second that illustrates a promotional process for leadership succession.

Case 1. High-Velocity Hiring for Entry- and Mid-Level Leadership Positions

Most private sector organizations, if successful, face the positive prospect of starting up a new facility, plant, or store. This is a positive outcome of success and growth in the business. Although there are many positive aspects to growth, in these instances, the pressure for immediate success is very high. Senior leaders are under pressure to make sound expansion decisions with good return on investment (ROI). They must choose the right site, pick the right product mix, install the right technology, and create the right culture. In this complex mix of business issues is a unique opportunity to hire the right people—the first time. For "greenfield" facility start-ups, if executed in a well-planned way, a new culture can be more easily created because there is no existing culture to change. This situation can be contrasted with "brownfield" or retrofit work, in which existing facilities and incumbent employees need to be pointed in a new direction. In this less enviable situation, current operations must overcome the natural inertia caused by years, if not decades, of work conducted in the older operating style and culture.

The authors have worked on many facility start-ups. In our experience, these capital-intensive projects are entered into with a high degree of hope for return as well as incredible pressure for the people involved to be successful. One "greenfield" start-up in particular had this mix of factors at play from the start. The goal of this company's start-up in the Midwest was to build a mid-size automobile engine at better quality and lower cost. The pressure was high given that most of the company's high-quality engines were built outside of the U.S. If quality and cost goals could not be achieved, the plant would be seen as a failure.

Early in the planning for the plant, it was recognized that a new style of manufacturing would be required to achieve the goals. With this in mind, the plant start-up team set out to define a new work culture. In the new plant, lean operating procedures would be the core concept that

Scott C. Erker et al.

defined requirements for people and teams. Identification and elimination of waste is a core concept of lean manufacturing. This requires everyone in the plant to work together to follow established operating procedures and to put in place improvements on a fast, continuous basis. Leader success required higher levels of teamwork, empowerment, coaching, and initiative. The management team struggled to break away from past practices to define this new working culture. A job analysis was conducted with the new management team. A series of “visionary job analysis” discussions was conducted with the plant manager and his direct reports, the functional managers within operations, engineering, maintenance, and HR. Targets were set for behavior, motivational, and technical skills for leaders. It was recognized that front- and mid-level leaders would be critical for creating the desired culture and for executing the operating model that the senior leaders had established. A rigorous program was required to identify those leaders who would accept and excel in this progressive manufacturing environment. The recruitment effort was complicated by the fact that leader candidates would be selected from existing manufacturing facilities (where older manufacturing practices were the norm). It was critical to select leaders with the right skills and dispositions to create in the new culture.

The first step in the hiring process was a comprehensive job application form that covered work experience and technical skills. Special care was taken to fill the selection funnel with a broad pool of leader applicants to achieve a high number of people with the potential to display the right skill set and diversity mix. Screening of applicants was limited to minimal education achieved, technical skill requirements, and eligibility to work in the U.S. The next step involved a comprehensive test battery that targeted behavioral, personality, and motivational competencies that were consistent with a lean manufacturing environment. Candidates were prioritized for the next step according to “fit” (as measured by the test battery) with the defined roles leaders would play in the plant. A third step employed the use of a day-in-the-life AC. This simulation-based set of exercises involved pre-work about the fictitious company’s operation (market, competitors, structure, and culture) that was used in the simulation, an in-basket exercise that challenged the candidate on issues ranging from planning the schedule of production to dealing with HR issues, a coaching exercise to improve a direct report’s performance, and a peer exercise requiring partnering and negotiating skills. The AC was designed to reflect the operating environment of the new plant and give the candidates the opportunity to display behaviors required in leadership roles. Assessors were contractors trained in the assessment process and the client’s business context. The benefit of the AC was realized in two ways. First, candidates had the chance to experience a realistic preview of the leadership job for which they were applying. Second, assessors had the chance to see how candidates performed in exercises that were very similar to the target job. The final step in the selection process was a behavior-based interview, during which candidates described how they had performed in past jobs. Each candidate participated in two one-on-one structured interviews conducted by a line or HR manager. Interview questions were designed to elicit information about target competencies. This provided candidates with the opportunity to describe their previous work and the results they had achieved in these situations. Answers were evaluated against the target job requirements, with relevancy, recency, and similarity to the target job used as guiding evaluation criteria. At the end of the process, all of the data were integrated by a selection panel of line managers facilitated by a HR specialist. Successful candidates were given a contingent job offer (candidates needed a successful reference check and drug screen to get the job).

The plant management team recognized the importance of selecting the right leaders to the eventual success of the facility. The selection of the first leaders to come on board in a new facility is especially critical, as they play multiple roles early in the start-up and set the right tone for the desired culture. For this plant start-up, new leaders were supported with additional training on the concepts of lean manufacturing, coaching, interviewing, and team skills. The results at this plant have been impressive. To date, the new engine manufacturing facility is on target to reach its production goals and has started up on time and on budget, due in part to the successful hiring of its first wave of leaders. The workforce is measured on safety (number of safety violations and on-the-job injuries), quality (number of defects and achievement of quality goals), and engagement (workforce survey conducted yearly). Engagement levels at the new plant are at the top of the list as compared to the network of plants operated by the organization. The plant

management team attributes the high engagement level of the workforce to the quality of the front-line and mid-level leaders. This benchmark facility is held up as an example for how a new start-up should be implemented and as an example of the culture of the future.

Case 2. A Leadership Pipeline Approach for Entry- and Mid-Level Leadership Positions

More and more organizations are executing talent management strategies to close the leadership readiness gap at entry- and mid-level leader positions discussed previously (see Trend 5 above). They achieve this by getting individuals ready to face the challenges encountered at this level prior to promotion. A robust pipeline for entry-level leaders encourages promotion from within (which can be less risky than hiring from the outside) and demonstrates to employees with potential that the company supports a “grow from within” strategy.

The pipeline concept received considerable attention as a result of the book *The Leadership Pipeline: How to Build the Leadership Powered Company* (Charan, Drotter, & Noel, 2000) and was later expanded upon in *Grow Your Own Leaders* and *Leaders Ready Now* (Byham, Smith, & Paese, 2002; Paese, Smith, & Byham, 2016). According to Byham, Concelman, and Cosentino (2007), the leadership pipeline can be defined as “a critical business process that provides organizations with a sustainable supply of quality leaders (at all levels) to meet the challenges of today and tomorrow” (p. 3). A strong pipeline is an integrated assessment and development approach supported by senior management. It is not a single program or tool, but rather it is a process that provides the right quantity and quality of leaders in time to step up and meet pressing business challenges.

Traditional methods of succession management used at the senior level tend to fall apart when applied to lower organizational levels due to lack of scalability. At higher levels there are fewer candidates, all of whom have known track records. High-touch lengthy assessment programs and development plans tailored to each individual can be developed to support transitions into executive levels of leadership. A scalable pipeline strategy is needed at first- and mid-level leadership because leadership assessment and development processes need to be applied to potentially large numbers of first- and second-level leader candidates. We believe that an effective pipeline approach must (a) focus on early identification of leadership potential and readiness and (b) provide individuals with accelerated development prior to their promotion so they are confident in their leadership skills on day one. Practitioners responsible for entry- and mid-level career management look to mitigate the risk of early-leadership failure by integrating assessment and development solutions. The pressure to demonstrate payback to the company for the expense of these programs in terms of time and money is significant, and ROI analyses are critical for sustained implementations.

The company described here took a programmatic approach to leadership pipeline management. This Fortune 500 technology company was interested in identifying individuals in their sales force who had the motivation and potential to be effective district managers, a first-level leader position. They were committed to a “grow your own leadership strategy” because they recognized that performance of internally promoted leaders was more effective than those hired from the outside. The organization’s primary business involved advising potential clients on a number of technically complex products and supporting their launch in their client’s organization. Leaders with minimal technical and sales experience specific to the company lacked credibility with the sales associates and were not effective coaches. Unfortunately, individuals promoted from within (under the current process) were only marginally more effective as leaders. This was disconcerting to HR leaders because they spent considerable resources in training internal leader candidates prior to their promotion. Candidates for this leadership training program were picked based on top management’s judgment. These strategies were not working as the company faced new market opportunities, new competitors, and an increasingly complex set of market offerings.

The first step taken to improve the program was to develop a success profile for leaders. The selection criteria for new leaders had not changed for many years, whereas the business

challenges for sales leaders had changed substantially. Working with senior sales leaders, the authors identified the business drivers for sales leadership positions. Business drivers represent the critical activities on which incumbents must focus to successfully implement the company's sales strategy. In this case, they included better targeting of opportunities, establishing broader client networks, and insight selling. The data from the visionary job analysis formed the base for success profiles—specific competencies, experiences, knowledge, and personal attributes needed to address current leadership challenges. These conclusions were confirmed by successful managers. Key job activities related to each performance area were documented and confirmed by senior managers.

On the basis of this success profile, tools were developed, and a process was designed to support a new promotion process. The program included the following:

1. *Realistic job preview and assessment of motivational fit for leadership.* Current sales associates who were above average sales associates for three years had access to an online leadership career site. On the site, they obtained a balanced view of a career in sales leadership. This site included insights from current successful sales leaders about the transition challenges they faced. Without identifying themselves, users had access to a motivational fit inventory in which they documented the degree to which they liked various work activities. Their responses were computer-scored, and they were given immediate and confidential access to their motivational matches and mismatches with a leadership career. The profile gave associates data and insights to help them make better-informed decisions about their fit with a leadership career. The associates were encouraged, but not required, to share the results with their managers so they could help associates make the best possible decision about pursuing a leadership career.
2. *Assessment of leadership dispositions.* When they decided to continue in the process, the associates documented their relevant experience and knowledge online and completed a leadership insights inventory that was predictive of most of the required leadership competencies. The inventory consisted of a variety of item types, including situational judgment, bio data, and personality items. The items were grouped into subscales that mapped back to the target success profile dimensions. Only managers of candidates had access to the results. Based on the assessment results, candidates had varying degrees of readiness for a leadership career. These managers received training in interpreting the results and provided feedback to candidates. Managers were required to have a feedback discussion with candidates. Managers were to try to influence candidates' career choice, but the final decision to proceed was left to the job candidates.
3. *Online training.* Candidates had access to online leadership courses that they completed at their own pace and on their own time. After candidates completed the coursework, they were encouraged to discuss their training results with their managers and decide jointly if they were ready for the next step in the process.
4. *Competency assessment.* Candidates who decided to proceed in the process had access to an online assessment of the new sales leader competencies. The online assessment asked candidates to respond to a series of leadership challenges by rating the effectiveness of various actions to address each challenge. The leadership challenges provided to candidates were tailored to challenges identified by the job analysis process. Responses were computer-scored, and results were provided to a promotional panel, who conducted a behavioral interview to further evaluate readiness. The promotional panels integrated the interview and assessment results in order to make the best decisions. Candidates were provided with feedback. If the decision was not to proceed, there was a career planning discussion.
5. *Ongoing leadership training.* Candidates placed in a promotion pool had access to more in-depth leadership training.

In a concurrent validity study, 153 randomly selected incumbent managers completed the competency assessment. Ratings of the leadership competencies of the participating managers were made by their direct supervisors. The correlation between the predictor (the competency assessment) and criterion (the ratings of supervisors) was .56. Under the new process, satisfaction with the slate of candidates and success rates in the final promotional interview were much higher. There was no increase in turnover among sales associates who did not succeed in the final steps of the promotional process, suggesting that those not selected saw the process as fair. Performance in pre-promotional training was substantially better than before the process redesign.

CONCLUSIONS

Current trends in business suggest that the demand for high-quality leaders is high, the complexity of their jobs has increased, and the process for readying future leaders is more difficult for organizations to implement. Selection processes that have multiple phases and methods have the greatest likelihood of success. These processes include well-developed and validated screening tools (e.g., cognitive tests, biodata instruments, personality and/or situational tests) accompanied by more in-depth evaluations, such as simulations, assessment centers, and structured interviews. Sound leadership selection processes that are tied to development have the greatest impact on performance, especially when there is a sound implementation strategy (e.g., the way the need for assessment is communicated to participants; transparency of results with those impacted by the assessment; clear accountability for the participants, managers, and HR; alignment with other HR systems; and success metrics that can be used to demonstrate ROI). As the case studies demonstrate, differing organizational needs and contexts, such as start-up and leadership pipeline, have differing demand characteristics that impact the tools and processes used and the implementation strategy. Other organizational contexts, such as mergers and acquisitions and the desire to improve employee and customer engagement, also have differential impact on the assessment targets, as well as implications for how they are measured and implemented.

It is clear that private organizations are not all in the same place when it comes to improving the performance of leaders. Although there are bright spots that can be pointed to as examples that others should follow, the lack of a systematic approach to identifying, selecting, and developing leaders provides opportunity for the future. Leadership is a topic that has been written about extensively in the academic and popular business press, and there is no lack of theory or advice on defining leadership or conceptualizing what steps should be taken to improve leadership performance. There is, however, a lack of agreement on the best way to assess leadership potential and performance and how to get individuals ready for entry- and mid-level leadership roles. To be useful, future practice and research should seek to evaluate the specific tools, processes, and implementation strategies that will create the best ROI within specific organizational contexts. Modern, successful selection systems balance the science of leadership selection with practical realities of the business environment. Sustainable, long-term impact is achieved by taking a holistic and practical approach to interpreting organizational context, weighing the potential impact of various selection tools, and rigorously executing the implementation plan.

REFERENCES

- Anderson, N., Lievens, F., van Dam, K., & Born, M. (2006). A construct-driven investigation of gender differences in a leadership-role assessment center. *Journal of Applied Psychology, 91*, 555–566.
- Bandura, A. (2006). Social cognitive theory. In S. Rogelberg (Ed.), *Encyclopedia of industrial/organizational psychology*. Beverly Hills, CA: Sage.
- Barrick, M. R., & Mount, M. K. (1991). The Big Five personality dimensions and job performance: A meta-analysis. *Personnel Psychology, 44*, 1–26.
- Bartram, D. (2004). Assessment in organizations. *Applied Psychology: An International Review, 53*, 237–259.
- Becton, J. B., Matthews, M. C., Hartley, D. L., & Whitaker, D. H. (2009). Using biodata to predict turnover, organizational commitment, and job performance in healthcare. *International Journal of Selection and Assessment, 17*, 189–202.
- Bergner, S., Neubauer, A. C., & Kreuzthaler, A., (2010). Broad and narrow personality traits for predicting managerial success. *European Journal of Work and Organizational Psychology, 19*, 177–199.
- Bernthal, P. R., & Erker, S. (2005). *Selection forecast: Recruiting and hiring talent*. Pittsburgh, PA: Development Dimensions International.
- Berry, C. M., Clark, M. A., & McClure, T. K. (2011). Racial/ethnic difference in the criterion-related validity of cognitive ability tests. *Journal of Applied Psychology, 96*, 881–906.
- Bersin, J. (2015). *Predictions for 2015, Research Report*. Deloitte/Bersin Consulting. Retrieved from: <http://blog.bersin.com/predictions-for-2015-redesigning-the-organization-for-a-rapidly-changing-world/>

- Bobrow, W., & Leonards, J. S. (1997). Development and validation of an assessment center during organizational change. *Journal of Social Behavior and Personality*, *12*(5), 217.
- Bowler, M. C., & Woehr, D. J. (2006). A meta-analytic evaluation of the impact of dimension and exercise factors on assessment center ratings. *Journal of Applied Psychology*, *91*, 1114–1124.
- Bray, D. W. (1982). The assessment center and the study of lives. *American Psychologist*, *37*, 180–189.
- Bray, D. W., & Howard, A. (1983). *The AT&T longitudinal studies of managers*. New York, NY: The Guilford Press.
- Breaugh, J., Labrador, J., Frye, K., Lee, D., Lammers, V., & Cox, J. (2014). The value of biodata for selecting employees: Comparable results for job incumbent and job applicant samples. *Journal Of Organizational Psychology*, *14*(1), 40–51.
- Burke, R. J., & Cooper, C. L. (2000). *The organization in crisis: Downsizing, restructuring, and privatization*. Hoboken, NJ: Blackwell.
- Byham, T. M., Concelman, J., & Cosentino, C. (2007). *Optimizing your leadership pipeline*. Pittsburgh, PA: Development Dimensions International.
- Byham, W. C., Smith, A. B., & Paese, M. J. (2002). *Grow your own leaders*. Upper Saddle River, NJ: Prentice Hall.
- Campbell, J. P., McHenry, J. J., & Wise, L. L. (1990). Modeling job performance in a population of jobs. *Personnel Psychology*, *43*, 313–333.
- Carlson, K. D., Scullen, S. E., Schmidt, F. L., Rothstein, H., & Erwin, F. (1999). Generalizable biographical data validity can be achieved without multi-organizational development and keying. *Personnel Psychology*, *52*, 731–755.
- Chakraborty, R., & Rudbeck, S. (2014). *Career management: Making it work for employees and employers*. Towers-Watson. Retrieved from: <https://www.towerswatson.com/en/Insights/Newsletters/Europe/HR-matters/2014/12/Career-management-Making-it-work-for-employees-and-employers>
- Chan, D., & Schmitt, N. (2002). Situational judgment and job performance. *Human Performance*, *15*, 185–199.
- Charan, R., Drotter, S., & Noel, J. (2000). *The leadership pipeline: How to build the leadership powered company*. Hoboken, NJ: Jossey-Bass.
- Christian, M. S., Edwards, B. D., & Bradley, J. C. (2010). Situational judgments tests: Constructs assessed and a meta-analysis of their criterion-related validities. *Personnel Psychology*, *63*, 83–117.
- Clevenger, J., Pereira, G., Wiechmann, D., Schmitt, N., & Harvey, V. S. (2001). Incremental validity of situational judgment tests. *Journal of Applied Psychology*, *86*, 410–417.
- Duncan, J. R., Jackson, D., Lance, C., & Hoffman, B. (Eds.). (2012). *The psychology of assessment centers*. New York, NY: Routledge.
- Cortina, J. M., & Luchman, J. N. (2013). Personnel selection and employee performance. In N. W. Schmitt & S. Highhouse (Eds.), *Handbook of psychology, Vol 12: Industrial and organizational psychology* (pp. 143–183). Hoboken, NJ: John Wiley & Sons, Inc.
- Feingold, A. (1994). Gender differences in personality: A meta-analysis. *Psychological Bulletin*, *116*, 429–456.
- Furnham, A. (2008). HR professionals' beliefs about and knowledge of assessment techniques and psychometric tests. *International Journal of Selection and Assessment*, *16*, 300–305.
- Gatewood, R. D., Feild, H. S., & Barrick, M. (2011). *Human resource selection*. Mason, OH: Thompson Southwestern.
- Gaugler, B. B., Rosenthal, D. B., Thornton, G. C., & Bentson, C. (1987). Meta-analysis of assessment center validity. *Journal of Applied Psychology*, *72*(3), 493–511.
- Goldman, D. (1996). *Emotional intelligence*. London, England: Bloomsbury.
- Guion, R. M. (1998). *Assessment, measurement, and prediction for personnel decisions*. Mahwah, NJ: Lawrence Erlbaum.
- Hoffman, C. C., & Thornton, G. C. (1997). Examining selection utility where competing predictors differ in adverse impact. *Personnel Psychology*, *50*, 455–470.
- Hogan, J., Davies, S., & Hogan, R. (2007). Generalizing personality-based validity evidence. In S. M. McPhail (Ed.), *Alternative validation strategies: Developing new and leveraging existing validity evidence* (pp. 181–229). Hoboken, NJ: John Wiley & Sons.
- Hogan, J., & Ones, D. S. (1997). Conscientiousness and integrity at work. In *The handbook of personality psychology* (pp. 849–870). New York, NY: Academic Press.
- Hogan, R., & Hogan, J. (1995). *Hogan personality inventory manual*. Tulsa, OK: Hogan Assessment Systems.
- Hogan, R., Hogan, J., & Roberts, B. W. (1996). Personality measurement and employment decisions: Questions and answers. *American Psychologist*, *51*, 469–477.
- Hogan, R., & Kaiser, R. B. (2005). What we know about leadership. *Review of General Psychology*, *9*, 169–180.

- Hollander, E. (2006). Influence processes in leadership-followership: Inclusion and the idiosyncrasy credit model. In D. A. Hantula (Ed.), *Theoretical & methodological advances in social & organizational psychology: A tribute to Ralph Rosnow* (pp. 293–312). Mahwah, NJ: Lawrence Erlbaum.
- Hollander, E. (2008). *Inclusive leadership and leader-follower relations: Concepts, research, and applications*. New York, NY: Routledge/Psychology Press.
- Hough, L. M., & Oswald, F. L. (2000). Personnel selection: Looking toward the future—remembering the past. *Annual Review of Psychology*, *51*, 631–664.
- Hough, L. M., Oswald, F. L., & Ployhart, R. E. (2001). Determinants, detections and amelioration of adverse impact in personnel selection procedures: Issues, evidence and lessons learned. *International Journal of Selection and Assessment*, *9*, 152–194.
- Howard, A. (2006). Best practices in leader selection. In J. A. Conger & R. E. Riggio (Eds.), *The practice of leadership: Developing the next generation of leaders* (pp. 11–40). San Francisco, CA: Jossey-Bass.
- Hunter, J. E., & Hunter, R. F. (1984). Validity and utility of alternative predictors of job performance. *Journal of Applied Psychology*, *96*, 72–98.
- Hunter, J. E., Schmidt, F. L., & Judiesch, M. K. (1990). Individual differences in output variability as a function of job complexity. *Journal of Applied Psychology*, *75*, 28–42.
- Johansen, B. (2009). *Leaders make the future: Ten new leadership skills for an uncertain world*. San Francisco: Berrett-Koehler Publishers.
- Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations*. Hoboken, NJ: John Wiley & Sons, Inc.
- Kleinmann, M., & Klehe, U. C., (2011). Selling oneself: Construct and criterion-related validity of impression management in structured interviews. *Human Performance*, *24*, 29–46.
- Kluger, A. N., & Rothstein, H. R. (1993). The influence of selection test type on applicant reactions to employment testing. *Journal of Business and Psychology*, *8*, 3–25.
- Krajewski, H. T., Goffin, R. D., McCarthy, J. M., Rothstein, M. G., & Johnston, N. (2006). Comparing the validity of structured interviews for managerial-level employees: Should we look to the past or focus on the future? *Journal of Occupational and Organizational Psychology*, *79*, 411–432.
- Kramer, R. M. (1999). Trust and distrust in organizations: Emerging perspectives, enduring questions. *Annual Reviews in Psychology*, *50*, 569–598.
- Kuncel, N. R., & Sackett, P. R. (2014). Resolving the assessment center construct validity problem (as we know it). *Journal of Applied Psychology*, *99*, 38–47.
- Lance, C. (2008). Why assessment centers don't work the way they're supposed to. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, *1*, 84–97.
- Landy, F. J. (2005). Some historical and scientific issues related to research on emotional intelligence. *Journal of Organizational Behavior*, *26*(4), 411–424.
- Lefkowitz, J., Gebbia, M. I., Balsam, T., & Dunn, L. (1999). Dimensions of biodata items and their relationships to item validity. *Journal of Occupational and Organizational Psychology*, *72*, 331–350.
- Lombardi, M. (2013). *Human capital management trends 2013: It's a brave new world*. Aberdeen Group. Retrieved from: <http://www.aberdeen.com/assets/report-preview/8101-RA-human-capital-management.pdf>
- Lynn, A. (2005). *The EQ difference: A powerful plan for putting emotional intelligence to work*. Broadway, NY: AMACOM.
- Marston, C. (2007). *Motivating the "What's in it for me?" workforce*. Hoboken, NJ: John Wiley & Sons.
- Matthews, G., Zeidner, M., & Roberts, R. D. (2004). *Emotional intelligence: Science and myth*. Cambridge, MA: MIT press.
- Mayer, J. D., Roberts, R. D., & Barsade, S. G. (2008). Human abilities: Emotional intelligence. *Annual Review of Psychology*, *59*, 507–536.
- McDaniel, M. A., Morgeson, F. P., Finnegan, E. B., Campion, M. A., & Braverman, E. P. (2001). Use of situational judgment tests to predict job performance: A clarification of the literature. *Journal of Applied Psychology*, *86*, 730–740.
- McDaniel, M. A., Whetzel, D. L., Schmidt, F. L., & Maurer, S. D. (1994). The validity of employment interviews: A comprehensive review and meta-analysis. *Journal of Applied Psychology*, *79*, 599–616.
- Mitchell, C., Ray, R. L., & van Ark, B. (January 2014). *The Conference Board CEO Challenge® 2014: People and performance*. New York, NY: The Conference Board.
- Mitchell, S., Bolling, B., Phang, N., & Schott, T. (2013). *Talent beyond borders: An organizational guide to delivering the promise of global talent management*. Pittsburgh, PA: Development Dimensions International.
- Modern Survey. (2016). *The corporate trust crisis*. Minneapolis, MN: Modern Survey.
- Mount, M. K., Witt, L. A., & Barrick, M. R. (2000). Incremental validity of empirically keyed biodata scales over GMA and the five factor personality constructs. *Personnel Psychology*, *53*, 299–323.
- Mumford, M. D., Barrett, J. D., & Hester, K. S. (2012). Background data: Use of experiential knowledge in personnel selection. In N. Schmitt (Ed.), *The Oxford handbook of personnel assessment and selection* (pp. 353–382). New York, NY: Oxford University Press.

- Mumford, M. D., Stokes, G. S., & Owens, W. A. (1990). *Patterns of life history: The ecology of human individuality*. Hillsdale, NJ: Lawrence Erlbaum.
- Ones, D. S., & Viswesvaran, C. (1996). *What do pre-employment customer service scales measure? Explorations in construct validity and implications for personnel selection*. Presented at the Annual Meeting for the Society of Industrial and Organizational Psychology, San Diego, CA.
- Ones, D. S., & Viswesvaran, C. (1998). Gender, age and race differences on overt integrity tests: Analyses across four large-scale applicant data sets. *Journal of Applied Psychology, 83*, 35–42.
- Ones, D. S., Viswesvaran, C., & Schmidt, F. L. (1993). Comprehensive meta-analysis of integrity test validities: Findings and implications for personnel selection and theories of job performance. *Journal of Applied Psychology, 78*, 679.
- Oracle Corporation. (2012). *Talent retention: Six technology enabled best practices*. Retrieved from: <http://www.oracle.com/us/media1/talent-retention-6-best-practices-1676595.pdf>
- Paese, M. J., Smith, A. B., & Byham, W. C. (2016). *Leaders ready now: Accelerating growth in a faster world*. Bridgeton, PA: DDI Press.
- Ployhart, R. E. (2006). Staffing in the 21st century: New challenges and strategic opportunities. *Journal of Management, 32*, 868–897.
- Ployhart, R. E., & Ryan, A. M. (1998). Applicants' reactions to the fairness of selection procedures: The effects of positive rule violations and time of measurement. *Journal of Applied Psychology, 83*(1), 3.
- Robertson, I. T., Barron, H., Gibbons, P., MacIver, R., & Nyfield, G. (2000). Conscientiousness and managerial performance. *Journal of Occupational and Organizational Psychology, 66*, 225–244.
- Robertson, I. T., & Smith, M. (2001). Personnel selection. *Journal of Occupational and Organizational Psychology, 74*, 441–472.
- Rothstein, H. R., Schmidt, F. L., Erwin, F. W., Owens, W. A., & Sparks, C. P. (1990). Biographical data in employment selection: Can validities be made generalizable? *Journal of Applied Psychology, 75*, 175–184.
- Ryan, A. M., & Ployhard, E. (2014). A century of selection. *Annual Review of Psychology, 65*, 693–717.
- Sackett, P. R., & Dreher, G. F. (1982). Constructs and assessment center dimensions: Some troubling empirical findings. *Journal of Applied Psychology, 67*(4), 401.
- Sackett, P. R., & Lievens, F. (2008). Personnel selection. *Annual Review of Psychology, 59*, 419–450.
- Sackett, P. R., & Wilk, S. L. (1994). Within-group norming and other forms of score adjustment in pre-employment testing. *American Psychologist, 49*, 929–954.
- Salgado, J. F., Viswesvaran, C., & Ones, D. S. (2001). Predictors used for personnel selection: An overview of constructs, methods, and techniques. In N. Anderson, D. S. Ones, H. K. Sinangil, & C. Viswesvaran (Eds.), *Handbook of industrial, work, and organizational psychology. Vol. 1: Personnel psychology* (pp. 165–199). Thousand Oaks, CA: Sage.
- Schmidt, F. L., & Hunter, J. E. (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. *Journal of Applied Psychology, 124*, 262–274.
- Schmitt, N. (2014). Personality and cognitive ability as predictors of effective performance at work. *Annual Review of Psychology, 1*, 45–65.
- Schmitt, N., & Chan, D. (2006). Situational judgment tests: Method or construct? In J. Weekley & R. E. Ployhart (Eds.), *Situational judgment tests* (pp. 135–156). Mahwah, NJ: Lawrence Erlbaum.
- Schmitt, N., & Golubovich, J. (2013). Biographical information. In K. F. Geisinger (Ed.), *APA handbook of testing and assessment in psychology*. Washington, DC: American Psychological Association.
- Sinar, E. (2013). *Leadership insights: A 10-year culmination of executive analytics*. Pittsburgh, PA: Development Dimensions International.
- Sinar, E., Wellins, R. S., Ray, R., Abel, A. L., & Neal, S. (2014). *Ready-now leaders: 25 findings to meet tomorrow's business challenges*. Development Dimensions International and The Conference Board. Retrieved from: http://www.ddiworld.com/ddi/media/trend-research/global-leadership-forecast-2014-2015_tr_ddi.pdf?ext=.pdf
- Society for Human Resource Management. (2009). *SHRM's 2009 HR trend book*. Alexandria, VA: Author.
- Stricker, L. J., & Rock, D. A. (1998). Assessing leadership potential with a biographical measure of personality traits. *International Journal of Selection and Assessment, 6*, 162–184.
- Spencer, G. (2014). *Career development framework at IBM*. Delray Beach, FL: Brandon Hall Case Study.
- Stewart, G. L., Darnold, T., Barrick, M. R., & Dustin, S. D. (2008). Exploring the handshake in employment interviews. *Journal of Applied Psychology, 93*, 1139–1146.
- Stokes, G. S., Hogan, J. B., & Snell, A. F. (1993). Comparability of incumbent and applicant samples for the development of biodata keys: The influence of social desirability. *Personnel Psychology, 46*, 739–762.
- Stricker, L. J., & Rock, D. A. (1998). Assessing leadership potential with a biographical measure of personality traits. *International Journal of Selection and Assessment, 6*, 164–184.

Selection Methods and Desired Outcomes

- Thornton, G. C., & Rupp, D. E. (2006). *Assessment centers in human resource management: Strategies for prediction, diagnosis, and development*. Mahwah, NJ: Lawrence Erlbaum.
- Thornton, G. C., & Rupp, D. E. (2012). Research into dimension-based assessment center. In Duncan, J. R., Jackson, D., Lance, C., & Hoffman, B. (Eds.), *The psychology of assessment centers* (pp. 141–172). New York, NY: Taylor & Francis.
- Thornton, G. C., Rupp, D. E., & Hoffman, B. J. (2014). *Assessment center perspectives for talent management strategies*. New York, NY: Routledge.
- Tormala, Z. L., Jia, J. S., & Norton, M. I. (2012). The preference for potential. *Journal of Personality and Social Psychology, 103*(4), 567–583.
- Van Iddekinge, C. H., Eidson, C. E., Kudisch, J. D., & Goldblatt, A. M. (2003). A biodata inventory administered via interactive voice response (IVR) technology: Predictive validity, utility, and subgroup differences. *Journal of Business and Psychology, 18*, 145–156.
- Van Rooy, D. L., & Viswesvaran, C. (2004). Emotional intelligence: A meta-analytic investigation of predictive validity and nomological net. *Journal of Vocational Behavior, 65*(1), 71–95.
- Weekley, J. A., Ployhart, R. E., & Holtz, B. C. (2006). On the development of situational judgment tests: Issues in item development, scaling, and scoring. In J. A. Weekley & R. E. Ployhart (Eds.), *Situational judgment tests: Theory, measurement, and applications*. (pp. 157–182). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Wernimont, P. F., & Campbell, J. P. (1968). Signs, samples, and criteria. *Journal of Applied Psychology, 52*, 372–376.
- Zibarras, L. D., & Woods, S. A. (2010). A survey of UK selection practices across different organization sizes and industry sectors. *Journal of Occupational and Organizational Psychology, 83*, 499–511.