THE SEARCH IS ON:

UTILIZING RIGOROUS ASSESSMENT

TO IDENTIFY HIGH POTENTIAL EMPLOYEES

A Dissertation in

Psychology

by

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ABSTRACT

Accurately identifying high potential employees is imperative for a successful talent management strategy, however there is a paucity of research on this special form of personnel selection. Using the Leadership Blueprint (Church & Silzer, 2013) as a predictive framework, a criterion validation study, which utilized a sample of corporate employees, was designed to empirically determine whether the proposed dimensions were able to identify high potential employees. The study employed a concurrent design and sampled employees at job levels higher than the ultimate target audience for future assessment and forecasting. The results of the study suggested that cognitive abilities, motivation, and past experiences were important predictors of potential. The implications of these findings and the serious need for additional research on predicting potential are discussed.
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Introduction

The science and art of predicting human behavior in the workplace has a long history in Industrial-Organizational (IO) psychology. In a traditional personnel selection context, the typical outcome of interest is job performance in the near future; however, when selecting current employees into the exclusive group commonly referred to as high potentials (HiPos; i.e., individuals with the ability and motivation to be successful many levels higher in an organization), there is an added level of complexity due to the extended temporal nature of the task. The goal of HiPo assessment is not to predict who will succeed following their immediate next promotion, it is to predict beyond the near term, determining whom will likely rise through the ranks and ultimately take on top leadership positions in an organization. This temporally unique selection goal begs the conceptual question, “how does one predict an individual’s future manifestation of potential?”

The importance of predicting HiPo is trifold for organizations. Identifying HiPo is critical for 1) succession planning for key leadership roles, 2) allocating expensive developmental resources to those most likely to benefit from them in a manner that provides ROI to the organization, and 3) retaining top talent. Specific to talent retention, it is a well-established finding that receiving feedback affects motivation (Hackman & Oldham, 1976), and this may be truer now than ever before. The Millennial generation has been characterized as desiring frequent feedback and recognition (Ng, Schweitzer, & Lyons, 2010) and a prime way to fulfill that need is with a HiPo program. A survey conducted by the Center for Creative Leadership found that 77% of respondents placed high value on being formally identified as a HiPo, and interestingly, only 14% of formally identified HiPos were seeking alternative employment, whereas 33% of HiPos who were not formally recognized had turnover intentions (Campbell & Smith, 2010). Findings
such as this demonstrate the undeniable need for rigorous and scientifically based HiPo identification. Moreover, if organizations are going to categorize exemplary employees as HiPos, then the processes by which these talent designations are generated certainly must be substantive, psychometrically sound, and procedurally just (Gelens, Hofmans, Dries, & Pepermans, 2014).

The focus of this research was to explicate the process of identifying HiPo junior level employees using psychometric assessments. Early career HiPo identification would enable selection into the top talent pool to occur prior to individuals having established a track record of success within an organization, thus jumpstarting their development. In particular, this research sought to test whether a comprehensive model of HiPo identification based in the scientific and practice literatures was predictive of potential in an organization. The ultimate goal of this effort was to increase the understanding of HiPo identification, and subsequently allow such methods to inform talent designations and allocation of developmental resources.
Literature Review

History of High Potential

The process of predicting and assessing HiPo does not have a long history compared to other content and methodology areas within IO psychology. The early efforts to predict potential arose within the leadership literature (e.g., Bennis & Nanus, 1985; Bray, Campbell, & Grant, 1974; Howard & Bray, 1988; Spreitzer, McCall, & Mahoney, 1997). While the work by Bennis and Nanus (1985) was primarily a study of successful leaders and their attributes, the longitudinal work by Bray and colleagues (1974) explored which factors predicted managerial success over time. Over a twenty-year period Bray and colleagues repeatedly administered assessments and gathered performance ratings on a group of managers, ultimately finding that a handful of competencies predicted later success. More specifically, interpersonal skills, cognitive ability, desire for advancement (i.e., ambition), and administrative skills predicted the managers’ progression, while other skills developed over time. This groundbreaking work by Bray and colleagues demonstrated that a combination of early indicators and developing skills over the course of one’s career has the potential to predict the future success of employees. The research by Spreitzer and colleagues (1997) took a narrower focus for their prediction of potential, focusing on identifying the characteristics that would predict potential success as an expatriate. A series of field studies were conducted, leading to mixed findings that suggested further research on predicting executive potential in multinational organizations (MNO) was needed. These scholarly efforts represent a limited body of literature that clearly demonstrates the methodological and theoretical complexity surrounding the prediction of potential.

Interest in predicting future executive success can also be found in the practice literature. In 1998 consultants from McKinsey and Co. (Chambers, Foulon, Handfield-Jones, Hankin, &
Michaels) coined the phrase “war for talent” in reference to the dire need to acquire and develop top talent. The subsequent book by the same name (Michaels, Handfield-Hones, & Axelrod, 2001) reiterated the importance of a strategic approach to talent management practices. This “war for talent” mindset remains active today, encompassing two primary factors, 1) the acknowledgement that human capital is an organization’s most valuable resource, and 2) recognition of the changing demographics of the workforce. As the Baby Boomers retire, the workforce will be replaced with Millennials— in fact, it is predicted that by 2025 the Millennials will comprise three quarters of the workforce (Schwabel, 2012). Given that knowledge workers are arguably the most important commodities for organizations, learning how to strategically predict who has the potential to fill the leadership pipeline is imperative for survival. Or in other words, the war rages on!

In an effort to consolidate the varying views and approaches to HiPo identification throughout the academic and practice literatures, Silzer and Church (2009) conducted an extensive review and confirmed their own suspicion that what little published research exists is largely not peer-reviewed (n.b., with the exception of McCall, 1994 & Spreitzer et al., 1997). More specifically, the majority of the recent literature is in the form of conceptual trade books, internal research from organizations, and consulting firms’ marketing of their assessment offerings. A number of problems arise from this dearth of rigor. Among them the lack of a consistent definition of HiPo itself, replication of findings, and clear portrayals as to what, if any, measurement and statistical analyses were used to reach their espoused conclusions.

In a recent benchmarking study presented in Silzer and Church (2010), twenty large organizations (e.g., AOL, Marriott, Ingersoll Rand, and Bristol-Myers Squibb) shared their definitions of HiPo. The authors categorized them into four primary types of definitions; the
main methods of defining HiPo were, in order of prevalence: defining HiPo by role (e.g., potential to move into top management roles), by level (e.g., ability to move and perform a certain number of levels above current role), by breadth (e.g., capability to adopt a role with a broader scope), and by record (e.g., track record of high performance).

Silzer and Church (2010) view these types of definitions as reflecting the evolution of HiPo. The least common method, by record, is a past-looking definition, which would have been most appropriate during a time when organizations were not experiencing rapid workplace change. Two of the more common definitions, that is, by role and by breadth, are reflective of a future-oriented approach to predicting HiPo, taking into consideration the ambiguity that surrounds the future of work. Silzer and Church (2010) posit that defining HiPo by breadth and/or by role are likely the most appropriate for the current state of the world of work. These four categories of definitions could also be viewed as two broader categories: by record representing “can they perform”, and the other three representing “can they expand”. While our discipline is busy sorting out the various approaches to defining potential, the war for talent in an ever-evolving workplace continues to necessitate defining direction.

**Perspectives on High Potential**

While there is an abundance of research in IO psychology on predicting future performance the majority has focused on predicting relatively short-term success, likely due to the context in which IO psychology was born (e.g., immediate placement during World Wars I and II for armed services personnel selection) and the typical client need of hiring employees for a specific job. The personnel selection techniques developed to accommodate such demands (e.g., job analysis and competency modeling) are most suitable for situations in which the goal is to predict whether the candidate currently possesses the knowledge, skills, and abilities (KSAs)
to perform in a specific role, but far less suitable for forming a prediction of whether one will someday possess KSAs that are related to success in future and distal roles. The temporal difference inherent in predicting HiPo requires a novel mindset.

The approach to conceptualizing and measuring HiPo put forth by McCall (1994) argues that when identifying HiPo the goal should not be to find a replica of a successful executive, but instead to identify individuals who have the potential to reach a specified level of success later in their career. McCall refers to this as “a philosophy of development…rather than one of selection” (p. 49; 1994). This approach is largely supported in the limited literature on identifying HiPo (e.g., Dries & Pepermans, 2012; Lombardo & Eichinger, 2000; Martin & Schmidt, 2010; Ready, Conger, & Hill, 2010; Spreitzer et al., 1997), however whether it is widely utilized in practice is debatable. Making talent movement decisions based on current performance and KSAs is well a well-established practice, whereas the McCall (1994) approach lacks any instructive guidance and this nascent field provides little to inform the practitioner or interested academic about the best practices for predicting HiPo. Standard job analysis procedures are not suitable for this type of long-term prediction, which could have legal implications. A job analysis is often considered mandatory for devising a legally defensible selection system; therefore the rigor of job analysis would need to be replaced with new methods that result in an equally valid HiPo selection tool.

Methods of Predicting High Potential

Organizations have a vested interest in identifying and developing high-potentials in their leadership pipelines. The growing prevalence of formal HiPo assessment amongst the industry leaders reflects the perceived importance of predicting HiPo. According to a handful of benchmarking studies, over the last decade the percentage of organizations utilizing formal
assessment processes with their HiPo talent has increased from 31% (of 71 Canadian companies; Slan & Hausdorf, 2004), to 55% (of 100 companies; Hewitt, 2003) to 75% (of 59 large organizations; Church & Rotolo, 2013) and 100% (of 20 major corporations; Silzer & Church, 2010).

Most recently Church and Rotolo (2013) surveyed a group of 95 large organizations (e.g., 90% had over 10,000 employees and the mean annual revenue was 45.7 billion) with strong talent management and leadership development functions. After a response rate of 88%, and responses indicating that only 70.2% used a method of formal assessment, 59 organizations remained in the sample. Of those 59, while 44 were utilizing assessment for HiPo (e.g., 360 feedback, personality inventories, structured interviews), only 22 of those organizations were doing so with identification in mind. The majority took a developmental approach, meaning that they used the assessment to determine the strengths and development opportunities of a group of employees that had already deemed HiPos (Church & Rotolo, 2013). This demonstrates that while HiPo is receiving far more attention in the realm of formal assessment, only a small percentage of organizations are seeking to identify HiPo with such rigorous methods.

The infrequency with which organizations are adopting formal assessment processes for identifying HiPo talent is likely a result of how little is known regarding HiPo identification via psychometric assessment. Though a variety of consulting groups, such as Korn/Ferry, YSC, DDI, and CEB/SHL, offer tools to identify HiPo talent, there is a long history of HiPo identification being a solely subjective process that must first be overcome before this new movement toward assessment takes root. The notion of managers being able to accurately determine HiPo based on their own subjective criteria is deeply entrenched, and the difficulty inherent in psychometrically identifying HiPo does not help the argument for moving toward a
new assessment-based method. The results of the 2008 benchmarking study of 20 organizations presented in Silzer and Church (2010) found that all of the organizations surveyed used immediate manager recommendations and ratings, as well as senior manager reviews, as part of their HiPo identification process, which demonstrates the pervasiveness of relying on manager opinions and ratings for identifying HiPo. While human insight can be valuable as a means of interpreting the data through an appropriate context, it is unwise to rely on this single source in the absence of rigorous, valid, and standardized assessment.

**Predictors of High Potential**

Narrowing the discussion from focusing on perspectives and methods of prediction, the issue of what factors should be measured when predicting potential will now be addressed. In 2009, Silzer and Church reviewed the literature on HiPo to summarize the range of individual difference variables that are being espoused as predictors of potential. Eleven models of HiPo, arising from research and practice, were summarized and the common themes were identified as:

- Cognitive skills
- Personality/interpersonal variables
- Learning
- Leadership
- Motivation
- Knowledge/values
- Performance

While there was value in this first level of categorization, seven categories borders on unwieldy and most of the categories would be operationalized with multiple scales, therefore, based on their collective expertise the authors further categorized these themes into an integrated model of potential consisting of three dimensions: foundational, growth, and career (Silzer & Church, 2009). This theoretical model of predicting potential has since been coined the Leadership Potential BluePrint (Church & Silzer, 2013).
The authors categorized cognitive skills and personality/interpersonal variables under the umbrella of foundational dimensions, which are dimensions seen as resistant to intra-individual change (Silzer & Church, 2009). That cognitive ability and personality are stable over time is widely accepted within the extant literature, whereas other dimensions are known to change throughout an individual’s career due to specific and accumulated developmental experiences (McCall, 1994).

This segues into the second dimension of the integrated HiPo model: the growth dimension. Learning and motivation were categorized as growth dimensions, meaning that they are seen components that can affect one’s growth and development, while also developing as a result of the assignments, roles, and various activities the individual experiences. Approaches to learning and ability to learn, as well as one’s motivation, may indicate the degree to which one will develop over time (Silzer & Church, 2009).

The third category is the career dimension, consisting of themes such as leadership, performance, and knowledge/values. The career dimensions are seen as early indicators of future potential, such that having a strength in any of these dimensions at the beginning of one’s professional career should indicate an increased probability of success in those arenas in the future (Silzer & Church, 2009). However, the previously discussed temporal issues with predicting HiPo (i.e., how far into the future can we predict?) are most problematic for the career dimension. The career dimensions are subject to change via the growth dimensions, which may damper the long-term predictive ability of this dimension. Despite the complications with the career dimension, each of these dimensions is posited to assist in the prediction of potential. In the present research, the target audience of HiPo prediction was early career professionals.
**Foundational dimensions.** Extensive research has demonstrated that cognitive ability and personality are strong predictors of job performance (Kuncel, Ones, & Sackett, 2010). Cognitive ability predicts job performance with validities ranging up to .50, and personality dimensions also have strong predictive ability with validities ranging between .20 and .40 (Kuncel et al., 2010). Though both have received their fair share of criticism and doubt over the years, the amount of evidence supporting their ability to predict job performance is impressive (e.g., Barrick & Mount, 1991).

**Cognitive ability.** Cognitive ability is widely accepted as “the most powerful predictor of overall job performance” (Gottfredson, 1997, p.83). The relationship between cognitive ability and job performance is thought to be indirect, with learning and acquisition of job knowledge mediating the relationship (Kuncel, Hezlett, & Ones, 2004). The role that learning and acquisition of knowledge play in the relationship between cognitive ability and performance helps to explain why cognitive ability is more predictive of performance in complex jobs (Hunter, 1983). Jobs with higher complexity require that more job specific and difficult knowledge be acquired; therefore complexity moderates the relationship between cognitive ability and job performance. Professional level jobs are undoubtedly complex, requiring acquisition of multifaceted skills and knowledge. Based upon the classic research supporting cognitive ability as a predictor of job success alone (e.g., Hunter & Hunter 1984; Hunter, 1986; Hunter, Schmidt, & Judiesch, 1990), the literature makes a strong argument for the value cognitive ability would bring to predicting HiPo; however, recent research enhances this already compelling case.

Part of the definition of HiPo is the propensity for success, therefore promotions, high salary, and occupational prestige are indicators (and outcomes) of HiPo. Longitudinal research
by Judge, Klinger, and Simon (2010) demonstrated that individuals with higher general mental ability (GMA) have stronger indicators of extrinsic career success (e.g., income and occupational prestige), and moreover they found a difference in the rate of career growth. Using multi-level modeling Judge and colleagues (2010) found that not only did individuals with higher GMA have more occupational prestige from the onset; they achieve a significantly higher level as their career evolves. Similarly, while GMA did not differentiate between starting salaries, throughout the course of their careers individuals with higher GMA earn substantially larger salaries than those with lower GMA. Most notable for the present research, they found that the rate (i.e., slope) of growth was significantly steeper for high GMA individuals on both of the indicators of extrinsic career success. They posited that GMA can predict those who will have an accelerated career trajectory, which is an indication of a HiPo employee. Additional support for cognitive ability as a predictor of HiPo is the reoccurring finding that those with higher GMA benefit more from learning and development opportunities than do those with lower GMA (Judge et al., 2010; Kuncel et al., 2004). Part of strategic talent management is allocating resources to those who provide the organization with the largest ROI and this literature demonstrates that individuals with higher cognitive ability are able to acquire job relevant knowledge in a meaningful manner, subsequently supporting the reasoning behind investing in HiPos.

**Hypothesis 1 (H1):** Cognitive ability/GMA will positively predict potential.

Treating GMA as the most important cognitive predictor of performance stems back to the work of Charles Spearman and his two-factor theory (1904). He proposed that there are general and specific cognitive abilities, but that the correlation between different tests of
cognitive ability was due to GMA (i.e., g). Eventually, however, Spearman’s two-factory theory was replaced with a hierarchical model (Kuncel et al., 2004), which proposes that GMA is the higher-order factor, with more specific (i.e., narrower) cognitive abilities forming the lower-order factors (Lang, Kersting, Hulsheger, and Lang, 2010). There are a wide variety of narrower cognitive abilities; most central to the effort of predicting HiPo are judgment and/or decision-making. Of the models reported in Silzer and Church (2009), those of Hewitt Associates (2008), Hogan Assessment Systems (2009b), YSC (UK) Rowe (2007), and Slan & Hausdorf (2004; Canadian benchmarking study) included judgment and/or decision making among the critical components for predicting HiPo.

Situational judgment tests (SJTs) have been utilized since the early 1920s to measure judgment in work settings (McDaniel, Morgeson, Bruhn Finnegan, Campion, and Braverman, 2001). In 2001 McDaniel and colleagues meta-analyzed the literature on SJTs in an attempt to bring clarity to the massive set of published findings. Their results suggest that SJTs population validity for predicting performance is .34, and can even be increased to .38 when a job analysis is utilized for creating the SJT. A strong relationship with cognitive ability was also demonstrated with a mean correlation of .46. McDaniel and colleagues explored the logical follow-up question of whether this correlation is so high as to suggest that SJTs do not explain additional variance and found that SJTs contributed incremental variance above GMA alone. These findings suggest the ability of SJTs to predict job performance as a specific component of cognitive ability.

More recent research on the predictive validity of SJTs differentiated between the different construct domains of SJTs, as well as specific job performance facets (Christian, Edwards, & Bradley, 2010). Their results (n.b., based on low ks) demonstrated that SJTs designed to measure interpersonal skills and leadership were predictive of both task performance
and managerial performance with validities ranging from .21 for leadership SJTs predicting task performance to .36 for interpersonal skill SJTs predicting managerial performance. Along the same research trajectory, Lievens and Sackett (2012) conducted a longitudinal study of SJTs measuring interpersonal skills, such as building and maintain relationships, and communication/exchanging information. Scores on the interpersonal skills SJT predicted internship success for medical students seven years later with a validity of .22, and job performance an additional two years later with a barely diminished validity of .21 (Lievens & Sackett, 2012). Moreover, Lievens and Sackett (2012) found that the SJT added incremental variance (i.e., 5%) above cognitive ability.

Taken as a whole the research on SJTs measuring general decision making as well as interpersonal skills and leadership suggests that well designed (e.g., based on job analysis) SJTs are able to predict performance in the short term with validities around .38 (McDaniel et al., 2001) and seven to nine years later with validities around .21 (Lievens & Sackett, 2012). In the case of predicting long-term potential a job analysis is not possible in the conventional sense, therefore the SJT would need to be crafted based on an analysis of the skills necessary across the organizational hierarchy or based on organization-wide competencies. While this approach to SJT development varies from what has previously been studied, it is most appropriate for this type of prediction. Based on the extensive research foundation surrounding SJTs, the following hypotheses are put forth:

_Hypothesis 2 (H2a):_ Judgment in interpersonal and leadership situations will positively predict potential.

_Hypothesis 2b (H2b):_ Judgment in interpersonal and leadership situations will demonstrate
incremental validity above and beyond cognitive ability in predicting potential.

**Personality.** Personality is another stable characteristic that predicts job performance, thus is categorized as a foundational dimension. In the early 1990s two meta-analyses on personality and job performance affected the trajectory of personality research within the field of personnel selection by showing that the five factor model of personality (i.e., conscientiousness, extraversion, neuroticism, agreeableness, and openness to experience) demonstrated predictive validity for job performance that, while not as robust as that of cognitive ability, makes a highly meaningful contribution (Barrick & Mount, 1991; Tett, Jackson, & Rothstein, 1991). While there has been debate regarding the findings of these meta-analyses and whether they are consistent with each other, ultimately they both show the predictive ability of personality variables for job performance (Rothstein & Goffin, 2006).

Research suggests that certain personality characteristics may be associated with more success in the workplace, such as conscientiousness and extraversion. Conscientiousness is widely accepted as the most predictive personality dimension across a wide range of jobs (Barrick & Mount, 1991). Extraversion, while less generalizable, has been linked to success in jobs that require social interaction, such as managerial positions (Barrick & Mount, 1991), which makes it appropriate for the majority of executive jobs. Moreover, extraversion is positively related to the amount of work experiences that an individual accumulates, which is subsequently related, though minimally, to strategic thinking (Dragoni, Vankatwyk, & Tesluk, 2011). This finding is, however, consistent with the profile of a HiPo employee; in order to climb the corporate ladder one must strategically acquire a variety of work experiences that broaden one’s knowledge of the business. Research by Judge, Higgins, Thoresen, and Barrick (1999) found that
both conscientiousness and extraversion positively predicted extrinsic career success (i.e., salary and occupational status) across individuals’ lifetimes, suggesting that these traits are enduring and important for predicting future success.

Throughout the literature on predicting HiPo a number of models propose that openness to experience is a valuable predictor. Findings from empirical research on openness to experience have not been consistent, and the trend in meta-analyses is that it is not a strong predictor of performance (Barrick & Mount, 1991; Barrick, Mount, & Judge, 2001; Tett et al., 1991). Researchers have suggested that the lack of relationship between openness to experience and job performance may be due to the construct itself. Even McCrae (1994) admitted that openness to experience is the least understood of the five factors, thus leaving room for further investigation of this construct.

In an effort to increase the understanding of openness to experience, Griffin and Hesketh (2004) factor analyzed the construct and found that it can be separated into two distinct factors that have differential relationships with neuroticism. Internal openness (e.g., fantasy, feelings, aesthetics) has a positive relationship with neuroticism, which has a strong negative relationship with job performance, while external openness (e.g., actions, ideas, liberalism) has a negative relationship with neuroticism. These findings suggest that the two factors of openness to experience would relate to job performance in opposite directions, which would bring greater clarity to the near zero correlations often found. Moreover, recent longitudinal research with a population of early career professionals found that while openness to experience was not directly related to performance, those higher in openness to experience had a slower rate of performance decline, and began to decline later than did those lower in openness to experience (Minbashian, Earl, & Bright, 2013). This quadratic relationship may help to explain why there is no
relationship between openness to experience and job performance when explored as a purely linear relationship. The authors proposed that openness to experience might delay and lessen the decline of performance due to an indirect relationship with learning, which, as was previously discussed, is crucial for job performance. Openness to experience has a positive relationship with learning goal orientation, which is learning with the goal of mastering a new skill, and is related to learning and job performance (Minbashian & Earl, 2013). The importance of learning for job performance is well established (Hunter, 1983, Judge et al., 2010; Kuncel et al., 2004), suggesting that constructs relating to learning are worthy of attention in the effort to identify potential. Based on the extensive research on personality and job performance/career success, the following hypotheses are put forth:

Hypothesis 3a (H3a): Conscientiousness will positively predict potential.

Hypothesis 3b (H3b): Extraversion will positively predict potential.

Hypothesis 3c (H3c): External openness to experience will positively predict potential, while internal openness to experience will negatively predict potential.

Growth dimensions. Learning and motivation are the primary constructs comprising the growth dimension. Both are broad, multifaceted constructs that are not operationalized easily, but the intuitive appeal surrounding each is strong. The generally accepted logic proposes that for an individual to succeed they must both be able to learn, and have the motivation to drive them toward learning, working hard, and seeking new opportunities.

Learning. The ability to learn has been described as a metaconcept comprised of characteristics that enable individuals to gain knowledge, such as GMA, openness to experience, and motivation to seek out learning opportunities (DeRue, Ashford, & Myers, 2012). In recent
years a new term has entered the learning realm: learning agility. Lombardo & Eichinger (2000) introduced learning agility as “the willingness and ability to learn new competencies in order to perform under first-time, tough, or different conditions” (p.323). According to them, four agilities underlie this definition: people, results, mental, and change agility. As DeRue and colleagues (2012) point out, however, neither this definition nor its subcomponents are necessarily learning agility. Agility refers to flexibility and speed; therefore in the learning sphere this would be the speed of learning and the degree to which one can apply that learning to new situations (DeRue et al., 2012). Moreover, the work done to validate the Lombardo and Eichinger (2000) conceptualization of learning agility for predicting HiPo has been unconvincing (for a thorough discounting of this work see DeRue et al., 2012, or read the Korn/Ferry International materials on the Choices Architect ® tool to form your own assessment).

Separating learning agility from the existing meta-construct of learning ability, DeRue and colleagues (2012) explored a new conceptualization of learning agility that while under the learning umbrella, is distinct from the ability to learn. Part of what characterizes a HiPo is the ability to learn quickly and apply lessons learned to divergent situations; therefore, DeRue and colleagues believe that a definition that focuses on speed and flexibility of learning will lead to practical application. Based on their research and exploration of the existing literature, the authors propose that cognitive ability, goal orientation, and openness to experience predict learning agility. That cognitive ability and openness to experience are related to learning has already been explored in this effort, the topic of goal orientation, however, has not yet received appropriate discussion.

The concept of goal orientation originated in educational psychology. The approach that has had the most enduring impact is that of Dweck (1986). She conceptualized students as
having either learning or performance goals. Those with learning goals were motivated for the sake of learning itself, whereas those with performance goals were learning in order to avoid negative feedback or embarrassment. Dweck (1986) also posited that learning and performance goals were at the opposite ends of a continuum and that it was the individual’s theory of intelligence that determined which goal orientation they adopted. The theory of intelligence states that those with an incremental theory believe that intelligence and performance can be increased (i.e., growth), while those with an entity theory believe that they are unchangeable (i.e., fixed). Based on this research Dweck wrote a book “Mindset: The new psychology of success” (2006) that aimed to apply this research more broadly, and in a manner largely incompatible with organizational psychology research.

Fortunately, goal orientation was introduced to the organizational psychology literature by Farr, Hoffman, and Ringenbach (1993). They applied learning goal orientation (LGO) and performance goal orientation (PGO) to workplace topics such as goal setting, feedback seeking, and trainee motivation (Payne, Youngcourt, & Beaubien, 2007). Since the introduction of goal orientation to the IO psychology literature, there have been a number of efforts to further explicate this construct. Button, Mathieu, & Zajac (1996) put forth that LGO and PGO were not opposite ends of a bipolar continuum and that instead individuals could simultaneously hold both types of goals. Another significant alteration was the reconceptualization of PGO as multidimensional (VandeWalle, 1997). He separated PGO into a prove dimension (PPGO; e.g., prove one’s ability and gain favorable evaluations) and an avoid dimension (APGO; e.g., avoid disproving one’s ability and avoid negative evaluations). This transformed goal orientation from a two-factor structure to a three-factor structure, which a meta-analysis by Day, Yeo, and Radosevich (2003) found increased variance explained by 7%. 
The belief that LGO was the only positive type of goal orientation has persisted despite the bifurcation of PGO. LGO has been put forth as related to a propensity to seek feedback (VandeWalle & Cummings, 1997), planning and goal setting (Locke, Shaw, Saari, & Latham, 1981; Sujan, Weitz, & Kumar, 1994), and task persistence (Wood & Bandura, 1989), however, there is not strong evidence that it is related to GMA. A recent meta-analysis of the goal orientation literature demonstrated that LGO is positively related to a number of antecedents of goal orientation such as, need for achievement, conscientiousness, extraversion, openness to experience, self-esteem and self-efficacy, as well as, consequences of goal orientation such as feedback seeking and learning strategies. None of the three forms of goal orientation are related to cognitive ability, thus there is the potential for LGO to show incremental validity for predicting HiPo. Conversely, APGO was negatively related to all positively construed constructs and was positively related to neuroticism (Payne et al., 2007).

PPGO was unrelated to the majority of antecedents and consequences studied (Payne et al., 2007), but recent research has proposed that there may be positive outcomes associated with PPGO. Because goal orientation is not a bi-polar continuum, it is possible for an individual to possess both LGO and PPGO simultaneously. It as been posited that this combination of a desire to learn for the sake of mastery and to be recognized for one’s successes may have a positive impact on job performance (DeShon & Gillespie, 2005; VandeWalle, Cron, & Slocum, 2001). Such individuals may be more likely to implement what they have learned in a timely manner, and are thus more likely to make performance improvements after receiving feedback or training (VandeWalle et al., 2001).

The ability to extract meaning from learning experiences and apply that knowledge to work situations is highly desired by organizations, and is thus an indication of HiPo. Based on
the strong evidence indicating that LGO predicts learning, and that PPGO may increase implementation of acquired knowledge, the following hypotheses are put forth:

_Hypothesis 4a (H4a):_ LGO will positively predict potential.

_Hypothesis 4b (H4b):_ PPGO will provide incremental validity above and beyond LGO in predicting potential.

**Motivation.** Motivation has been studied extensively in the IO literature, and the social sciences more broadly. It is well accepted that motivation affects nearly all behaviors, however, for this very reason, understanding motivation and how to measure it has proven to be complex and elusive (Diefendorff & Chandler, 2010). The definition of motivation, that it is “an unobservable force that directs, energizes, and sustains behavior over time and across changing circumstances”, captures the degree of ambiguity surrounding this construct (Diefendorff & Chandler, 2010). Motivation varies both within and across individuals, further adding to the difficulty in operationalizing motivation in a manner that is reliable and useful for personnel assessment. The expectancy theory of motivation states that individuals make rational decisions about whether to exert effort based on whether he/she perceives that effort would lead to a valued outcome (Vroom, 1964). This theory can be interpreted as implying that the factors affecting motivation are partially internal, but also can be manipulated by the context (e.g., the organization).

In the context of predicting executive success, or HiPo by extension, ambition is discussed as a form of motivation. Often referred to alongside motivation, is can be difficult to determine exactly what is meant by ambition. Recently Judge and Kammeyer-Mueller (2012)
sought to examine the causes and consequences of ambition; part of this effort included defining ambition as “the persistent and generalized striving for success, attainment, and accomplishment” (p.759). Research has found that ambition predicts advancement (Howard & Bray, 1988), career success (Cannings & Montmarquette, 1991; Cox & Cooper, 1989), salary Judge, Cable, Boudreau, & Bretz, 1995; Judge & Kammeyer-Mueller, 2012), educational attainment, and occupational prestige (Judge & Kammeyer-Mueller, 2012). Based on these findings, and that ambition could be viewed as a motivation to be a HiPo, the following hypothesis is put forward:

Hypothesis 5 (H5): Ambition will positively predict potential.

Career dimensions. The final category, career dimensions, of the Silzer and Church (2009) model consists of primarily leadership, performance, and technical knowledge/functional expertise. While a proven track record of leadership excellence, solid performance, and business acumen are likely apt predictors of a senior executive’s success in his/her subsequent position, their suitability for predicting the future success of junior level employees is debatable. Bearing in mind the developmental approach advocated by McCall (1994), and the research by Bray and colleagues (1974), these characteristics may not be appropriate for early identification of HiPo.

While the role of leadership skill in predicting HiPo specifically remains to be defined, there is a long history in the organizational sciences of studying both leaders and leadership. This research ranges from seeking to identify the innate dispositions possessed by leaders (Stogdill, 1948), to what behaviors successful leaders exhibit (e.g., Ohio and Michigan State Studies), to what processes make up leadership (Path-Goal; Evans, 1970), and what affects leadership
(Situational Leadership; Hersey, Blanchard, & Hambleton, 1977). Recent work by Mumford and colleagues (Bedell, Hunter, & Mumford, 2008; Mumford, Scott, & Hunter, 2006; Hunter, Cushenbery, Thoroughgood, & Ligon, 2011), however, argues that multiple types of leadership, and therefore leaders, are effective. The charismatic, ideological, and pragmatic (CIP) leadership model puts forth that each of these types of leadership styles can have positive outcomes despite significant differences in time frame orientation, type of experiences used to influence others, and the numbers of outcomes sought (Hunter et al., 2011). Moreover, it has been suggested that leadership can be developed over time through feedback and mentoring (Day, 2000), leadership training (Barling, Weber, & Kelloway, 1996), and experiences (McCall, 2010).

Taken together the lack of consensus on what predicts leadership, and the growing evidence that leadership can be developed, suggests that proficiency on leadership competencies (i.e., current proficiency as a leader) should not be used to predict HiPo. There may, however, be other methods of predicting success in leadership positions. As early life experiences may affect whether an individual develops leadership characteristics (Barling, Christie & Hopkins, 2010), measures that seek to delve into past experiences to predict leadership ability or interests may be appropriate. A manner of doing so would be to create a biographical data inventory. As this method is highly customizable, the focus on the items can be geared toward the criterion of interest. As such, a biographical data inventory that seeks to assess past experiences and attitudes, some of which may relate to leadership capabilities, could be a method of predicting future success in the leadership domain. A long history of research on biodata inventories suggests that they can be highly valid predictors, and can even reduce adverse impact is the items are carefully constructed (Reilly & Chao, 1982). Therefore, the ability of biodata to predict potential was explored and the following research question was offered:
Research Question 1 (RQ1): Can past experiences and attitudes, as measured by a biographical data inventory, predict potential?

Job knowledge as an indicator of potential is similarly situated to leadership in that it is a commonly considered factor in promotion/selection decisions, which is not in itself justification for use in predicting future potential. Early predictions of potential serve the goal of identifying individuals with broad potential to grow and succeed throughout their careers in varied functions/roles. Because functional knowledge/skills are generally context or domain specific, they overly narrow for this type of long-term prediction. Moreover, job knowledge is typically something that can be trained or developed either in role, or in preparation for a near-future promotion.

Performance, however, is a slightly different and more complex predictor of potential. The Corporate Leadership Council (CLC; 2009) found that nearly all HiPos were high performers, and only 1/3 of high performers were HiPos. The implication of this finding is that being a high-performer is not synonymous with being a HiPo. The CLC specifically cautions against falling into the trap of relying on short-term promotability instead of focusing on long-term potential. Relying on past performance as an indicator of future potential increases the chances of following victim to a phenomenon known as the Peter Principle; the unfortunate truth that individuals are often promoted up until the point that they are no longer successful, rather than stopping one promotion prior to exceeding one’s maximum potential (Peter & Hull, 1969). Utilizing measurements of potential for future success to make promotion decisions as opposed to past performance may decreases the frequency with which individuals are put into roles above their ability level.
Important to note is that the CLC study found that not all HiPos had high performance scores, and in practice there are clear explanations for this seemingly strange finding. One possibility is that these HiPos had low performance scores due to the performance management system in place at their organization. For example, in some businesses, a performance rating can be largely dictated by sales or production numbers that may be beyond the individual’s control. Alternatively, a HiPo may end up with lower performance ratings than peers with less potential because their HiPo status has led to frequent rotations or developmental/stretch assignments. While arguably a HiPo should be such an agile learner that his/her performance should never flag despite being in a new role, the reality is that HiPos are human, and therefore imperfect. While research does not suggest that HiPo is equivalent to “high performer”, they are inarguably related in many cases, therefore the following hypothesis is put forth:

**Hypothesis 6 (H6):** Performance will positively predict potential.

**Demographics and High Potential**

In any personnel selection context the issue of unfair discrimination, whether that be disparate treatment or adverse impact, is a serious consideration. Both types of discrimination (i.e., purposeful and accidental, respectively) are illegal as outlined by the Uniform Guidelines on Employee Selection Procedures (Equal Employment Opportunity Commission, Civil Service Commission Department of Labor, & Department of Justice, 1978). Therefore, when predicting potential it must be ensured that the process does not work to the disadvantage of any race, ethnic group, age group, sex, or other protected group. To this end, race (US sample only), gender, and age were explored.
Mobility, that is whether an employee was willing to relocate, is a heavily loaded issue in many organizations. In MNOs it can, and is, argued that for an employee to be considered a HiPo, he/she should be part of the global talent pool, meaning that they have designated themselves as having global mobility. Incorporating mobility into the definition of HiPo likely discriminates against those with family obligations (i.e., children with disabilities, sick family members), or even just strong preferences about from where they would like to enjoy their life. While mobility is not a protected group under the Uniform Guidelines, it is a contentious issue in practice that may affect managers’ ratings of potential. While not being globally mobile may indeed practically prevent an employee from entering the C-suite, there is not substantial proof that a restricted mobility should prevent an individual from being invested in as a HiPo earlier in his/her career. The present effort did not seek to resolve this ethical and theoretical dilemma, but whether those who are less mobile are discriminated against in current conceptualizations of potential was explored.
Review of Hypotheses:

Hypothesis 1 (H1): Cognitive ability/GMA will positively predict potential.

Hypothesis 2 (H2a): Judgment in interpersonal and leadership situations will positively predict potential.

Hypothesis 2b (H2b): Judgment in interpersonal and leadership situations will demonstrate incremental validity above and beyond cognitive ability in predicting potential.

Hypothesis 3a (H3a): Conscientiousness will positively predict potential.

Hypothesis 3b (H3b): Extraversion will positively predict potential.

Hypothesis 3c (H3c): External openness to experience will positively predict potential, while internal openness to experience will negatively predict potential.

Hypothesis 4a (H4a): LGO will positively predict potential.

Hypothesis 4b (H4b): PPGO will provide incremental validity above and beyond LGO in predicting potential.

Hypothesis 5 (H5): Ambition will positively predict potential.

Hypothesis 6 (H6): Performance will positively predict potential.

Research Question 1 (RQ1): Can past experiences and attitudes, as measured by a biographical data inventory, predict potential?
Method

Present Study

A criterion validation study, which utilized a sample of corporate employees, was designed to empirically determine whether the proposed variables were able to identify HiPo employees. The study employed a concurrent design and sampled employees at job levels higher than the ultimate target audience for future assessment and forecasting. More specifically, to test the hypotheses, a range of assessments and questionnaires were given to a sample of mid-level employees that ranged from one to three levels more advanced than the intended population for the assessment (i.e., junior-level employees). Additionally, the managers of each employee in the sample were asked to provide ratings of performance, potential, and a variety of other competencies. The manager ratings partially comprised the validation criteria for the model of HiPo assessment/prediction. The remainder of the validation criteria was sourced from archival data collected from the organization’s performance management system.

Participants

The participants in this study were mid-level professional employees at a multinational food and beverage organization headquartered in the Northeastern United States. This MNO employed approximately 300,000 people worldwide, however, the professional population that was suitable (i.e., the correct level) for this study consisted of approximately 10,000 individuals. Within this population the researcher selected participants using a stratified random sampling approach based on historical performance ratings, rate of advancement, preferred language for assessment, business sector/region, and functional area. This sampling approach was particularly important for ensuring that the full range of performance levels was captured.
The MNO from which the sample came was global and while fluency in English was a requirement for the high mid- to senior-level employees, the junior-level and lower mid-level employees spoke a range of languages. The communication department of the MNO determined that offering the assessment in eight languages was sufficient to cover the majority of potential participants that the assessment would be used with after the validation. Those languages were: American English, Arabic, Brazilian Portuguese, French Canadian, Latin American Spanish, Simplified Chinese, Traditional Chinese, and Russian. An effort was made by the researcher to choose individuals who preferred to speak each of these languages, however, the quality of the data informing on language preference was inconsistent throughout the MNO. After the sample was identified, frequencies were conducted to determine whether there was adequate representation across the sectors (e.g., the Americas, Europe, Asia/Middle East/Africa, corporate), and functions (e.g., marketing, finance, human resources, supply chain, etc.).

Prior to being invited to participate, the human resource managers for the identified employees were consulted by the researcher to determine whether it was appropriate to invite that employee to be part of the validation sample (i.e., were there factors affecting that individual that would prevent them from completing the survey, such as plans to terminate them). After the sample was vetted by the local human resource managers the participants received an email communication explaining the purposes of the study, what the process entailed, and the developmental opportunities that they would receive in exchange for their participation in the validation study.

**Procedure**

Each participant received an email from the consulting firm (i.e., IO Ph.D. practitioners from a third party firm) that the MNO worked with to create and administer the assessments. The
email provided additional context for the study and the website links for the participants to follow to the online assessments. The first link contained a situational judgment test, a biographical data inventory, a goal orientation inventory, and questions surrounding ambition. The second link led the participants to a third party site upon which to complete the cognitive ability and personality assessments. The manager of each participant also received an email from the consulting firm asking them to participate in the validation process by completing a series of ratings of their direct report’s performance, potential, and ambition.

**Measures: Participants**

Below is a summary of how each variable was measured. When possible the full scale or item set has been included in the appendix. Appendix A includes items from the participant assessments, and appendix B contains the entire survey that the managers completed.

**Cognitive ability.** Participants completed the Raven’s Standard Progressive Matrices Plus (SPM Plus) as an indicator of cognitive ability. High-level professionals are the target audience for this specific version due to the use of more difficult items than those used in the standard SPM. The Raven’s SPM Plus is a non-verbal instrument designed to assess cognitive ability without cultural or language biases, which made it an appropriate measure for a global assessment process. The SPM Plus is untimed and consists of 60 items presented in five sets of 12 items. Each item requires the participant to identify the element missing from a pattern of shapes. The test developers put forth that the SPM Plus is well suited for indicating an individual’s potential for success in demanding professional and management positions. The output of the Ravens SPM Plus is a single raw score, and a percentile ranking them with a norm group. The percentile rankings of the present sample formed a normal distribution; therefore restriction of range was not indicated.
**Personality.** Participants completed the most recent version of the Occupational Personality Questionnaire (i.e., OPQ32r; Savile & Holdsworth, 1990). This is an ipsative measure designed to assess 32 personality characteristics that roll up into 3 dimensions: 1) relationships with people, 2) thinking style, and 3) feelings and emotions. The OPQ32r is not a measure of the five-factor model, but using the guidelines presented in the technical manual the researcher mapped the 32 personality sub-dimensions to a six-factor model with the sixth factor coming from splitting openness to experience into two separate factors (See Appendix A). This enabled the researcher to test the third set of hypotheses using the five-factor dimensions of interest. The test publisher reported that the item response theory composite reliability score of the OPQ32r was .84.

**Judgment.** Participants completed an SJT. Three focus groups were held by the consulting firm in conjunction with the researcher. High performing and HiPo junior-level employees of the MNO served as subject matter experts (SMEs) with the purpose of gathering examples of realistic work situations from them that could be utilized in an SJT. The SMEs provided situations that they believed were typical of the culture and context of the MNO in which they worked, and also provided examples of how they believed a HiPo would have handled the situations and how less successful employees would have reacted to the situations. The consulting firm took these scenarios and turned them into an SJT that sought to measure judgment in interpersonal and leadership situations.

The SJT contained 37 scenarios and each prompted the participant to choose both the course of action that they are the most likely to take, and least likely to take. An item that typified the measure was “You have just moved into your first people manager role within a technical function. Over the years, you have received repeated feedback that your technical skills
are outstanding, and you have successfully completed many complex technical projects. However, your new manager has just told you that your ‘people skills’ are lacking. Which course of action would you be MOST likely to take and which one would you be LEAST likely to take?” The participant was then presented with seven different courses of action to choose from, such as “Ask your manager for suggestions to improve your people skills”, or “Leverage the organization’s feedback tools for additional input (e.g., 360, MQPI).”

As this measure was custom built for usage by the MNO, the scoring was determined using the current study sample. The researcher determined that empirical keying, specifically the vertical percent method (VPM), would be the most appropriate method of scoring and thus she carried out the keying process (Cucina, Caputo, Thibodeaux, & Maclane, 2012). The researcher divided the sample into thirds; two-thirds comprised the development sample to create the scoring key, and the remaining third was reserved for cross-validation of the results (i.e., the cross-validation sample). To empirically determine the scoring key, the frequency of endorsement for each item choice (i.e., a-e for each item) was calculated. Those item choices that differentiated between the highest and lowest potential individuals with a percentage of ten or larger were selected for scoring and assigned a unit weight (archival data were used to determine level of potential; see Archival Data section below for further detail). Those item choices that were endorsed more frequently (i.e., 10% or greater) by high potentials were weighted +1, and those that were endorsed more frequently by individuals lacking potential were weighted -1; all other item choices were given a zero weight. For each participant a total SJT score was calculated by summing the unit weights.

The researcher investigated the validity of the scoring by correlating the SJT sum (judgment) with the criterion variable, which, bear in mind, was also the criterion for the
empirical keying. This relationship was explored in three different samples: the development sample, the cross-validation sample, and the full sample. As would be expected, the correlation was strongest in the development sample ($r = .24, p < .01$) and weakest in the cross-validation sample ($r = .13, p = .07$). The correlation in the cross-validation sample was not statistically significant within the typically accepted standards but still has the potential for adding value in the identification of HiPo individuals given its positive association. The significant relationship in the full sample ($r = .21, p < .01$), although upwardly biased, is important to note as in the hypotheses testing this is the sample utilized unless otherwise noted.

**Leadership experiences.** Participants completed a biographical data (biodata) inventory. Three focus groups (separate from those used to develop the SJT) were held with high performing and HiPo mid-level employees of the MNO who served as SMEs with the purpose of learning about the types of experiences that they believed affected their career trajectory. The SMEs were asked to think about the types of experiences that they had in school, at work, and outside of work that they believed had a positive impact on their careers. They were asked to identify experiences in which a choice that they made was responsible for the positive outcome, as well as provide examples of what less effective alternatives may have been. The consulting firm took these experiences and turned them into a biodata inventory that focused on experiences that would affect leadership capability and more generally, career success. There were 62 multiple-choice questions. An item that typified the measure was “I primarily participate in activities outside of work… 1) that help me advance my career, 2) because I am personally interested in those activities, 3) to help build my skills or knowledge in specific areas, 4) to expose me to different perspectives and types of people, 5) that can help to improve the lives of others, 6) I do not participate in activities outside of work.”
As this measure was also custom-built for usage by the MNO, the scoring was determined using the validation sample in the same empirical keying process that was used to score the SJT. The validity of the scoring was investigated by correlating the biodata sum (past experiences & attitudes) with the criterion variable. This relationship was explored in three different samples: the development sample, the cross-validation sample, and the full sample. As would be expected the correlation was strongest in the development sample ($r = .34, p < .01$) and weakest in the cross-validation sample ($r = .27, p < .01$). The correlation in the cross-validation sample, as well as in the full sample ($r = .32, p < .01$), remained statistically significant, thus demonstrating the robustness of this measure.

**Ambition.** The participants answered two questions regarding their ambition; both of which were written for this specific assessment. In previous research ambition has been measured with questions regarding whether the respondent possesses desire to progress upward in the organizational hierarchy (i.e., Judge and colleagues, 1995), however, due to the competitive culture of the MNO where the study took place it was believed by the researcher that this type of item would be ineffective due to severe restriction of range. In an effort to measure this characteristic with a minimum of socially desirable responding, the researcher created two items as operationalizations of ambition. The logic being that it is easier to claim to have a desire for achievement or success (i.e., the method typically utilized), than it is to claim more tangible manifestations such as actually taking steps toward achieving a higher role in the organization. To measure ambition in this manner, the items focused on career goals and plans. These items read, “I have a personal career goal to achieve a more complex role in my function that enables me to have an influence on the organization”, and “I have a highly detailed and aggressive 5 year career plan that I am striving to achieve.” Both were answered with a 5-point Likert scale
ranging from “strongly disagree” to “strongly agree”. The correlation between these items was $r = .4, p < .01$, which suggested that while related, these two items are not measuring the same facet of ambition.

The relationship of these items to the dynamism subscale of the OPQ32r was examined due to purported construct overlap. The dynamism subscale of the OPQ32r consisted of four components: vigorous, competitive, achieving, and decisive. Achieving, which measures ambition, career-centeredness, and whether the individual sets demanding goals, significantly correlated with the ambition items ($r = .25-.26, p < .01$). The intercorrelations of the three scores measuring ambition were minimally significant, and did not warrant the creation of a composite variable. Furthermore, the two ambition items’ low correlations with the OPQ subdimension achieving were troublesome from a convergent validity perspective.

**Goal orientation.** Participants answered the 13-item goal orientation scale created by VandeWalle (1997). This scale measured the three-factor model of goal orientation: learning, prove performance, and avoid performance goal orientations. VandeWalle (1997) developed the scale using rigorous scale development methods; the appropriateness of the three-factor structure was tested through both exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). The EFA suggested the presence of three factors and the CFA confirmed, with goodness-of-fit statistics, that the three-factor model had the strongest fit to the data (Vandewalle, 1997). The internal consistency of each subscale was very strong (learning $\alpha = .89$, prove $\alpha = .85$, and avoid $\alpha = .88$), however the test-retest reliabilities demonstrated that even within a 3-month period there was variation (learning $r = .66$, prove $r = .60$, and avoid $r = .57$; VandeWalle, 1997). This suggested that while the scale was methodologically sound, the construct could vary within persons over time. All questions were answered using a 5-point Likert scale ranging from
“strongly disagree” to “strongly agree”. An item that typified the learning subscale was “I often look for opportunities to develop new skills and knowledge” (p. 1004, VandeWalle, 1997). The prove performance scale consisted of items such as “I try to figure out how to prove my abilities to others at work”, whereas the avoid performance scale consists of items such as “Avoiding a show of low ability is more important to me than learning a new skill”.

The researcher tested that the 3-factor solution was appropriate in the present sample using CFA and found that 58.7% of the variance was explained. LGO and APGO explained the majority of the variance (26.2% and 21.2%, respectively), with PPGO only explaining an additional 11.3% of variance. The internal consistency of each subscale was adequately high (learning $\alpha$ = .81, prove $\alpha$ = .73, and avoid $\alpha$ = .79), though none were as strong as the alphas reported by VandeWalle (1997).

**Measures: Managers**

The manager questionnaire was important in that it, in conjunction with the archival data, was intended to operationalize the outcome variable for hypothesis testing: potential.

**Performance.** Following the track record (i.e., can they perform) definition of HiPo, managers rated their direct report’s performance. First they rated, “Which performance level best describes the employee’s current overall performance?” followed by a comparative item, “How would this employee’s overall performance compare to others doing similar work at the same job level?” Both items were responded to using a Likert scale including the option “cannot rate” for managers who felt that they are unable to answer these questions for any reason. These two items were highly correlated with each other ($r = .79$, $p < .01$).

**Potential.** To address the future-oriented (i.e., can they expand) definition of HiPo, managers rated their direct report’s potential. As has been discussed, potential, or HiPo, is not an
easily defined concept; therefore eight questions were deemed necessary to measure potential. Items surrounding the ultimate level in the organization’s hierarchy that the direct report could reach (i.e., HiPo by level), and their timeline for promotion (i.e., faster rate of success) were included (See Appendix B). The researcher determined that the reliability of these eight items was sufficient to create a composite variable ($\alpha = .89$), which served as the manager-based criterion variable.

**Ambition.** Managers rated their direct report’s ambition by answering three questions that sought to operationalize ambition (i.e., persistent and generalized striving for success, attainment, and accomplishment; Judge and Kammeyer-Mueller, 2012). The item, “How frequently does your direct report initiate conversations about his/her career path outside of PMP?” referred to the organization’s performance management process (i.e., PMP) in which feedback is provided and career conversations are part of the dictated conversation, therefore the item sought to understand whether the direct report (i.e., the participant) had the drive to initiate conversations of this nature without a formal process supporting him/her. The other two ambition items probed level of ambition more directly by asking whether the direct report shared his/her career plan and/or ambition to progress with his/her manager ($r = .52, p < .01$). The relationships between these two ambition items and the career conversation item were negative, and while the relationship with the sharing one’s ambition item was not statistically significant, the sharing career plan item had a negative correlation with initiating career conversations ($r = -.12, p < .05$). This suggests that to the managers there is a positive connotation with sharing ambition and your plans, but a negative connotation associated with frequently discussing future career aspirations.
Archival Data

The MNO’s robust performance management system provided a wealth of information for this research, from additional indicators of potential, to demographic information. The researcher mined the participants’ historical performance scores (e.g., ratings based on their business and people management success), current mobility, talent calls, and their average rate of progression (going back as far as six years in some cases) from the performance management database. The researcher also calculated the average rate of progression by dividing the number of levels the individual had progressed over the number of years of data available for that individual. Additionally, the following demographic information was collected on all participants (when available): age, gender, race (US only), and language preference.

These data were useful in that they allowed the identification of the groups of individuals that have progressed quickly while simultaneously performing strongly, as well as those who have not. In other words, they added another temporal component to the analysis that enabled an examination of past performance and progression as another way of measuring potential. Using the past three years of performance ratings, current talent call, and average rate of progression, the researcher formed a second criterion variable from archival data. Those with the strongest talent calls (i.e., HiPo), fastest rate of progression, and highest performance were categorized as the strongest HiPos, with the opposite profile creating the low potential group. Using this categorization system a 5-point variable was created, with 5 representing HiPos and 1 representing the low potential group (See Table 1 for distribution). This criterion was based on the past-focused (i.e., by record; “can they perform”) definition of potential (Silzer & Church, 2009).
Insert Table 1 about here
Results

Means, standard deviations, and intercorrelations for the study variables are presented in Table 2. Of particular note is the lack of correlation between the two criterion variables, potential (manager ratings) and potential (archival). Of the variables shown in the correlation matrix, the manager ratings of potential only significantly correlated with the manager rating of performance, whereas the archival measure of potential had statistically significant correlations with the majority of the hypothesized predictors. The absence of correlations with the manager ratings of potential demonstrates that these ratings are independent of the employees’ past and current performance, average rate of promotion, and current talent call, as well as unrelated to all of the theoretically driven predictors. Due to these non-significant correlations with the manager ratings of potential, all hypothesis testing was conducted with the archival measure of potential as the criterion variable.

Hypothesis Testing

Foundational dimensions. The first hypothesis, which proposed that cognitive ability positively predicts potential, was supported using linear regression (R=.12; F(1, 581)= 8.03, p < .01; See Table 3). This suggested that while cognitive ability only accounted for a small percentage of the variance, there was a general trend toward those with higher cognitive ability having higher potential. Bear in mind that while the sample had a normal distribution on the Raven’s Progressive Matrices, the percentiles are based on a professional, working sample, which means that this predictive relationship is underestimated in comparison to the general
population; however this underestimation will continue given that this measure would always be used with professional level employees within the MNO.

Hypothesis 2a, that judgment in interpersonal and leadership situations would positively predict potential, was confirmed by regressing potential on the participants’ total score on the SJT \((r = .21; F(1,593) = 26.40, p < .001; \text{See Table 4})\). Hypothesis 2b, that judgment would provide incremental validity above and beyond cognitive ability was also supported by a statistically significant change statistic \((R= .24, F(1, 580) = 23.05, p < .001; \text{See Table 5})\). The results of hypotheses 2a-2b implied that individuals with better judgment have stronger potential, and that quality of judgment provides unique explanation of variance separate from raw cognitive ability. Recall, however, that the testing of hypotheses 2a-2b is upwardly biased due to the sample including the development sample from the empirical keying. The unbiased estimates (i.e., when using the cross-validation sample only) were unfortunately not statistically significant \((R=.12, F(2,178) = 1.19, p = .31)\).
The third set of hypotheses, 3a-3c, surrounded the relationship between the personality variables and potential. As can be seen in Table 2, none of the personality variables had significant correlations with either criterion variable; therefore hypotheses 3a-3c were not supported.

**Growth dimensions.** Hypothesis 4a, that LGO would positively predict potential, was supported using linear regression ($r = .13, F(1,592) = 10.92, p < .01$; See Table 6). That PPGO would add incremental validity to LGO, hypothesis 4b, however, was not supported (See Table 7 for a non-significant change in r-squared). This finding implied that those with a higher orientation toward learning are indeed more likely to be HiPo, but an orientation toward proving one’s performance is minimally related to HiPo and subsequently does not explain unique variance. Hypothesis 5 predicted that ambition would positively predict potential and the results of the multiple regression supported this hypothesis ($R = .20, F(2,533) = 11.28, p < .001$; See Table 8), therefore individuals with higher career ambition are more likely to be HiPos.

Insert Table 6 about here

Insert Table 7 about here

Insert Table 8 about here
Career dimensions. The final hypothesis, hypothesis 6, proposed that performance would predict potential. Given that performance was utilized to form the composite variable that comprises the archival criterion variable, this hypothesis could not be tested in the same manner as were the previous hypotheses. Therefore, other performance-potential relationships within the dataset were explored. The participants’ most recent performance score (archival) was uncorrelated with the managers’ ratings of performance and potential provided in the present study ($r = -0.02$, $p = 0.70$, and $r = -0.02$, $p = 0.61$, respectively). Unsurprisingly, however, the managers’ ratings of performance and potential were highly related ($r = 0.68$, $p < 0.001$). The extent of this correlation is likely due to the established belief amongst many managers that performance and potential are synonymous, as well as being exacerbated by common method variance. That the correlation was not even stronger was, however, encouraging.

Finally, research question 1 was examined. This research question posed the idea that attitudes and past experiences relating to leadership could predict potential. The regression results demonstrated that indeed past experiences and attitudes could predict potential ($r = 0.32$, $F(1, 592) = 66.70$, $p < 0.001$; See Table 9). As with the test of the second hypothesis (i.e., the relationship between judgment and potential), the results of this exploration are upwardly biased due to the sample including the development sample from the empirical keying. Using the cross validation sample only the relationship remains statistically significant ($r = 0.27$, $F(1, 186) = 15.09$, $p < 0.001$).

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Insert Table 9 about here

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Exploratory Analyses

Following the proposed theoretical model for predicting potential (i.e., the 3 dimensions; Silzer & Church, 2009), an overall model was investigated. When potential as defined by the archival data was regressed on cognitive ability, judgment, goal orientation, ambition, and leadership experiences and attitudes, 13% of the variance was explained (R= .36, F(6, 521)= 13.09, p < .001). Each predictor provided unique and statistically significant explanation of variance (See Table 10). When the predictors were grouped by dimension, the foundational dimension (i.e., cognitive ability and judgment) explained 6% of the variance, followed by the career dimension (i.e., leadership experiences & attitudes) with an additional 5%, and the growth dimension (i.e., goal orientation & ambition) explained 2% of the variance.

These results suggest that each dimension is indeed an important predictor of potential. That 13% of the variance of a very difficult to define outcome such as potential, somewhat narrowly operationalized here as performance and promotion track record, can be explained by five predictors is very promising. It should once again be noted, however, that the relationships between the archival measure of potential and the empirically keyed inventories were slightly inflated due to the use of part of the total sample in the development of the scoring protocol. When the model was tested on the third of the sample that served as the cross-validation group for the empirical keying, the strength is only slightly diminished (R= .31, F(6,156)= 2.77, p <.05; See Table 11) and is still significant. This demonstrates that even without the bias from the empirical keying, the hypothesized predictors explain a statistically significant amount of variance in potential when operationalized as performance, talent call, and rate of advancement.
Demographics and Adverse Impact

The relationships between potential, its predictors, and the demographic variables were investigated (See Table 12). Neither gender nor mobility was significantly correlated with potential. Further exploration of mobility demonstrated that while it did significantly predict potential on its own ($r^2 = .16, F (1, 519) = 13.36, p < .01$), when added to the overall model it did not provide unique explanation of variance. Most notable, however, was the correlation between age and the archival measure of potential ($r^2 = -.43, p < .001$); the negative directionality suggesting that younger individuals were more likely to be HiPo. When age was added to the overall model as a control variable it was made clear that a significant portion of the variance is accounted for by age (See Table 13).
These findings suggested that the archival operationalization of potential was highly biased against older individuals. This may be related to the sample being only a specific segment of the organization’s population. If an older individual has plateaued in this lower-middle management level of the organization, then perhaps they have also fallen victim to the Peter Principle, and are therefore receiving lower performance ratings and are no longer being promoted. Alternatively, this may indicate age bias in performance management processes, which would be a far more serious issue.

Adverse impact was explored using the archival operationalization of HiPo, as well as the overall model of potential. For potential as measured by the archival data, the 87th percentile was used as the cut score because as a categorical variable all of the 5s were counted as HiPo, which comprised 13% of the sample, whereas for the truly continuous overall measure of potential the 90th percentile was used as the cut score for selection of HiPo (See Table 14). As the table makes evident, for age and race there are serious adverse impact problems with both variables. Due to the low selection rates however, if even one more member of each racial group were selected, the 80% rule would no longer be violated when using the overall measure of potential. When dealing with ratios that have single digit numerators and double-digit denominators, the 80% rule is highly reactive and arguably does not reflect meaningful differences. The selection ratios for gender, however, were not problematic with either criterion variable; in both cases the selection ratio for females was slightly higher than that for males, clearly indicative of an absence of gender-based adverse impact. Taken as a whole, the results of the adverse impact analyses do not identify one outcome variable as being the least biased, and therefore preferred, option.
Insert Table 14 about here
**Discussion**

The present effort had the potential, if you will, to make a significant practical contribution to the study of HiPo, and the results demonstrate that this potential was indeed realized. This endeavor answered the call for research that seeks to increase our understanding of potential, as well as how to identify it in employees (Dries & Pepermans, 2012; Silzer & Church, 2009). While not every prediction was supported, the hypothesized relationships were largely confirmed and the overall model of potential explained a meaningful amount of variance. Moreover, this research was conducted within a large MNO, which despite the requisite challenges with HRIS and biased performance ratings that are inherent compromises in using a field sample, also “provides great potential for knowledge building, given a firm grounding in organizational reality” (Spreitzer et al., 1997, p.24).

The results demonstrated that each of the dimensions of the Leadership Potential BluePrint (Church & Silzer, 2013) predicted potential. The foundational and career dimensions were responsible for the majority of the variance explained (e.g., 11%), with the growth dimension struggling to make a meaningful contribution (e.g., 2%). Bear in mind, that both the foundational and career dimensions’ r-squared were aided by the confounding nature of the empirical keying methodology. The measurement of each dimension warrants discussion to help inform future study and use of assessment to predict high potential.

As defined, the foundational dimensions are cognitive and personality based. The small amount of variance explained by the cognitive ability assessment and STJ (i.e., Hypotheses 1, 2, and 2a) demonstrated that there is promise in measuring the cognitive dimension, however, this minimal contribution was unexpected due to the robust literature supporting cognitive ability as an indicator of both performance and career success (Hunter & Hunter, 1984, Judge et al., 2010).
As the outcome of this research was counter to what the literature predicts, further exploration of cognitive ability as a predictor of potential is warranted. While restriction of range was not indicated in the present sample, motivation-related issues were not investigated due to lack of informative data. Test-taker motivation affects performance (Arvey, Strickland, Drauden, & Martin, 1990; Chan, Schmitt, DeShon, Clause, & Delbridge, 1997), and, unfortunately, without a self-reported measure of test-taking motivation, or the ability to covertly capture the degree of focus given to the assessment (e.g., time taken to complete), it is impossible to determine the motivation level of the present sample.

Furthermore, the global nature of the present effort precluded extensive discussion of which cognitive ability measure would best cover the range of cognitive facets as the multilingual sample required an assessment that was nonverbal. Past research, such as that done by Judge and colleagues (2010) was able to successfully predict extrinsic career success using cognitive ability assessments that required verbal capability. The measure of cognitive ability used by Judge et al. (2010) was the Armed Forces Qualify Test which had four components: arithmetic reasoning, word knowledge, paragraph comprehension, and mathematics knowledge. Perhaps future research could benefit from an exploration of the types of cognitive ability that are most predictive of potential, both across and within fields of work. A trade-off with finding a more predictive measure of cognitive ability could be an increase in adverse impact across racial groups. While cognitive ability is generally highly predictive of performance, it is also known for having significant subgroup differences. The research suggests, however, that in higher complexity jobs the subgroup differences between racial groups tend to be smaller (Ones, Dilchert, Viswesvaran & Salgado, 2010). The levels at which the MNO would be utilizing these
assessments are professional jobs, which require higher education, therefore, the likelihood of subgroup differences is slightly diminished based on the intended sample.

The SJT, focusing on judgment in navigating interpersonal situations in the workplace, was the other measure that focused on the cognitive foundational dimension. The validity of the SJT was aligned with previous research on interpersonal skills and leadership focused SJTs (Lievens & Sackett, 2012). Notably, the SJT was uncorrelated with the cognitive ability measure, which is inconsistent with the majority of SJT research (McDaniel et al., 2001), but consistent with the limited research on interpersonal oriented SJTs (Lievens & Sackett, 2012). While the lack of relationship with cognitive ability may call into question the categorization of this measure as a subset of cognitive ability, it may be a useful predictor in its own right. Lievens and Sackett (2012) found that interpersonal skills were predictive of long-term career success. While theoretically interpersonal skills could be learned and honed on the job, few organizations provide training in this area; therefore, identifying individuals that are more skilled in regard to interacting with others may be highly predictive of their long range potential.

In order to more fully capture the cognitive dimension, however, a different type of measure would be needed. For example, an SJT with a stronger focus on strategic judgment, or a business case simulation that would require the participant to deal with complex situations and make more business oriented judgments, would be more cognitively driven and may therefore better assess the cognitive dimension of the Leadership Potential BluePrint (Chuch & Silzer, 2013). The content of the SJT utilized in the present research focused on judgment in interpersonal situations, not situations that required business acumen.

The other foundational dimension, personality, did not predict potential in the present sample (i.e., Hypotheses 3a-3c). Despite the extensive literature demonstrating the relationships
between certain personality dimensions (e.g., conscientiousness) and job performance, that relationship was not present in this study. This lack of relationship could have been due to the cross-functional, and multicultural sample. If that were the case, then this research would suggest that there is not a single profile of personality that is best for potential. Moreover, instead of a there being individual personality characteristics that are predictive of potential, an overall profile may be a more valuable predictor. In order to better understand this dimension, it would be useful to conduct additional research that investigates personality profiles by organizational function. It is plausible, for example, that the profile that predicts HiPo in the legal function is different than what predicts HiPo in the marketing function. Additionally, it is possible that while the Big 5 may be predictive of the portion of variance that HiPo shares with performance, there may be other individual difference variables that are better predictors of potential.

As mentioned above, the growth dimension explained the least amount of variance (i.e., Hypothesis 4, 4a, and 5). While both learning goal orientation and ambition explained unique, statistically significant variance in the overall model, it is possible that the sheer impact may have been larger had different constructs been used to measure this dimension. Silzer and Church (2009) put forth that the growth dimensions vary in regard to whether they are stable over time. While the authors posited that adaptability, energy level, achievement orientation and risk taking would be generally stable over time (and that are, perhaps, borderline personality elements) they believed that the most variable would be the dimensions measured in this study (i.e., learning orientation and ambition). They predicted that learning orientation and ambition could be largely situation specific, and therefore vary based on the context the individual finds his/herself in at the time of the assessment. For example, in an optimally challenging role with a highly motivating manager, an individual’s latent learning orientation and drive to climb the organizational
hierarchy may emerge, however these motivations may be lie dormant if the situation does not allow them to manifest. That both motivation and goal orientation are not highly reliable across time is supported in the literature (Diefendorff & Chandler, 2010; VandeWalle, 1997).

This variability suggests that assessing learning orientation and ambition are likely most useful in a more high-touch assessment process where the individual’s scores can be looked at as a whole to determine their developmental needs. For predicting HiPo en masse, however, it is likely to be more effective to measure the growth dimension by assessing the more stable components (i.e., adaptability, achievement orientation and risk taking). Similar to the STJ, adaptability, risk taking, and perhaps achievement orientation as well, may be better measured in an online business case simulation that requires the participant to engage in behaviors that would demonstrate these qualities instead of using self-report methods that could be biased by social desirability. For example, in the MNO that this study was conducted in all employees would have known that being more adaptable would be desirable and could therefore have skewed their responses accordingly.

In the present study the career dimension was measured with the biodata inventory focusing on past leadership experiences and attitudes (i.e., research question 1). The strong predictive validity of the biodata measure supported the Reilly & Chow (1982) conclusion that biodata inventories are valuable alternative predictors. The role that the career dimensions should play in predicting potential is the least clear as all of the dimensions as it is largely comprised of skills that can be developed over time and would vary across disciplines. As the goal of this research was to find a model that generally predicted HiPo across the enterprise, proclivity toward leading, not actual leadership capability was measured. Utilizing a custom-built biodata inventory to serve this purpose was a highly successful experiment.
While leadership is a characteristic that is highly regarded in most disciplines, and is therefore quite generalizable throughout an organization, it is not the only aspect of the career dimension that may be of interest. If the goal were, for example, to predict functionally specific HiPo, then the career dimension could be leveraged more fully. Functional skills could be assessed to determine the individuals’ baseline level of competence, which if one were mapping career trajectory would raise their intercept to a higher starting point. In other words, given equal levels of the foundational and growth dimensions, individuals who possessed more functional competence would have a higher starting point from which to actualize their potential.

The other aspect of the career dimension, performance (i.e., Hypothesis 6), was not comprehensively explored in the context of this research due to the nature of the criterion variables. The participants’ current and past performance was utilized to construct the archival based operationalization of HiPo, and therefore performance could not be used as a predictor of that criterion. The manager ratings of potential and performance were unrelated to the participants’ archival performance ratings, which did not support hypothesis 6, though within the manager ratings there was a strong correlation between performance and potential, which could be seen as confirming hypothesis 6. The manager ratings did not have significant relationships with any variables outside of the manager ratings, however, which strongly pointed toward the manager ratings being the result of the managers’ own implicit theories about HiPo.

The manner in which this Leadership Potential BluePrint-based prediction of potential affected protected groups was also investigated in the present effort. Most troubling was the severe age-based adverse impact demonstrated by two separate methods of identifying potential. Identification as HiPo talent in an organization is tied to a number of valued outcomes, ranging from special developmental opportunities to promotions. As a result, HiPo identification is
indeed an evaluation circumstance in which the potential for adverse impact is an important consideration. The degree of adverse impact demonstrated by the instruments used in the present study may, however, be a slight exaggeration due to the nature of the sample utilized.

While sampling the organizational levels above the targeted population was appropriate for testing the proposed hypotheses in a future-oriented manner, these higher levels do not have the same demographic composition as the ultimate target population. Specifically, these higher levels are composed of older, more experienced employees. In the present sample, 64.6% of individuals were 40 years old and above, whereas the population that these assessments will be used with has only 41.9% of the population in the protected range. This difference is relatively large, and demonstrates that the present sample was not representative of the actual age distribution of the population of interest. Furthermore, the present sample included employees at all performance levels in order to test the predictive ability of the assessments without further range restriction. While appropriate for a validation study, this characteristic of the sample further increased the likelihood of finding adverse impact.

In the HiPo identification process that the MNO will undergo based on this research, the initial criteria for qualifying to be assessed would be strong performance and a promotion within at least the last five years. While screening criteria such as these are also part of an adverse impact consideration, there is little evidence that time in rank or measures of job performance would have a systematic negative impact on any protected group. These screening qualifications would prevent those without the potential to progress multiple levels in the organization from initially entering the assessment pool, and would likely further decrease adverse impact. The ultimate point being, the risk of adverse impact on older individuals is a serious consideration, however, the present sample exacerbated this effect due to the age and performance distributions.
The MNO will be advised to monitor this risk when the assessment suite is implemented for HiPo identification with a junior-level population.

**Theoretical Contribution**

While a theory of high potential has yet to be formed, the Leadership Potential BluePrint (Church & Silzer, 2013) was the most significant step toward the creation of a cohesive theory. Their model of potential synthesized the relevant literature, both academic and applied, to organize the relevant constructs for the prediction of potential (Silzer & Church, 2009). This research has taken this model forward by empirically testing for the predictive validity of the proposed categories of predictors (i.e., the dimensions), as well as the majority of the proposed constructs within the 3 dimensions. As the first test of the Leadership Potential BluePrint (Church & Silzer, 2013), this research moves the field forward by providing support for the structure and content of the model, as well as furthering the discussion on appropriate criterion measures of potential.

Identifying a comprehensive criterion measure of high potential is a complex task. Definitions of HiPo vary in regard to their temporality (i.e., future or past focused), as well as their specificity. Conceptualizing criteria for concurrent validation research is made further convoluted by the realities of organization data. Even objective measures such as performance ratings and salary are biased by organization politics and business successes (or failures) that are largely beyond the control of the individual. While the two operationalizations of potential in the present work were far from perfect, the range of utilizing manager ratings of potential, performance, talent call, and rate of progression to form two separate criteria was indeed comprehensive. The lack of correlation between the criteria suggested that the different definitions of potential (i.e., future vs. past focused) may be quite disparate, and that even if there
were little interest in reaching agreement on a single definition of potential, there would be value in exploring the intercorrelations of these definitions at minimum.

**Limitations and Future Directions**

The primary limitation of this research was that it utilized a concurrent criterion validation method instead of a predictive (i.e., longitudinal) method. A predictive methodology, which in the present effort was beyond the scope of the MNO permitting the research, would allow for creation of a criterion variable based on the future focused (i.e., by level/role/breadth; “can they expand”) definition of HiPo, whereas the present study had only access to past-focused (i.e., by record; “can they perform”) data. The exception, however, was the incorporation of the average rate of progression data, which did provide a valuable longitudinal component.

Another limitation of this research stems from the lingual diversity of the sample. As the context for this research was a MNO with participants in a variety of countries, cross-cultural equivalence of measures is of concern. In order to have direct comparisons across locations and languages it is necessary to use the same survey methodology and measures which was achieved in the present research, however, if the questionnaires do not represent the same construct across cultures, such comparisons cannot be made with complete confidence. There are four hierarchical levels of statistical cross-cultural equivalence that should be tested for to determine whether the constructs are equivalent (Fontaine, 2008), however in the present research there were not enough participants in languages other than English to conduct such analyses. Therefore, despite the efforts taken to ensure consistency through high quality translations of materials, the cross-cultural equivalence was not confirmed in the present research. In future research with adequate samples sizes, cross-cultural equivalence should be determined to ensure that the model is equally predictive across cultures.
The study of high potential could also benefit from future research that takes a predictive approach with multiple data collection periods. The richest contribution would come from a predictive study that incorporated both past and future focused criterion variables, as well as a wide, theoretically sound, range of predictors to determine the unique contributions to variance explained by each. The need to identify HiPo employees is experienced by organizations worldwide, therefore this topic area warrants increased attention by IO psychologists. Not only is additional research needed on the identification/prediction of potential, but on the person-centered aspects of potential (Weiss & Rupp, 2011) as well. The effects of talent designations, transparent or not, on the individuals, organizational culture, etc. are related and important areas of study (Bjorkman, Ehrnrooth, Makela, Smale, & Sumelius, 2013).
Conclusion

The paucity of empirical research on identifying HiPo in contrast to the evident need for generalizable and objective assessments to serve this purpose highlights the importance of this topic. In this, the first empirical exploration of the Leadership Potential BluePrint (Church & Silzer, 2013), it was determined that foundation, growth, and career dimensions each explained unique variance in the prediction of potential, a highly complex and difficult to define construct. Despite the difficulty experienced in operationalizing potential in a manner that fully encompassed the entirety of the construct, this research demonstrated that potential could be psychometrically predicted using rigorous tools and processes. While there is still much work needed in the realm of identifying potential, this research has made a significant contribution in the form of both findings and lessons learned. It is the author’s hope that this work can contribute to the formation of a true theory of potential by providing support for the Leadership Potential BluePrint (Church & Silzer, 2013) and setting the stage for future research.
References


Corporate Leadership Council (2005a). Realizing the full potential of rising talent (Volume I): A quantitative analysis of the identification and development of high potential employees. Washington, DC: Corporate Executive Board.


Tables

Table 1

Distribution of the Archival Representation of High Potential

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*Note. n=596*
### Table 2

**Correlation Matrix**

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**Note:** Potential (Mgr Rating), Extraversion, Conscientiousness, Emotional Stability, Openness Internal and Openness External are standardized variables. Bolded values are significant at the p < .05 level or higher.
### Table 3

Results of Regressing Potential Archival on Cognitive Ability

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<th>Independent Variable</th>
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<th>p</th>
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*Note.***p < .001 *p < .01 n=584

### Table 4

Results of Regressing Potential Archival on Judgment

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<th>p</th>
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*Note.***p < .001 *p < .01 n=595

### Table 5

Results of Regressing Potential Archival on Cognitive Ability and SJT

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<th>$\Delta R^2$</th>
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*Note.***p < .001 *p < .01 n= 584

### Table 6

Results of Regressing Potential Archival on Learning Goal Orientation

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*Note.***p < .001 *p < .01 n=594
Table 7

Results of Regressing Potential Archival on Learning & Performance Prove Goal Orientations

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<th>Beta</th>
<th>t</th>
<th>p</th>
<th>ΔR²</th>
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*Note. **p < .001  *p < .01. n= 594*

Table 8

Results of Regressing Potential Archival on Ambition

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*Note. **p < .001  *p < .01 †p < .05. n=534*

Table 9

Results of Regressing Potential Archival on Biodata

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*Note. **p < .001  *p < .01. n= 594*
Table 10

Results of Regressing Potential Archival on Cognitive Ability, Judgment, Goal Orientation, Ambition, and Biodata

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Note. **p < .001  *p < .01  †p < .05. n= 523-528

Table 11

Results of Regressing Potential Archival on Cognitive Ability, Judgment, Goal Orientation, Ambition, and Biodata with the Holdout Sample

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Note. **p < .001  *p < .01  †p < .05; Three decimal points used in ΔR² for clarity. n=159-164
Table 12

Correlation Matrix

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Note: Bolded values are significant at the p < .05 level or higher.
Table 13

Results of Regressing Potential Archival on Cognitive Ability, Judgment, Goal Orientation, Ambition, and Biodata while Controlling for Age

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<td>Ambition (Plan)</td>
<td>0.03</td>
<td>0.04</td>
<td>0.03</td>
<td>0.66</td>
<td>0.51</td>
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<tr>
<td>Achieving</td>
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<td>0.03</td>
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<td>0.45</td>
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<td>Biodata</td>
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<td>0.01</td>
<td>0.22</td>
<td>4.89</td>
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<td>Total R²</td>
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Note. **p < .001  *p < .01 †p < .05. n=528
Table 14

Results of Adverse Impact Analyses by Protected Group and Criterion Variable

<table>
<thead>
<tr>
<th>Adverse Impact Ratio for:</th>
<th>Archival Measure of HiPo</th>
<th>Overall Model of Potential</th>
<th>Adverse Impact Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (Protected Group = Over 40 Yrs)</td>
<td>16% n= 596 Protected n= 385</td>
<td>28% n= 529 Protected n=344</td>
<td>Archival: Yes Overall: Yes</td>
</tr>
<tr>
<td>Race (Protected Group = Nonwhite)</td>
<td>119% n= 443 Protected n= 93</td>
<td>64% n=399 Protected n= 79</td>
<td>Archival: No Overall: Yes</td>
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<tr>
<td>Race (Protected Group = Black)</td>
<td>59% n= 443 Protected n= 29</td>
<td>70% n=399 Protected n= 24</td>
<td>Archival: Yes Overall: Yes</td>
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<tr>
<td>Race (Protected Group = Asian)</td>
<td>170% n= 443 Protected n= 30</td>
<td>65% n=399 Protected n= 26</td>
<td>Archival: No Overall: Yes</td>
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<tr>
<td>Race (Protected Group = Hispanic)</td>
<td>125% n= 443 Protected n= 34</td>
<td>58% n=399 Protected n= 29</td>
<td>Archival: No Overall: Yes</td>
</tr>
<tr>
<td>Gender (Protected Group = Women)</td>
<td>143% n=596 Protected n= 227</td>
<td>167% n=529 Protected n= 198</td>
<td>Archival: No Overall: No</td>
</tr>
</tbody>
</table>
Appendix A

Participant Measures

OPQ Mapping to a six-Factor Model

Table 6. Rotated component matrix for the IRT-scored responses to OPQ32r: OPQ32r calibration sample (N=518).

<table>
<thead>
<tr>
<th></th>
<th>Openness (unconventionality)</th>
<th>Extraversion</th>
<th>Conscientiousness</th>
<th>Emotional Stability</th>
<th>Agreeableness</th>
<th>Openness (critical thinking)</th>
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<tbody>
<tr>
<td>Persuasive</td>
<td>0.39</td>
<td>0.41</td>
<td>0.19</td>
<td>0.20</td>
<td>-0.07</td>
<td>0.35</td>
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<tr>
<td>Controlling</td>
<td>0.33</td>
<td>0.44</td>
<td>0.47</td>
<td>0.13</td>
<td>-0.15</td>
<td>0.21</td>
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<tr>
<td>Outspoken</td>
<td>0.22</td>
<td>0.58</td>
<td>0.09</td>
<td>0.17</td>
<td>-0.20</td>
<td>0.16</td>
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<tr>
<td>Independent-minded</td>
<td>0.49</td>
<td>0.18</td>
<td>0.14</td>
<td>0.04</td>
<td><strong>-0.43</strong></td>
<td>-0.07</td>
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<tr>
<td>Outgoing</td>
<td>0.20</td>
<td>0.81</td>
<td>0.00</td>
<td>0.08</td>
<td>0.06</td>
<td>-0.13</td>
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<tr>
<td>Affiliative</td>
<td>-0.02</td>
<td>0.57</td>
<td>-0.08</td>
<td>0.07</td>
<td><strong>0.44</strong></td>
<td>-0.22</td>
</tr>
<tr>
<td>Socially Confident</td>
<td>0.15</td>
<td><strong>0.57</strong></td>
<td>0.18</td>
<td><strong>0.48</strong></td>
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<td>0.11</td>
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<tr>
<td>Modest</td>
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<td>-0.73</td>
<td>-0.06</td>
<td>0.10</td>
<td>0.11</td>
<td>-0.12</td>
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<tr>
<td>Democratic</td>
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<td>0.01</td>
<td>-0.12</td>
<td><strong>0.73</strong></td>
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<td>Caring</td>
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<td>0.06</td>
<td>0.21</td>
<td>0.07</td>
<td><strong>0.72</strong></td>
<td>-0.18</td>
</tr>
<tr>
<td>Data Rational</td>
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<td>0.0</td>
<td>0.14</td>
<td>0.13</td>
<td>-0.16</td>
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<td>Evaluative</td>
<td>0.27</td>
<td>0.06</td>
<td><strong>0.36</strong></td>
<td>0.07</td>
<td>0.07</td>
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<td>Behavioural</td>
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<td>0.02</td>
<td>0.06</td>
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<td>Conventional</td>
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<tr>
<td>Conceptual</td>
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<td>Innovative</td>
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<td><strong>0.33</strong></td>
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<td>Variety Seeking</td>
<td><strong>0.72</strong></td>
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<td>0.06</td>
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<tr>
<td>Adaptable</td>
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<td>-0.43</td>
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<tr>
<td>Forward thinking</td>
<td>0.20</td>
<td>0.01</td>
<td><strong>0.71</strong></td>
<td>0.09</td>
<td>0.09</td>
<td>-0.01</td>
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<tr>
<td>Detail Conscious</td>
<td>-0.28</td>
<td>0.00</td>
<td><strong>0.69</strong></td>
<td>0.08</td>
<td>0.01</td>
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<td>Conscientious</td>
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<td>0.05</td>
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<td>Rule Following</td>
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<td>-0.02</td>
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<td>-0.07</td>
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<td>Relaxed</td>
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<tr>
<td>Worrying</td>
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<td>-0.18</td>
<td><strong>-0.69</strong></td>
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<td>Tough Minded</td>
<td>0.09</td>
<td>-0.11</td>
<td>0.04</td>
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<tr>
<td>Optimistic</td>
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<td>Trusting</td>
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<td><strong>0.39</strong></td>
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<td>Emotionally Controlled</td>
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<td>0.05</td>
<td>-0.20</td>
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<tr>
<td>Vigorous</td>
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<td>0.4</td>
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<td>Competitive</td>
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<td>Achieving</td>
<td><strong>0.33</strong></td>
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<td><strong>0.72</strong></td>
<td>0.04</td>
<td>-0.09</td>
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<td>Decisive</td>
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<td>0.04</td>
<td>0.28</td>
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</tr>
</tbody>
</table>

Main factor loadings are in **bold**, secondary loadings above 0.3 are in **bold italic**.
Situational Judgment Test
*For each item they were asked to choose what they were both most and least likely to do in that situation*

1. You have just moved into your first people manager role within a technical function. Over the years, you have received repeated feedback that your technical skills are outstanding, and you have successfully completed many complex technical projects. However, your new manager has just told you that your “people skills” are lacking.
   1. Focus on your strengths; continue to build your technical skills.
   2. Explain to your manager how your technical skills add value to the organization.
   3. Approach HR for a second opinion.
   4. Approach your manager’s boss for additional input.
   5. Leverage the organization’s feedback tools for additional input (e.g., 360, MQPI).
   6. Ask your manager for suggestions to improve your people skills.
   7. Investigate development offerings (e.g., PepsiCo University) to see what might be helpful.

2. You have been temporarily assigned to a special project with a team that is located overseas. Because you are staying in your current location, this new assignment will require frequent team meetings and conference calls outside of your normal work hours to accommodate the overseas team members. During this assignment, you are expected to continue managing your current workload; however, you are finding it hard to keep up.
   1. Try to reschedule team meetings and conference calls so that they fall within your working hours.
   2. Delegate tasks to others, as appropriate, to reduce your workload.
   3. Ask your boss to help coordinate assignments to reduce your overall workload.
   4. Ask your new, overseas colleagues for help with tasks related to the special project.
   5. Work longer hours to ensure that all your work is completed.

3. You have recently joined a task force as a team member on a new initiative. You are not familiar with the subject area and know that there will be a steep learning curve. However, the work has not begun so you hope to get up to speed quickly before the team starts to meet. Today, your manager alerts you to the news that the task force leader is leaving the company and asks if you would be willing to lead the task force.
   1. Decline the offer; explain to him/her that you are more comfortable as a team member since this is not an area with which you have any familiarity
   2. Accept the offer; you’ll figure out how to do it as you go
   3. Explain to your manager what your current workload looks like and ask him to help you prioritize your current tasks versus leading the new team
   4. Suggest someone else who is more knowledgeable in this particular area
   5. Ask for more information about the project deliverables, risks, skill requirements, etc.

4. You are responsible for leading the project team working with one of PepsiCo’s largest customers. The customer has requested project deliverables that you believe are impossible to accomplish given the currently available resources and processes. However, the relationship with the customer is at risk if the customer’s expectations are not met.
   1. Agree to the customer’s request and work as long and as hard as necessary to get it done.
   2. Agree initially to the goals and timeline, and then realign regularly with the customer as the project progresses.
   3. Request additional resources from your manager.
   4. Tell the customer that you cannot meet the deadline and ask for an extension.
   5. Break down the project into specific steps and eliminate unimportant steps so that you can meet the deadline.
   6. Ask your team to help you establish a more reasonable timeline and then negotiate with the customer to change the project deadline.
   7. Identify ways to improve the efficiency of the project team so that you can complete the project on time.
5. You have recently taken leadership of a team that has been together for several years. As you look through the employee files, you notice that one team member, Peter, seems to have had performance issues for some time, but that no action has been taken.
   1. Immediately put Peter on a Performance Improvement Plan.
   2. Spend the first few months closely observing Peter’s performance before making any decisions.
   3. Talk with other team members to understand how Peter’s performance is affecting the rest of the team.
   4. Ask the previous team leader for more details about Peter’s performance.
   5. Speak with Peter to understand what may be influencing his performance.

6. You have just become the manager of a team that had poor performance throughout the past year. One of the employees on the team has a reputation for causing problems by being difficult and voicing very negative opinions, although he has a strong performance record.
   1. Try to get the difficult employee transferred to a different team.
   2. Meet with the employee, and ask him to bring his concerns to you before he vocalizes them to the entire team.
   3. Meet with the employee, focus your discussion on his positive performance, and suggest that he could help motivate others to perform as well as he does.
   4. Meet with the employee, and tell him he cannot continue to cause problems.
   5. Meet with the employee to discuss the issues he has had in the past so you can find ways of avoiding the issues in the future.

7. You are a member of a small team that has been tasked with developing a new process. You have done something similar before and are confident that you know the best way to proceed. However, one of the other team members strongly disagrees with your recommendation and has put forth a recommendation of his own.
   1. Ask him to explain why his idea is better than yours.
   2. Reiterate your own idea firmly and remind the team that you have previous experience in this area.
   3. Show, in as much detail as possible, why his recommendation would not be effective.
   4. Ask someone outside the team who has experience in this area to decide which idea is better.
   5. Listen to his recommendation and agree with him initially, but then continue to push your own position.

8. You have just become the manager of a team that has not been meeting its performance objectives for some time. You have some ideas about what changes to make to improve the team’s performance, but you are not sure how your team will react to these changes.
   1. Wait until you have the respect and trust of your team, and then suggest your changes.
   2. Talk to your manager about the changes you want to make, and ask her to help you encourage your team to implement these changes.
   3. Hold a meeting with your team to explain the changes you will be implementing and answer any questions they have.
   4. Hold a meeting with your team to discuss your ideas and changes, and let them vote on which changes they would like to see happen.
   5. Hold a meeting with your team to discuss current performance, and ask them what changes they would make.

9. You are in the busiest time of the year, and you are beginning to get behind in your work. You are afraid that you might miss your deadlines.
   1. Wait to see if you actually miss a deadline and then talk to your manager about the situation.
   2. Train one of your co-workers to perform some of your easier tasks.
   3. Discuss with your manager which tasks need to be completed now and which can wait until you are less busy.
   4. Work as many hours as necessary to get all of the work done.
   5. Continue working at a steady pace, and catch up with everything when business slows down.
10. Your manager has asked you to join him in attending a meeting with senior leaders to provide details about a project you are leading. During the meeting, one of the leaders asks you a series of questions that you do not understand. Although it is obvious that you cannot answer, he continues to ask questions and makes remarks about your lack of knowledge about the subject.

1. Let him know that you will find the answers and send an email with your responses to all meeting attendees.
2. Respond that your manager is in a better position to answer the questions.
3. Ask for clarification of the questions so that you can better provide a helpful answer.
4. Leave the meeting; your presence there is not helpful.
5. Let him know that you are extremely knowledgeable on the topic, but he needs to ask clearer questions if he wants a reasonable answer.

11. You have an idea for a way to improve a process that your team uses every day. You’ve spent some time researching it and talking with close colleagues, and you are convinced that it would improve the team’s productivity. However, when you present the idea to your manager, she tells you that she doesn’t think it’s a good idea and asks that you don’t spend any more time on it.

1. Mention the idea to your senior leader when you meet with him during an upcoming group lunch.
2. Put the idea aside for the time being and focus on your work as your manager asks.
3. Continue to gather data to build a case to convince your manager to back the idea.
4. Identify a peer of your manager who might champion the idea.
5. Talk about your idea with team members to get their support; if the team thinks it’s a good idea, your manager will be more likely to accept it.

12. Your manager has mentioned an optional, one-hour training session that will be held tomorrow during business hours. The session would be very helpful, but attending would require you to stay longer after work, missing an after-work event that you have been looking forward to.

1. Ask whether or not the training session can be moved to another day.
2. Let your manager know that you won’t be able to attend the training session due to a previous commitment.
3. Attend the training session and stay as late as necessary to complete all of your work.
4. Ask your manager if the training will be offered at another time in the future when your workload may be lighter.
5. Attend the training session and leave in time to make it to the after-work event.

13. Yesterday, you presented your recommendation to a key stakeholder; you provided your rationale, explained the details in their entirety, and urged her to move forward immediately. The stakeholder agreed to your recommendation and you executed it. Today, the stakeholder tells you that she did not mean for you to act on the recommendation.

1. “Let me see what I can do to reverse everything.”
2. “Unfortunately, I can't undo it.”
3. “I’m so sorry, I must have misunderstood you.”
4. “What changed since yesterday?”
5. “Let me remind you of the benefits of this action …”

14. You have given specific advice to one of your major customers but he has decided to take a different course of action. You have reviewed the advice with your colleagues and they have assured you that your advice is the right thing to do.

1. Continue making the same recommendation to the customer; you know it’s the best option for him.
2. Ask your manager, or the customer’s manager, to intervene.
3. Explain to the customer why his course of action is not the best one to take.
4. Try to determine why the customer is not following your advice.
5. Wait to see what happens; your customer may be right after all.
15. You have been asked to take over leadership of a project team that is not meeting its goals. You discover that the team’s charter is unclear, there are insufficient resources to complete the work in a timely manner, and that there is no clear solution to the problem the team is trying to address.

1. Given the difficulties, decline to take on leadership of the project team.
2. Ask for additional resources before agreeing to lead the project team.
3. Meet with the team members to better understand the challenges they face before making a decision about whether or not to take on the leadership role.
4. Before making a decision, meet with key stakeholders to see whether they can clarify the team’s charter.
5. Agree to lead the project team; it will be challenging but you can work out the difficulties over time.

**Biodata Inventory**

*asked to choose the answer that best describes them

1. I primarily participate in activities outside of work …
   1. that can help me advance my career.
   2. because I am personally interested in those activities.
   3. to help build my skills or knowledge in specific areas.
   4. to expose me to different perspectives and types of people.
   5. that can help improve the lives of others.
   6. I do not participate in activities outside of work

2. Which of the following is MOST important to you in a job?
   1. Opportunity for advancement
   2. Recognition from others for a job well done
   3. High salary
   4. Pleasant working conditions
   5. Opportunity for individual thought and initiative
   6. Job security
   7. Geographic location
   8. Work that aligns with my primary interest or passion
   9. Supportive managers

3. In your lifetime, how many times have you received an award or public recognition for something that you, personally, have done?
   1. Never
   2. Once
   3. Twice
   4. Three or four times
   5. More than four times

4. How much recognition do you usually get for your accomplishments?
   1. None
   2. I’m recognized occasionally, but not as often as I deserve
   3. I’m recognized as often as I deserve
   4. Sometimes I get more recognition than I deserve

5. Which do you prefer?
   1. To be an active member of an established team
   2. To work alone to achieve results
   3. To lead a team through challenges
   4. To be responsible for the results / outcomes of a team
6. Which of the following would bother you MOST?
   1. Being taken off a task before it could be finished
   2. Finishing work left by others
   3. Last minute notice of work to be done
   4. Having my suggestions ignored
   5. Poor understanding of work problems by management

7. Which of the following would you appreciate most in your job?
   1. Regular work hours
   2. Usually doing the same kind of work
   3. Pleasant working conditions
   4. Having good friendships with co-workers
   5. Not having more than one boss to please

8. If we asked your manager, how hard would he/she say you usually work (compared to other people doing the same type of work)?
   1. Not nearly as hard as most others
   2. A little less hard than most others
   3. About the same as most others
   4. A little harder than most others
   5. Much harder than most others

9. What is your greatest strength?
   1. Quality of educational background
   2. Practical knowledge and work experience
   3. High personal standards
   4. Ability to work well with others
   5. Willingness to work long hours
   6. I’m not sure

10. What has generally been the major cause of your past failures at work?
    1. Lack of talent or ability
    2. Not trying hard enough
    3. Goals that were too difficult
    4. Not fully understanding the task
    5. Bad luck
    6. Lack of support
    7. Poor effort or quality work from others
    8. I’m not sure
    9. I haven’t failed at work

11. During your undergraduate studies, how many elective courses did you take outside of your major area of study?
    1. There was no option to take elective courses as part of my studies
    2. None
    3. One
    4. Two
    5. Three or more

12. During the first five years of your career, how many different positions did you hold, including positions held as part of a rotational program and/or before joining PepsiCo?
    1. 1
    2. 2
    3. 3
    4. 4
    5. 5 or more
13. How many voluntary work-related seminars, conferences, training courses, or classes did you participate in last year?
   1. None
   2. One
   3. Two or more

14. How often do you volunteer for new assignments or projects at work?
   1. Almost always
   2. Frequently
   3. Pretty often
   4. Sometimes
   5. Rarely or never

15. I am willing to do something at work that is especially challenging if …
   1. I know a lot about it
   2. I know others have done the same and can help me
   3. It will benefit my career or reputation
   4. It will be a good experience
   5. It is clear what needs to be done

16. In working with other people, which of the following roles do you usually prefer to take?
   1. Assisting/helping to get work done
   2. Counseling/giving emotional support
   3. Directing/telling others what to do
   4. Persuading/convincing others to do things
   5. Teaching/training others

17. Which one of the following descriptions is most true of you?
   1. I am the type of person who would like to have my own business; I’m enterprising, independent, and willing to take risks.
   2. I am the type of person who enjoys persuading people to do things; I’m full of energy and self-confidence, I want to earn a lot of money, and I’m competitive, assertive, and outgoing.
   3. I am the type of person who prefers well-defined, structured tasks over ambiguous ones; I’m good at handling details, I fit well into an established chain of command, and I’m orderly, cooperative, and dependable.
   4. I am the type of person who places high value on helping other people; I’m highly concerned for the welfare of others, I’m sociable, and I enjoy being with other people.

18. If we asked your manager, how quickly would he/she say you learn new things?
   1. Faster than anyone else
   2. Much faster than most others
   3. Somewhat faster than most others
   4. About as fast as most others
   5. Not as fast as most others
   6. I’m not sure

19. Those I’ve worked for will say that the one statement which fits me best is:
   1. I can get along with anybody
   2. I can be counted on to come through in tough situations
   3. I can handle any assignment, no matter how difficult
   4. I can stay calm and collected in stressful situations
   5. I can adapt to any change in work or schedules
   6. I can be counted on to be loyal, no matter what
20. If we asked your manager, what would he/she say has caused the MOST problems in your work?
   1. Getting upset under pressure
   2. Pushing my ideas too fast
   3. Criticizing others too much for minor errors
   4. Not following through on my work
   5. Relying too much on advice or input from others
   6. Not using all available resources

21. When you are competing against someone, what percent of the time do you win?
   1. 10% or less
   2. About 20%
   3. About 30%
   4. About 40%
   5. About 50%
   6. About 60%
   7. About 70%
   8. About 80%
   9. About 90%
  10. More than 90%

22. If we asked your manager, how would he/she rate your potential or actual ability to supervise others?
   1. Poor
   2. Fair
   3. Good
   4. Very good
   5. Outstanding
   6. I don't know

23. Which of the following would you like MOST?
   1. Developing a new kind of product
   2. Getting a loan or grant to produce a new product
   3. Testing the operation of a new product
   4. Selling a new product
   5. Supervising the manufacture of a new product
   6. Teaching others how to use a new product

24. Which of the following would bother you MOST?
   1. Being micro-managed
   2. Working with people who don’t live up to their commitments
   3. Working in an ambiguous or constantly-changing environment
   4. Not receiving recognition for going the extra mile
   5. Conflict with my manager or co-workers

25. How do you usually behave in a team meeting with peers?
   1. I don’t usually participate.
   2. I am reluctant to express my views, but they are usually very well received.
   3. I feel free to express my views, but the team doesn’t always share them.
   4. I feel free to express my views, and I usually sway the team considerably.

26. If we asked your manager, how well would he/she say you able to get other people to do what you need?
   1. Much better than anyone else
   2. Much better than most people
   3. Somewhat better than most people
   4. About as well as most people
   5. Not as well as most people
   6. I’m not sure
27. In a normal work day, which would you generally prefer?
   1. To fully complete a task before moving on to the next one
   2. To work on a couple of things at a time
   3. To have many important tasks going on at the same time

28. Which of the following do you typically prefer?
   1. To be given specific goals but to decide for myself how best to achieve those goals
   2. To be given specific goals and general instructions on how to achieve those goals
   3. To determine my own goals and how to achieve them
   4. To be told specifically what to work on

29. If we asked your manager, how would he/she rate your ability to complete several assignments at once?
   1. I’m the very best
   2. Much better than others
   3. Somewhat better than others
   4. About as well as others
   5. Not as well as others
   6. Not well at all
   7. I’m not sure

**Ambition Items**
*each answered of a 5-Point Likert Scale of Strongly Agree-Strongly Disagree*

1. I have a personal career goal to achieve a more complex role in my function that enables me to have an influence on the organization. [SA-SD]
2. I have a highly detailed and aggressive 5 year career plan that I am striving to achieve. [SA-SD]

**Goal Orientation Items (VandeWalle, 1997)**
*each answered of a 5-Point Likert Scale of Strongly Agree-Strongly Disagree*

**Learning Goal Orientation**
1. I am willing to select a challenging work assignment that I can learn a lot from.
2. I often look for opportunities to develop new skills and knowledge.
3. I enjoy challenging and difficult tasks at work where I’ll learn new skills
4. For me, development of my work ability is important enough to take risks.
5. I prefer to work in situations that require a high level of ability and talent.

**Performance-Prove Goal Orientation**
6. I am concerned with showing that I can perform better than my coworkers.
7. I try to figure out what it takes to prove my ability to others at work.
8. I enjoy it when others at work are aware of how well I am doing
9. I prefer to work on projects where I can prove my ability to others.

**Performance-Avoid Goal Orientation**
10. I would avoid taking on a new task if there was a chance that I would appear rather incompetent to others.
11. Avoiding a show of low ability is more important to me than learning a new skill.
12. I’m concerned about taking on a task at work if my performance would reveal that I had low ability
13. I prefer to avoid situations at work where I might perform poorly.
## Appendix B

**Manager Measures**

*Competency/construct labels not present in actual survey*

### Overall Job Performance

Based upon your review and evaluation of the employee’s performance on all of the preceding competencies, and the relative importance of those competencies to overall job success, provide your best judgment of each employee’s current **overall job performance**.

<table>
<thead>
<tr>
<th>CR</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
</table>

Which performance level best describes the employee’s current overall performance?

<table>
<thead>
<tr>
<th>CR</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
</table>

How would this employee’s overall performance compare to others doing similar work at the same job level?

<table>
<thead>
<tr>
<th>CR</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
</table>

### Overall Potential

Based upon your review and evaluation of the employee's performance on all of the preceding dimensions, and the relative importance of those dimensions to overall job success, provide your best judgment of the employee's overall leadership potential.

<table>
<thead>
<tr>
<th>CR</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
</table>

Which best describes the employee’s current overall potential?

<table>
<thead>
<tr>
<th>CR</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
</table>

How would this employee’s current overall potential compare to others at the same job level?

### Potential:

<table>
<thead>
<tr>
<th>0-3 months</th>
<th>3-6 months</th>
<th>6-12 months</th>
<th>12-18 months</th>
<th>18-24 months</th>
<th>24+ months</th>
<th>Never</th>
</tr>
</thead>
</table>

In how many months do you think this employee will be ready for promotion to a larger role?

<table>
<thead>
<tr>
<th>Very Unlikely</th>
<th>Somewhat Unlikely</th>
<th>Possible</th>
<th>Somewhat Likely</th>
<th>Very Likely</th>
</tr>
</thead>
</table>

Compared to other employees, what is the likelihood that this employee will progress to **at least 2 job levels higher** than his/her current band/level?

<table>
<thead>
<tr>
<th>0-2 years</th>
<th>2-4 years</th>
<th>4-6 years</th>
<th>6+ years</th>
<th>He/She is unlikely to progress 2 job levels</th>
</tr>
</thead>
</table>

In what timeframe do you think this employee will have progressed **at least 2 job levels higher** than his/her current band/level?

<table>
<thead>
<tr>
<th>L10</th>
<th>L11</th>
<th>B1</th>
<th>B2</th>
<th>B3</th>
<th>B4</th>
<th>B5</th>
<th>B6</th>
</tr>
</thead>
</table>

Given what you know about this employee, what is the **ultimate level/band** that you think he/she could rise to within PepsiCo?

### Please indicate the extent to which you agree or disagree with the following statements:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>CR</th>
</tr>
</thead>
</table>
This employee has the ability required to progress two or more positions beyond his/her current role.

This employee has the organizational commitment required to progress two or more positions beyond his/her current role.

This employee has the motivation required to progress two or more positions beyond his/her current role.

### Ambition:

**Please rate how frequently this employee engages in each of the following behaviors.**

<table>
<thead>
<tr>
<th>Very Frequently</th>
<th>Infrequently</th>
<th>Somewhat Frequently</th>
<th>Frequently</th>
<th>Very Frequently</th>
</tr>
</thead>
</table>

Initiates conversations about his/her career path outside of PMP.

**Please indicate the extent to which you agree or disagree with the following statements.**

This employee …

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

- has conveyed to me a clear and targeted career trajectory.
- has expressed a clear interest in advancement within PepsiCo.

### Feedback Seeking:

<table>
<thead>
<tr>
<th>Never</th>
<th>Seldom</th>
<th>Occasionally</th>
<th>Usually</th>
<th>Always</th>
</tr>
</thead>
</table>

When you provide this employee with feedback, how often does he/she act on the feedback given?

**Please rate how frequently this employee engages in each of the following behaviors.**

<table>
<thead>
<tr>
<th>Very Infrequently</th>
<th>Infrequently</th>
<th>Somewhat Frequently</th>
<th>Frequently</th>
<th>Very Frequently</th>
</tr>
</thead>
</table>

Seeks performance feedback from you outside of PMP.

### Openness to Experience:

<table>
<thead>
<tr>
<th>Very Uncomfortable</th>
<th>Somewhat Uncomfortable</th>
<th>Neither Comfortable Nor Uncomfortable</th>
<th>Somewhat Comfortable</th>
<th>Very Comfortable</th>
</tr>
</thead>
</table>

How comfortable is this employee with adopting new technologies?

**Please indicate the extent to which you agree or disagree with the following statements.**

This employee …

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

- seeks opportunities to work on new projects.
- is open to new ideas and approaches to business issues.
- is comfortable with change.
**Commitment:**

<table>
<thead>
<tr>
<th>Please indicate the extent to which you agree or disagree with the following statements:</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>This employee is actively involved in volunteer work through a PepsiCo ERG or outside of work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Please indicate the extent to which you agree or disagree with the following statements.**

*This employee …*

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>clearly demonstrates commitment to seeing the organization succeed.</td>
<td></td>
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<tr>
<td>voluntarily helps others who have heavy workloads.</td>
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<tr>
<td>voluntarily goes out of the way to help new employees.</td>
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<tr>
<td>voluntarily passes along work-related information to coworkers.</td>
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<tr>
<td>has established a robust network of colleagues within and outside of PepsiCo.</td>
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<tr>
<td>persists in overcoming obstacles to complete important tasks.</td>
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<tr>
<td>makes innovative suggestions to improve our team, function, or business.</td>
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<tr>
<td>puts in the hours to get the work completed on time.</td>
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<tr>
<td>takes the initiative to solve work problems.</td>
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</table>

**Learning Agility:**

<table>
<thead>
<tr>
<th>Please indicate the extent to which you agree or disagree with the following statements. <em>This employee …</em></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>makes clear connections between complex and seemingly unrelated events.</td>
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<tr>
<td>quickly identifies the most important part of a complex problem or issue.</td>
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<tr>
<td>gets up to speed with new projects faster than other employees at his/her level.</td>
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</tr>
<tr>
<td>displays flexibility and creativity in his/her thinking and problem solving.</td>
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</tbody>
</table>

**Ability:**

<table>
<thead>
<tr>
<th>Please indicate the extent to which you agree or disagree with the following statements. <em>This employee …</em></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>has a solid understanding of our business.</td>
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<tr>
<td>is willing to take a stand on complex issues.</td>
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<tr>
<td>has a special talent for dealing with people.</td>
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<tr>
<td>can be depended on to tell the truth regardless of circumstances.</td>
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<tr>
<td>takes personal as well as business risks.</td>
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</tr>
</tbody>
</table>
Nicole M.F. Ginther
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EDUCATION

Ph.D.  Industrial and Organizational Psychology (2014)  
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Highest Honors & Distinction in Major (GPA 3.99)  
The University of California, Santa Barbara

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PSU Chapter of Sacramento-San Joaquin Scholarship Award (2011-2012)
PSU I-O Graduate Student Socialization Chair (2011-2013)
Distinguished Graduate Fellowship (2010-2011)
Service to Psychology Department, University of California, Santa Barbara (2010)

PUBLICATIONS

Journal of Organizational Psychology, 14(2).


PRESENTATIONS


