

PERSONALITY AND COGNITIVE ABILITY AS PREDICTORS OF JOB SEARCH AMONG EMPLOYED MANAGERS

JOHN W. BOUDREAU

Center for Advanced Human Resource Studies, ILR School
Cornell University

WENDY R. BOSWELL

Department of Management
Texas A&M University

TIMOTHY A. JUDGE

Department of Management and Organizations
University of Iowa

ROBERT D. BRETZ JR.

Department of Management
University of Notre Dame

Research on employee job search and separation traditionally focuses on situationally specific variables. Such variables may change with particular employment situations (e.g., job tenure, salary, perceived organizational success), they may be differentially relevant to work situations over time (e.g., education), or may reflect individual reactions to particular work situations (e.g., job satisfaction). More enduring individual characteristics, particularly personality and cognitive ability, may affect job search in consistent ways across different situations, but to date we have little empirical research on those effects. The present study extends traditional job search investigations by incorporating these two enduring individual characteristics—personality and cognitive ability. The value of these two enduring individual characteristics, in predicting job search, is then tested on a sample of U.S. executives. Cognitive ability as well as the personality dimensions of Agreeableness, Neuroticism, and Openness to Experience related positively to job search. These effects remained even in the presence of an array of situational factors previously shown to affect search. The relationship between Extroversion and job search became significant

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Correspondence and requests for reprints should be addressed to John W. Boudreau, Center for Advanced Human Resource Studies, ILR School, 187 Ives Hall, Cornell University, Ithaca, NY 14853-3901; jwb6@cornell.edu.

and positive in the presence of situational factors, particularly job satisfaction. Implications for future research and practice are discussed.

Employee separation processes have enjoyed considerable research attention, owing to their important role in the staffing process, as well as their central role in theories of job choice and careers. Existing models focus mainly on separation, and more specifically on the effects of the current situation (individual, organizational, and labor market) on individual motivation to search and/or separate (e.g., Hom & Griffeth, 1995; Maertz & Campion, 1998; Price, 1977). A recent meta-analysis and review by Hom and Griffeth (1995) did not mention personality, and noted only two studies that included cognitive ability. They noted that most turnover models do not explicitly include personality. Some frameworks (e.g., March & Simon, 1958; Steers & Mowday, 1981) mention "personal traits" or "individual attributes," such as skills, education, demographic characteristics, or tenure, but most (e.g., Hom & Griffeth, 1991; Hulin, Roznowski, & Hachiya, 1985; Mobley, 1977; Price & Mueller, 1981) focus on characteristics of the present job, perceived alternatives, and expected utility and cost of quitting. Staw (1995, p. 89) has argued for more research on how distal factors affect human behavior, "my own prejudice is that we need, in general, to stretch the distance between variables, becoming more risk-taking in our empirical investigations." It seems plausible that more enduring individual traits, such as personality and cognitive ability, may be useful additions to existing predictive models that focus on more "proximal" situational factors.

Job search is typically addressed only within the context of turnover models, yet emerging evidence suggests that job search is distinct from separation and does not occur merely to locate a position after deciding to leave. Employed individuals may engage in job search to serve a variety of purposes—to establish networks, demonstrate marketability to current employer, or develop alternatives to compare with the current position (Blau, 1993; Bretz, Boudreau, & Judge, 1994). Bretz et al. (1994) found that although search activity is significantly related to separation, a considerable amount search activity is not associated with separation. Search activity may also be far less constrained than separation decisions, thus providing greater observed variance.

Studying job search is also compatible with the study of turnover as a process. A key element of turnover process models is job search (e.g., Hom & Griffeth, 1991, 1995; Mobley, 1977). If enduring traits predict job search over and above the effects of situation-specific variables, this would suggest that individuals may be predisposed toward certain search processes. It would support the addition of enduring traits to future studies that aim to predict and explain such processes. If certain individuals

are predisposed to view life experiences more positively, or to gain more from learning opportunities, this may help explain how work experiences affect their assessment of their situation, or how their success in learning might contribute to search and marketability.

Existing research on search also frequently focuses on samples of individuals who are entering the job market following a period of full-time education, or who are unemployed. Yet, there are good reasons to extend this research to employed individuals, because they compose a much larger domain; the costs, benefits, and motivations for search may be very different for employed individuals; and understanding and managing the search processes of employed individuals is potentially of significant practical importance, especially if the search process provides clues to later behaviors such as separation. The value of focusing on search and employed individuals is illustrated by evidence from nurses and employees in the "Big 6" accounting firms (Lee, Mitchell, Holtom, McDaniel, & Hill, 1999; Lee, Mitchell, Wise, & Fireman, 1996) that verified the complexity of the turnover process. This research suggested that turnover and search processes deviate from the traditional sequential model, in which dissatisfaction leads to a decision to leave, which is followed by a search for alternatives, which in turn is followed by a decision to separate. Rather, it appears that search and separation are part of complex processes involving "a larger set of ongoing decisions about life" (Lee et al., 1996, p. 33).

Incorporating a combination of enduring individual characteristics with situationally specific factors may explain additional variability in search, and may also provide important theoretical insights and practical implications. For example, organizations striving to reduce separations devote considerable resources to enhancing the work situation so that it better fits individual or group traits (e.g., Chatman, 1991). If search is also determined by enduring individual traits, such as personality or cognitive ability, then selecting those with traits that are more compatible with retention may enhance organizational efforts to reduce or predict search and turnover.

Moreover, certain enduring traits may help explain how situational factors affect search and separation. For example, job satisfaction affects turnover, and job satisfaction may be considered a response influenced by the particular situationally specific individual characteristics interacting with the particular work and labor market situation (Brief, Butcher, & Roberson, 1995; Cropanzano, James, & Konovsky, 1993; George, 1992). If individual predispositions (e.g., personality traits) also create a tendency to experience greater or less satisfaction in a given situation, then the effect of the enduring traits may be mediated by the situationally specific variable, such as job satisfaction. Similarly, cognitive

ability is regarded as a relatively enduring individual difference, independent of the particular work situation (e.g., Dunn, Mount, Barrick, & Ones, 1995; O'Reilly & Chatman, 1994; Ree & Earles, 1991). Cognitive ability may also predict success in education and training, which builds situationally specific human capital, which in turn may make an individual more marketable and thus affect search.

Therefore, it appears fruitful to extend existing research by focusing on job search as a distinct process, incorporating enduring individual traits such as personality and cognitive ability, and using samples of employed individuals. The present study examines the role of personality and cognitive ability in the search process, using a sample of employed high-level U.S. executives.

The Role of Personality and Cognitive Ability in Job Search

As noted above, research focusing specifically on job search is rare. There are also no models specific to job search. Job search has been examined primarily within the turnover process. Therefore, we draw upon existing turnover research to develop hypotheses regarding the effects of personality and cognitive ability on job search, noting where that research can be extended or has been applied to the job search process.

Bretz et al. (1994) used situational variables, drawn primarily from theories in labor economics and industrial-organizational psychology, noting the need for further research addressing the job search process explicitly, particularly the role of other individual differences. They incorporated a set of 23 predictors into a model that distinguished individual motivation and opportunity to search and separate. The 23 tested predictors consisted primarily of situationally specific characteristics of the work or employment situation. Their results suggested that a small subset of these predictors accounted for the significant predictive effects on search. The significant predictors included: (a) perceived organizational success, (b) total compensation, (c) job satisfaction, (d) job tenure, (e) gender (women more likely to search), (f) ambition, and (g) desired work-family balance and company policies. Among the significant predictors was one enduring personal characteristic (gender) and one disposition (ambition) that has been related to the personality trait of extroversion. Thus, the Bretz et al. results suggested that the array of situational factors could be reduced to a more parsimonious set, and that enduring personal characteristics and dispositions were potentially valuable predictors in addition to the situational factors.

Prior evidence suggests that there may be general predispositions toward search and separation. It has been proposed that some individ-

uals may exhibit a “hobo syndrome,” being more prone to move between jobs merely because they are disposed toward such movement (Ghiselli, 1974). Ghiselli defined this tendency as “. . . the periodic itch to move from a job in one place to some other job in some other place” (p. 18). Judge and Watanabe (1995) used event history analysis to test the validity of Ghiselli’s hobo syndrome. Results supported the hypothesis, showing that past turnover behavior was indeed a significant predictor of present turnover behavior. Other research indicates general support for the notion that certain individuals have a tendency to engage in job-hopping behavior. Specifically, Veiga (1981) found that some managers appear to move “instinctively,” as if “mobility is in their blood,” rather than as a result of situational factors such as job dissatisfaction or the desire for higher compensation. Labor economics literature provides additional support, showing that individuals with more periods of unemployment are more likely to be unemployed in the future (e.g., Heckman & Borjas, 1980). Judge (1993) studied registered nurses in a midwest medical clinic and found that affective disposition was a significant positive predictor of voluntary turnover, after controlling for alternative employment opportunities, education, age, job tenure, wage rate, and overall job satisfaction, but little additional research has examined the role of specific individual traits in explaining the general tendency to search.

We therefore set out to incorporate two general categories of enduring individual traits—personality and cognitive ability, into the predictive model that emerged from Bretz et al. (1994).

Direct Effects of Personality on Search

Given the recent revival of the dispositional perspective in organizations (House, Shane, & Herold, 1996), the absence of dispositional variables in most empirical research on job search and separation is conspicuous. The last decade of personality research has suggested that five cardinal traits—described as the five-factor model of personality or, more simply, the “Big Five” (Goldberg, 1990)—can be used to describe many salient aspects of an individual’s personality. The Big Five can be found in virtually any measure of personality (e.g., McCrae & John, 1992), including the analysis of the trait adjectives in many languages, factor reanalyses of existing multidimensional measures, and decisions made by expert judges based on existing measures (see Mount & Barrick, 1995). The cross-cultural generalizability of the five-factor structure has been established through research in many countries, including Germany, Portugal, Korea, China, Israel, and the Netherlands. Evidence indicates that the Big Five are heritable and stable over time (Costa & McCrae, 1988; Digman, 1989). The primary application of the five-factor model

has been in the area of personnel selection, where it has proven useful in predicting job performance (Barrick & Mount, 1991; Tett, Jackson, & Rothstein, 1991).

The dimensions composing the five-factor model are Agreeableness, Conscientiousness, Extroversion, Neuroticism, and Openness to Experience. Agreeableness is the tendency to be trusting, compliant, caring, and gentle. Conscientiousness is composed of two related facets, achievement and dependability. Conscientiousness has been found to be the major component of integrity (Hogan & Ones, 1997). Extroversion represents the tendency to be sociable, assertive, active, and experience positive affects such as energy, zeal, and excitement. Neuroticism represents the tendency to exhibit poor emotional adjustment and experience negative affects such as anxiety, insecurity, and hostility. Openness to Experience is the disposition to be imaginative, nonconforming, unconventional, and autonomous.

The Big Five have not been studied with regard to job search, and their effect on retention in general has never been examined in a sample of employed managers. Still, the potential role of personality in the turnover process has been suggested. Mobley (1982) noted that personality and cognitive ability might affect turnover, but that the results to date had been very mixed. Mobley, Griffeth, Hand, and Meglino (1979) explicitly mention personality and interests, but they focus on the importance of the present job's characteristics "fitting" with personal values, rather than the idea that enduring individual traits may make turnover generally more or less likely. Hom and Griffeth's (1995) integrative model notes that negative affectivity may relate to withdrawal through its effect on job satisfaction.

A few empirical studies have linked dimensions of the five-factor model and turnover. Meta-analysis showed that conscientiousness negatively predicts a variety of withdrawal behaviors (Barrick & Mount, 1991). Another review concluded that emotional stability was significantly negatively correlated with turnover (Hough, Eaton, Dunnette, Kamp, & McCloy, 1990). Barrick and Mount (1996) studied long-haul truck drivers, and found that conscientiousness and emotional stability measured at the time of hire were both negatively related to turnover after 6 months, even after adjusting for response distortion.

Turnover research using personality measures different from the Big Five has also focused on emotional stability or anxiety, and on non-manager samples. Porter and Steers' (1973) hypothesized that individuals with extreme personality characteristics were more apt to withdraw from organizations through absence or separation. Several early studies seemed to support this position (Cleland & Peck, 1959; Farris, 1971; Hakkinen & Toivainen, 1960; MacKinney & Wolins, 1960; Meyer

& Cuomo, 1962; Sinha, 1963). Using the 16 Personality Factor Questionnaire (16PF; Cattell, Eber & Tatsuoka, 1970), Bernardin found that organizational leavers and those with shorter tenure exhibited higher scores on anxiety and lower scores on conscientiousness scales, even after matching the samples on pay, or partialling out the effects of pay and age. Bernardin (1977) speculated that workers may manifest anxiety by frequent job-hopping, a hypothesis suggested as early as Hanna (1935). Anxiety and Neuroticism are related, suggesting that more neurotic workers may leave more frequently.

Mowday, Porter, and Stone (1978) studied clerical workers in two insurance offices with the Jackson Personality Research Form (PRF; Jackson, 1967), and found that leavers exhibited a higher need for autonomy, and a lower need for harm avoidance than stayers. Mowday and Spencer (1981) studied employees of a government agency, and found that need for achievement and need for autonomy positively related to turnover, especially for jobs high in Motivating Potential Score, which may be similar to the jobs of high-level managers studied here. Need for achievement is related to conscientiousness in the Big Five, suggesting a possible positive relationship between Conscientiousness and separation.

Jenkins (1993) studied the role of "self-monitoring," or "the extent to which individuals monitor their expressive behavior and self-presentation" (p. 84), among fluid power plant workers, and found that self-monitoring significantly and positively predicted turnover intentions even after controlling for job satisfaction and commitment, and that the impact of job satisfaction on turnover intentions was higher for high self-monitors. It seems possible that Agreeableness may reflect, in part, a tendency to self-monitor, which would suggest a positive relationship between Agreeableness and separation.

On the other hand, compliance is a facet of Agreeableness, which might suggest a negative relationship between Agreeableness and separation or job search, if such behaviors are seen as failing to comply with an organizational norm to stay. This traditional view reflects an assumption that there is an expectation of long-term employment, and that there would be no offsetting norms urging search and/or separation. The present study, however, focuses on high-level executives in 1995, a time of unprecedented U.S. economic growth and tight labor markets, especially for skilled professionals such as managers. It seems likely in this group that it is typical and acceptable to explore alternative opportunities, and search is not seen as a breach of the psychological contract (e.g., Kissler, 1994; Roehling, Cavanaugh, Moynihan, & Boswell, 2000). In fact, it might well be that these managers frequently encounter colleagues in other organizations or search firms who urge them to actively explore other employment alternatives. Agreeable individuals might

well express their predisposition by complying with such requests, rather than having to confront these colleagues by refusing their suggestions.

In summary, the existing evidence is mixed, seldom focuses on search, and does not always use compatible measures of personality. Still, if search behavior exhibits patterns similar to separation behavior, we can draw some tentative hypotheses from the existing literature. Neuroticism should relate positively to search, based on findings about anxiety and emotional stability. Conscientiousness may relate positively to search, to the extent that it reflects need for achievement, or negatively to the extent that it reflects dependability. However, given the existing meta-analytic evidence on turnover, it appears the more supportable hypothesis is a negative relationship with search. The dimensions of Agreeableness, Extroversion, and Openness to Experience have not been studied specifically, so only speculative hypotheses can be offered. If Extroversion reflects a tendency to interact with others, to be more visible both within and outside of one's employer, then it may be positively related to search. If Openness to Experience reflects a tendency to seek out new situations, then it may also be positively related to search. If Agreeableness reflects self-monitoring or a tendency to comply with outside invitations to search, then agreeable individuals may be more willing to search.

Hypothesis 1: Agreeableness will be positively related to search.

Hypothesis 2: Conscientiousness will be negatively related to search.

Hypothesis 3: Extroversion will be positively related to search.

Hypothesis 4: Neuroticism will be positively related to search.

Hypothesis 5: Openness to Experience will be positively related to search.

Direct Effects of Cognitive Ability on Search

Cognitive ability is particularly important to investigate because it predicts many real-life criteria (see Brand, 1987), and thus is likely to play an enduring role in the search process. We could locate no prior research specifically examining the relationship between cognitive ability and job search, but research on cognitive ability and turnover is informative. Cognitive ability has a rich heritage of research in psychology, but its most noteworthy application to industrial-organizational psychology has been as a predictor of job performance. General cognitive ability test scores are one of the most consistently positive predictors of job performance (Schmidt, Ones, & Hunter, 1992), and they are most predictive for complex jobs, such as those of executives (Hunter, 1986). There is evidence that these findings are not lost on employers, as the business press features companies such as Microsoft that heavily weigh intelli-

gence in their selection practices (e.g., Seligman, 1997). Thus, it seems reasonable to consider cognitive ability to be an element of human capital, contributing to an individual's "opportunity" to leave (Bretz et al., 1994). Further, those higher in cognitive ability are likely to perceive more opportunities, perhaps leading to increased motivation to search, as a way to seek out alternatives.

Evidence linking cognitive ability directly with job search and separation has not reflected a national sample of managers, and has produced mixed findings. O'Reilly and Chatman (1994) found no main effect for GMAT scores on the number of offers received by MBA graduates, though they did find a significant interaction effect with Conscientiousness. Colarelli, Dean, and Konstans (1987) found a nonsignificant effect of cognitive ability on both performance and turnover among newly-hired accountants in the "Big 8" firms. Villanova, Bernardin, Johnson, and Dahmus (1994) found that numerical and verbal ability predicted performance among movie theater workers, and that numerical ability was negatively associated with turnover. Dickter, Roznowski, and Harrison (1996) examined turnover in the U.S. National Longitudinal Survey of Youth, finding that cognitive ability was negatively associated with turnover. Both studies included those terminated "for cause," as well as voluntary turnover.

Thus, the existing evidence on cognitive ability and turnover is mixed, perhaps reflecting the variety of samples and the inclusion of both voluntary and involuntary separations. The absence of an accepted and consistently applied measure of general mental ability, and the difficulty of obtaining mental ability data in field surveys, may add to the equivocal results. Due to the paucity of research on cognitive ability and job search, we rely primarily on the turnover research and theory noted above, which suggests a positive effect of cognitive ability.

Hypothesis 6: Cognitive ability will be positively related to search.

Established Situational Predictors of Search

In addition to examining the association between cognitive ability and personality with job search, our objective in this study is to examine whether these enduring individual traits add significantly to an array of established situational factors demonstrated through prior research to be significant predictors of job search. If enduring individual traits remain significant even in the presence of an array of situational predictors, this is even stronger evidence that models of job search should incorporate them. As noted earlier, Bretz et al. (1994), using a similar sample of high-level managers and executives, found an array of situational

factors, including compensation, ambition, job satisfaction, job tenure and gender, significantly predicted job search. Thus, for this study, we took these empirically supported predictors as our operationalization of the established situational factors.

Mediated Effects of Enduring Traits Through Situational Factors

There is research and theory to suggest that the effects of personality on search may be mediated by situational factors. For example, research on career success and performance (e.g., Harrell, 1969; Harrell & Alpert, 1989) suggests that Extroversion is a desirable trait, that may increase alternative employment opportunities. However, Extroversion also shows a positive relationship with job satisfaction (e.g., Furnam & Zacherl, 1986; Headey & Wearing, 1989; McCrae & Costa, 1991), suggesting an indirect negative effect on search. Previous research also shows a negative relation between Neuroticism and job satisfaction (Furnam & Zacherl, 1986; Smith, Organ, & Near, 1983), which would suggest that Neuroticism would have an indirect positive effect on search through job satisfaction.

There appears to be a positive relationship between Conscientiousness and performance, as indicated by various meta-analyses (Barrick & Mount, 1991; Salgado, 1997), perhaps suggesting that conscientious individuals are more likely to receive higher rewards (e.g., compensation). This is further supported by Barrick and Mount's finding of a nonzero "true" correlation between Conscientiousness and salary of .17. Thus, Conscientiousness may increase organizational rewards and achievements, which may be negatively correlated with a desire to search or leave.

Similarly, individuals with higher cognitive ability may learn faster, thus enhancing their training "capital" over time (Schmidt & Hunter, 1992). If such capital is rewarded, greater training success may enhance individual compensation and achievements, which may be negatively related to a desire to search or leave.

Thus, prior research suggests that the effects of the enduring traits will be mediated by situational factors. Little evidence or theory exists regarding whether this will be full or partial mediation. We hypothesize partial mediation, with some, but not all, of the explained variance being reduced in the presence of the situational factors.

Hypothesis 7: The effects of enduring traits on search will be partially mediated by the array of established situational factors.

Method

Subjects

Surveys were sent to 10,000 high-level managers contained in the database of Ray & Berndtson executive search firm. A complete description of the executive search firm can be found in Bretz et al. (1994). A total of 1,886 subjects responded to the survey (19% response rate). To determine whether respondents were representative of nonrespondents, the two groups were compared based on information contained in the search firm's database (e.g., salary, demographics, tenure). Results suggested respondents were significantly more likely to be married ($M_R = 86\%$, $M_{NR} = 77\%$), were older ($M_R = 47.2$, $M_{NR} = 45.4$), and had more children ($M_R = 1.8$, $M_{NR} = 1.5$) than nonrespondents. We were not able to compare the groups' personality and cognitive ability, but it appears that respondents are generally representative of the full target sample on the available demographic variables.

Of those responding, most were male (91%), White (96%), and U.S. citizens (95%). The majority of the respondents were married (91%) and just over half had one or more dependents. Eighteen percent of the managers had a spouse that was also a manager. The average age was 47 years old, 33% had earned an undergraduate degree, and 56% had earned an advanced degree (defined as a master's degree or above). The managers worked an average of 56 hours per week and 82% were away from home 3 or more nights per month. An average of 8 hours per week was devoted to caring for dependents, 11 hours on household duties, and 12.5 hours on leisure activities. On average, the managers had spent 3.4 years in their current position and had received 7.9 promotions in their career. The average respondent was two levels below the CEO (93% were fewer than five levels below) and their total compensation (including bonuses) was \$164,618 per year. The respondents came from companies averaging \$1.5 billion in sales per year and 10,140 total employees. There was a slight overlap between the present sample and those in the Bretz et al. (1994) study. Specifically, 224 of the 1,886 respondents (12%) had also responded to the 1992 survey.

Procedure

Questionnaires were sent to the subjects in June 1995 by Ray & Berndtson. Subjects were instructed to return the survey (business reply envelope included) directly to the researchers. In addition to the survey, information was obtained directly from the search firm's database. This

included information regarding compensation and gender. Any information missing from this database on these variables was supplemented by self-reported data from the survey. A control number on the bottom of the surveys allowed matching of the survey to the archival information obtained directly from Ray & Berndtson's database as well as the cognitive ability data (discussed below).

Measures

Personality. Managers' personality traits were assessed with the NEO Personality Inventory (Costa & McCrae, 1992). The five personality traits that make up this measure are Agreeableness, Conscientiousness, Extroversion, Neuroticism, and Openness. Each trait in the NEO is measured by asking respondents to indicate their agreement with 12 statements (1 = *strongly disagree*, 5 = *strongly agree*). The items for each trait were added to make one index for each trait: Agreeableness (coefficient alpha, $[\alpha] = .71$), Conscientiousness ($\alpha = .80$), Extroversion ($\alpha = .77$), Neuroticism ($\alpha = .82$), Openness ($\alpha = .72$).

General cognitive ability. Scholastic Aptitude Test (SAT) scores were used as the measure of cognitive ability. A standardized test score, such as the SAT or GMAT, is a valid and simple way to assess an individual's intelligence, shown to be predictive of a number of different types of intellectual performance (Jensen, 1980), and has been used in previous research (O'Reilly & Chatman, 1994; Wright, McCormick, McMahan, & Smart, 1995). Gottfredson and Crouse (1986) concluded in their review of the use of SAT scores that it is a reasonable measure of general cognitive ability. The SAT, as opposed to other standardized tests, was used in the present study because it is a commonly taken college entrance exam, and information is centrally collected by the Education Testing Service (ETS). Survey respondents were asked to complete an "Approval to release test scores form" which required them to provide their name, social security number, month, and year they took the SAT, and their signature. There were 873 approval forms returned. These forms were sent to ETS which researched and returned the scores. Of the 873 release forms sent to ETS, scores for 459 individuals were located by the testing service. Many scores were not retrievable due to insufficient information on the release form (e.g., social security number not correctly listed) or because microfilm archives of ETS did not extend to the test year. The overall SAT score (verbal + math) was used as the measure ($r = .73$), as suggested by Schmidt et al. (1992). If the subject had taken the test more than one time, the average of all scores was used.

Job search. Job search activity was measured with 10 items from the Job Search Behavioral Index (JSBI; Kopelman, Rovenpor, & Millsap,

1992). This measure asks respondents if they had engaged in different search activities over the past year (1 = *yes*, 0 = *no*). Examples of items include: revised resume, gone on a job interview, made telephone inquiries to prospective employers, and initiated contact with an executive search firm. Consistent with previous research using this measure (e.g., Bretz et al., 1994; Cavanaugh, Boswell, Roehling, & Boudreau, 2000), items were summed to create one job search index ($\alpha = .84$). Blau (1994) distinguished two dimensions of job search—"preparatory" search examines whether desirable alternatives exist, and "active" search attempts to determine the actual availability of those alternatives to the individual. Blau (1994) measured job search similarly to Bretz et al., though his instrument used Likert frequency scales rather than a dichotomous scale, and he included 12 activities rather than 10. The key finding was that two dimensions did indeed emerge, and that they had different antecedents and effects on separation in samples of hospital workers, pharmaceutical managers and graduating students. However, in the present study, the 10-item measure yielded a single search dimension. Confirmatory factor analysis (CFA) using LISREL 8 (Jöreskog & Sörbom, 1993) of these items demonstrated strong support for a 1-factor structure of search ($\chi^2 [35, N = 1,769] = 222.31, p < .00 [CFI = .99, GFI = .99]$). A 2-factor model was also tested, but the CFI and GFI for the 2-factor model were lower. In the interest of simplicity and consistent with previous use of this measure (Bretz et al., 1994; Cavanaugh et al., 2000), we treat job search as a unidimensional construct, noting the value of considering the two dimensions of search in future studies. A high number on this index indicates more search activity.

Perceived organizational success. Perceived organizational success was measured with one item that asked: "How successful would you say your organization has been in reaching its strategic goals during the last 2 years?" Subjects were asked to give their responses as a percentage (100% being completely successful).

Compensation. Where possible, managers' compensation levels were obtained directly from the search firm's database. When the archival measures of salary were missing, they were supplemented with self-report data. Due to skewness in the distribution of compensation, the log of total compensation was used, as is customary for this variable (e.g., Kerr & Kren, 1992).

Job satisfaction. A 3-item measure from the first survey was used to measure job satisfaction (Judge, Boudreau, & Bretz, 1994). These three items were: A Gallup Poll measure ("Are you satisfied with your present job?" 1 = *yes*, 0 = *no*), the nongraphic version of the G.M. Faces scale ("How satisfied are you with your job in general?" 1 = *very dissatisfied*, 5 = *very satisfied*), and an item similar to the Fordyce Percent Time

Happy Item ("The percent of time I feel satisfied with my present job"). Due to the different response formats of these three satisfaction items, they were each standardized and then the three standard scores were summed to create one job satisfaction index ($\alpha = .83$).

Ambition. Ambition was assessed on the first survey with the question: "How many levels do you want to move up from your present position in your current organization?" (1 = *happy where I am at*; 2 = *I would like to move up 1 level*; 3 = *I would like to move up 3 levels*).

Job tenure. Managers' job tenure was assessed by a single question on the survey that asked how many years they had been in their current position.

Results

Descriptive statistics and correlations between the variables are shown in Table 1.

Enduring Factors Predicting Search

To establish the relationship between the array of enduring factors and job search, we regressed search on the five personality dimensions and cognitive ability, as shown in Table 2. Overall, the six enduring factors significantly related to search, explaining 4% of the variance. The five personality dimensions explained 3%, and cognitive ability explained an additional and statistically significant 1% increment over personality. When all six enduring factors were entered together, significant and positive coefficients emerged for Agreeableness, Neuroticism, and Openness, and a marginally ($p < .10$) significant coefficient for cognitive ability. This is generally consistent with the bivariate results in Table 1, and provides support for Hypothesis 1, 4, 5 and, marginally, Hypothesis 6. Next we explore how much of this shared variability with search is incremental to the array of established situational predictors.

Incremental Predictive Effects of Enduring Traits

Hierarchical regression analysis (Baron & Kenny, 1986) was used to determine the incremental variance in search explained by personality, over and above the established array of established situational factors. The vector of situational factors was entered first, followed by the vector of all five personality dimensions. The results are shown in the top two sections of Table 3. The situational variables were entered on the first step, and the five personality factors were entered on the second step. The array of personality dimensions remained significantly associated

TABLE 1
Descriptive Statistics and Intercorrelations Among Variables

| | <i>M</i> | <i>SD</i> | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---------------------------|----------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| 1. Search | 5.36 | 2.97 | - | | | | | | | | | | | |
| 2. Perceived org. success | 62.67 | 27.36 | -17 | - | | | | | | | | | | |
| 3. Log of total comp. | 11.83 | .57 | -19 | 10 | - | | | | | | | | | |
| 4. Ambition | 1.08 | .89 | 13 | 00 | -16 | - | | | | | | | | |
| 5. Job satisfaction | 0.00 | 2.60 | -40 | 25 | 10 | -07 | - | | | | | | | |
| 6. Years of job tenure | 3.39 | 4.36 | -06 | -01 | -01 | -05 | -01 | - | | | | | | |
| 7. Gender (male) | .91 | .29 | -06 | -03 | 18 | 00 | -02 | 04 | - | | | | | |
| 8. Agreeableness | 43.84 | 4.93 | 06 | 01 | -09 | 04 | 03 | -03 | -10 | - | | | | |
| 9. Conscientiousness | 49.48 | 4.98 | -04 | 02 | 05 | 00 | 02 | -02 | -02 | 19 | - | | | |
| 10. Extroversion | 45.90 | 5.21 | -01 | 09 | 05 | 11 | 16 | -01 | -06 | 32 | 28 | - | | |
| 11. Neuroticism | 25.27 | 6.16 | 13 | -08 | -11 | -01 | -24 | -02 | -06 | -31 | -35 | -43 | - | |
| 12. Openness | 41.25 | 5.54 | 07 | 02 | 05 | 06 | 03 | -01 | -15 | 08 | 00 | 24 | -09 | - |
| 13. Cognitive ability | 1139 | 165 | 11 | -10 | 17 | -04 | -04 | -15 | -05 | 10 | -13 | -10 | -02 | 21 |

Notes: Decimals omitted. Except for cognitive ability, listwise deletion yielded $N = 1,734$ for correlational analysis. Correlations $\geq |07|$ are significant at $p < .01$; those $\geq |05|$ are significant at $p < .05$. For cognitive ability, pairwise correlations with Conscientiousness, Openness, compensation, and job tenure significant at $p < .01$; search, Agreeableness, Extroversion, and organization success at $p < .05$.

TABLE 2
*Ordinary Least Squares Results of Job Search Regressed on Personality
 and Cognitive Ability*

| | R^2 | ΔR^2 | Beta |
|-------------------|-------|--------------|------------------|
| Agreeableness | | | .10** |
| Conscientiousness | | | -.01 |
| Extroversion | | | .02 |
| Neuroticism | | | .17** |
| Openness | | | .08** |
| | .03 | .03** | |
| Cognitive ability | | | .08 [†] |
| | .04 | .01* | |

Notes: $N = 1,734$ (model including personality variables only) and 436 (model including cognitive ability).

** $p < .01$ * $p < .05$ [†] $p < .10$

with search ($\Delta R^2 = .01, p < .01$), and the pattern of coefficients in the model with situational factors was similar to the results without them. Specifically, Agreeableness, Openness to Experience, and Neuroticism remained positive and significant predictors of search ($\beta = .06, p < .05$; $\beta = .07, p < .01$; $\beta = .06, p < .05$, respectively). There was one difference in the full model. Notably, Extroversion became a significant predictor of search ($\beta = .05, p < .05$) when the situational variables were included in the model. This is discussed below.

The hierarchical regression analysis was continued, to determine the incremental variance explained by cognitive ability in the presence of established situational factors and the personality dimensions. The results of adding cognitive ability to the analysis are shown in the bottom portion of Table 3. Cognitive ability significantly improved the model ($\Delta R^2 = .01, p < .05$), remaining a significant positive predictor of search ($\beta = .10, p < .05$) after controlling for the vector of situational variables and personality dimensions.

Overall, the variance explained by the enduring traits remains significant in the presence of the situational factors, but the amount of variance explained drops from 4% (Table 2) to 2% in Table 3. This partial mediation provides support for Hypothesis 7. It also suggests there is value in examining how enduring traits relate to situational factors, which we address next.

Effects of Personality and Cognitive Ability on Situational Factors

The effects of enduring traits appear to be partially mediated through the situational factors, and each situational factor was significantly bivariate related to search (Table 1). So we set out to examine how enduring traits relate to situational factors. We restricted our analysis only

TABLE 3

Ordinary Least Squares Results of Job Search Regressed on Situational, Personality, and Cognitive Ability Variables

| | R^2 | ΔR^2 | Beta |
|-------------------------|-------|--------------|--------|
| Perceived org. success | | | -.07** |
| Total compensation (ln) | | | -.12** |
| Ambition | | | .07** |
| Job satisfaction | | | -.36** |
| Years of job tenure | | | -.06** |
| Gender (male) | | | -.03 |
| | .19 | .19** | |
| Agreeableness | | | .06* |
| Conscientiousness | | | -.03 |
| Extroversion | | | .05* |
| Neuroticism | | | .06* |
| Openness | | | .07** |
| | .20 | .01** | |
| Cognitive ability | | | .10** |
| | .21 | .01* | |

Notes: $N = 1,734$ (model including situational and personality variables only) and 436 (model including cognitive ability).

** $p < .01$ * $p < .05$

to those situational factors that shared more than 1% of the variance with search (correlations greater than $|.10|$, in Table 1), on the premise that smaller bivariate correlations imply very little potential mediating value. The results are shown in Table 4.

Regarding personality, Agreeableness and Neuroticism were significantly and negatively related to compensation and job satisfaction, both of which were negatively related to search, consistent with the positive overall relationship between these personality dimensions and search. Conscientiousness was negatively related to job satisfaction, though it was a nonsignificant predictor of search overall. Extroversion was positively related to perceived organizational success and job satisfaction, suggesting a negative indirect effect on search; it was also positively related to ambition, suggesting an offsetting positive indirect effect. This may partially explain the nonsignificant overall effect of Extroversion on search. Openness was nonsignificantly related to all four situational variables, suggesting that its effect may be mediated less. This is also suggested by the fact that the coefficient on openness in the absence of situational factors ($\beta = .08$ in Table 2) is little changed in the presence of situational factors ($\beta = .07$ in Table 3).

Cognitive ability was positively related to compensation, which would suggest a negative mediated effect on search, yet its bivariate relationship with search was positive (Table 1), suggesting that direct and mediated effects may offset each other. This is consistent with the fact

TABLE 4
*Ordinary Least Squares Results of Perceived Organizational Success, Compensation, Ambition,
 and Job Satisfaction Regressed on Personality and Cognitive Ability*

| | Perceived org. success | | | Compensation | | | Ambition | | | Job satisfaction | | |
|-------------------|------------------------|-----------------|-------|----------------|-----------------|--------|----------------|-----------------|-------|------------------|-----------------|--------|
| | R ² | ΔR ² | Beta | R ² | ΔR ² | Beta | R ² | ΔR ² | Beta | R ² | ΔR ² | Beta |
| Agreeableness | | | -.04 | | | -.15** | | | .02 | | | -.05* |
| Conscientiousness | | | -.02 | | | .02 | | | -.02 | | | -.09** |
| Extroversion | | | .09** | | | .01 | | | .11** | | | .10** |
| Neuroticism | | | -.05 | | | -.15** | | | .03 | | | -.22** |
| Openness | .02 | .02** | -.01 | .04 | .04** | .03 | .03** | .02 | .08 | .08** | | -.01 |
| Cognitive ability | .03 | .01† | -.09† | .08 | .04** | .21** | .03 | .00 | -.05 | .08 | .00 | -.04 |

Notes: N = 1,734 (model including personality variables only) and 436 (model including cognitive ability).
 **p < .01 *p < .05 †p < .10

that the coefficient on cognitive ability in the presence of personality alone ($\beta = .08$, Table 2) is smaller and less significant than the coefficient when the situational factors are added ($\beta = .10$, Table 3). Controlling for situational factors actually enhances the shared variance between cognitive ability and search.

Discussion

This study proposed to increase our understanding of job search by investigating the incremental effects of the enduring traits of personality and cognitive ability, using a sample of employed managers. We found that the addition of personality and cognitive ability significantly enhanced the explained variance in search over the array of established situationally specific variables.

Personality

The personality results are both intriguing and perplexing. On the one hand, as predicted, personality significantly enhanced the prediction of search, beyond the array of situational variables. Three personality dimensions—Agreeableness, Neuroticism, and Openness—had significant and predicted effects on job search even after accounting for the effects of the situational factors. The literature on Openness and Neuroticism is somewhat more consistent in its predictions than the literature on Agreeableness. The positive relationship between Agreeableness and search appears to support the effects of self-monitoring and/or the idea that prevalent norms among this sample may favor search.

Other personality dimensions exhibited a somewhat unexpected pattern. Conscientiousness was not a significant predictor of search, despite prior evidence suggesting that it is related to turnover. The present study focuses on managers, although most prior studies used nonmanagerial samples. Perhaps the effects of Conscientiousness have already been reflected in the progression to management, so that among managers there is little remaining predictive ability.

Extroversion's effect on search, both bivariate and in the presence of the other enduring traits, was nonsignificant, but became significant in the presence of the situational variables. As shown in the Tables 1 and 4, Extroversion related positively to perceived organizational success, ambition, and job satisfaction. Perceived organizational success and job satisfaction, however, were significantly related to search in the *opposite* direction. In other words, more extroverted individuals appear to be predisposed to search more, but simultaneously tend to experience greater job satisfaction and organizational success, which offsets this enduring

predisposition. When controlling for the situational variables (including job satisfaction and perceived organizational success), the shared variance among the predictors is removed, revealing the relation between Extroversion and search (Cohen & Cohen, 1983).

Conscientiousness and Neuroticism have received the bulk of attention in prior turnover research, but our results suggest that several relatively unaddressed facets of the Big Five may associate with search among managers. Openness to Experience and Agreeableness have not been as widely studied, yet our results suggest that further research on these traits may be promising, if focused on behaviors that clearly relate to them, such as job search. This also supports the value of studying job search explicitly. It is common for organizations to incorporate personality dimensions into staffing decisions, so understanding the personality profiles of employed executives may provide new insights into the propensity to search, beyond the more commonly examined situational factors and personality dimensions.

Cognitive Ability

This is the first published study to examine directly the role of cognitive ability in the search process. Results suggest that cognitive ability had a significant direct effect on search, and explained a significant incremental variance in search, over and above situational variables. Those higher in cognitive ability searched more intensively, which is consistent with the notion that this trait enhances the perceived benefits of search, rather than the premise that those high in cognitive ability search less due to their marketability. Intelligence testing of executives is rare, so it seems likely that such individuals may well find that to reap returns on their cognitive ability they must “display” it through search activities (e.g., interviews).

The finding that cognitive ability positively predicts search suggests that organizations that favor high cognitive ability in staffing and promotion decisions may be favoring individuals who will also search more actively. If the effect on enhancing search also enhances the probability of leaving, then there is a tradeoff between higher workforce cognitive ability and employee retention. Yet, we also found that the relationship between cognitive ability and search was stronger and statistically significant in the presence of the situational variables (compare Tables 2 and 3), and that cognitive ability was strongly and positively related to compensation. It appears that more intelligent managers are paid more, and that higher pay associates with less search. However, once the effects of compensation are equalized, more intelligent managers seem to search more.

This appears to argue that organizations must recognize managerial intelligence through higher pay, or risk that they will search more. If managers high in cognitive ability search more actively so that their relatively "hidden" abilities are recognized, then organizations might counter this tendency by clearly communicating to such managers that they are highly valued, and that they have good opportunities within the organization. Such communication may be particularly important for those high in cognitive ability.

One might suspect that education would mediate the effects of cognitive ability, especially in view of the fact that we used SAT scores as our proxy for cognitive ability, and such scores traditionally are key determinants of the caliber of university accepting the candidate. In the interest of parsimony, and because education level and educational institution quality proved nonsignificant in predicting search in the Bretz et al. (1994) study, we did not include it in the primary analysis. We did, however, examine the effect of adding both education level and quality to the model (see Bretz et al., 1994 for a description of these measures), and found both variables to be nonsignificant predictors of search. Moreover, the pattern of significant relationships was unchanged in the presence of the education variables.

Situational Variables

Although this study's primary purpose was investigating the influence of enduring characteristics on employee search, the findings for the situational variables are notable. The results provided strong support for the importance of salary, job satisfaction, and perceived organizational success as negative predictors of job search. Indeed, the significant variables drawn from Bretz et al. (1994) were also significant predictors of search in the present study, further supporting their value in the study of job search. Future research incorporating these variables is warranted, as they appear to provide a useful array of predictors for studying the incremental effects of proposed additions to future search models.

Limitations and Conclusion

As is common with survey research, a prominent concern is common method bias. These data were collected from an existing database and a mail survey, and the survey data were verified archivally where possible. Still, the majority of these variables were generated from self-reports. Future research employing other data-gathering methods may well improve on this aspect of the study.

There are additional measurement issues that should be noted. First, we used an abbreviated measure of job satisfaction. Our findings were consistent with prior research, suggesting that this measure behaved appropriately, but future research using more extensive satisfaction measures, including different work facets, might be illuminating. We also chose to retain the unidimensional aspects of some constructs such as Conscientiousness and job search, to maximize fidelity with prior research. However, future research might fruitfully split Conscientiousness, for example, into its "achievement" and "dependability" components.

Finally, the generalizability of this research should be noted. Our sample was large, but reflected a relatively low response rate. In addition, our respondents, like the sample of managers from which they were drawn, were mostly White males. A significant difference was observed between respondents and nonrespondents with respect to marital status, and personality is related to marital status (Buss, 1996). This indirectly suggests that there may be a response bias based on personality. This bias would affect means of the personality characteristics, but would not appear to inflate the correlations involving the personality traits. Thus, although there may be a response bias based on personality, it is not clear that this would upwardly bias correlations involving the Big Five traits. The fact that we sampled a large number of executives employed across many organizations and industries bolsters the generalizability of the results. However, it is possible that our findings may not generalize to nonmanagerial samples (or to more diverse samples in terms of gender and race), so further research to replicate the findings in other samples is advisable.

In conclusion, this study demonstrates the value of incorporating enduring individual traits and more traditional situational factors in future studies of job search. The enduring traits explained somewhat less search variance than the array of situational factors, but also revealed intriguing indirect relationships that suggested sometimes complex and offsetting effects. Moreover, the study provides new empirical information about job search among managers, a behavior and sample that have received relatively little attention to date. This is especially valuable in that some results were different from prior nonmanagerial samples. It appears that search behavior is significantly affected by situational factors over which organizations have some influence. Organizations and researchers striving to fully understand search behavior may also want to consider enduring traits, especially when valued traits (e.g., cognitive ability and Openness to Experience) may also lead to greater search.

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