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## **Abstract**

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## **Keywords**

study, job, stress, search, manager, employ, experience, challenge, hindrance

## **Comments**

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WORKING PAPER SERIES

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## **Effects of Personality, Cognitive Ability, and Fit on Job Search and Separation among Employed Managers**

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This paper has not undergone formal review or approval of the faculty of the ILR School. It is intended to make results of Center research available to others interested in preliminary form to encourage discussion and suggestions.

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**Abstract**

The present study attempted to provide a constructive replication and extension of a study on managerial job search completed by Bretz, Boudreau, and Judge (1994). Beyond examining the same variables as Bretz et al. (1994), the effects of personality, cognitive ability, challenge and hindrance related job stress, and fit on job search and turnover also were examined. Data were collected from a 1995 survey of employed U.S. managers and a 1996 follow-up survey of respondents. Results based on a sample of 1,886 managers generally replicated the Bretz et al. results. Furthermore, hindrance related stress, cognitive ability, extraversion, openness to experience, and agreeableness were associated with search and/or separation.

## **Effects of Personality, Cognitive Ability, and Fit on Job Search and Separation Among Employed Managers**

Job search and separation 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 employee turnover. Recently, Bretz, Boudreau, and Judge (1994) proposed the need to study job search as a distinct process, rather than primarily focusing on job choice as a result of a prior decision to leave, or after becoming unemployed. Their study examined search and separation among a national sample of U.S. employed managers. The Bretz et al. (1994) results suggested that a considerable amount of search activity does not lead to separation, although search activity is an important precursor to separation. That study also demonstrated support for a model in which job search and separation are seen as distinct processes, but are both influenced by certain “push” factors (e.g., job dissatisfaction) that lead to a motivation to examine alternatives and/or separate, as well as certain “pull” factors (e.g., perceived alternative opportunities) that lead to a perception that search might produce benefits that outweigh the costs. The authors noted the need for further research addressing the job search process explicitly, particularly the role of other individual difference variables likely to influence search and separation.

The present study seeks to address this need. First, the present study provides an opportunity to replicate the earlier findings, an important but frequently infeasible step in the research process (Bateman & Ferris, 1984; Robson, 1993). In addition, the present study provides: (1) A more detailed examination of the effects of job stress on search and separation; (2) An examination of the role of cognitive ability in the search process; (3) An examination of the incremental role of personality in the search and separation process; (4) An examination of the incremental role of culture fit in search and separation.

### **Model Development**

As Bretz et al. (1994) noted, prior research has tended to focus primarily on turnover or separation as the dependent variable. Moreover, existing search research often focuses on samples of individuals who are entering the job market following a period of full-time education, or who are unemployed. Little research focuses on the search processes of employed individuals, despite the fact that employed individuals comprise a much larger domain, that the costs, benefits, and motivations for search may be very different for employed individuals, and that 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. This is also true with regard to stress, personality, and cognitive ability, where there is some prior research linking these variables to employee turnover, but relatively little research on their effects on the search process. In the next section we explore the role of these variables in a model more comprehensive than that tested by Bretz et al.

#### The Enhanced Bretz et al. (1994) Job Search and Separation Model

Bretz et al. (1994) reviewed the literature on search and separation, producing a model of “motivation” and “opportunity” factors hypothesized to influence search and separation. They also proposed that search would mediate the relationship between motivation and separation, and that opportunity might have both direct effects on search and separation, as well as moderate the search-separation relationship. Figure 1 depicts the Bretz et al. model, enhanced in two ways. First, those relationships that were supported in the Bretz et al. study are designated with an asterisk. Second, new variables have been added to the model, and are depicted in the shaded sections of Figure 1. Because the Bretz et al. study provided the rationale and literature review for the basic model, this section will briefly update that literature review with more recent studies. Later sections will provide a more comprehensive review of literature supporting the addition of the new variables.



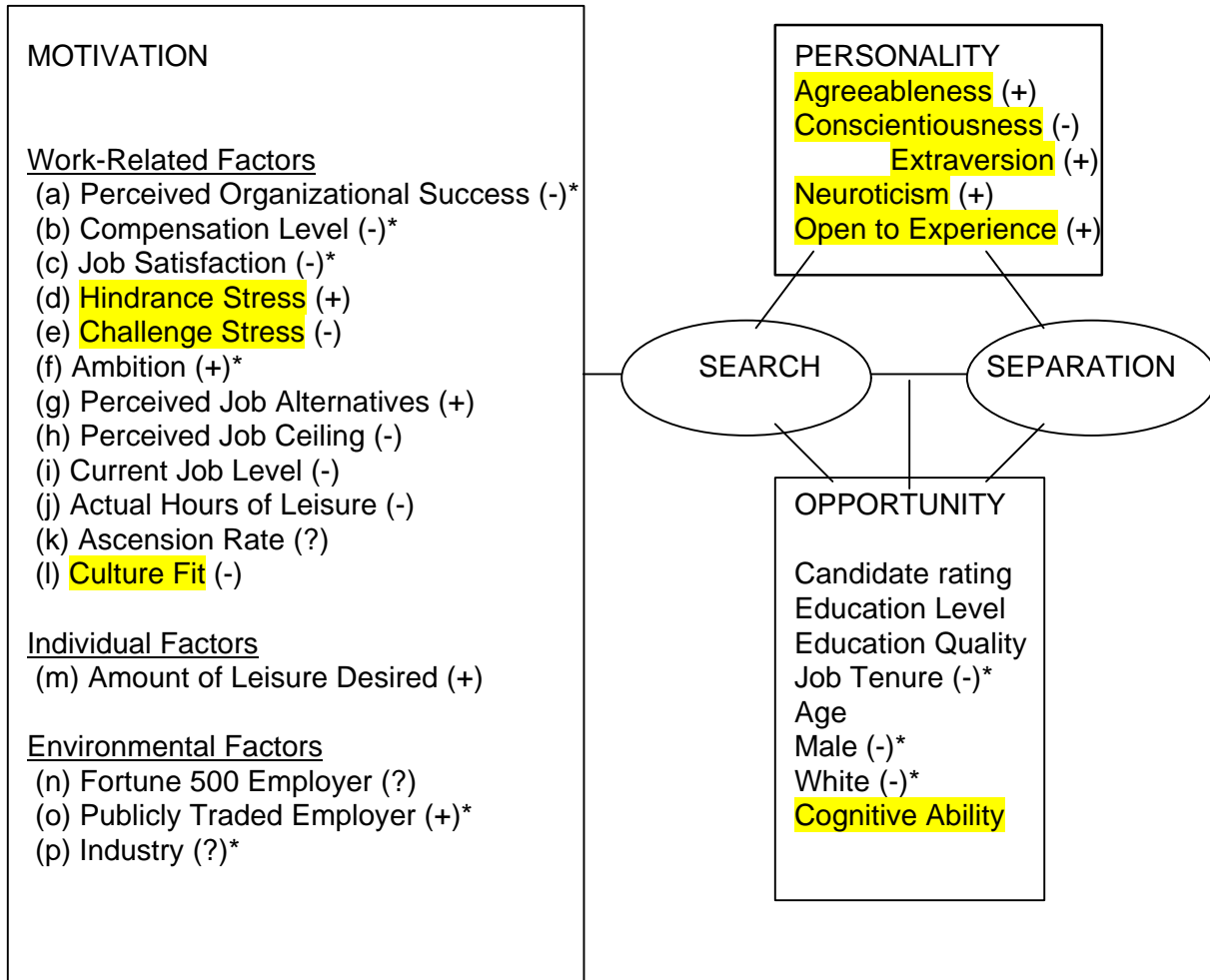


Figure 1. Model of the relationship of motivation, opportunity, and personality variables with job search and separation. (Notes: \* indicates variable that was significant in Bretz et al. (1994). New variables are shaded.)

Carson, Carson, Griffeth, and Steel (1994) conducted a meta-analysis examining the relationship between promotion-related variables and turnover. They found no significant relationships between promotion satisfaction nor perceived promotion opportunities and turnover, though actual promotions were negatively related to turnover. These findings may explain the lack of significance for “perceived job ceiling” in the Bretz et al. (1994) study, though the significant effect of “ambition” (the number of job levels one wishes to move up) in the Bretz et al. study is somewhat inconsistent. A study of approximately 1,400 hospital CEO’s (Weil, 1995) suggested that job satisfaction and family obstacles to moving were both

negatively related to turnover. Empirical evidence from nurses (Lee, Mitchell, Wise, & Fireman, 1996) has verified the complexity of the turnover process, suggesting that turnover occurs through processes that deviate from the traditional concept of dissatisfaction leading to a decision to leave, a search for alternatives, and separation. Rather, it appears that search and separation are part of complex processes involving “a larger set of ongoing decisions about life” (p. 33).

The above studies underscore the importance of studying job search and separation as distinct but related processes. Consistent with previous research, 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 both Bretz et al. (1994) and the present study, the 10 item measure yielded a single search dimension. In the interest of simplicity and fidelity of this replication with the earlier study, we retained the Bretz et al. measure of job search and we treat job search as a unidimensional construct as before, noting the value of considering the two dimensions of search in future studies. Thus, following Bretz et al., we set out to replicate the following hypotheses:

- H-1: The overall relation between the vector of motivation variables from the Bretz et al. (1994) study will be significant, with the influence of each variable in the direction specified in Figure 1.
- H-2: The relation between search and separation will be positive and significant, even controlling for possible direct effects of the motivation variables.
- H-3: The relation between search and motivation will be stronger than the relation between search and separation.

As Bretz et al. (1994) noted, enhanced human capital or “opportunity” may arguably increase or decrease search activity. Search activity might be enhanced because more marketable individuals perceive high likelihood of gaining offers of employment, and are highly sought after, so the costs of search are low, and the benefits are high. Conversely, these same factors may make it less necessary for individuals to search very extensively to find

attractive alternatives or to gain the necessary information about their marketability, so more human capital might be associated with less search intensity. Bretz et al. argued that enhanced human capital should decrease job search, but enhance separation. Thus, we test the following hypotheses:

H-4: Opportunity will be significantly negatively related to job search.

H-5: Opportunity will be significantly positively related to separation.

#### Challenge and Hindrance Related Stress, Job Search, and Separation

As noted earlier, Bretz et al. (1994) hypothesized that job stress would positively relate to search based on standard turnover models suggesting that stress would contribute to a negative reaction to the current job. Stress did not emerge as a significant predictor of job search. More recent research, however, suggests that stress may have both positive and negative consequences (McCauley, Cavanaugh, & Noe, 1996; McCauley, Ruderman, Ohlott, & Morrow, 1994). Hindrance (or hassle or negative) related stress has been conceptualized as job demands that “produce excessive or undesirable constraints ... on the individual” (Bhagat et al, 1985, p. 203), such as role ambiguity, conflict, and overload, and have been conceptualized as positively related to withdrawal behaviors (Lee & Mitchell, 1994). Challenge (or positive) related stress has been conceptualized as job demands that “produce a state of challenge ...” (Bhagat et al., 1985, p. 203). Research related to challenge related stress has focused on determining the job demands or work circumstances which produce positive feelings and/or stimulate development and learning for executives (Cavanaugh, Boswell, Roehling, & Boudreau, 1998; McCauley, Ruderman, Ohlott, & Morrow, 1994; McCauley, Cavanaugh, & Noe, 1996). Researchers have suggested that the two types of stress should be examined separately, and that they may have opposite effects on separation, with hindrance related stress leading to withdrawal, and vice versa (e.g., Cavanaugh et al., 1998). Thus, in view of the prior results from Bretz et al. and the emerging stress research, we propose that a combined stress index will exhibit no significant relationship with job search. Further, we propose:

H-6: When measured separately, challenge related stress will be negatively related to job search and separation and hindrance related stress will be positively related to job search and separation.

#### Cognitive Ability and Job Search

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.

Research clearly demonstrates that general cognitive ability test scores are one of the most consistently positive predictors of job performance (Schmidt, Ones, & Hunter, 1992), and that 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 has recently featured examples of companies such as Microsoft that heavily weight intelligence 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 the “opportunity” construct in the Bretz et al. (1994) model.

Direct evidence linking cognitive ability with job search and separation is significantly more limited, however. 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 non-significant effect of cognitive ability on both performance and turnover among newly-hired accountants in the “big-eight” 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, though this includes those terminated “for cause,” while the present study focuses on voluntary 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. In sum, there is virtually no prior research specifically examining search behavior as a function of cognitive ability, and the existing evidence on job offers and turnover is mixed, reflecting a variety of samples and including both voluntary and involuntary separations. This may also reflect the absence of an accepted and consistently applied measure of general mental ability, and the difficulty of obtaining mental ability data in field surveys. Our own review of the literature and communication with colleagues unearthed no instrument designed for this purpose.

As noted in Figure 1, two opportunity variables emerged significant in the Bretz et al. (1994) study, with male and longer-tenure individuals exhibiting less search. However, the lack of a significant effect for education-related variables which are arguably more closely linked to cognitive ability, combined with the very limited empirical findings, suggests that either a positive or negative effect is plausible. Thus, we offer a non-directional hypothesis for cognitive ability.

H-7: Cognitive ability will be significantly related to job search.

### Personality, Job Search, and Separation

Given the recent revival of the dispositional perspective in organizations (House, Shane, & Herold, 1996), the absence of dispositional variables in the Bretz et al. (1994) study is conspicuous. In particular, 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” – can be used to describe the most salient aspects of an individual’s personality. While the five-factor model has received a great deal of attention in the personality measurement literature, its application to organizational psychology has been limited. The primary application of the five-factor model has been in the area of personnel selection, where it appears that classification of personality into the five factors substantially improves the ability of personality traits to predict job performance (Barrick & Mount, 1991; Tett, Jackson, & Rothstein, 1991). For the most part, the five-factor model has not been applied to job search and turnover, and never before in a sample of employed managers.

Consensus is emerging that a five-factor model of personality, often termed the “Big Five” (Goldberg, 1990), can be used to describe the most salient aspects of 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 dimensions comprising the five-factor model are neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness. Neuroticism represents the tendency to exhibit poor emotional adjustment and experience negative affects such as anxiety, insecurity, and hostility. Extraversion represents the tendency to be sociable, assertive, active, and experience positive affects such as energy, zeal, and excitement. Openness to experience is the disposition to be imaginative, nonconforming, unconventional, and autonomous. Agreeableness is the tendency to be trusting, compliant, caring, and gentle. Conscientiousness is comprised of two related facets, achievement and dependability. Conscientiousness has been found to be the major component of integrity (Hogan & Ones, 1997).

There have been various studies investigating the relationship between dimensions of the five-factor model and turnover. Meta analysis suggests that conscientiousness has been found to negatively predict 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). Finally, in a recent study, 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 six months, even after adjusting for response distortion.

Other research has used a variety of different personality measures and samples. With regard to job search and turnover, existing evidence is somewhat mixed. Bernardin (1977) studied phone sales workers in the Midwest, noting Porter and Steers' (1973) hypothesis that individuals with extreme personality characteristics such as anxiety achievement orientation, aggression, independence, self-confidence, and sociability were more apt to withdraw from organizations through absence or separation, and noted that several early studies seemed to support this position (Cleland and Peck, 1959; Farris, 1971; Hakkinen & Toivainen, 1960; MacKinney and Wolins, 1960; Meyer & Cuomo, 1962; Sinha, 1963). Using the 16 Personality Factor Questionnaire (16PF) (Cattell, Eber & Tatsuoka, 1970), Bernardin (1977) 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 more anxious and more casual workers may manifest these tendencies by frequent job-hopping, a hypothesis suggested as early as Hanna (1935). Mowday, Porter, and Stone (1978) studied clerical workers in two insurance offices with the Jackson Personality Research Form (PRF, Jackson, 1967), and found that after controlling for age, company tenure, and education level, a regression on turnover after eight months suggested 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. 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. Further, a negative interaction was found

between job satisfaction and affective disposition in predicting voluntary turnover 10 months after the survey was administered. O'Reilly and Chatman (1994) found no main effect for conscientiousness on the number of offers received by MBA graduates, though they did find a significant correlation between conscientiousness and GMAT scores.

Jenkins (1993) studied the role of "self monitoring," or "the extent to which individuals monitor their expressive behavior and self-presentation" (p. 84), noting evidence that high self-monitors tend to tailor their actions and expressions to situational cues, and to choose friends based on their contribution to current activities, while low self-monitors tend to express their "true dispositions" across all situations, and choose friends based on shared values. In a study of fluid power plant workers, Jenkins 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.

Thus, the existing evidence is somewhat mixed, and does not always use compatible measures of personality. Moreover, there is virtually no research on the role of personality in job search among employed individuals. Still, the individual studies and recent meta-analytic evidence suggests that neuroticism should relate positively to turnover. One can argue that conscientiousness will relate positively to turnover, 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, it appears the more supportable hypothesis is one of negative relationship with separation. The dimensions of agreeableness, extraversion, and openness to experience have not been studied specifically, so only speculative hypotheses can be offered. If extraversion leads to 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 and separation activity. If openness to experience leads to a tendency to seek out new situations, then it may also be related to both search and separation. These propositions reflect research on personality and turnover. The paucity of research on personality and job search offers little basis for specific hypotheses regarding personality dimensions. However, considering that search is, at least in part, related to intentions to separate, we propose that personality dimensions will affect search in the same direction as turnover.

We depict and will test personality as a separate block of variables affecting both search and separation in Figure 1, rather than categorizing some personality dimensions as opportunity and others as motivation. Given the lack of prior research on personality and job search, this seems justified. One might consider that three dimensions of personality,

extraversion, openness to experience, and neuroticism represent facets of motivation to search, in that they reflect tendencies to interact with others, seek new situations, and to be anxious about existing situations, respectively. Conscientiousness and agreeableness might represent aspects of human capital, and thus opportunity variables, because they reflect desirable worker characteristics, and because conscientiousness has been demonstrated to predict job performance. However, at this exploratory stage, we chose to test personality as a block of predictors, entered after both motivation and opportunity variables. This provides the most conservative test of personality effects which, if they emerge, may suggest more refined approaches in the future.

H-8: Agreeableness will be positively related to search and separation.

H-9: Neuroticism will be positively related to search and separation.

H-10: Conscientiousness will be negatively related to search and separation.

H-11: Extraversion will be positively related to search and separation.

H-12: Openness to Experience will be positively related to search and separation.

#### Person-Organization Fit, Job Search, and Separation

The concept of fit, or congruence, as a key element of individual attraction and retention within organizations has long been important in organizational research (Nadler & Tushman, 1980), whether expressed as a fit between individual characteristics and occupational choice (Holland, 1985; Super, 1957), work environment and demands (Lofquist & Dawis, 1969), or expectations and job demands (Wanous, 1977). The concept of fit has also been applied to congruence between individuals and organizations, especially in terms of norms and values. Fit defined as congruence between the norms and values of the organization and the person has emerged as a key element in theories of organizational behavior, and it has been suggested that profile comparison approaches may be used to study fit, where individuals rate the existence and the personal importance of various norms and values as they perceive them (e.g., Chatman, 1989; O'Reilly, III, Chatman, & Caldwell, 1991). Chatman (1989) also proposed that fit will lead to enhanced organizational role behaviors and reduced turnover, and O'Reilly et al. (1991) empirically demonstrated that fit negatively predicted turnover after two years, among government agency workers and public accountants. Fit also predicted the rate of newcomer adjustment, was enhanced by socialization, and related to satisfaction and intent to remain (Chatman, 1991). Meglino, Ravlin, and Adkins (1989) assessed fit as the correspondence between values of workers and supervisors, though congruence was not significantly correlated with worker tenure. Similarly,



Ferris, Youngblood, and Yates (1985) found that congruence between personality characteristics of individuals and the average of successful job incumbents did not significantly predict turnover. There is little direct evidence regarding the relationship between fit and job search intensity, though the role of fit in job choice has been studied extensively, and evidence suggests that applicants consider and act on fit-related factors when choosing new jobs (e.g., Cable & Judge, 1994; Judge & Bretz, 1992). Though evidence of a fit-turnover relationship is limited, the small number of studies combined with the theoretical logic suggesting that fit should negatively relate to turnover suggests the following hypothesis:

H-13: Person-organization fit will negatively relate to both search and separation.

#### 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). 1,886 subjects responded to the survey (19% response rate). 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, 37% had earned an undergraduate degree, and 63% 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 three 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 ½ 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 2.1 levels below the CEO 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 respondents in the 1992 study and the present 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 July 1996, a follow-up survey was then sent to each manager who had

responded to the original questionnaire. Forty-five percent of the original survey respondents returned the follow-up survey (841 of 1,885).

In addition to the two surveys, information was obtained directly from the search firm's database. This included information regarding compensation, candidate accomplishment rating, age, marital status, number of children, education level and university attended, organizations' sales, and number of employees. Any information missing from this database was supplemented by self-reported data from the survey. A control number on the bottom of the surveys allowed matching of the follow-up survey to the original survey as well as to the archival information obtained directly from Ray & Berndtson's database.

#### Measures New to the Current Study

Culture fit. Culture fit was measured using nine organizational characteristics including: aggressive, continuing change, detail oriented, innovative, market driven, outcome oriented, respect for people, stable, and team oriented. Respondents were asked to place each of the nine characteristics in a grid (one to a box) ranging from 1=least descriptive to 9=most descriptive of the organization where they currently work. They were then asked to do the same for their ideal organization (1=least desirable, 9=most desirable). Difference scores for each culture characteristic were calculated by taking the absolute value of the difference between the current and the ideal ranking for each organizational characteristic. A total difference score was computed by adding these nine separate difference scores. That number was then subtracted from 46 (the highest possible difference score) in order to obtain a measure of culture fit. A high number, therefore, indicates a high degree of fit between the respondent's current and ideal organization.

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, extraversion, 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 disagree). The items for each trait were added to make one index for each trait: Agreeableness (coefficient alpha, [ $\alpha$ ]=.71), Conscientiousness ( $\alpha$ =.80), Extraversion ( $\alpha$ =.77), Neuroticism ( $\alpha$ =.82), Openness ( $\alpha$ =.72).

General cognitive ability. Scholastic Aptitude Test (SAT) scores were used as the measure of cognitive ability. Previous research has failed to find a way to measure intelligence that is both simple to obtain and accurate. A standardized test score, such as the SAT or GMAT, is a valid and simple way to assess an individual's intelligence and has been used in

previous research (O'Reilly & Chatman, 1994; Wright, 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 readily available from 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 not 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 ( $\alpha=.73$ ). If the subject had taken the test more than one time, the average of all scores was used.

#### Measures Used in the Bretz et al. (1994) Study

Job stress. A 16-item scale developed by Judge, Boudreau, and Bretz (1994) was used to measure job stress. Subjects were asked to respond to how much stress each of the items produce using a 1-5 Likert scale (1=produces no stress, 5=produces a great deal of stress). Examples of items include: the amount of time I spend in meetings, the degree to which politics rather than performance affects organizational decisions, and the lack of job security I have. In the Bretz et al. study all 16 stress items were summed to create one overall scale. As discussed above, stress may actually be comprised of two factors—challenge related stress and hindrance related stress. These disparate types of stress may exert conflicting influences on search behavior. Following Cavanaugh and colleagues (1998), we constructed a two-factor model of stress. Internal consistency of the challenge and hindrance stress scales was demonstrated ( $\alpha=.87$  &  $.75$ , respectively). Moreover, confirmatory factor analysis (CFA) confirmed the two-factor model ( $\chi^2[43, N=1,769]=540.71, p<.00[CFI=.90, NNFI=.87]$ ). A one factor model was also tested, however, the fit of this alternative model was poor ( $\chi^2[44, N=1,769]=991.59, p<.00[CFI=.81, NNFI=.77]$ ).

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 et al., 1998), items were summed to create one job search index ( $\alpha = .84$ ). A high number on this index indicates more search activity.

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

Compensation level. Where possible, managers' salary 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. The log of total compensation was used for the analysis.

Job satisfaction. A three-item measure from the first survey was used to measure job satisfaction. These three items were: A Gallup Poll measure ("Are you satisfied with your present job?" 1=yes, 0=no), the non-graphic version of the G. M. Faces scale (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 scales of these three satisfaction items, they were standardized and then 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). Perceived job alternatives was likewise measured on the first survey by asking respondents to estimate their present employment alternatives (1=no alternatives, 5=many alternatives). Perceived job ceiling was assessed similarly to the ambition variable with the word "want" replaced with "can."

Other variables. In order to assess current job level respondents were asked how many levels below the CEO is their current position. They were asked how many hours per week they usually spend on leisure (actual hours of leisure) as well as how many hours per week they want to spend on leisure (amount of leisure desired). Ascension rate was computed by dividing number of promotions by career length. Both variables were obtained through the first survey. Finally, data on whether the respondent worked at a Fortune 500 and/or publicly traded company as well as industry was obtained directly from the search firm's database.

Accomplishment rating. The rated quality of managers' accomplishments consisted of three Ray & Berndtson associates' ratings of each candidate on multiple dimensions. Candidates were rated on flexibility/adaptability, proficiency in current job, and appearance/stature/personal impact. They were evaluated on a 3=low, 4=average, and 5=high scale. The three ratings were averaged to create one measure of candidate rating ( $\alpha=.68$ ).

Education variables. Education level was taken from the database and coded as follows: 1=bachelor's degree, 2=master's degree, 3=doctoral degree. Consistent with Bretz and colleagues (1994), quality of the education was determined by using The Gourman Report (1996) ratings of educational institutions' quality. The search firm's database listed the university of the manager's highest degree. The quality of the institution for the manager's major was used as the measure. A higher rating indicates a higher quality institution for that major.

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.

Demographic variables. Age, gender (1=male, 0=female), race (1=white, 0=other), and citizenship (1=U.S., 0=other) were obtained directly from the search firm's database, and as indicated above, supplemented with survey responses when database information was missing.

Voluntary separation. Voluntary separation was measured on the follow-up survey with a question that asked whether the respondent was in the same position that they occupied at the time of the original survey. Circumstances surrounding the separation were also assessed. Voluntary separation occurred if the respondent was no longer in the same position nor with the same company and left on their own accord. If the respondent was no longer in the same position but had accepted a position within the same company they were treated as not separating. This variable was coded 1=separated, 0=not separated. 145 (20%) of the respondents indicated they had left the organization voluntarily. In the Bretz et al. (1994) sample, the separation rate was 13%, so the present sample was more likely to separate than before.

## Results

Descriptive statistics and correlations between the variables are shown in Table

**Table 1** Descriptive Statistics and Intercorrelations among Variables

	N	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27		
1 Search	1879	5.36	2.97	----																												
2 Separation	713	.20	.40	.29	----																											
3 Perceived org success	1875	62.67	27.36	-.19	-.01	----																										
4 Log of total comp.	1778	11.64	.45	-.17	.00	.03	----																									
5 Perceived job ceiling	1884	.91	.89	.00	-.05	.10	-.16	----																								
6 Ambition	1884	1.08	.89	.12	.02	.01	-.21	.51	----																							
7 Current job level	1886	2.14	2.04	.13	.06	.02	-.30	.35	.46	----																						
8 Ascension rate	1874	.37	.39	.00	-.02	.00	.00	.10	.04	.00	----																					
9 Perceived job altern.	1885	3.91	.83	-.01	.02	.04	.08	.14	.11	.02	.03	----																				
10 Job satisfaction	1884	0.00	2.60	-.39	-.32	.26	.11	.16	-.08	-.13	.04	.11	----																			
11 Hindrance stress	1884	14.00	4.05	.35	.22	-.18	-.14	-.06	.13	.16	-.02	-.15	-.52	----																		
12 Challenge stress	1884	16.27	4.57	.06	.01	-.02	-.04	.08	.00	.09	-.03	.04	-.05	.27	----																	
13 Hrs leisure desired	1885	19.38	10.7	-.03	.01	.00	-.04	-.01	.00	.05	-.01	-.02	.00	.00	.00	----																
14 Actual hrs of leisure	1885	12.53	9.70	-.03	.04	.00	-.04	-.02	-.05	.00	-.02	.01	.02	-.04	-.09	.74	----															
15 Frtn 500 employer	1885	0.00	.24	-.02	.02	.00	.08	.09	.12	.17	-.02	.02	.04	.03	-.01	.00	.02	----														
16 Public traded	1874	.16	.37	.00	.03	-.04	.09	.04	.02	.10	-.01	-.04	.00	-.01	.01	.03	.02	.54	----													
17 Education level	1668	.72	.62	.01	-.01	-.04	.08	-.09	-.07	-.04	-.09	-.02	.00	-.01	.07	-.05	-.05	.03	.03	----												
18 Quality of education	1613	.244	.223	-.05	.00	-.11	.17	-.07	-.05	-.06	-.01	-.01	-.04	.02	-.02	.04	.05	.04	.05	.24	----											
19 Years of job tenure	1886	3.39	4.36	-.07	-.04	.03	.02	-.11	-.05	-.06	-.08	-.10	-.03	.02	-.01	.01	.03	-.03	-.06	-.07	-.03	----										
20 Age	1884	46.77	7.16	-.09	-.08	.02	.21	-.29	-.28	-.24	-.09	-.19	.01	.02	-.13	-.02	-.02	-.02	.02	.06	-.01	.20	----									
21 Race (white)	1881	.96	.21	-.02	.01	.01	.07	-.01	-.01	-.05	.01	-.08	.00	-.01	.03	.00	-.01	-.05	-.02	-.01	-.01	.01	.13	----								
22 Gender (male)	1885	.91	.29	-.05	-.05	-.03	.09	-.06	.00	-.06	.00	-.10	-.05	.01	-.10	-.13	-.10	-.01	-.02	-.01	.00	.05	.17	.07	----							
23 Agreeableness	1886	43.84	4.93	.05	.05	.03	-.08	.06	.04	.04	.00	.08	.05	-.09	-.05	.00	.02	.01	-.01	.00	-.04	-.04	.00	-.03	-.10	----						
24 Conscientiousness	1886	49.48	4.98	-.03	.04	.02	.04	-.05	-.02	-.10	.05	.02	.00	-.01	-.13	-.04	-.03	.00	-.01	-.05	-.07	.01	.06	-.01	.00	.13	----					
25 Extraversion	1886	45.90	5.21	-.01	.04	.10	.02	.10	.10	-.09	.11	.18	.16	-.12	-.09	-.04	.01	.02	-.04	-.13	-.10	-.03	-.02	-.01	-.06	.29	.26	----				
26 Neuroticism	1886	25.27	6.16	.12	.05	-.09	-.11	.00	.00	.12	-.07	-.11	-.25	.33	.28	.04	.00	-.01	-.02	.10	.06	-.02	-.10	-.01	-.06	-.29	-.33	-.42	----			
27 Openness	1886	41.25	5.54	.06	-.02	-.02	.04	.02	.03	-.06	.03	.10	.02	-.02	.01	.09	.06	-.01	.00	.12	.04	-.02	-.02	-.03	-.15	.10	.00	.23	-.09	----		
28 Fit	1560	22.94	10.29	-.17	.02	.26	.03	.05	-.11	-.15	-.01	.03	.35	-.27	-.02	-.01	.05	-.05	-.04	.01	-.03	-.01	.02	.00	-.03	.02	.07	.07	-.12	-.02		

**Note:** Decimals omitted. Correlations greater than |.07| are significant at  $p < .01$ ; those greater than |.05| are significant at  $p < .05$ . Listwise deletion yielded  $N = 1,250$  for correlational analysis except for those with Separation ( $N = 492$ ; correlation with search, job satisfaction, and hindrance related stress at  $p < .01$ ). Correlations with cognitive ability and candidate rating were omitted because listwise deletion yielded  $N = 74$ . Industry variables are omitted due to space constraints.

There were no significant mean differences between the Bretz et al. (1994) sample and the current sample for any variable. Therefore, there was no reason to believe that the two samples differed significantly.

### Replication

Before testing the effects of personality, cognitive ability, stress and culture fit on executive mobility, we first attempted to replicate the Bretz et al (1994) study. Search was regressed on the vector of motivation variables (Table 2). The overall model was significant ( $F=21.61$ ,  $p<.01$ ), supporting H-1, and most of the variables in the present study were similar in terms of direction and significance to Bretz et al. The only differences were that in the 1995 sample perceived job alternatives ( $\beta=.05$ ,  $p<.05$ ), consumer industry ( $\beta=-.08$ ,  $p<.01$ ), and high tech industry ( $\beta=-.06$ ,  $p<.05$ ) were significant predictors, and publicly traded employers was not significant ( $\beta=.02$ , n.s.). An overall composite index of stress emerged as significant among the motivation variables ( $\beta=.10$ ,  $p<.01$ ), in contrast to the Bretz et al. (1994) findings.

TABLE 2: Ordinary Least Squares Results of Job Search Regressed on Motivation Variables

	B	SE	Beta	t
Perceived organizational success	-.01	.00	-.07	-3.24**
Total compensation (ln)	-.83	.15	-.13	-5.47**
Perceived job ceiling	-.02	.09	-.01	-.26
Ambition	.20	.09	.06	2.26*
Current job level	.05	.04	.03	1.32
Ascension rate	.00	.16	.00	.03
Perceived job alternatives	.17	.08	.05	2.19*
Job satisfaction	-.37	.03	-.32	-13.19**
Job stress	.03	.01	.10	4.18**
Hours of leisure desired	-.01	.01	-.03	-1.08
Actual hours of leisure	.01	.01	.02	.57
Fortune 500 employer	.04	.31	.00	.11
Publicly traded employer	.13	.21	.02	.62
Consumer products industry	-.86	.24	-.08	-3.62**
Food service industry	-1.06	.77	-.03	-1.38
High technology industry	-.46	.18	-.06	-2.56*
Manufacturing industry	-.62	.22	-.06	-2.83**
Entertainment industry	.70	.80	.02	.87
Not-for-profit industry	-.59	.56	-.02	-1.06
Oil and gas industry	-1.26	.67	-.04	-1.89
Medical services industry	-.272	.35	-.02	-.77
Constant		13.57	1.83	7.42**
Multiple R	.46			
R <sup>2</sup>	.21			
Adjusted R <sup>2</sup>	.20			

Note: N=1,740

\* $p<.05$ ; \*\* $p<.01$

Consistent with the Bretz et al. study, there was a positive, significant relationship between search and separation ( $r=.25$ ,  $p<.01$ ), supporting H-2. The relationship was even stronger when the polyserial correlation was computed to correct the distributional properties of the dichotomous separation variable ( $r=.35$ ,  $p<.01$ ). Also consistent with Bretz et al. (1994), we found support for H-3, in that motivation and search were significantly and positively related to separation, and the Fisher's  $r$  to  $Z$  transformation showed that the motivation-search relationship was significantly stronger than the search-separation relationship.

A logistic regression model was specified to investigate the relationship between separation and motivation. Results were consistent with Bretz et al. The overall model was significant ( $\chi^2$  with 21  $df = 65.98$ ,  $p<.01$ ), supporting H-4, and job satisfaction was a significant predictor of separation ( $\beta=-.27$ ,  $p<.01$ ). However, unlike the Bretz et al. study, perceived employment opportunities and ascension rate were not significant ( $\beta=.22$ , n.s.;  $\beta=.03$ , n.s., respectively). Moreover, salary approached significance in a positive direction ( $\beta=.45$ ,  $p<.10$ ). When search was added to the model (see Table 3), there was an improvement in model fit (block  $\chi^2$  with 1  $df = 21.58$ ,  $p<.01$ ) and the search variable was a significant, positive predictor of separation ( $\beta=.19$ ,  $p<.01$ ), supporting H-2. Unlike the Bretz et al. study, however, job satisfaction remained highly significant ( $\beta=-.21$ ,  $p<.01$ ), and the coefficient did not decrease appreciably in the presence of search. Salary also became statistically significant in a positive direction ( $\beta=.61$ ,  $p<.05$ ). This result is somewhat counterintuitive and will be discussed below.



TABLE 3: Logistic Regression Results of Separation Regressed on Motivation Variables (with Search)

	Maximum likelihood estimate	SE
Perceived organizational success	.01	.00
Total compensation (ln)	.61*	.28
Perceived job ceiling	-.01	.14
Ambition	-.12	.15
Current job level	.05	.04
Ascension rate	.01	.21
Perceived job alternatives	.22	.14
Job satisfaction	-.21**	.05
Stress	.01	.01
Hours of leisure desired	-.01	.01
Actual hours of leisure	.01	.02
Fortune 500 employer	.03	.50
Publicly traded employer	.31	.32
Consumer products industry	-.20	.42
Food service industry	.68	.86
High technology industry	.18	.30
Manufacturing industry	-.28	.38
Entertainment industry	.44	1.43
Not-for-profit industry	.04	.84
Oil and gas industry	-.58	1.14
Medical services industry	.07	.55
Search	.19**	.04
Constant	-11.30**	3.40
Model Chi-square (35 df)	87.56**	
-2 log likelihood	594.85	
Goodness of fit	674.33	

Note: N=678

\* $p < .05$ ; \*\* $p < .01$

The relationship between search and opportunity was again very similar to Bretz et al, supporting H-4 (Table 4). The only exception was that job tenure was significant in the prior study but only approached significance in the present study ( $\beta = -.07$ ,  $p < .10$ ). On the other hand, the relationship between separation and opportunity differed somewhat from the previous study (Table 5). In particular, the overall model failed to reach the acceptable significance level ( $\chi^2$  with 9 df = 15.02,  $p < .10$ ) and no individual opportunity variables significantly predicted separation, failing to support H-5. Additional analysis revealed that including job search in the model improved the model fit ( $\chi^2$  with 10 df = 31.46,  $p < .01$ ) and search was the only significant predictor of separation ( $\beta = .23$ ,  $p < .01$ ).

TABLE 4: Ordinary Least Squares Results of Job Search Regressed on Opportunity Variables

	B	SE	Beta	t
Candidate rating	-.43	.25	-.06	-1.72
Education quality	.00	.00	-.03	-.82
Education level	.17	.17	.04	.96
Years of job tenure	-.05	.03	-.07	-1.83
Job tenure squared	.00	.00	.04	1.20
Age	.03	.07	.08	.45
Age squared	.00	.00	-.18	-.99
Race (white)	-.26	.69	-.01	-.38
Gender (male)	-1.12	.42	-.10	-2.64**
Constant	8.43	2.31		3.65**
Multiple R	.19			
R <sup>2</sup>	.04			
Adjusted R <sup>2</sup>	.02			

Note: N=782

\*p<.05; \*\*p<.01

TABLE 5: Logistic Regression Results of Separation Regressed on Opportunity Variables

	Maximum likelihood estimate	SE
Candidate rating	.00	.38
Education quality	.00	.00
Education level	-.36	.28
Years of job tenure	.16	.16
Job tenure squared	-.01	.01
Age	.26	.27
Age squared	.00	.00
Race (white)	.51	1.16
Gender (male)	.08	.69
Constant	-6.53	6.46
Chi-square (9 df)	15.02+	
-2 log likelihood	260.89	
Goodness of fit	280.07	

Note: N=298

+ p<.10

Bretz et al. (1994) found limited support for opportunity as a moderator to the relationship between search and separation. We conducted the same analysis and also failed to find strong support for the moderator hypothesis. Consistent with Bretz et al., a logistic regression was specified where search and one opportunity variable (e.g. education level, gender) were entered on the first step and the interaction term was entered on the second step. This was done for all seven opportunity variables. In most of the models, search was the only significant predictor of separation. In only the job tenure model did the interaction term reach significance ( $\beta=.03$ ,  $p<.05$ ). Therefore, consistent with Bretz et al., we failed to find consistent support for opportunity moderating the relationship between search and separation.

### Stress

Since Table 2 contains the results for search regressed on the motivation variables, and there were no substantial changes in these variables when the two stress dimensions were added to the model. Therefore, to avoid repetition we have not included a table showing coefficients for all motivation variables with stress. We simply describe the results here. Complete tables are available upon request. As discussed above, stress was split into two dimensions—challenge and hindrance related stress. These dimensions significantly contributed to explaining the variance in search after controlling for the vector of motivation variables ( $\Delta R^2=.02$ ,  $p<.01$ ). Hindrance related stress was a positive predictor of job search ( $\beta=.18$ ,  $p<.01$ ) as hypothesized. Challenge related stress was in the predicted direction but not significant ( $\beta=-.03$ , n.s.). The two stress dimensions did not significantly contribute to the separation model (block  $X^2$  with 2  $df$  = 4.37, n.s) and only hindrance related stress was a significant predictor ( $\beta=.07$ ,  $p<.05$ ). The effect of challenge related stress was in the hypothesized direction ( $\beta=-.02$ , n.s.). This lends partial support to H-6, with respect to hindrance related stress. When search was included in the model, there was an improvement in model fit (block  $\chi^2$  with 1  $df$  = 18.44,  $p<.01$ ) and search was a positive predictor ( $\beta=.18$ ,  $p<.01$ ). Moreover, with search in the model, hindrance and challenge related stress were both in the hypothesized directions but not significant ( $\beta=.05$  &  $-.02$ , respectively, n.s.).

### Cognitive Ability

Because cognitive ability was hypothesized to relate to opportunity for mobility, the vector of opportunity variables was entered in the first step of the model to determine the incremental variance in search explained by cognitive ability. The results are shown in Table 6. Cognitive ability significantly improved the model ( $\Delta R^2=.03$ ,  $p<.05$ ), supporting H-7. It emerged

as a positive predictor ( $\beta=.20$ ,  $p<.05$ ) of search. It was not possible to investigate the effect of cognitive ability on separation because of limited sample. There were only 85 executives whose follow-up survey and SAT scores were both available. Of these, only 17 had voluntarily separated from their organization.

**TABLE 6: Ordinary Least Squares Results of Job Search Regressed on Cognitive Ability and Opportunity Variables**

	B	SE	Beta	t
Candidate rating	-.78	.49	-.11	-1.57
Education quality	.00	.00	-.03	-.40
Education level	.22	.39	.04	.56
Years of job tenure	-.26	.25	-.21	-1.02
Job tenure squared	.02	.02	.18	.92
Age	.03	.09	.06	.33
Age squared	.00	.00	-.06	-.34
Race (white)	.13	1.54	.01	.09
Gender (male)	-.27	.86	-.02	-.32
Cognitive ability	.00	.00	.20	2.58*
Constant	3.68	4.24		.87
Model R <sup>2</sup>	.08			
Change in R <sup>2</sup> with cognitive ability	.03*			

Note: N=202

\* $p<.05$

Personality

Hierarchical regression analysis controlling for the full set of motivation and opportunity variables used in the replication was used to determine the incremental variance explained by personality. The results are shown in Table 7.

TABLE 7: Ordinary Least Squares Results of Job Search Regressed on Personality, Motivation, and Opportunity Variables

	B	SE	Beta	t
Perceived organizational success	-.01	.00	-.08	-3.43**
Total compensation (ln)	-.70	.17	-.11	-4.15**
Perceived job ceiling	-.11	.10	-.03	-1.17
Ambition	.20	.10	.06	2.01*
Current job level	.06	.05	.04	1.23
Ascension rate	-.02	.17	.00	.14
Perceived job alternatives	.08	.09	.02	.96
Job satisfaction	-.36	.03	-.31	-11.97**
Stress	.03	.01	.10	3.70**
Hours of leisure desired	-.01	.01	-.03	-1.02
Actual hours of leisure	.00	.01	.01	-.40
Fortune 500 employer	.10	.34	.01	.29
Publicly traded employer	.08	.22	.01	.36
Consumer products industry	-.95	.25	-.09	-3.82**
Food service industry	-.73	.95	-.02	-.77
High technology industry	-.50	.19	-.06	-2.61**
Manufacturing industry	-.41	.24	-.04	-1.71
Entertainment industry	.60	.85	.02	.71
Not-for-profit industry	-.70	.60	-.03	-1.16
Oil and gas industry	-1.62	.69	-.05	-2.34*
Medical services industry	-.41	.39	-.03	-1.07
Education quality	.00	.00	-.05	-1.88
Education level	.01	.12	.00	.09
Years of job tenure	-.05	.02	-.07	-2.98**
Job tenure squared	.00	.00	.04	1.55
Age	.09	.06	.20	1.42
Age squared	.00	.00	-.21	-1.51
Race (white)	-.01	.37	.00	-.03
Gender (male)	-.30	.26	-.03	-1.13
Agreeableness	.03	.02	.05	2.03*
Conscientiousness	-.02	.02	-.03	-1.37
Extraversion	.03	.02	.05	1.77
Neuroticism	.01	.01	.02	.73
Openness	.03	.01	.05	2.17*
Constant	8.22	2.71		3.03**
Model R <sup>2</sup>	.23			
Change in R <sup>2</sup> with personality	.01**			

Note: N=1,536; \*p<.05; \*\*p<.01

Candidate rating was omitted because with it included listwise deletion yielded  $N=726$ . The motivation and opportunity variables were entered on the first step, and the five personality factors were entered on the second step. Personality significantly contributed to explaining the variance in search ( $\Delta R^2=.01$ ,  $p<.01$ ). Specifically, agreeableness and openness to experience were positive predictors ( $\beta=.05$ ,  $p<.05$  &  $\beta=.05$ ,  $p<.05$ , respectively), supporting Hypotheses 8 and 12, with regard to search.

A logistic regression model, with separation as the dichotomous dependent variable, was used to investigate the relationship between personality and separation (Table 8). The block of personality factors significantly contributed to the model (block  $\chi^2$  with 5  $df$  = 15.69,  $p<.01$ ). However, extraversion was the only significant personality factor ( $\beta=.12$ ,  $p<.05$ ), supporting H-11 with regard to separation. It should also be noted that salary was positively related to separation in the presence of the personality variables. When search was entered in the model, the model improved (block  $\chi^2$  with 1  $df$  = 5.36,  $p<.05$ ) and search was a positive predictor of separation ( $\beta=.21$ ,  $p<.05$ ). Extraversion also remained a significant, positive predictor of separation with search in the model.

**Table 8**

Logistic Regression Results of Separation Regressed on Personality, Motivation, and Opportunity Variables

	Maximum likelihood estimate	SE
Perceived organizational success	.00	.01
Total compensation (ln)	2.57**	.65
Perceived job ceiling	.25	.29
Ambition	-.23	.30
Current job level	.06	.17
Ascension rate	-.33	.41
Perceived job alternatives	-.34	.30
Job satisfaction	-.43**	.10
Stress	.04	.02
Hours of leisure desired	.00	.03
Actual hours of leisure	.00	.03
Fortune 500 employer	-.75	1.03
Publicly traded employer	.58	.59
Consumer products industry	-.66	.67
Food service industry	-8.17	60.45
High technology industry	-.25	.57
Manufacturing industry	.23	.72
Entertainment industry	-6.87	60.44
Not-for-profit industry	1.98	1.70
Oil and gas industry	-.02	1.45
Medical services industry	-6.15	19.34
Candidate rating	-.26	.48
Education quality	.00	.00
Education level	-.31	.39
Years of job tenure	.15	.20
Job tenure squared	-.01	.02
Age	-.09	.33
Age squared	.00	.00
Race (white)	.37	1.46
Gender (male)	-.29	.96
Agreeableness	-.07	.05
Conscientiousness	.03	.05
Extraversion	.12*	.05
Neuroticism	-.07	.04
Openness	-.02	.04
Constant	-27.45	11.36
Model Chi-square (35 df)	75.40**	
-2 log likelihood	187.75	
Goodness of fit	237.75	

Note: N=255; \*p<.05; \*\*p<.01

## Fit

The motivation variables from Bretz, et al. (1994) were entered in the first step of the regression model and fit was entered in the second step. As discussed above with regard to stress, we have not included a table showing the full array of motivation variables when fit was included in the analysis because the coefficients for the motivation variables were not substantially different from those reported in Table 2. Complete tables are available upon request. Fit did not significantly contribute to explaining job search ( $\Delta R^2=.00$ , n.s.), although the effect of fit was in the hypothesized direction ( $\beta=-.02$ , n.s.). Fit was also not a significant predictor of separation (block  $\chi^2$  with 1 df = 1.62, n.s.;  $\beta=.02$ , n.s.). Thus, H-13 was not supported. Entering search significantly improved the model (block  $\chi^2$  with 1 df = 14.80,  $p<.01$ ), and search was a significant predictor ( $\beta=.17$ ,  $p<.01$ ), though fit remained non-significant

## Discussion

This study proposed to increase our understanding of the job search and separation process by providing a constructive replication of the Bretz et al. (1994) research on employed managers, using a more recent managerial sample. Moreover, we set out to examine the incremental value of distinguishing challenge and hindrance related stress, and of adding cognitive ability, personality, and culture fit to the prior set of variables. Our results suggest that the Bretz et al. model was generally replicated, especially with regard to the search variable. The ability to predict separation with the opportunity variables from the Bretz et al. study was less in the present study than before. We also found that the addition of personality, cognitive ability, and distinguishing challenge and hindrance related stress significantly enhanced the explained variance in search and separation over the Bretz et al. variables. We now discuss each major finding, and the related research and practical implications.

### Replication of Bretz et al. (1994)

With regard to the replication, we found the present managerial sample to be generally similar to the earlier group in terms of demographic and survey variables. We replicated the earlier finding that the array of motivation variables generally positively affects search. Within the array of motivation variables, notable findings included the emergence of perceived employment opportunities as a significant predictor, and the non-significance of publicly-traded employers. Theory and prior empirical evidence argue that these factors should affect search. Thus, we speculate that sampling error may explain these differences, suggesting that further replication may be appropriate.



More important, the present results strongly replicated the earlier finding that job search and separation are positively related, and that search generally emerges as a significant predictor of separation, even in the presence of both the prior list and the enhanced set of motivation and opportunity variables. As before, the relationship between motivation and search was significantly stronger than the relation between search and separation, supporting the idea that although search is a precursor of separation, much search is motivated by other processes. Organizations, therefore, might do well to view search and separation as somewhat separate phenomena, with search perhaps serving purposes other than the location of a new position. Search might indicate to organizations of the need to better communicate that a manager is valued and has opportunities within the current organization. Search may be a leading indicator of future satisfaction and behavior, not simply the result of a prior decision to leave.

Unlike the prior study, search did not significantly mediate the relationship between motivation and separation. In the present sample, in the presence of the search variable, job satisfaction remained a significant predictor of separation with little decrease in the coefficient when search was added. This underscores the strength of job satisfaction as a predictor of both search and separation. Although job satisfaction is routinely measured for lower-level employees in organizations, it is less commonly measured for high-level managers. Moreover, even when managers are included in organizational attitude surveys, their results are seldom analyzed separately. Given the strength of the results shown here, using only three general satisfaction items, organizations should consider whether systematically tracking the satisfaction levels of managers might provide a useful leading indicator of future turnover and other behaviors.

Salary emerged as a significant and positive predictor of separation in the presence of various other variables despite a bivariate correlation of zero, and despite a negative relation with search in all models. The apparent suppression effect with regard to salary, and the fact that the direction of the effect is opposite to what is usually found is notable. It suggests that among individuals at similar organizational levels and with similar ascension rates and other motivation variables, controlling for search intensity and opportunity tends to reveal a tendency for higher-salaried individuals to separate. This might reflect the possibility that higher-salaried individuals attained those pay levels through a willingness to move, so salary is an indicator of that willingness. It might also reflect the fact that among equally-motivated, qualified, and

searching individuals, salary is a signal to other employers of enhanced marketability. Clearly, further investigation is warranted.

Our findings replicated the Bretz et al. (1994) results that search is significantly related to the array of opportunity variables, with a very similar pattern among the individual variables. However, unlike Bretz et al. we did not find a positive relationship between opportunity and separation. We also failed to find significant interactions between search and education or candidate rating. This suggests that in the current sample those with higher opportunity tend to search less, as before, but they do not appear to be more likely to separate. Though speculative, we note that the 20% separation rate in the present sample is somewhat higher than the 13% separation rate of the Bretz et al. sample. This may suggest a greater number of alternative opportunities for executives in our sample, perhaps creating somewhat more opportunities for those with less human capital and thus diminishing the distinction between those high and moderate in human capital.

#### Challenge and Hindrance Related Stress

Our results suggest that splitting the job stress measure into challenge and hindrance aspects clarifies the relationship between stress and search. Unlike Bretz et al. (1994), we found that an index combining all job stress items was significantly negatively related to search. Splitting the index into challenge and hindrance related stress components revealed that it was the hindrance related stress component that had a significant relationship with job search. Neither the overall composite nor either of the two components significantly related to separation, in the presence of the motivation variables, though both were in the hypothesized direction. The emergence of differing patterns of challenge and hindrance related stress suggests that organizations may enhance their understanding of managerial motivation and separation by viewing stress less simplistically. Reports of high stress may actually be good, if the stress relates to a state of challenge, development, or learning. These results lend support to further research that continues to separate job stress into challenge and hindrance components. Specifically, further research linking job demands and the work environment to the two stress dimensions might be fruitful.

#### Cognitive Ability

We provided what appears to be one of the first examinations of the role of cognitive ability on the search process. Results suggest that cognitive ability explained a significant increment in search, over and above the opportunity variables used previously. Those higher in cognitive ability searched more intensively, which is consistent with the notion that this

qualification enhances the perceived benefits of search, and not supportive of the idea that those high in cognitive ability need to search less due to their marketability. It was also interesting to find that cognitive ability remained a significant predictor even in the presence of education level and education quality. One might have suspected 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. Education and education quality proved non-significant in predicting search and separation both here and in the earlier Bretz et al. (1994) study. It may be that among candidates with equal levels of more visible human capital (e.g., education, job tenure, age), those with higher cognitive ability search more in an effort to communicate their higher qualifications to the market. 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 even after accounting for educational differences suggests that organizations that emphasize cognitive ability in their staffing and promotion decisions may also be creating a work force that will more actively search. Although we have no data on the relationship between cognitive ability and turnover, if the effect on enhancing search also enhances the probability of leaving, then there is a tradeoff between cognitive ability qualifications and employee retention. Though speculative, our findings also suggest that managers high in cognitive ability may perceive a need to search more actively so that their relatively “hidden” abilities are recognized. Thus, organizations might do well to clearly communicate to such managers that they are highly valued, and that they have good opportunities within the organization.

### Personality

The results for personality provide some of the most intriguing and perplexing findings of the study. On the one hand, the addition of personality variables to the combined array of both motivation and opportunity variables significantly enhanced the predictive ability for both search and separation. On the other hand, the individual personality elements exhibited a pattern somewhat different from what might have been expected. Specifically, neither conscientiousness nor neuroticism were significant predictors of either search or separation, despite prior evidence suggesting that they are both related to turnover. Most prior studies have focused on non-managerial samples, so it may be possible that once people progress to managerial levels these effects have already been reflected in the sample, leaving little

variance to predict. It was intriguing to note that all three of the other personality dimensions were significant, with agreeableness and openness positively predicting search, and extraversion positively predicting separation, even in the presence of the search variable. To the extent that agreeableness reflects the tendency to self-monitor (Jenkins, 1993), this lends support to the theory that such individuals form relationships more pragmatically. Or, perhaps agreeable managers, when dissatisfied, would rather quietly leave an organization rather than complain in order to improve their job. It also seems logical that openness to experience would positively influence the tendency to search, and this suggests that further research into this element of personality may be warranted. The findings for extraversion and separation may reflect human capital. Among equally motivated and qualified individuals, it may be that extraversion is a valued human capital attribute for the managerial positions studied here. Elements of extraversion are similar to elements often touted as valuable for leaders and communicators. Further research into this possibility is warranted.

The results for personality suggest that several relatively unaddressed facets of the “Big Five” may affect search and separation among managers. Although it is not uncommon for organizations to incorporate personality dimensions into staffing decisions, our results suggest that understanding the personality profiles of executives on agreeableness, openness, and extraversion may provide new insights into the propensity to search and separate, beyond motivation and opportunity.

### Fit

We failed to find an effect for our fit measure on search or separation, despite theory and empirical evidence suggesting that fit is related to turnover and possibly to job search. It seems possible that our relatively simple measure of fit may have failed to adequately tap the fit construct, and the results are thus due to insufficient power. Much prior fit research has also relied on two different sources of information, tapping the subjects for their personal preferences or values, and tapping other organizational members to measure elements of the organization. Further research with more extensive measures of fit are needed before concluding that fit is not related to these variables.

### Limitations and Conclusion

As with the Bretz et al. (1994) and other survey research, a prominent concern is common method bias. These data were collected from an existing data base and two mail surveys, and the survey data was 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. This survey, like others, also used perceptions of variables such as job alternatives, job ceiling, and organizational success. Future research using actual measures of organizational performance, career progression, and career potential might enhance the findings reported here.

It should be noted that the present array of motivation variables omitted questions about the desire for increased work-family balance and the organization's work-family policies, both of which emerged as significant search predictors in the Bretz et al. (1994) study. Unfortunately, the addition of new variables to the survey created space limitations that required dropping some questions, and work-family issues, although interesting, were not the focus of this stage of the research.

We also had some limits due to measurement issues. We used abbreviated measures of job satisfaction and culture fit which make it difficult to generalize to studies using more extensive measures. We also chose to retain the unidimensional aspects of some constructs such as conscientiousness and job search, to maximize fidelity with prior research or the earlier study we were replicating. However, one can argue that conscientiousness might be fruitfully split into its "achievement" and "dependability" components, and that "preparatory" and "active" job search might be examined separately. Although previous research (e.g., Blau, 1993, 1994) has found a multidimensional structure for search, our data yielded a single factor. This may be a function of differences between samples—high-level managers studied here versus lower-level professionals used in Blau (1993, 1994). These questions were beyond the scope of this study, but await future research.

On a positive note, this study provides additional empirical information about job search among managers, a construct and a sample that has received relatively little attention to date. Moreover, despite the limitations above, the study provided a successful replication of many of the Bretz et al. (1994) findings, as well as identifying elements of personality, cognitive ability, and job stress that offer fruitful future research possibilities.

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