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COMMENTARIES

How Special Are Executives? How Special Should Executive Selection Be? Observations and Recommendations

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Hollenbeck (2009) suggests that executive selection decisions are often wrong and believes that selection of executives should be differentiated from selection at lower levels. In addition, he asserts that by focusing on competencies, rather than characteristics, ''we are doing it backwards.'' We agree with Hollenbeck that sound personnel selection should start with and be based on personal characteristics rather than amorphous, often ill-defined competencies. Yet, this principle applies to all selection not just executive selection. In order to determine whether executive selection should truly be a special process, two key questions must be asked and answered.

How Unique Are Determinants of Executive Success?

In nearly a century of applied psychological research, our field has learned that certain characteristics, such as cognitive ability, if assessed using reliable psychometric measures, predict performance well for all kinds of employees (Ones, Dilchert, Viswesvaran, & Salgado, in press; Ones, Viswesvaran, & Dilchert, 2005). Hunter's (1981) reanalysis of cognitive test score validities reported by Ghiselli (1973) yielded a mean operational validity of .53 for predicting managerial performance. Salgado et al. (2003) reported an operational validity of .67 for general mental ability tests predicting job performance among managers, based on European validation studies. A recent meta-analysis reported a true score correlation of .33 between paper-and-pencil intelligence measures and objectively assessed leadership effectiveness (Judge, Colbert, & Ilies, 2004). One of the best established findings from the literature on validity generalization is that the validity of cognitive ability increases as the complexity of jobs increases. Increased knowledge and information processing demands of high complexity jobs also underlie the importance of cognitive ability for executives. Few would doubt that executive jobs are among those highest in complexity. Consequently, cognitive ability is a key determinant of executive job performance. The commonly voiced objection that executives among

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themselves don't differ much in their cognitive capacities, which supposedly renders ability tests useless for selection, can be easily refuted using data (see below). Industrial–organizational (I–O) psychology scholars may not have been able to persuade all practitioners or executives themselves that our tools work and that they are relevant, but the fact is that they are, if duly utilized.

Generalizable findings show that the personality characteristics of Conscientiousness and integrity predict job performance and other valued work behaviors [e.g., avoiding counterproductive work behaviors (CWB)] very well, regardless of the job (Ones, Dilchert, Viswesvaran, & Judge, 2007). Ones, Viswesvaran, and Schmidt (1993) presented data indicating that integrity tests predict both overall job performance as well as avoiding counterproductive behaviors for individuals in high complexity jobs (ρs = .51 for job performance and .68 for CWB). Meta-analyses focusing on managerial samples also indicate that the assertiveness and activity/energy facets of Extraversion, the achievement facet of Conscientiousness, and global Conscientiousness are the most potent predictors of managerial performance (Hough, Ones, & Viswesvaran, 1998). Even how well the highest kind of executives, namely U.S. presidents, perform is predicted outstandingly by measures assessing cognitive ability, Conscientiousness (especially achievement orientation), and Extraversion (assertiveness and energy facets, see Rubenzer, Faschingbauer, & Ones, 2000).

Thus, it is an empirically justified, economically mandated strategy to select managers, including (and we would say *especially*) executives, for the characteristics listed above. Not surprisingly, similarly consistent and large-scale empirical support for the criterion-related validity of competencies is lacking.

The straightforward (in that it is data driven) answer to the question ''how unique are determinants of executive performance?'' is not very! Characteristics that predict job performance in general do so even for highest level managers. After it has been settled that the determinants of executive success are not unique, we must now answer the question whether executives themselves may be special in terms of these characteristics.

How Special Are Executives?

To provide a precise answer to this question (at least in terms of cognitive ability and personality traits), three interrelated questions must be considered: Are executive profile patterns similar to those of lower level managers? How high (or low) are executives in terms of their standing on various ability and personality traits? And last, how variable are executives as a group on these same traits?

Again, it doesn't require conjecture to address these issues. We can use normative samples and large-scale primary data sets to answer these questions. For this purpose, we compiled data on managers and executives at different hierarchical levels on a number of relevant individual differences traits: general mental ability (normative data for the Wonderlic Personnel Test), critical thinking (normative data for the Watson–Glaser Critical Thinking Appraisal), deductive reasoning (normative data for the eTest Deductive Reasoning Test), verbal ability (large-scale primary data on the Wesman Personnel Classification Test), and the Big Five factors: Emotional Stability, Extraversion, Openness, Agreeableness, and Conscientiousness (large scale primary data from the Global Personality Inventory). Extracting mean scores and group standard deviations (*SD*) on each of these measures for a variety of managerial groups, we can answer the questions of what truly distinguishes executives from other managers as well as the general working population.

Ability and Personality Profiles of Executives Closely Resemble Managers at Lower Levels

To illustrate this point, consider Figures 1 and 2, which provide cognitive ability and

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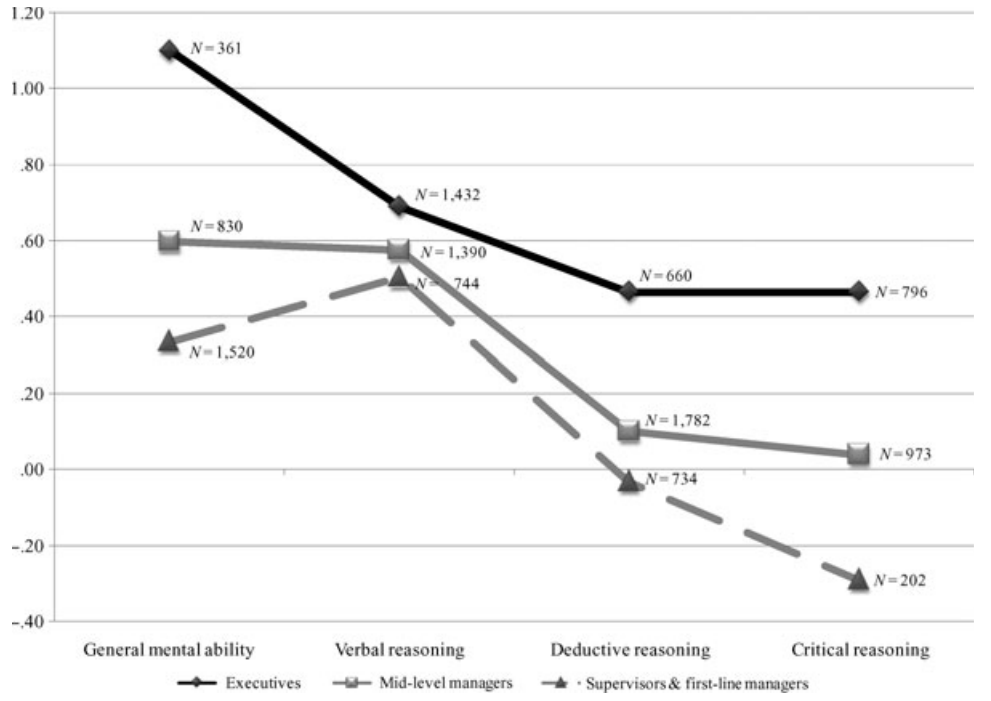

Figure 1. Cognitive ability mean-score differences between managers at different organizational levels. All values are Cohen's d-values referenced to general working population norms (using population standard deviation units). Data sources: General mental ability: Wonderlic Personnel Test normative data (Wonderlic Personnel Test Inc., 1998). Deductive reasoning: eTest Deductive Reasoning Scale normative data (Management Psychology Group, 2005). Critical reasoning: Watson–Glaser Critical Thinking Appraisal normative data (Hartcourt Assessment Inc., 2006). Verbal Reasoning: Wesman Personnel Classification Test (primary data, see Dilchert & Ones, 2008, for sample description).

personality profiles of different levels of management in terms of general population standard deviation units. On almost all traits, managers of all levels score above general population norms. However, more strikingly, managers at all levels exhibit a distinct profile, characterized by higher scores on general mental ability as well as higher scores on Emotional Stability, Extraversion, and Agreeableness in relation to comparatively lower scores on Conscientiousness and Openness. Even though mean scores differ across hierarchical levels, top-level executives follow the same general profile pattern on cognitive ability and personality attributes as mid-level managers and even low-level supervisors.

Executives Score Uniformly Higher Than Lower Level Managers in Terms of Their Ability and Personality Attributes

For executives, the normative data we compiled for various ability measures indicate largest deviations from the general working population on general mental ability (executives score 1.10 standard deviation units higher). In the personality domain, Emotional Stability (1.41 standard deviation units higher), Extraversion (1.12 standard deviation units higher overall; 1.60 and 1.33 standard deviation units for the facets energy and dominance), and Agreeableness (1.00 standard deviation units higher) distinguish executives from the norm.

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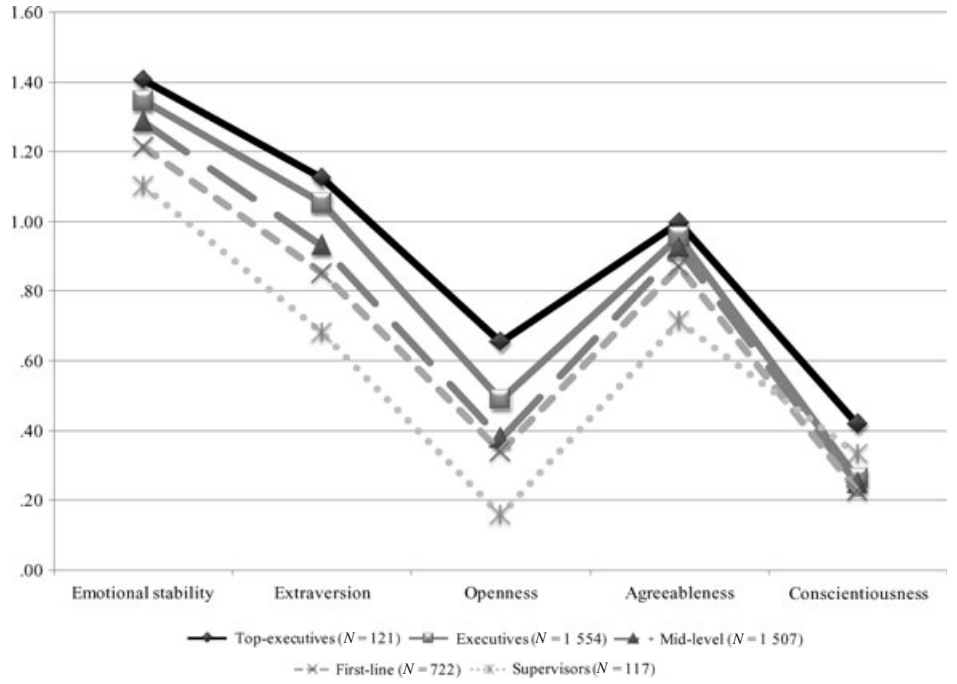

Figure 2. Personality mean-score differences between managers at different organizational levels. All values are Cohen's *d*-values referenced to general working population norms (using population standard deviation units). Data sources: Global Personality Inventory (ePredix, 2001, primary data, see Dilchert & Ones, 2008, for sample description).

Although the same traits distinguish managers at lower levels, executives consistently outscore other managers on every trait.[1] Executives score 0.50 and 0.77 standard deviation units higher than mid- and first-line managers on general mental ability, respectively. This was the largest difference among levels found on the cognitive ability measures charted in Figure 1. In terms of their personality characteristics, Figure 2 clearly shows that there is a perfect gradation from lowest to highest level executives in terms of each of the Big Five dimensions of personality. Top executives score higher than regular executives, who in turn score higher than mid-level managers, first-line managers, and supervisors. But again, profiles run parallel to one another.

There Is Substantial Variability in Cognitive Ability and Personality Scale Scores of Executives and Executive Applicant Pools

Previous work on cognitive ability and personality indicates that applicants to a large variety of jobs (including managerial positions) display substantial variability, typically mimicking variability in the general population (Ones & Viswesvaran, 2003; Sackett & Ostgaard, 1994). The same is true for executives and applicants to executive positions. Figures 3 and 4 display variability of cognitive ability and Big Five personality factor scores for different managerial levels. Using the same measures and normative data as before, standard deviation of the respective managerial groups have been indexed back to those of the

1. We could only find one notable exception, even after investigating 31 different personality facets and six ''dark side'' traits in addition to the ability and personality traits presented in Figures 1 and 2. Top executives score lower on ''attention to detail'' than other levels of management.

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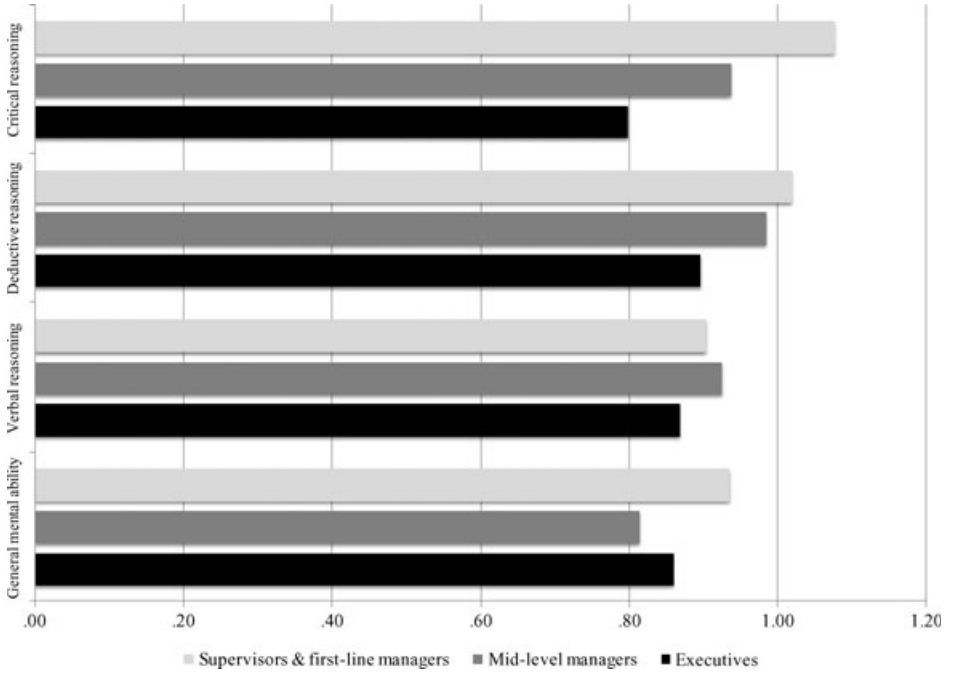

Figure 3. Variability in cognitive ability of managers at different organizational levels compared with the general working population. All values are standard deviation ratios (u-values) expressing the variability of one group compared with another. Values of 1.00 indicate that the variability among managers and executives is the same as in the general working population; values below 1.00 indicate that the variability among managers is lower than in the reference group, whereas values above 1 indicate that managers are more variable. Data sources and sample sizes are the same as those in Figure 1.

general working population. The resulting *u*-values (see Hunter & Schmidt, 1990, p. 184) express restriction of range (values below 1.00) or range enhancement (values above 1.00). For cognitive ability measures, executives are most homogenous on critical reasoning and general mental ability. Yet, for the latter trait, the degree of reduced variability among executives is moderate, only 14% lower than the general population. For the Big Five dimensions of personality, executives are much less variable. Here, the homogeneity of executives compared with the general working population is quite striking. Reductions in score variability are 49% for Openness, 48% for Extraversion, 45% for Emotional Stability, 38% for Agreeableness, and 28% for Conscientiousness. Lower level executives as well as mid-level managers (those who typically fill the pipelines for executive positions), and even first-line managers and supervisors, display similar levels of reduced variability in their personality characteristics.

Implications of Our Observations for Executive Selection

As a field, we are now at a point where we can have a positive impact on individual well-being and organizational productivity through practices rooted in strong empirical evidence. The observations we have made above have important implications for executive selection.

Focusing on profile patterns of applicants, rather than absolute trait levels (as is often the case when considering individual ''fit''), misleads executive selection efforts. There are at least two reasons for this.

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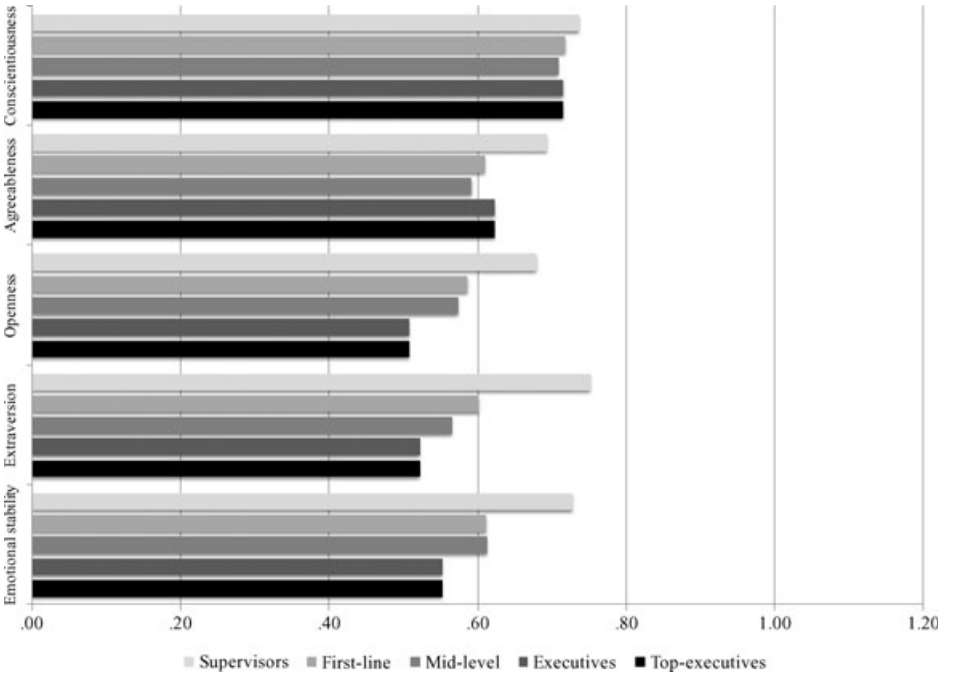

Figure 4. Variability in personality of managers at different organizational levels compared with the general working population. All values are standard deviation ratios (*u*-values) expressing the variability of one group compared with another. Values of 1.00 indicate that the variability among managers and executives is the same as in the general working population; values below 1.00 indicate that the variability among managers is lower than in the reference group, whereas values above 1 indicate that managers are more variable. Data sources and sample sizes are the same as those in Figure 2.

First, cognitive ability and personality profiles of lower levels of management follow the same patterns as those of executives. Executive profile patterns reflect trait configurations created by occupational attraction–selection–attrition effects. Second, the profile patterns needed to predict criteria of executive success do not necessarily correspond to mean profile patterns found among executives. For example, the best marker of executives' personality profiles is Emotional Stability, a trait that displays only modest predictive validity for managerial performance.

Selection should focus on the relative standing of the applicant being evaluated on traits that are relevant to performance. In the case of executive selection, where large applicant pools are the exception, and individual candidates are often evaluated on their own without direct comparison, the use of proper normative data is imperative. This is true not only for the use of psychometric tests but also for standardized interviews, assessment centers, and the like. For example, on general mental ability, executives score over 1 standard deviation unit higher than the general population (and over half a *SD* higher than mid-level managers). It is not enough to provide a ''hire'' recommendation into an executive position for a candidate who scores well above average. It is important to know precisely how high the candidate's trait standing is and how it compares to typical applicants and incumbents in the position he or she aspires to. Unless assessors have at their disposal appropriate managerial and executive normative data (and use them in decision making), recommendations and evaluations will

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be shots in the dark rather than on target. Sadly, few cognitive ability tests, and even fewer personality measures, offer appropriate norms for managers and executives. This may well be one of the reasons why psychometric tests are held in low regard or used infrequently in these populations. Information that illustrates how outstanding executives really are in terms of their ability and personality trait levels is rare. One of the most important additions that our field can make to the executive selection toolbox is the systematic accumulation of executive and managerial norms for psychometrically sound, valid individual differences measures, in order to make scores more meaningful and encourage their use.

Another improvement will be the manner in which executive selection occurs. Most often, only one or maybe a handful of candidates are evaluated and considered for a given position. The differences between the average executive and low-level managers are such that only 2 in 10 low-level managers will score at or above the level of the average executive in terms of general mental ability. Only 2 or 3 in 10 first-line managers have the energy and assertiveness (Extraversion) that would be congruent with the levels of these attributes found among most senior executives. The data tell a similar story for many of the individual differences traits examined.

As a consequence, either much larger pools of candidates should be considered for executive positions or those select few who are being considered should be better preselected to arrive at relative homogeneity on relevant attributes. The latter is too often erroneously taken for granted, which limits organizations' recruitment and selection efforts, increasing the chances of making hiring mistakes. The empirical evidence we summarized in Figures 3 and 4 tells a different story—especially for cognitive ability. We agree with Hollenbeck that too often the focus is on ''what one has done,'' rather than looking into the future and what a person is likely to achieve based on his character. However, the latter approach requires wider and stronger executive search practices that do not limit candidate pools based on prior achievement but instead take into account the large variability of personal characteristics and individual differences that exist among executives.

The fact that managers and executives are more variable in *cognitive ability* than commonly believed suggests that there is an opportunity (we would say obligation) to select based on this trait. The fact that high-level managerial job incumbents are more homogenous in terms of their *personality characteristics* suggests that (a) applicant pools supplying executive candidates may already be quite homogenous in personality characteristics, and/or (b) executive selection is already targeting these traits and may be doing so to the exclusion of other relevant attributes (e.g., cognitive abilities). Our foremost recommendation is to start to more heavily select executives on general mental ability, a variable that has traditionally been neglected in executive selection. As a field, we cannot afford to give up on our most popular tools just because some consider them unfashionable, especially if there are no viable substitutes.

As Hollenbeck aptly points out, I–O psychology ''has the character, competence, and competencies'' to contribute to executive selection. We would like to add that our field also has the data that must inform how we make selection decisions. If Hollenbeck is right and most executive selection decisions are wrong, then perhaps it is again time to listen to what the data are telling us.

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