

Running head: HOW TO IDENTIFY LEADERSHIP POTENTIAL

DRIES, N., PEPEMANS, R. (2012). HOW TO IDENTIFY LEADERSHIP POTENTIAL: DEVELOPMENT AND TESTING OF A CONSENSUS MODEL. HUMAN RESOURCE MANAGEMENT, 51 (3), 361-385.

Building on two studies, the current paper responds to urgent calls in the literature for more empirical research on how to identify leadership potential. Based on an extensive review of the 1986-2010 literature, and applying a combination of qualitative and quantitative techniques, we developed a model of leadership potential consisting of four quadrants: Analytical skills (containing the factors Intellectual curiosity, Strategic insight, Decision making, and Problem solving); Learning agility (containing the factors Willingness to learn, Emotional intelligence, and Adaptability); Drive (containing the factors Results orientation, Perseverance, and Dedication); and Emergent leadership (containing the factors Motivation to lead, Self-promotion, and Stakeholder sensitivity). Notably, the developed model steers clear from some of the typical issues that tend to hinder valid assessments of leadership potential – i.e., the confound between performance and potential, as well as that between leadership potential and successful, mature leadership. Furthermore, high consensus was found between top managers, line managers and HR managers about the practical relevance of the proposed model. The paper concludes with some specific future avenues for research and practice.

Keywords: Leadership potential, Leadership development, Talent management, Inter-rater consensus, Inter-rater dissensus, Q-sorts, Multidimensional scaling (MDS)

INTRODUCTION

Human resource practitioners around the world are struggling with the identification of leadership potential, declaring it a top priority, but at the same time acknowledging the immaturity of their assessment procedures and the need for more objective and generalizable guidelines (Buckingham & Vosburgh, 2001; Fulmer & Bleak, 2008). Recent studies (e.g. Silzer, Slider & Knight, 1994; Slan & Hausdorf, 2004; Wells, 2003) estimate that only between 31 and 55 percent of large US corporations have a specific framework in place for the systematic identification of leadership potential. Both leadership scholars and practitioners indicate that there is a pressing need for more research into the criteria organizations are, or

should be, using to assess leadership potential in (junior) staff (Silzer, 2010; Spreitzer, McCall & Mahoney, 1997).

Specific issues that have been identified in relation to the identification of leadership potential in organizations include: adequately separating performance from potential ratings (Balzer & Sulsky, 1992); moving away from “gut feelings” and informal or subjective assessments carried out by untrained management staff, and toward the deliberate development of valid frameworks of leadership potential (Silzer & Church, 2010); embedding procedures relating to the identification of leadership potential in organizational strategy, as opposed to assuming a short-term, ad-hoc approach (Boudreau & Ramstad, 2007); and getting line management fully engaged in the process, taking into account that they often feel burdened by tasks they are obliged to fulfill on top of their regular managerial responsibilities (Dries & Pepermans, 2008).

Survey studies have uncovered that, in practice, organizations rely mostly on performance reviews and specific competency models (often based on analyses of critical incidents reported by successful executives) in their assessments of leadership potential (e.g. Pepermans, Vloeberghs & Perkisas, 2003; Briscoe & Hall, 1999). Although both approaches intuitively make sense, there are also some issues with each of them. Using *past performance* as an indicator of potential increases the risk of Halo bias creeping into the assessment process, in that high performance scores tend to be generalized to other characteristics (such as leadership potential), often incorrectly so (Balzer & Sulsky, 1992; Konczak & Foster, 2009). Inter-rater disagreement caused by the opposing viewpoints and interests of the different parties involved in assessments of leadership potential (i.e. top management, line management, the HR department) may introduce additional bias (Remdisch & Dionisius, 1998). The problem with using *competency frameworks* based on successful leadership profiles is that they are grounded in the assumption that leadership potential and mature,

successful leadership are quasi-identical constructs (McCall, 1998). However, it is not at all clear to which extent organizations can expect junior employees to exhibit the same competencies as senior managers, even in a seminal form – or whether the leadership competencies leading to success today will do so in the unpredictable future (Briscoe & Hall, 1999).

In the current paper we will develop and test a model of leadership potential aiming to steer clear of each of the issues raised above.

Aims of the current study

Although the topic of leadership potential has been tackled by several authors in recent years (e.g. Buckingham & Vosburgh, 2001; Baruch & Peiperl, 1997; Boudreau & Ramstad, 2007), only few studies have built on empirical data (e.g. Dries & Pepermans, 2008; Lombardo & Eichinger, 2000; Remdisch & Dionisius, 1998; Spreitzer *et al.*, 1997). The current paper draws on data obtained from both qualitative and quantitative techniques, thus responding to calls for more empirical research on the identification of leadership potential (Silzer, 2010).

It intends to contribute to the literature in a fourfold manner. First of all, by presenting the results of an extensive literature review focused specifically on leadership potential as opposed to successful, mature leadership. Second, by integrating all criteria for the identification of leadership potential found in the literature into one comprehensive model of leadership potential using qualitative techniques especially developed for data reduction and theory building. Third, by spelling out implications for measurement of the different criteria in the model, and provide a discussion of how each of these measures relates to leadership effectiveness over time. And fourth, by testing the model in a sample of the different parties involved in assessments of leadership potential (i.e. top managers, line

managers, and HR managers) so as to assess the degree of consensus that can be expected in a real-life organizational context.

STUDY 1: DEVELOPMENT OF THE MODEL

Literature review on leadership potential

In a first step, an extensive review of the 1986-2010 literature was conducted. Inclusion required that publications explicitly described a number of criteria that are (or, in case of best practice-type publications, should be) used in assessments of leadership potential. Our search led to a set of 40 articles. The journals covered were (in alphabetical order) *Academy of Management Journal*, *Administrative Science Quarterly*, *Career Development International*, *Career Development Quarterly*, *Human Relations*, *Human Resource Management*, *Human Resource Planning*, *Journal of Applied Psychology*, *Journal of Career Development*, *Journal of Management*, *Journal of Management Studies*, *Journal of Occupational and Organizational Psychology*, *Journal of Organizational Behavior*, *Journal of Social Psychology*, *Journal of Vocational Behavior*, *Leadership Quarterly*, *Organization Science*, *Organization Studies*, *Personnel Psychology*, and *Personnel Review*. In addition, we ran a search in PsycINFO in order to track relevant articles published in other journals. We also added seven books to the list. Appendix A lists the articles ($k = 40$) and books ($k = 7$) identified as relevant in the literature search. Although the obtained reference list may not be exhaustive, we are confident that it is at least representative of the published work within the field.

Methods

Data reduction. Based on the publications listed in Appendix A, a set of 545 leadership potential identification criteria was assembled¹. In order to reduce it into a shorter, more workable form more suited for research and practice applications, we organized a focus group with four senior practitioners and three senior academics active in the field of HRM and leadership development. During the four-hour session, all criteria on the longlist were assessed in terms of relevance and clarity. Ambiguous and identical criteria were removed; double-barreled criteria were split up into several singular criteria. At the end of the session, seventy-seven criteria remained. The terminology of each of the individual criteria was standardized (i.e. converted into the -ing form) for clarity reasons (see Tables 1 through 4). In a next step, the remaining criteria were structured into one comprehensive model of leadership potential.

Data structuration. All 77 criteria were printed onto separate numbered cards (i.e., “Q-sorts”) and sent to a heterogeneous group of 32 subject-matter experts (see Derous, De Witte & Stroobants, 2003). Half of the sample were students enrolled in the Master of Industrial and Organizational Psychology program of a large Belgian University (all students had received several HRM courses); the other half were senior HR professionals specialized in leadership development. Eleven of the experts were women (34%), twenty-one were men (66%). Their age varied between 21 and 61 ($m = 41.3$; $sd = 16.37$). The experts were instructed to sort all cards into structured piles. They were told to place two cards in the same pile if they were similar in meaning, and in different piles if they were dissimilar. After sorting all 77 cards into piles, they were instructed to label each pile and send a structured overview of their results back to the researchers.

Classical ordinal multidimensional scaling (MDS) analysis was performed on the 32 labeled piles of cards obtained from the Q-sort study. MDS is an exploratory technique that

¹The full list is available from the authors upon request.

helps researchers determine the underlying structure (i.e. graphical configuration, dimensions and factors) in sets of data, and is considered particularly useful for the development of theory (Borg & Groenen, 1997). It requires dissimilarity- or distance-type data in a matrix format. In our case, the raw data corresponded to the number of experts who did *not* place a certain pair of Q-sorts into the same pile, for each pair of Q-sorts. Subsequently, content analysis of the labels assigned by the experts to their piles of cards allowed us to allocate appropriate labels for the different dimensions and factors found in the MDS analyses (for more details, see Derous *et al.*, 2003; Dries, Pepermans & Carlier, 2008).

Results

Figure 1 shows the two-dimensional model that was obtained from the analyses outlined above. The location, shape and size of the factors in the Figure represent the graphical configuration of the 77 individual leadership potential identification criteria as found in the MDS analyses. The first, horizontal dimension was labeled *Conation versus Cognition (i.e. Heart versus Head)*. The leadership potential identification criteria on the Conation side of the dimension focus on drive, motivation, and action, whereas the Cognition side highlights the analytical skills held by an individual. The second, vertical dimension was labeled *Extrapersonal versus Intrapersonal (i.e. Context versus Self)*. The Extrapersonal end of this dimension stands for leadership potential identification criteria that relate to the interaction between an individual and his or her external environment. Criteria at the Intrapersonal end of the dimension, on the other hand, focus on the individual's inner life.

Insert Figure 1 about here

Tables 1 through 4 further specify which of the 77 individual criteria of leadership potential are part of which factor. The two-dimensional model of leadership potential developed in the current study consists of four quadrants spanning thirteen factors:

(I) *Analytical skills*. This quadrant contains four factors: *Intellectual curiosity* (i.e. being open to feedback and new impulses); *Strategic insight* (i.e. having broad insight in the business and the organization); *Decision making* (i.e. being decisive and assertive); and *Problem solving* (i.e. being able to solve problems well and quickly). Table 1 provides a more detailed overview of the individual criteria per factor.

 Insert Table 1 about here

(II) *Learning agility*. This quadrant consists of three factors: *Willingness to learn* (i.e. actively looking for novel experiences that enhance learning); *Emotional intelligence* (i.e. maintaining a stable self-concept even in stressful or novel situations); and *Adaptability* (i.e. being open to change when novel circumstances require it). Table 2 provides a more detailed overview of the individual criteria per factor.

 Insert Table 2 about here

(III) *Drive*. This quadrant encompasses three factors: *Results orientation* (i.e. being motivated to consistently deliver high-quality results); *Perseverance* (i.e. maintaining high energy levels even in difficult circumstances); and *Dedication* (i.e. displaying a deep and intrinsic commitment to relevant goals). Table 3 provides a more detailed overview of the individual criteria per factor.

 Insert Table 3 about here

(IV) *Emergent leadership*. This quadrant contains three factors: *Motivation to lead* (i.e. naturally assuming leadership responsibilities); *Self-promotion* (i.e. knowing how to create personal visibility and credibility); and *Stakeholder sensitivity* (i.e. being able to identify relevant stakeholders and optimize interactions with them). Table 4 provides a more detailed overview of the individual criteria per factor.

Insert Table 4 about here

STUDY 2: TESTING OF MODEL CONSENSUS

Different parties involved in assessments of leadership potential

Different parties have been identified in the literature as being (partly) accountable for the identification of leadership potential. A survey study by Pepermans *et al.* (2003) found that top management, line management, the HR department, and to a lesser degree other members of management and the talented employee him or herself are all commonly involved in assessments of leadership potential (the order in which they are listed here reflects their average degree of participation).

An important question is whether these different parties – with their different perspectives on, and interests in the process of identifying the organization's future leaders – are able and willing to come to a consensus of which criteria are most relevant and why. In general, it is assumed that assessments of leadership potential are much more likely to be valid under conditions of high inter-rater consensus (Cook & Emler, 1999; Konczak & Foster, 2009). Although consensus is desired, however, the existence of differential access to information, conflicts of interest, and conflicting implicit leadership theories tend to cause dissensus about which identification criteria are more important (Bowen & Ostroff, 2004; Tsui & Ohlott, 1988).

Following the argument of *differential access to information*, we expect that line managers will rely primarily on employee performance, achievements, and effort displayed on a day to day basis in their assessments of leadership potential (Balzer & Sulsky, 1992); HR managers, on the other hand, are expected to focus more on career aspirations, strengths and weaknesses, and development goals, as it is their task to collect this type of employee data (Silzer & Church, 2010); and top managers, generally not present in the immediate environment of junior staff, might focus more on visibility, assertiveness, networking and charisma, as employees possessing these qualities are most likely to draw their attention (Ruderman & Ohlott, 1990).

Conflicts of interest between the different parties involved in assessments of leadership potential can also cause inter-rater dissensus. Line managers, for instance, are often reluctant to identify their best people as “high potentials” as this might result in losing them to another department (McCall, 1998). HR managers, from their side, are essentially internal service providers with certain predetermined targets. In many cases, their organizations dictate to them the percentage of employees that should be identified as potential future leaders on a yearly basis (Dries & Pepermans, 2008). As for top managers (who generally have the final say in leadership decisions) – they are typically accused of homosocial reproduction, a selection process by which managers are biased towards the candidates who are most similar to themselves (Kanter, 1977). In addition, some top managers feel threatened by their junior staff, blocking their progress out of fear that their own position might become compromised (Dries & Pepermans, 2008).

Finally, *implicit leadership theories* – i.e., people’s preconceived notions of what a leader should look like (Hogan, Curphy & Hogan, 1994) – have been demonstrated to vary widely, based on national culture (e.g. Ling, Chia & Fang, 2000), gender (Offerman, Kennedy & Wirtz, 1994), and personality (Keller, 1999), among other individual differences (Porr &

Fields, 2006). Clearly, opposing views on what it means to be a leader are highly likely to cause dissensus throughout multiple-rater assessments of leadership potential.

Methods

Measures and procedure. An online survey study was set up in order to assess the degree of consensus about the model of leadership potential developed in Study 1 in a sample of real-life practitioners. A large number of top managers, line managers and HR managers were contacted asking for their participation in an online survey on leadership potential. Contact data came from a large database managed by the research department supporting the research. Potential respondents were asked to fill out the survey and forward it to other leadership development professionals within their networks. Participants were instructed to indicate for each of the 77 criteria to which extent (on a 7-point scale ranging from 1 = not at all to 7 = to a very large extent) they consider it an essential criterion when asked for their personal input in assessments of leadership potential. Furthermore, they were specifically requested to answer according to their own personal experiences with assessments of leadership potential and *not* rely (exclusively) on formalized criteria imposed by the organization. Finally, they were asked to indicate their gender, age, educational level and role(s) in their organization's assessments of leadership potential (roles adapted from Dries & Pepermans, 2008; see Table 5).

Participants. A total of 179 respondents took part in the online survey: 52 top managers (29%), 54 line managers (30%) and 73 HR managers (41%). Of these 179 respondents, 60 were women (34%) and 119 were men (66%). The age of the respondents varied between 23 and 65 ($m = 44.37$; $sd = 8.25$). As regards educational level, 8% of respondents reported having obtained a high school degree, 23% a Bachelor's degree, 55% a Master's degree and 14% had obtained a post-graduate degree.

Table 5 illustrates the fact that top managers, line managers and HR managers typically take up different roles in assessments of leadership potential. Top managers in our sample were more involved in providing top-down input on leadership identification policies, and had more decision-making capacity than line managers and HR managers. Their main role seems to be participating in committees that evaluate employees' leadership potential. Line managers reported to be involved mainly in terms of providing bottom-up information about the leadership potential of employees. Finally, HR managers indicated that their main role was developing criteria and processes for assessing leadership potential.

 Insert Table 5 about here

Results

Descriptive analyses. Table 6 reports the means, standard deviations and intercorrelations of the survey data. Correlation analyses revealed that all quadrants and factors of our developed model of leadership potential correlate at the $p < .01$ level. Coefficient alphas (added on the diagonal) were .60 or above for all quadrants and factors, indicating satisfactory internal consistency. In addition, we performed a confirmatory factor analysis using Lisrel 8.80 structural equation modeling (SEM). We found that the factor structure of our model displayed overall good fit with the data.

 Insert Table 6 about here

Between-group differences. We performed multiple ANOVAs to test our assumptions about potential differences between top managers, line managers and HR managers as concerns the criteria they consider most essential in their assessments of leadership potential. Contrary to our expectations, we did not find any significant differences, nor for Analytical skills ($F(2,176) = .18, p = .84$), nor for Learning agility ($F(2,176) = .20, p =$

.82), nor for Drive ($F(2,176) = .13, p = .88$), nor for Emergent leadership ($F(2,176) = .40, p = .67$). We then proceeded to perform ANOVAs for each of the 13 factors, but did not find any significant differences at the factor level either. Consequently, all possible suppositions about inter-rater dissensus had to be discarded.

DISCUSSION

In spite of the fact that the identification of leadership potential is a prime concern for many organizations (Buckingham & Vosburgh, 2001), to date, there has hardly been any empirical research into the criteria organizations are (or should be) using in their assessments (Dries & Pepermans, 2008; Silzer, 2010; Spreitzer *et al.*, 1997). HR practitioners around the world are reporting that they are in urgent need of more (and more explicit) guidelines on how to identify leadership potential (Fulmer & Bleak, 2008; Konczak & Foster, 2009; Silzer, 2010). The current paper responds to these calls in the literature by drawing on data obtained from two studies (one qualitative and one quantitative), whilst steering clear from some typical issues that hinder valid assessments of leadership potential (i.e., the confound between performance and potential, and between leadership potential and successful, mature leadership) (Silzer, 2010). In doing so, it contributes to theory and practice in four ways.

First, by presenting an extensive overview of the 1986-2010 literature. The references listed in Appendix A can be seen as a recommended reading list for scholars and practitioners looking for articles and books on leadership potential. Second, by bringing together all information collected in the literature review into one comprehensive model of leadership potential. In contrast to earlier models of leadership potential (see Appendix B for a systematic discussion of the overlap between our model and earlier ones), our model was not developed with specific consulting projects (i.e. Hezlett, Ronkvist, Holt & Hazucha, 1997; Silzer and Church, 2010) or commercial purposes (i.e. Spreitzer *et al.*, 1997; Lombardo &

Eichinger, 2000) in mind, nor with the goal of achieving fit with a predefined theory, such as Big Five personality theory (i.e. Hogan *et al.*, 1994). Furthermore, due to our specific focus on leadership potential as opposed to mature, successful leadership, our model contains only criteria that can easily be observed in junior staff without any previous leadership experience. Third, by offering specific suggestions for measurement of each of the factors in the model, as well as careful estimates of their effect sizes in predicting long-term leadership effectiveness (see Implications for practice, Tables 7 through 10). And fourth, by testing whether our developed model of leadership potential holds across a sample of top managers, line managers and HR managers (it does).

Key findings

Through a combination of qualitative and quantitative analyses, a two-dimensional model of leadership potential was revealed, consisting of four quadrants spanning thirteen factors:

(I) The *Analytical skills* quadrant (containing the factors Intellectual curiosity, Strategic insight, Decision making, and Problem solving) relates not only to the concept of intelligence, which is commonly considered one of the best predictors of future performance as a leader (Schmidt & Hunter, 2004) - it also includes the transformation of information into action (i.e. decision making and problem solving) and describes how information, decisions and problems become increasingly complex at higher levels in the organizational hierarchy. Being able to deal with increasing complexities is commonly acknowledged as a crucial indicator of leadership potential (Silzer & Church, 2010).

(II) The *Learning agility* quadrant (containing the factors Willingness to learn, Emotional intelligence, and Adaptability) emphasizes the critical significance of future leaders' willingness and ability to learn from experience. The importance of learning agility in

assessments of leadership potential has been widely advocated in the literature (e.g. Briscoe & Hall, 1999; Lombardo & Eichinger, 2000; Spreitzer *et al.*, 1997), based on the observation that junior staff, even those with high potential, cannot be expected to demonstrate advanced leadership competencies simply because, at their career stage, they lack experience in terms of leadership. They can, however, be expected to demonstrate the learning agility needed to acquire leadership competencies in the future (McCall, 1998). Moreover, including learning agility in assessments of leadership potential might help reduce Halo bias (Balzer & Sulsky, 1992), as assessors tend to see the distinction between performance and potential more clearly when potential is defined as the willingness and ability to learn from experience (Spreitzer *et al.*, 1997).

(III) The *Drive* quadrant (containing the factors Results orientation, Perseverance, and Dedication) points out that not everyone who is able to be a leader, is willing to make the sacrifices that come with leadership. Being a leader means working long hours, making personal sacrifices (especially in terms of work-life balance) and carrying much personal responsibility. The popularity of the “opt-out” concept illustrates the growing recognition of the fact that not all those in a career have (or should have) similar ambitions. Talented people vary in terms of the centrality they attribute to the work role (Mainiero & Sullivan, 2006).

(IV) Finally, the *Emergent leadership* quadrant (containing the factors Motivation to lead, Self-promotion, and Stakeholder sensitivity) describes how there has to be a certain orientation, tendency or attraction towards leadership in order to identify a person as high in leadership potential. Although this finding seems very self-evident, all too often future leaders in organizations are identified based on ability alone, without taking career orientation into account (Dries & Pepermans, 2008). Various studies have described the disadvantages of “forcing” people with an expert career orientation into leadership tracks, based on their performance record (e.g. Garavan & Coolahan, 1996). The career derailment literature, as

well, has addressed the importance of motivation to lead in managerial careers (Van Velsor & Leslie, 1995).

Based on the literature on implicit leadership theories (e.g. Hogan *et al.*, 1994), conflicts of interests (e.g. Dries & Pepermans, 2008), and differential access to information (e.g. Balzer & Sulsky, 1992), we expected to find differences between top managers, line managers, and HR managers in terms of which criteria they considered most important in their assessments of leadership potential. In contrast to our assumptions, however, we found overall high consensus between the different parties with respect to our model. Each party, with its particular role in the identification of leadership potential (see Table 5), indicated that they considered each factor as highly important (i.e. over 5 on a 7-point scale, with no significant differences). One possible explanation for this finding is that our model contains only criteria that are truly essential to the identification of leadership potential (as in Tsui & Ohlott, 1988). However, we should not rule out alternative explanations – social desirability bias may also have played a role in our Study 2 findings. We will discuss this issue further here below.

Limitations and directions for further research

Several directions for further research can be identified, based in part on the limitations of the current study.

A first avenue for future research involves separating more generic, universal leadership potential identification criteria from factors that should be tailored to fit specific organizational, cultural and temporal contexts (Silzer & Church, 2010). An interesting paper, guiding the way forward, is that of Hollenbeck, McCall and Silzer (2006). In this paper, the authors provide an in-depth discussion of how leadership models, ideally, should not only include (meta-)competencies, but also situational variables (e.g. job content, interpersonal

relations, teamwork dynamics, organizational culture, national culture), desired outcomes (e.g. leadership effectiveness), and interactions between them (e.g. leader-organization fit). That being said, developing theoretical (as opposed to organization-specific) models of leadership potential taking into account all of these contingencies will likely prove a challenging (if not impossible) task (Silzer & Church, 2010).

Second, it remains unclear to what extent the leadership potential factors identified in this paper are malleable versus trait-like. The “nature versus nurture” debate has known a long history in the competency literature (e.g. Boyatzis & Saatscioglu, 2008). Findings are inconsistent, however, and many passionate views are held (e.g. McCall, 1998; Briscoe & Hall, 1999). A closer inspection of the model of leadership potential developed in this paper reveals that, for each individual criterion, arguments can be raised both in support of them being traits and developable competencies. Longitudinal and/or intervention studies are needed in order to determine growth curves for the various dimensions of leadership potential and examine the following crucial research issues: the extent to which leadership potential can be developed; the extent to which such development depends on individual adaptability; the extent to which adaptability, itself, is adaptable; how early in a person’s career leadership potential can be identified; and the relationship between leadership potential at time x and leadership effectiveness at time y (Silzer, 2010).

A third suggestion for further research is to collect more factual data on real-life assessments of leadership potential (i.e., evaluation reports, assessment center data, participant observation data) in order to find out which criteria organizations are *actually* using to identify future leaders, and by which processes. As mentioned earlier, social desirability bias may have confounded our findings with respect to the degree of consensus that exists between different parties involved in assessments of leadership potential. Even though we specifically instructed our Study 2 participants to fill out the survey in accordance

with their real-life (personal) assessment behavior, it is possible that some of them were unwilling to admit that certain constraints (typically in terms of time, structure, resources and engagement) hinder their observations of (some of) the criteria presented in the survey. Alternatively, respondents may have unwittingly confused “how it is” with “how it should be”.

A final point, somewhat related to the above, is that the literature on leadership potential tends to focus on the characteristics of *ratees* – thus neglecting the fact that the characteristics of the *raters* involved in any assessment of leadership potential are also an important determinant of its outcomes. The literature on implicit person theory (e.g. Heslin, Latham & VandeWalle, 2005), for instance, describes how being an entity theorist (i.e., being convinced that human characteristics are fixed) versus an incremental theorist (i.e., being convinced that characteristics are malleable) strongly affects people’s assessments of others in an organizational context. It would be interesting to see some more research about the impact of the assessment skills and assessment styles of managers on who is ultimately identified as a future leader, and who is not (Silzer & Church, 2010).

Implications for practice

In this Implications for practice section, we will focus on three guiding questions relating to the identification of leadership potential, i.e. what should be measured, how should it be measured, and why should it be measured?

Insert Table 7 about here

As regards our first guiding question (i.e. “what should be measured?”), the model of leadership potential developed in this paper suggests that organizations in the process of identifying future leaders should focus their assessments on: (I) the extent to which a potential

future leader can deal with increasingly complex information, decisions and problems; (II) the extent to which a potential future leader is willing and able to learn from experience; (III) the extent to which a potential future leader is ambitious and driven; and (IV) the extent to which a potential future leader exhibits an orientation, tendency or attraction towards leadership.

It remains unclear, however, to what *exact* extent a person needs to meet the above criteria in order to be deservedly identified as a future leader within the organization. A first question organizations need to ask themselves is whether they consider each factor as equally important, or whether there is some sort of rank order between them. While our Study 2 findings seem to imply equal importance of each factor (at least for our sample), Silzer and Church (2010) did find a rank order in their poll of 20 large organizations – concepts similar to emergent leadership were rated as most important, followed by drive, then learning agility, and finally analytical skills.

A second question is how high a future leader should score on each factor. Establishing *absolute* norms is probably unfeasible (not to mention undesirable); a more likely approach is *relative* (i.e. comparative) evaluation. Although forced distribution evaluation systems are quite controversial, there is a tendency for organizations to approach assessments of leadership potential in this way. Most organizations would argue that their “high potentials” are those employees whose assessment scores are in the top 2-20% of the organization’s population (Dries & Pepermans, 2008; Silzer & Church, 2010). Another common practice is to establish incremental criteria and work with sub-pools that are then labeled “young potentials”, “high potentials” and “top potentials”, or the like (Dries & Pepermans, 2008).

Insert Table 8 about here

As regards our second guiding question (i.e. “how should leadership potential be measured?”), Tables 7 through 10 offer specific suggestions for measurement of each of the 13 factors in our model of leadership potential based on existing scales within the management and work psychology literature. The majority of the measures suggested in the Tables, in their original format, imply measurement by way of a survey; however, organizations might draw inspiration from the items in the scales to develop behavioral indicators of leadership potential for use in other assessment methods, as well (e.g. 360° evaluations, ability tests, personality inventories, behavioral interviews; see Silzer & Church, 2010).

Insert Table 9 about here

A possible answer to our third guiding question (i.e. “why should leadership potential be measured?”) would be: because we want to be able to make better predictions of leadership behavior x years after identification, considering the impact it has on organizational outcomes (Boudreau & Ramstad, 2007). In relation to this point – even though we did not collect the type of data that would allow us to predict the effects of the different factors on leadership effectiveness at a later point in time – Tables 7 through 10 report some careful predictions of the effect size ranges that can be expected for each of the factors in our model, based on the leadership effectiveness literature.

Generally speaking, it is surprisingly difficult to draw straightforward conclusions from the leadership effectiveness literature. First of all, the effect sizes of similar predictors of leadership effectiveness differ widely across individual studies and cultures (Foti & Hauenstein, 2007; Silverthorne, 2001; Yan & Hunt, 2005). In addition, many leadership effectiveness studies adopt a contingency approach, meaning that they work with complex moderation and mediation models rather than with individual predictors (Hamlin, 2004).

Addressing all of these complexities falls way beyond the scope of this paper, however; interested readers should consult the leadership effectiveness literature for more specifics (e.g. van Knippenberg & Hogg, 2003; Yukl, 1999).

 Insert Table 10 about here

Concluding remarks

In spite of all the issues encountered by researchers and practitioners interested in the identification of leadership potential, recent studies have also identified some positive trends. First of all, there seems to be a growing awareness, especially amongst HR professionals, that the identification of leadership potential is a strategic imperative (Buckingham & Vosburgh, 2001). Second, an increased engagement is observed amongst organizational decision makers to invest in formal leadership development programs (Mattioli, 2009). And third, there is a trend toward more objective, quantifiable tools in assessments of leadership potential (Konczak & Foster, 2009). In conclusion, we can safely say that there is no lack of will within the field to advance our knowledge about the identification of leadership potential. However, in order to do so future research will need to systematically address the various avenues for future research identified in this paper and elsewhere (e.g. Silzer, 2010).

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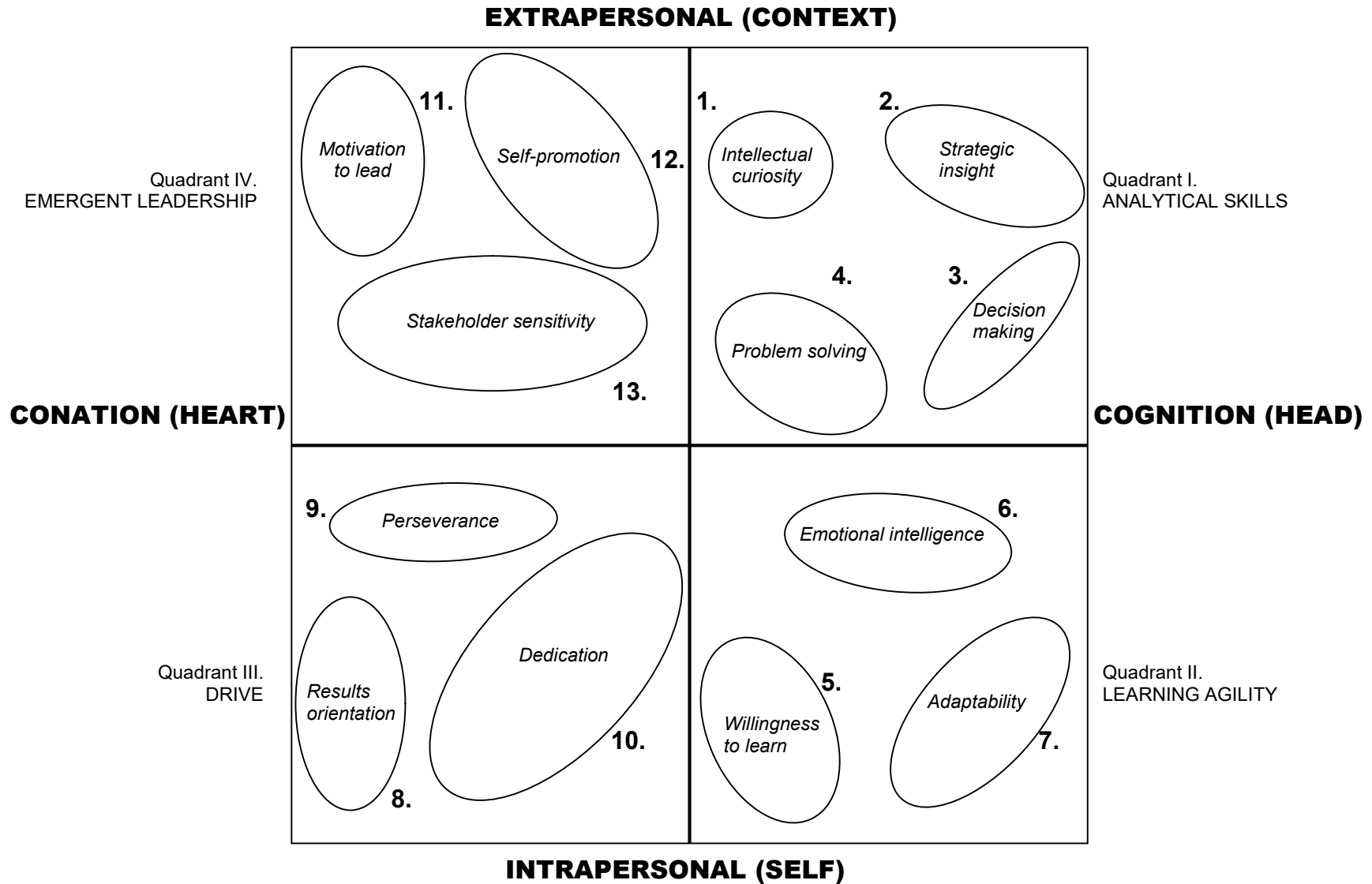


Figure 1. Two-dimensional model of the criteria considered by subject matter experts as essential to the identification of leadership potential.

Table 1. Overview of the individual leadership potential identification criteria making up Quadrant I (Analytical skills).

<i>Quadrant I. Cognition-Extrapersonal (Head-Context)</i> "Analytical skills"	
<i>Factors</i>	<i>Individual criteria</i>
<i>1. Intellectual curiosity</i>	seeking and using feedback being open to new and diverse people and ideas possessing a certain amount of social intelligence
<i>2. Strategic insight</i>	being insightful, seeing things from new angles demonstrating strategic thinking displaying broad insight into the organization's business and one's own role in its goals possessing a "helicopter view" (i.e. being multidisciplinary) being intelligent (i.e. possessing certain analytical capacities) reflecting critically on practices and procedures
<i>3. Decision making</i>	being decisive being able to make decisions rapidly being assertive
<i>4. Problem solving</i>	being able to solve problems well and quickly possessing problem-solving skills being able to cope with complexity

Table 2. Overview of the individual leadership potential identification criteria making up Quadrant II (Learning agility).

<i>Quadrant II. Cognition-Intrapersonal (Head-Self)</i> "Learning agility"	
Factors	Individual criteria
<i>5. Willingness to learn</i>	<ul style="list-style-type: none"> being open to learning chasing after variety, challenges and intellectual stimulation seeking out opportunities to learn being eager to learn about self, others and ideas displaying self-management in a manner that fosters learning and high performance enjoying complex first-time problems and challenges associated with new experiences
<i>6. Emotional intelligence</i>	<ul style="list-style-type: none"> being able to deal with stress and ambiguity demonstrating independence demonstrating emotional intelligence being self-confident being self-aware of strengths and weaknesses
<i>7. Adaptability</i>	<ul style="list-style-type: none"> feeling comfortable with turbulent change not being afraid to take risks showing adaptability demonstrating flexibility being change oriented being proactive displaying personal flexibility and mobility

Table 3. Overview of the individual leadership potential identification criteria making up Quadrant III (Drive).

<i>Quadrant III. Conation-Intrapersonal (Heart-Self)</i> "Drive"	
Factors	Individual criteria
<i>8. Results orientation</i>	seizing opportunities when they present themselves being driven for excellence being quality driven demonstrating need for achievement (i.e. being performance-oriented) being competitive consistently delivering tangible, measurable results above expectations demonstrating a drive for results
<i>9. Perseverance</i>	displaying high levels of energy showing drive and perseverance persevering under adverse conditions
<i>10. Dedication</i>	doing more than just "carry out a job" demonstrating high dedication to the job demonstrating intrinsic motivation (i.e. for the work in itself) being passionate being committed to making a difference assuming responsibility/accountability having an internal locus of control (i.e. attributing control over events to oneself) displaying ambition, wanting to grow taking initiative

Table 4. Overview of the individual leadership potential identification criteria making up Quadrant IV (Emergent leadership).

<i>Quadrant IV. Conation-Extrapersonal (Heart-Context)</i> "Emergent leadership"	
Factors	Individual criteria
<i>11. Motivation to lead</i>	<ul style="list-style-type: none"> showing commitment being credible being able to manage others motivating others delegating decision making capacity to those best suited (i.e. empowerment) directing others being able to delegate being able to build high-performing teams displaying leadership ability actively looking for opportunities to lead being able to set clear objectives
<i>12. Self-promotion</i>	<ul style="list-style-type: none"> enhancing one's own "visibility" (i.e. ensuring one gets noticed by significant others) being able to communicate strategically building up professional credibility (i.e. getting results noticed) demonstrating influence skills knowing how to "sell" ideas having cogency (i.e. being able to present strong arguments) generating an impact using, and not abusing, power conveying a vision, inspiring, being charismatic
<i>13. Stakeholder sensitivity</i>	<ul style="list-style-type: none"> having a focus on the customer and the market having good interpersonal skills being able to build long-term relationships with clients possessing networking skills (i.e. being able to build organizational relationships) being able to adapt communication style and content to an audience

Table 5. Crosstabs for the different parties involved in assessments of leadership potential and their roles.

<i>Role in assessments of leadership potential</i>	Top managers (<i>n</i> = 52)		Line managers (<i>n</i> = 54)		HR managers (<i>n</i> = 73)	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Providing bottom-up input to management about the leadership potential observed in employees	52	48%	40	74%	31	43%
Providing top-down input to different people in the organization about how to identify leadership potential	22	42%	11	20%	26	36%
Developing criteria and processes for the identification of leadership potential	23	44%	10	19%	53	73%
Participating in a committee that decides who is identified as a potential future leader and who is not	32	62%	21	39%	32	44%
Having decision-making capacity (or veto right) about who is identified as a potential future leader and who is not	22	42%	9	17%	11	15%

Note. % = within group percentages.

Table 6. Means, standard deviations and intercorrelations of the model quadrants and factors ($n = 179$).

	<i>m</i>	<i>sd</i>	I	II	III	IV	1	2	3	4	5	6	7	8	9	10	11	12	13
<i>Quadrants</i>																			
I. Analytical skills	5.74	.61	(.89)																
II. Learning agility	5.52	.60	.80*	(.88)															
III. Drive	5.57	.61	.82*	.81*	(.87)														
IV. Emergent leadership	5.42	.71	.79*	.72*	.76*	(.93)													
<i>Factors</i>																			
1. Intellectual curiosity	5.88	.74	.80*	.74*	.66*	.64*	(.69)												
2. Strategic insight	5.77	.68	.86*	.70*	.68*	.70*	.58*	(.78)											
3. Decision making	5.46	.83	.85*	.65*	.74*	.74*	.52*	.67*	(.70)										
4. Problem solving	5.86	.69	.82*	.56*	.63*	.53*	.52*	.64*	.60*	(.64)									
5. Willingness to learn	5.60	.70	.55*	.82*	.59*	.50*	.60*	.53*	.34*	.38*	(.77)								
6. Emotional intelligence	5.52	.68	.79*	.87*	.77*	.70*	.70*	.63*	.68*	.60*	.54*	(.63)							
7. Adaptability	5.44	.73	.72*	.88*	.73*	.68*	.62*	.64*	.66*	.47*	.57*	.70*	(.79)						
8. Results orientation	5.41	.72	.69*	.65*	.84*	.70*	.48*	.60*	.67*	.53*	.48*	.56*	.63*	(.74)					
9. Perseverance	5.63	.78	.68*	.68*	.85*	.56*	.60*	.53*	.59*	.53*	.46*	.70*	.59*	.51*	(.65)				
10. Dedication	5.66	.62	.74*	.76*	.88*	.71*	.61*	.61*	.65*	.57*	.59*	.71*	.65*	.66*	.64*	(.78)			
11. Motivation to lead	5.63	.72	.73*	.65*	.68*	.87*	.62*	.63*	.67*	.50*	.38*	.66*	.62*	.62*	.49*	.65*	(.75)		
12. Self-promotion	5.19	.79	.72*	.67*	.75*	.93*	.54*	.65*	.71*	.48*	.44*	.66*	.62*	.72*	.54*	.68*	.73*	(.88)	
13. Stakeholder sensitivity	5.46	.84	.69*	.63*	.65*	.91*	.58*	.61*	.62*	.46*	.42*	.59*	.61*	.58*	.50*	.60*	.67*	.78*	(.85)

Notes. Cronbach's alphas were added on the diagonal.

* $p < .01$

Table 7. Suggestions for measures relating to Quadrant I (Analytical skills).

<i>Quadrant I. Cognition-Extrapersonal (Head-Context)</i>		
<i>“Analytical skills”</i>		
Factors	<i>R</i> ² range	Suggested measures
1. Intellectual curiosity	.15-.33 ^a	Intellectual curiosity (Kempa & Dube, 1973) Openness to experience (McCrae & Costa, 1997) Feedback-seeking strategy (Ashford & Tsui, 1991) Social intelligence (Silvera, Martinussen & Dahl, 2001)
2. Strategic insight	.02-.18 ^b	Critical thinking (Watson & Glaser, 1994) Strategic thinking (Stumpf, 1988) Business acumen (Bassellier & Benbasat, 2004)
3. Decision making	.01-.58 ^c	Decision-making self-efficacy (Taylor & Betz, 1983) Decisiveness (Webster & Kruglanski, 1994) Assertiveness (Rathus, 1973)
4. Problem solving	.08-.21 ^d	Everyday problem solving – work domain (Cornelius & Caspi, 1987) Planful problem solving (Folkman, Lazarus, Dunkel-Schetter, DeLongis & Gruen, 1986) Attributional complexity (Fletcher, Danilovics, Fernandez, Peterson & Reeder, 1986)

Notes. *R*² range = effect size range across studies including this factor as a predictor of leadership effectiveness or a similar outcome measure.

^a See Ashford & Tsui (1991), Judge, Colbert & Ilies (2004), and Silverthorne (2001); ^b See Fleming (2004), and Young, Arthur & Finch (2000);

^c See Alimo-Metcalfe & Alban-Metcalfe (2001), and Ames & Flynn (2007); ^d See Connelly *et al.* (2000), and Lowe, Kroeck & Sivasubramaniam (1996).

Table 8. Suggestions for measures relating to Quadrant II (Learning agility).

<i>Quadrant II. Cognition-Intrapersonal (Head-Self)</i>		
<i>“Learning agility”</i>		
Factors	<i>R</i> ² range	Suggested measures
5. Willingness to learn	.17-.30 ^a	Learning agility – Choices Architect questionnaire (Lombardo & Eichinger, 2003) Willingness to learn from experience (Zakay, Ellis & Shevsky, 2004) Ability to learn from experience – Prospector instrument (Spreitzer, McCall & Mahoney, 1997)
6. Emotional intelligence	.01-.19 ^b	Emotional Quotient Inventory (Bar-On, 1997) Mayer-Salovey-Caruso Emotional Intelligence Test (Mayer, Salovey & Caruso, 2002)
7. Adaptability	.06-.18 ^c	Adaptive performance (Pulakos, Arad, Donovan & Plamondon, 2000) Behavioral flexibility (Kaiser, Lindberg & Craig, 2007) Openness to change (Susskind, Miller & Johnson, 1998) Proactive personality (Bateman & Crant, 1993)

Notes. *R*² range = effect size range across studies including this factor as a predictor of leadership effectiveness or a similar outcome measure.

^a See Eichinger & Lombardo (2004), and Fleming (2004); ^b See Kerr, Garvin, Heaton & Boyle (2006), and Rosete & Ciarrochi (2005);

^c See Crant & Bateman (2000), and Hall, Workman & Marchioro (1998).

Table 9. Suggestions for measures relating to Quadrant III (Drive).

<i>Quadrant III. Conation-Intrapersonal (Heart-Self)</i>		
<i>“Drive”</i>		
<i>Factors</i>	<i>R² range</i>	<i>Suggested measures</i>
8. Results orientation	.09-.19 ^a	Need for achievement – Thematic Apperception Test (McClelland, Atkinson, Clark & Lowell, 1958) Need for achievement – Edwards Personal Preference Schedule (Edwards, 1959) Competitiveness index (Smither & Houston, 1992)
9. Perseverance	.09-.21 ^b	Perseverance (Stoltz, 1997) (Lack of) perseverance (Whiteside & Lynam, 2001) Work drive (Lounsbury, Gibson & Hamrick, 2004)
10. Dedication	.08-.21 ^c	Extra-role behavior (Van Dyne & LePine, 1998) Work engagement (Schaufeli, Salanova, Gonzalez-Roma & Bakker, 2002) Organizational citizenship behavior (Podsakoff & MacKenzie, 1989) Internal locus of control (Rotter, 1966)

Notes. *R² range* = effect size range across studies including this factor as a predictor of leadership effectiveness or a similar outcome measure.

^a See Fleming (2004), and Janssen & Van Yperen (2004); ^b See Atwater, Dionne, Avolio, Camobreco & Lau (1999), Norman, Avolio & Luthans (2010), and Pillai & Williams (2004);

^c See De Cremer & Van Knippenberg (2004), and Judge, Bono, Ilies & Gerhardt (2002).

Table 10. Suggestions for measures relating to Quadrant IV (Emergent leadership).

<i>Quadrant I. Conation-Extrapersonal (Heart-Context)</i>		
<i>“Emergent leadership”</i>		
<i>Factors</i>	<i>R² range</i>	<i>Suggested measures</i>
11. Motivation to lead	.05-.68 ^a	Motivation to lead (Chan & Drasgow, 2001) General managerial competence career anchor (Schein, 1978) Getting ahead career success orientation (Derr, 1986) Peer nomination as a leader (Balthazard, Waldman & Warren, 2009)
12. Self-promotion	.03-.71 ^b	Leader impression management (Gardner & Cleavenger, 1998) Influencing strategies and styles (Manning & Robertson, 2003) Charismatic leadership (Conger & Kanungo, 1994) Power (Finkelstein, 1992)
13. Stakeholder sensitivity	.25-.60 ^c	Customer orientation (Deshpandé, Farley & Webster, 1993) Market orientation (Jaworski & Kohli, 1993) Networking behaviors (Forret & Dougherty, 2001) Political skill (Ferris <i>et al.</i> , 2005)

Notes. R² range = effect size range across studies including this factor as a predictor of leadership effectiveness or a similar outcome measure.

^a See Lowe *et al.* (1996), and Vilkinas, Shen & Cartan (2009); ^b See Howell & Higgins (1990), Lowe *et al.* (1996), and Sosik (2005);

^c See Douglas & Ammeter (2004), and Mehra, Dixon, Brass & Robertson (2006).

APPENDIX A. Final set of relevant publications selected from the literature (1986-2010).

Year	Author(s)	Publication
1986	Kovach	The derailment of fast track managers. <i>Organizational Dynamics</i> , 15 (2), 41-48.
1986	Sternberg	Introduction: The nature and scope of practical intelligence. In R. J. Sternberg & R. K. Wagner (Eds.), <i>Practical intelligence: Nature and origins of competence in the everyday world</i> (pp. 1-10). New York, NY: Cambridge University Press.
1987	Gardner	Leadership development. <i>Leadership papers</i> , 7. Washington, DC: Independent Sector.
1987	Kouzes & Posner	<i>The leadership challenge</i> . San Francisco, CA: Jossey-Bass Publishers.
1988	Cox & Cooper	<i>High flyers: An anatomy of managerial success</i> . Oxford, UK: Blackwell Publishing.
1988	Derr, Jones & Toomey	Managing high-potential employees: Current practices in thirty-three US corporations. <i>Human Resource Management</i> , 27 (3), 273-290.
1988	Kotter	<i>The leadership factor</i> . New York, NY: Free Press.
1988	Lombardo, McCauley & Ruderman	Explanations of success and derailment in upper-level management positions. <i>Journal of Business and Psychology</i> , 2 (3), 199-216.
1988	McCall	Developing executives through work experiences. <i>Human Resource Planning</i> , 11 (1), 1-11.
1989	Gritzmacher	Staying competitive through strategic management of fast-track employees. <i>National Productivity Review</i> , 8 (4), 421-432.
1989	Pearson	Six basics for general managers. <i>Harvard Business Review</i> , 67 (4), 94-101.
1991	Barham & Oates	<i>The international manager</i> . London, UK: Business Books.
1991	Hartman, Griffeth, Crino & Harris	Gender-based influences: The promotion recommendation. <i>Sex Roles</i> , 25, 285-300.
1992	McCall	Executive development as a business strategy. <i>Journal of Business Strategy</i> , 13 (1), 25-31.
1994	Capowski	Anatomy of a leader: Where are the leaders of tomorrow? <i>Management Review</i> , 84, 10-17.
1994	Hogan, Curphy & Hogan	What we know about leadership. Effectiveness and personality. <i>American Psychologist</i> , 49 (6), 493-504.
1994	McCall	Identifying leadership potential in future international executives: developing a concept. <i>Consulting Psychology Journal</i> , 46 (1), 49-63.
1995	Cockerill, Hunt & Schroder	Managerial competencies: Fact or fiction? <i>Business Strategy Review</i> , 6 (3), 1-12.
1997	Hezlett, Ronnkvist, Holt, & Hazucha	<i>The PROFILOR technical summary</i> . Minneapolis, MN: Personnel Decisions International.
1997	Smith & Peters	Action learning: worth a closer look. <i>Ivey Business Quarterly</i> , 62 (1), 63-67.
1997	Spreitzer, McCall & Mahoney	Early identification of international executive potential. <i>Journal of Applied Psychology</i> , 82 (1), 6-29.
1998	McCredie & Shackleton	The unit general manager: A competency profile. <i>Personnel Review</i> , 29 (1), 106-114.
1999	Briscoe & Hall	Grooming and picking leaders using competency frameworks: Do they work? An alternative approach and new guidelines for practice. <i>Organizational Dynamics</i> , 28 (2), 37-52.
1999	Cook & Emler	Bottom-up versus top-down evaluations of candidates' managerial potential: An experimental study. <i>Journal of Occupational and Organizational Psychology</i> , 72 (4), 423-439.
1999	Dulewicz & Herbert	Predicting advancement to senior management from competencies and personality data: A seven-year follow-up study. <i>British Journal of Management</i> , 10 (1), 13-22.
1999	Robertson, Gibbons, Baron, MacIver & Nyfield	Understanding management performance. <i>British Journal of Management</i> , 10, 5-12.
2000	Lombardo & Eichinger	High potentials as high learners. <i>Human Resource Management</i> , 39 (4), 321-330.
2000	Robertson, Baron, Gibbons, MacIver & Nyfield	Conscientiousness and managerial performance. <i>Journal of Occupational and Organisational Psychology</i> , 73, 171-80.
2001	Mael, Waldman & Mulqueen	From scientific work to organizational leadership: Predictors of management aspiration among technical personnel. <i>Journal of Vocational Behavior</i> , 59 (1), 132-148.
2001	Segalla, Rouziès & Flory	Culture and career advancement in Europe: Promoting team players vs. fast trackers. <i>European Management Journal</i> , 19 (1), 44-57.

- 2002 Fields *Predicting potential for promotion: How the data in Human Resource information systems can be used to help organisations gain competitive advantage.* Available at: www.ilr.cornell.edu/depts/cahrs/downloads/pdfs/workingpapers/WP02-14.pdf (accessed October 6th, 2008).
- 2002 Kesler Why the leadership bench never gets deeper: Ten insights about executive talent development. *Human Resource Planning*, 25 (1), 32-44.
- 2002 Zenger & Folkman *The extraordinary leader: Turning good managers into great leaders.* New York, NY: McGraw-Hill.
- 2003 Alldredge, Johnson, Stoltzfus & Vicere Leadership development at 3M: New process, new techniques, new growth. *Human Resource Planning*, 26(3), 45-56.
- 2003 Byham Identifying potential – Are you identifying your top prospects? *Executive Excellence*, 20(5), 9.
- 2003 Pepermans, Vloeberghs & Perkisas High potential identification policies: An empirical study among Belgian companies. *Journal of Management Development*, 22 (8), 660-678.
- 2004 Eichinger & Lombardo Learning agility as a prime indicator of potential. *Human Resource Planning*, 27 (4), 12-15.
- 2004 Galpin & Skinner Helping high flyers fly high: Their motives and developmental preferences. *Industrial and Commercial Training*, 36 (3), 113-116.
- 2004 Ilies, Gerhardt & Le Individual differences in leadership emergence: Integrating meta-analytic findings and behavioral genetics estimates. *International Journal of Selection and Assessment*, 12, 207-219.
- 2004 Stern The right stuff: Are you an effective leader? *Canadian Business*, 77 (9), 95-99.
- 2005 Cheng, Dainty & Moore Towards a multidimensional competency-based managerial performance framework: A hybrid approach. *Journal of Managerial Psychology*, 20 (5), 380-396.
- 2005 Kuok & Bell Design, implementation, and evaluation of HR leadership development programs. *CAHRS Working Paper 05-02.*
- 2005 McCartney & Campbell Leadership, management, and derailment: A model of individual success and failure. *Leadership and Organization Development Journal*, 27 (3), 190-202.
- 2005 Snipes *Identifying and cultivating high-potential employees.* Available at: http://www.ninthhouse.com/papers/2%20CLO_HIPOsArticle.pdf (Accessed October 6th, 2008).
- 2006 Hay Group *Potential – for what? What every CEO should know – new insights into selecting the right leaders to secure your competitive future.* Available at: <http://www.talentinstitute.co.za/research/files/Potential%20-%20for%20what.pdf> (accessed October 6th, 2008).
- 2008 Dries & Pepermans "Real" high-potential careers: An empirical study into the perspectives of organisations and high potentials. *Personnel Review*, 37 (1), 85-108.
- 2010 Silzer & Church Identifying and assessing high-potential talent: Current organizational practices. In R. Silzer and B.E. Dowell (Eds.), *Strategy-driven talent management: A leadership imperative* (pp. 213-280). San Francisco, CA: Jossey-Bass.
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APPENDIX B. Earlier models of leadership potential and their correspondences with the model presented in the current paper.

Factors	Existing models of leadership potential Individual criteria ^a
<i>Hogan, Curphy & Hogan (1994)</i>	<i>(n criteria = 28)</i>
1. surgency	sociability ¹³ ; gregariousness ¹ ; assertiveness ³ ; dominance ¹² ; capacity for status ¹² ; social presence ¹² ; need for power ¹² .
2. emotional intelligence	calmness ⁶ ; steadiness ⁶ ; coolness ⁶ ; self-confidence ⁶ ; positive affect ⁶ .
3. conscientiousness	hard work ¹⁰ ; perseverance ⁹ ; organization ⁴ ; responsibility ¹⁰ ; ambition ¹⁰ ; need for achievement ⁸ ; dependability ¹⁰ .
4. agreeableness	cooperativeness ¹¹ ; likeability ¹² ; friendly compliance ¹ ; need for affiliation ¹ .
5. intellectance	imaginativeness ² ; broad-mindedness ⁵ ; curiosity ⁵ ; culture ⁷ ; openness to experience ⁵ .
<i>Hezlett, Ronnkvist, Holt & Hazucha (1997)</i>	<i>(n criteria = 24)</i>
1. thought leadership	analyze issues ² ; champion change ⁷ ; establish plans ³ ; know the business ² ; manage execution ⁸ ; provide direction ¹¹ ; use sound judgment ⁴ ; use technical/functional expertise ² .
2. results leadership	drive for results ⁸ ; lead courageously ¹² ; show work commitment ¹⁰ .
3. people leadership	build relationships ¹³ ; coach and develop ¹¹ ; display organizational savvy ¹³ ; foster open communication ¹² ; foster teamwork ¹¹ ; influence others ¹² ; listen to others ¹¹ ; manage disagreements ¹¹ ; motivate others ¹¹ ; speak effectively ¹³ .
4. self leadership	act with integrity ¹² ; demonstrate adaptability ⁷ ; develop oneself ⁵ .
<i>Spreitzer, McCall & Mahoney (1997)</i>	<i>(n criteria = 14)</i>
1. end-state competencies	has broad business knowledge ² ; is sensitive to cultural differences ⁷ ; has the courage to take a stand ³ ; brings out the best in people ¹¹ ; acts with integrity ¹⁰ ; is insightful ² ; is committed to success ⁸ ; takes risks ⁷ .
2. learning oriented competencies	seeks feedback ¹ ; uses feedback ¹ ; is cross-culturally adventurous ⁷ ; seeks opportunities to learn ⁵ ; is open to criticism ⁵ ; is flexible ⁷ .
<i>Lombardo & Eichinger (2000)</i>	<i>(n criteria = 14)</i>
1. people agility	know themselves well ⁶ ; learn from experience ⁵ ; threat others constructively ¹¹ ; are cool and resilient under the pressures of change ⁷ .
2. results agility	get results under tough conditions ⁸ ; inspire others to perform beyond normal ¹² ; exhibit the sort of presence that builds confidence in others ¹² .
3. mental agility	think through problems from a fresh point of view ² ; comfortable with complexity ⁴ ; explaining their thinking to others ¹³ .
4. change agility	are curious ³ ; have a passion for ideas ¹ ; like to experiment with test cases ⁷ ; engage in skill-building activities ⁵ .
<i>Silzer & Church (2010)</i>	<i>(n criteria = 41)</i>
1. cognitive abilities	conceptual or strategic thinking ² ; breadth of thinking ² ; intellect ² ; cognitive ability ² ; dealing with complexity/ambiguity ⁴ .
2. personality variables	interpersonal skills ¹³ ; sociability ¹ ; dominance ⁸ ; maturity ⁶ ; stability ⁶ ; resilience ⁹ .
3. learning variables	adaptability ⁷ ; flexibility ⁷ ; learning orientation ⁵ ; interest in learning ⁵ ; openness to feedback ¹ .
4. leadership skills	leadership capabilities ¹¹ ; managing and empowering people ¹¹ ; developing others ¹¹ ; influencing ¹² ; inspiring ¹² ; challenging the status quo ² ; change management ⁷ .
5. motivation variables	drive ⁹ ; energy ⁹ ; engagement; tenacity ⁹ ; aspiration ¹⁰ ; drive for advancement ¹⁰ ; ambition ¹⁰ ; career drive ¹⁰ ; organizational commitment ¹⁰ ; results orientation ⁸ ; risk taking ⁷ .
6. performance record	performance track record ⁸ ; leadership experiences ¹¹ .
7. other variables	technical/functional skills ² ; business knowledge ² ; mobility ⁷ ; diversity; cultural fit.

Notes. ^a The numbers alongside each criterion refer to supposed correspondences with the criteria making up the 13 factors of the leadership potential model presented in Figure 1 and Tables 1 through 4. Criteria fitting into our Strategic insight factor are most prevalent. Of the 121 individual criteria listed above, 14 (i.e. 12%) correspond to our conception of Strategic insight. Also prevalent are correspondences with our factors Adaptability (11%), Motivation to lead (11%) and Self-promotion (10%). Somewhat less prevalent are correspondences with Willingness to learn (9%), Dedication (9%), Intellectual curiosity (7%), Emotional intelligence (7%), and Results orientation (7%). Least prevalent are correspondences with Stakeholder sensitivity (4%), Problem solving (3%), Perseverance (3%), and Decision making (2%).