

Effects of Personality on Executive Career Success in the United States and Europe

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The present study extended prior career success models by incorporating traits from the five-factor model of personality (often termed the “Big Five”) and several dimensions of extrinsic (remuneration, ascendancy, job level, employability) and intrinsic (job, life, and career satisfaction) career success. The model examined both direct effects and the mediating effects of an array of human capital and motivation variables derived from prior research. Data were collected from two large samples of American and European executives. Some results supported prior research: Extroversion related positively, and neuroticism negatively, to intrinsic career success across both the U.S. and the European samples. Some results differed from expectations: Conscientiousness was mostly unrelated to extrinsic success and negatively related to intrinsic success in both samples, and agreeableness was negatively related to extrinsic success in both samples. Differences emerged between the European and U.S. samples, in that neuroticism associated with lower levels of extrinsic success for the U.S. executives but not the Europeans, and extroversion associated with higher levels of extrinsic success for the European executives but not the U.S. executives. For both samples, human capital and motivational variables associated predictably with career success, but seldom mediated the relationship between personality and career success. © 2001 Academic Press

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Career success has been an important and popular focus of investigation in the management literature. Judge, Cable, Boudreau, and Bretz (1995) defined career

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success as the extrinsic and intrinsic outcomes or achievements individuals have accumulated as a result of their work experiences. Career success encompasses both “extrinsic” success elements, reflecting objective and externally visible criteria such as pay and ascendancy (Jaskolka, Beyer, & Trice, 1985) and “intrinsic” success elements that are subjectively defined by the individual, such as career or job satisfaction (Gattiker & Larwood, 1988). Career success reflects the accumulated interaction between a variety of individual, organizational and societal norms, behaviors, and work practices.

The intrinsic and extrinsic elements of career success are only moderately correlated, and often influenced by different factors (Bray & Howard, 1980; Harrell, 1969), so studies of extrinsic and intrinsic success must consider motivation, human capital, and dispositional factors. Prior studies focusing on managers working in a single U.S. company (e.g., Howard & Bray, 1988) have provided valuable insights, but the focus on a single organization limits the degree to which differences in labor markets, industries, and company characteristics can be examined. In one extensive cross-organization study, Judge et al. (1995) surveyed 1400 executives in a diverse sample of U.S. organizations, examining the extrinsic career success outcomes of pay and ascendancy (number of promotions), and intrinsic career success outcomes of career and job satisfaction. The authors found that demographic, human capital, and motivational variables had important effects on career success, but did not examine the role of enduring dispositions.

Yet individual dispositions play a key role in organizational behavior (House, Shane, & Herold, 1996). Indeed, Judge, Higgins, Thoreson, and Barrick (1999) examined personality effects on job satisfaction (an intrinsic measure), and reported income and occupational status (extrinsic measures) in a longitudinal sample of California residents who were followed from childhood in the 1920s and 1930s for up to 60 years. Several of the personality dimensions correlated with the success measures, when measured in both childhood and adulthood, providing a valuable longitudinal perspective. This study, however, focused on a very specific region and time frame, and like prior studies failed to examine whether dispositional variables may affect career success indirectly through variables such as performance, motivation, and human capital.

Further, increasingly global careers emphasize the importance of international differences, which may reflect different labor markets, employment policies, and management practices (DeCieri & Dowling, 1999; Ferris, Hochwarter, Buckley, Harrell-Cook, & Frink, 1999). Research on careers must move beyond descriptive case studies (Schuler & Florkowski, 1996) and examine the “cross-cultural generalizability” of findings (Ferris et al., 1999; Ricks, Toyne, & Martinez, 1990; Sullivan, 1999), building on richer theory (Arvey, Bhagat, & Salas, 1991; Ferris et al., 1999). In this regard, it may be particularly useful to compare U.S. and Western European workers whose relatively stable social and political systems are nonetheless culturally distinct. For example, European countries are often described as more “collectivist” than the United States (Hofstede, 1991), and this is reflected in their different social and workplace systems (Gaugler & Wiltz, 1992; Ulman, Eichengreen, & Dickens, 1993). Indeed, Hammer (1999) noted

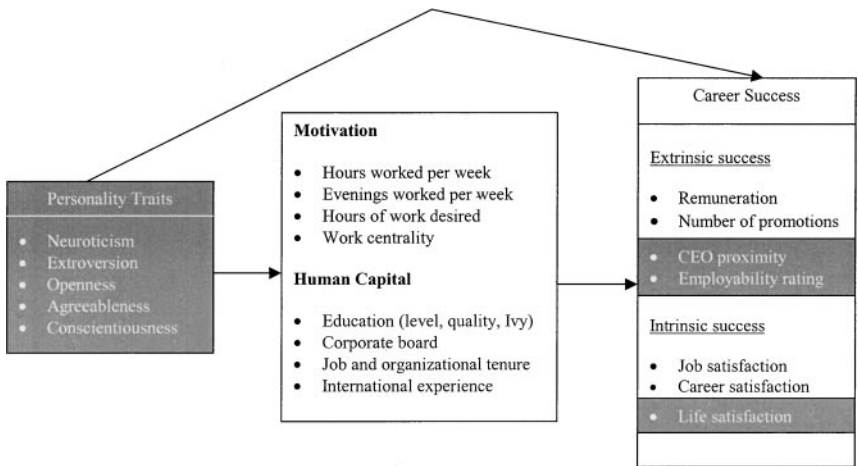


FIG. 1. Hypothesized model of executive career success. (Note: Shaded areas represent variables that are unique to this study.)

that, “European firms and their managers are less autonomous,” concluding that, “to manage within such constraints requires a leadership style, or process, that recognizes the reality of conflicting group interests and the rights of multiple stakeholders” (p. 105). A “European” top executive may adopt a more positive perspective toward unions, attach greater importance to external constituents (e.g., governments and communities), and recognize the “more limited autonomy (or greater support) afforded to managers” (Brewster, 1994; Brewster & Larsen, 1992). So, social skills and connections may be more important for European executives career success, perhaps lending greater impact in Europe to extroversion or conscientiousness (dependability in informal social contracts). Similarly, since Hofstede (1991) note that European workers often score higher than those in the United States on “uncertainty avoidance,” successful American managers may tolerate with less anxiety (neuroticism), ambiguity, deviant ideas, open-ended discussion and decisions, and reliance on fewer formal rules (e.g., Hammer, 1999).

Figure 1 depicts the extended career success model examined in the present research on U.S. and European executives, with the shaded areas representing constructs and relationships that have been added, and the unshaded areas representing the original Judge et al. (1995) model. For brevity, we refer the reader to the Judge et al. article for the theoretical and empirical evidence related to the unshaded portions, and focus here on the extensions.

Extended Career Success Dimensions

We include two additional extrinsic aspects of success, CEO proximity and employability, and one additional element of intrinsic success, life satisfaction. CEO proximity reflects power, authority, and responsibility in the *current* organization, while ascendancy and remuneration reflect success relative to prior career

stages, or compared to other organizations (Dreher & Bretz, 1991; Judge & Bretz, 1994). Employability is an increasingly relevant indicator of career success as multiple-employer and even multiple-profession careers become more common (e.g., Barrett, 1999; Blumfield, 1997; Kissler, 1994). Employability reflects the potential attractiveness of an individual to other employers as judged by gatekeepers such as search firms. Adding life satisfaction to career success acknowledges the importance of work-life/family balance (Greenhaus & Beutell, 1985; Thompson, Beauvais, & Lyness, 1999). This may be particularly relevant in cross-national research, as the balance between life facets (e.g., work and family) may differ with social policies.

The "Big Five" Personality Traits and Career Success

In Fig. 1 personality traits relate to career success both directly and through motivation and human capital. Motivation and human capital may change over time or with different work situations, but traits, such as personality, are enduring individual predispositions that either directly associate with career outcomes or lead individuals to behave or seek out experiences associated with career outcomes (Tharenou, 1997; Tokar, Fischer, & Subich, 1998). To date, no study has examined the role of personality within a comprehensive model, such as that presented in Fig. 1, and virtually all research has focused on one or two personality variables at a time.

Consensus is emerging that a five-factor model of personality, often termed the "Big Five" (Goldberg, 1990), can be used to describe the many 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 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). Evidence indicates that the Big Five are fairly heritable and stable over time (Costa & McCrae, 1988; Digman, 1989), although the environment undoubtedly plays a role.

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

The Big-Five personality model has been applied mostly in personnel selection, where the five factors predict job performance (Barrick & Mount, 1991; Tett, Jackson, & Rothstein, 1991). Conscientiousness positively related to job performance among U.S. (Barrick & Mount, 1991) and European (Salgado, 1997) employees. Neuroticism and job performance were negatively associated in two meta-analyses (Salgado, 1997; Tett et al., 1991). Extroversion did not correlate

with job performance across all jobs, but exhibited a positive relationship specifically for managers (Barrick & Mount, 1991) and seems to be particularly important for jobs involving an interpersonal performance component (Tokar et al., 1998). Although pay and performance do not always significantly correlate (Gerhart & Milkovich, 1992), and job performance is not the sole determinant of promotions and mobility, it seems reasonable to expect that consistently high levels of performance will associate with greater long-term career success. Thus, conscientiousness and extroversion may relate positively to career success, and neuroticism may relate negatively.

Job performance and career success are different, however, so it is important to look beyond personality effects on performance. Personality might associate directly with extrinsic career success if traits such as assertiveness, emotional stability, and achievement motivation "fit" the tasks of the executive role (Tharenou, 1997), enhancing effective leadership, social interactions, and complex decision-making. Personality and intrinsic success may relate if traits, such as extroversion, create a general tendency to react positively to outcomes of executive work (e.g., Furnam & Zacherl, 1986; Headey & Wearing, 1989; McCrae & Costa, 1991), to act in ways compatible with the executive environment (e.g., Aryee, Chay, & Tan, 1994; Bretz & Judge, 1994), or to strive for success (Super, 1957; Tharenou, 1997). Indeed, personality traits such as neuroticism and extroversion are linked consistently to employee well-being and satisfaction (Tokar et al., 1998).

These findings suggest a pattern of relationships, but there has been less research on the explanation for that pattern. Beyond effects on performance and a general fit to the executive role, why would we expect to see personality affect career success? The model shown in Fig. 1 suggests that personality may relate to success through its association with human capital and motivation (Judge et al., 1995).

Regarding human capital variables, Dearborn and Hastings (1987) found that women classified as Type A had shorter job tenure than did women classified as Type B. Type A personalities have been positively associated with neuroticism and conscientiousness, and negatively associated with agreeableness (Contrada, Leventhal, & O'Leary, 1990; Mayer & Sutton, 1996). Close and Bergmann (1979) found dogmatism (which is similar to low openness) associated negatively with educational attainment. Research on the Big Five found that academic achievement associated negatively with neuroticism and positively with openness and conscientiousness (Digman, 1989; Hough, 1998, 1997). Openness also has been linked to the tendency to learn from experiences, which has been identified as a key trait of successful managers, particularly those who succeed in international assignments (Montagliani & Giacalone, 1998; Spreitzer, McCall, & Mahoney, 1997).

Research also has linked personality to motivation (Barrick, Mount, & Strauss, 1993; Hansson, Hogan, Johnson, & Schroeder, 1983; Tang, 1986), particularly the influence of the Type A and B personality patterns. Dearborn and Hastings (1987) found that Type A women worked longer hours. Hansson et al. (1983) found Type A's to be more ambitious and Tang (1986) found Type A's spend more leisure time on work tasks. A recent meta-analysis (Brown, 1996) found that individuals predisposed to be highly job involved also were more likely to have traits such

as Protestant work ethic and high self-esteem. One prior study found that more conscientious sales representatives were more likely to set goals and be committed to those goals, which in turn was positively associated with job success (Barrick et al., 1993). Related research shows that neuroticism (negatively), and extraversion, agreeableness, and conscientiousness (positively) associate with beliefs about the importance of working hard, risking, and persisting when faced with obstacles (Holland, Johnston, Asama, & Polys, 1993), suggesting that individuals with these traits may be successful in executive positions.

Thus, the small amount of prior evidence suggests an intriguing pattern of relationships between personality with human capital and motivation. The paucity of prior research, however, precludes specific hypotheses regarding individual personality dimensions with particular human capital and motivation variables, but reinforces the value of research employing all three types of variables. Thus, we generally hypothesize that personality effects are mediated by intervening motivation and human capital variables.

The evidence for direct associations between personality and career success is more informative, despite a limited focus on one or two personality dimensions or career outcomes in isolation and few mediating effects. Traits associated with low neuroticism such as "optimism," "self-confidence," "self assurance," achievement motivation, and decisiveness have been correlated positively with managerial advancement, occupation level, executive pay, and job success (Howard & Bray, 1988; Goldberg, 1990; Mount & Barrick, 1995; Ghiselli, 1963, 1969; Siegel & Ghiselli, 1971; Harrell, 1969; Harrell & Alpert, 1989). Emotional stability may be particularly important at higher organizational levels characterized by high stress and external stimulation (Seibert & Kraimer, 1999). Neuroticism has related negatively to job satisfaction (e.g., Furnam & Zacherl, 1986) and life satisfaction (e.g., Headey & Wearing, 1989), ostensibly because neuroticism is linked to the experience of negative affect (Judge et al., 1995; Watson & Clark, 1997). There has been no prior research relating neuroticism and career satisfaction, a gap filled by the present study.

H-1. Neuroticism is negatively related to (a) extrinsic and (b) intrinsic career success directly and indirectly through motivation and human capital variables.

Extroversion associates with "activity," "dominance," a tendency to be energized by social situations, and the tendency to act to rectify unsatisfactory work situations, which are all linked with executive or leadership success (Dunn, Mount, Barrick, & Ones, 1995; Seibert & Kraimer, 1999). Empirical research suggests extroversion positively relates to salary (Harrell, 1969; Harrell & Alpert, 1989) and to job and life satisfaction (e.g., Furnam & Zacherl, 1986; Headey & Wearing, 1989), presumably because extroverts are predisposed to experience positive emotions (Costa & McCrae, 1992a; Judge et al., 1999; Watson & Clark, 1997).

H-2. Extroversion is positively related to (a) extrinsic and (b) intrinsic career success directly and indirectly through motivation and human capital variables.

Conscientiousness has been linked positively to managerial job performance, salary, and occupational status (Barrick & Mount, 1991; Judge et al., 1999;

Salgado, 1997). Achievement motivation and leadership motivation also have been linked to managerial advancement (Tharenou, 1997; McClelland & Boyatzis, 1982). Conscientiousness is associated with being goal-directed, persistent, and well-organized, which seem likely to associate with career success, but few studies have explored the direct association. No prior studies have explored the role of intervening motivation and human capital variables.

H-3. Conscientiousness is positively related to extrinsic career success directly and indirectly through motivation and human capital variables.

Although Howard and Bray (1988) reported a negative correlation between affability (nurturing, sympathetic) and management potential ratings, agreeableness also associates with being trusting, submissive, and compliant, which could be perceived as naïveté, docility, and a tendency to follow rather than lead. Similarly, openness might be a relevant construct for occupations requiring high creativity or inquisitiveness, but it is difficult to support a hypothesis linking this trait to executive success. We include agreeableness and openness in our model to address the lack of empirical evidence on this question, but cannot suggest hypotheses.

In sum, the present study extends prior models by: (1) Examining a broader set of extrinsic and intrinsic career success indicators; (2) Incorporating personality traits; and (3) Focusing on a diverse sample of both U.S. and European managers. This extended model allows us to examine the direct and indirect effects of personality traits on career success.

METHOD

Participants and Procedure

Participants were executives who had a relationship with a large international executive search firm. The search firm does not accept applications or resumes from individuals searching for positions, but instead potential candidates are identified only in direct response to a client's search for a specific position. Further, the search firm serves clients of all sizes, industries, and regions. This suggests that the sample drawn for this study should be fairly representative of the general population of executives. Data were collected in 1995 and 1996 from executives working in the United States and from executives working in Europe. Because the data collection procedures varied somewhat between the two samples, the participants and procedure are described separately for each sample.

U.S. sample. Surveys were mailed to 10,000 executives contained in the search firm's database. Executives were informed that participation was completely voluntary and confidential. The surveys were returned directly to the authors in business reply envelopes. Surveys were encoded so that those returned could be matched with information contained in the search firm's database. A total of 1885 surveys were returned (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. Results suggested respondents were significantly more likely to be married ($M_R = 86\%$, $M_{NR} = 77\%$), older ($M_R = 47.2$, $M_{NR} = 45.4$), and had more children ($M_R = 1.8$, $M_{NR} = 1.5$) than

nonrespondents. The demographics of our sample reflect the executive population (U.S. Census Bureau, 1998). The majority of respondents were white (95%) and male (90%). Average age of respondents was 47 years. Average remuneration earned by executives (including bonuses) was \$164,618. The average executive had been promoted 7.9 times in his or her career and was positioned two job levels below the CEO. The average number of employees in the executive's organization was 10,140. Executives were employed in a variety of industries, with the most common being high technology.

European sample. Surveys were distributed to a sample of 10,000 executives who had a relationship with the European offices of the search firm. For the most part, the survey was identical to the U.S. survey. Because the search firm did not maintain a database of the career profiles of European executives, all variables were measured within the survey. Accordingly, surveys were returned anonymously. A total of 1871 surveys were returned (19% response rate). Ninety-four percent of executives were male. Average age of respondents was 42.4 years. Average remuneration earned by executives (including bonuses) was \$158,461. The average executive had been promoted four times in his/her career and was positioned 1.9 job levels below the CEO. The average number of employees in the executive's organization was 9051. Although there were 66 nationalities represented in the sample, the most common were the following: German (59%), Danish (12%), Swiss (6%), Finnish (6%), Spanish (4%), Portuguese (2%), Dutch (2%), Austrian (2%), and French (2%).

Measures

Big Five traits. The Big Five traits were measured with the NEO Personality Inventory, the most widely used and extensively validated measure of the five-factor model (Costa & McCrae, 1992). Each of the five traits in the NEO-FFI are measured by asking respondents to indicate their agreement with 12 statements (1 = strongly disagree to 5 = strongly agree). Example statements include, "I often feel tense and jittery" (neuroticism), "My life is fast-paced" (extroversion), "I often enjoy playing with theories or abstract ideas" (openness), "I would rather cooperate with others than compete with them" (agreeableness), and "I have a clear set of goals and work toward them in an orderly fashion" (conscientiousness). Reliabilities of the NEO scales were as follows (coefficient alpha [α] reliability estimates are provided first for the American sample, followed by the α for the European sample): Neuroticism, $\alpha = .82, .74$; Extroversion, $\alpha = .77, .70$; Openness, $\alpha = .72, .71$; Agreeableness, $\alpha = .71, .58$; Conscientiousness, $\alpha = .80, .71$.

One advantage of the NEO is that extensive cross-cultural evidence exists regarding its validity. Recently, McCrae and Costa (1997) compared the factor structure of the NEO across seven cultures and found that the U.S. factor structure was closely reproduced. To investigate the generalizability of the NEO with our data, we conducted a principal components analysis of the NEO for the U.S. and European samples. Following McCrae and Costa's procedure, we investigated factorial equivalence by computing congruence coefficients between varimax-rotated principal components from the two samples (essentially, these represent the correlations

between the factor loadings of each sample). The congruence coefficients were .92 for neuroticism, .82 for extroversion, .88 for openness, .93 agreeableness, and .90 conscientiousness. These are comparable to those reported by McCrae and Costa and suggest that the factor structure of the NEO is comparable between the two samples.

Remuneration. Recognizing that a large part of an executive's income is in the form of incentive-based pay, remuneration is defined here to include salary, bonuses, stock options, and other forms of cash compensation. For the U.S. sample, data on total annual remuneration were obtained from the search firm's database. Because the archival database was not available for European executives, their total remuneration (salary, bonus, stock, options, and other forms of cash compensation) was self-reported on the survey. It would appear the archival and self-reported measures are equivalent as, for the U.S. sample, self-reported compensation correlated highly with the archival measure ($r = .85, p < .01$). Because most remuneration measures are disproportionately affected by a relatively few values at the high end of the distribution, this degree of skewness can render standard statistical tests inappropriate. Accordingly, consistent with standard practice in wage regressions (e.g., Kerr & Kren, 1992), we normalized the distribution of the remuneration variable by computing its natural log.

Ascendancy. For both samples, ascendancy was measured on the survey by asking executives to indicate the total number of promotions they received in their career. We used the natural log of number of promotions because the data plots revealed a skewed distribution.

CEO proximity. For both samples, CEO proximity was measured on the survey by asking executives to report the number of job levels below the CEO they were positioned in their current organization. The natural log was used to transform this variable due to skewness in the data. The natural log values were then multiplied by negative one to create an index of CEO proximity that is directionally consistent with the other extrinsic career success measures.

Employability. An accomplishment rating made by the search firm was used to assess employability. The search firm uses this information when deciding whether to recommend a candidate for positions. The rating is a three-item scale comprising (1) flexibility and adaptability, (2) proficiency in current job, and (3) appearance, stature, and personal impact. Each of these specific ratings is evaluated on a 3 = low, 4 = average, 5 = high scale. This measure was available only for the U.S. sample, and the reliability of this three-item scale was .68. We used the natural log of the rating for the analyses due to a skewed distribution.

Job satisfaction. For both samples, general job satisfaction was measured with the three items used by Judge et al. (1995). These items were the Gallup Poll measure of job satisfaction, the nongraphic version of the G. M. Faces Scale, and an adapted version of the Fordyce Percent Time Satisfied Item. Because the items used different response formats, they were standardized before being combined ($\alpha = .83$ for the U.S. sample, $\alpha = .78$ for the European sample).

Life satisfaction. The Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) measure asks individuals to respond to five general statements about

their life (e.g., "If I had to live my life over again, I would change almost nothing"). The α of this scale was .88 for the U.S. and .80 for the European sample.

Career satisfaction was measured with the five-item scale developed by Greenhaus, Parasuraman, and Wormley (1990), which asks individuals to report their satisfaction with five aspects of their career (overall success, progress toward career goals, income, advancement, development of new skills; $\alpha = .89$ for the U.S. sample, $\alpha = .85$ for the European sample).

Human capital variables. For the U.S. sample, all human capital variables were taken from the search firm's database. Level of education was the highest degree received (0 = bachelor's degree, 1 = master's degree or higher). Whether the executive's highest degree was from an Ivy League school was coded 1 = yes, 0 = no. Consistent with Judge et al. (1995), quality of the executive's highest degree was measured using The Gourman Report (Gourman, 1993), which rates university quality using a continuous scale ranging from 1.0 to 5.0. The Gourman rating was applied to the university from which the executive's highest degree was granted, based on the rating of the major in which the degree was earned. Whether the executive occupied a position on a corporate board of directors, years of job tenure, years of organizational tenure, and international experience (1 = yes, 0 = no) were collected from information in the search firm's database. For the European sample, the human capital variables were measured with items on the survey, with the following exceptions: information on education quality and prestige was not available, nor was information on whether the executive served on a board of directors. Nearly all business-oriented degrees in Europe are in economics, so we used an economics major dummy variable for the Europeans. Otherwise, education coding was the same in the two samples, with dummy variables for law and engineering majors.

Motivational variables. For both U.S. and European samples, hours worked per week, number of evenings worked per month, and hours per week the executive wished to work were assessed with survey questions. Work centrality was measured by asking the individual to assign 100 points to five different life domains (work, family, religion, leisure, and community) (MOW International Research Team, 1987).

Covariance Structure Analysis

Covariance structure analysis, estimated in the present study using LISREL 8 (Jöreskog & Sörbom, 1993), was used to test the hypothesized model shown in Fig. 1. The model included the two indirect paths: (1) from the personality traits to the motivation and human capital variables, and (2) from the motivation and human capital variables to extrinsic and intrinsic career success. It also included the direct link from personality traits to extrinsic and intrinsic career success. LISREL coefficient estimates and standard errors for direct, indirect, and total effects were used to test significance. Due to the complexity of this model and the prior evidence of construct validity for the personality dimensions, only the manifest variable model was tested. Two models were estimated—one for the U.S. sample and one for the European sample. The structure of the models was identical

except that some of the variables included in the U.S. model were not available in the European sample (e.g., quality of highest degree). Because the Big Five traits and the intrinsic success variables were measured with error, these measures were corrected for unreliability.

When evaluating the results of a covariance structure analysis, it is important to evaluate its overall fit. Accordingly, we report the following fit statistics: chi-square (χ^2), Root Mean Square Error of Approximation (RSEA), Goodness-of-fit Index (GFI), Normed Fit Index (NFI), Comparative Fit Index (CFI), and Incremental Fit Index (IFI) (Medsker, Williams, & Holahan, 1994). Although levels of the χ^2 statistic cannot be interpreted independent of the sample size, rules of thumb suggest that the RSEA should be no greater than .10 while values of GFI, NFI, CFI, and IFI should be greater than .90 (Medsker et al., 1994).

RESULTS

Table 1 contains descriptive statistics and intercorrelations among the study variables for the U.S. and European samples. In both samples, restriction of range was notable only for CEO proximity, which reached an “out of bounds” value (restricted range based on ± 2 standard deviations from the mean). As we will see, this apparently did not preclude significant relationships with the other variables in the model, although it may make findings conservative with regard to CEO proximity.

The correlation matrices for the U.S. and European samples are fairly similar, and the measures behaved as expected. The three intrinsic career success measures are moderately correlated. Extrinsic and intrinsic career success are moderately correlated, with intrinsic success among the European sample being somewhat more strongly positively related to CEO proximity.

The hypothesized LISREL models were based on Fig. 1, and fit the data well for both the U.S. and the European samples. The fit statistics for the U.S. sample were $\chi^2(134,1505) = 369.35$ ($p < .01$), RMSEA = .03, GFI = .98, NFI = .94, CFI = .96, and IFI = .96. The fit statistics for the European sample were $\chi^2(97,1315) = 493.25$ ($p < .01$), RMSEA = .05, GFI = .97, NFI = .90, CFI = .92, and IFI = .92. For clarity the results are presented in tables, rather than as coefficients on a path diagram. Tables 2 through 6 show the complete results, and have been arranged in right-to-left order, to correspond directly to the hypothesized model of Fig. 1. Tables 2 and 3 depict the total, direct, and indirect effects of the Big Five personality traits on each extrinsic and intrinsic career success measure. The “total” effects of Tables 2 and 3 reflect the combined effects of all the paths (all three arrows in Fig. 1) from each personality trait to each career success measure. The “direct” effects reflect the upper arrow of Fig. 1. The “indirect” effects reflect the combined effects of the two middle arrows in Fig. 1. Tables 4 and 5 depict the relationships between the two right-hand boxes in Fig. 1—the effects of motivation and human capital variables on each of the career success variables—for the American and European samples, respectively. Finally, Table 6 reflects the relationships between the two left-hand boxes in Fig. 1—the effects of each of the Big Five personality traits on the human capital and motivation variables—for both samples.

TABLE 1
Means (M), Standard Deviations (SD), and Intercorrelations of Study Variables (Both Samples)

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Log remuneration	11.83	0.57		36	61	—	25	13	29	19	21	17	07	—	04	—
2. Log ascendancy	1.95	0.51	25		38	—	15	05	18	12	14	10	00	—	-03	—
3. Log CEO proximity	-0.71	0.60	30	21		—	28	10	29	13	13	11	05	—	01	—
4. Log employability rating	1.49	0.01	22	01	08		—	—	—	—	—	—	—	—	—	—
5. Job satisfaction	0.00	2.60	11	10	06	07		35	45	02	08	09	02	—	00	—
6. Life satisfaction	25.13	5.83	16	07	04	10	43		57	-05	-01	03	-12	—	-01	—
7. Career satisfaction	24.58	6.13	24	13	13	11	45	65		04	09	04	01	—	-01	—
8. Evenings worked per month	5.17	4.39	19	10	05	08	01	-01	03		21	12	08	—	-04	—
9. Hours worked per week	56.52	10.68	18	09	05	08	05	-02	02	23		59	21	—	03	—
10. Hours of work desired	48.45	9.57	18	05	04	05	06	07	03	09	48		19	—	02	—
11. Work centrality	38.68	15.87	07	04	05	-02	03	-16	-04	08	17	10		—	03	—
12. Board of directors position	0.01	0.15	16	05	06	05	04	00	04	00	06	00	02		—	—
13. Graduate degree	0.72	0.62	07	-18	-01	-03	00	-04	-03	-02	03	05	08	06		—
14. Quality of highest degree	2.36	2.02	16	-08	03	08	-02	-02	-01	-04	00	05	05	04	24	
15. Ivy League graduate	0.10	0.30	19	-06	02	09	01	02	01	01	-02	04	05	03	13	36
16. Business/Econ degree	0.63	0.48	06	04	07	03	-05	-01	-05	-01	00	05	03	03	01	16
17. Engineering degree	0.12	0.33	00	08	-03	00	02	00	03	08	-02	03	-01	-01	-14	-06
18. Law degree	0.01	0.18	09	-11	02	-13	-02	-04	-06	-06	02	01	01	04	35	13
19. Job tenure	3.37	4.10	-01	-02	04	-01	-01	-02	-05	-02	-08	-08	03	03	-07	-01
20. Organizational tenure	5.88	6.50	03	-02	-19	-03	-03	05	01	00	-05	-04	00	01	-07	-02
21. International experience	0.36	0.48	16	11	09	04	-01	-05	-02	12	03	00	07	03	06	07
22. Neuroticism	25.27	6.16	-12	-15	-07	-02	-22	-32	-25	-01	01	-09	03	-03	07	03
23. Extroversion	45.90	5.21	04	11	06	05	15	24	18	06	09	09	-02	-01	-12	-06
24. Openness	41.25	5.54	04	-01	03	06	03	02	05	06	08	05	08	01	13	05
25. Agreeableness	43.84	4.93	-09	-03	-02	-05	03	15	07	-05	-06	-04	-08	-03	00	-01
26. Conscientiousness	49.48	4.98	04	06	04	-01	01	09	08	02	05	05	04	02	-02	-04

Variable	15	16	17	18	19	20	21	22	23	24	25	26	M	SD
1. Log remuneration	—	.15	-.04	.04	.16	.12	.09	-.10	.18	.04	-.06	.09	11.86	.46
2. Log ascendancy	—	.11	-.05	-.01	-.03	.15	.12	-.04	.17	.01	-.03	.04	1.36	.53
3. Log CEO proximity	—	.10	-.01	.01	.20	.08	.11	-.04	.14	.00	-.09	.00	-.98	.58
4. Log employability rating	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5. Job satisfaction	—	.04	-.04	-.01	.03	.08	.05	-.20	.18	-.01	.02	.05	0.00	2.50
6. Life satisfaction	—	.03	.00	-.04	.00	.02	.05	-.27	.21	.00	.07	.18	26.25	4.41
7. Career satisfaction	—	.08	-.04	-.05	.00	.03	.04	-.21	.22	.06	.08	.17	26.20	4.71
8. Evenings worked per month	—	-.04	.09	.01	-.07	-.06	.15	-.02	.11	.04	-.07	.04	5.97	4.72
9. Hours worked per week	—	.01	.04	.02	-.10	-.03	.07	-.12	.17	.04	-.02	.12	56.52	8.81
10. Hours of work desired	—	.02	.06	.00	-.09	-.03	.09	-.18	.17	.00	-.05	.14	48.94	8.40
11. Work centrality	—	.04	-.01	-.02	-.05	-.02	.01	-.08	.08	.01	-.04	.12	42.77	13.58
12. Board of directors position	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13. Graduate degree	—	.21	-.20	.17	-.11	-.09	-.01	-.03	-.02	.07	.07	-.02	.70	.46
14. Quality of highest degree	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15. Ivy League graduate	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16. Business/Econ degree	13	—	-.35	-.05	-.02	-.04	.02	-.01	.05	-.04	-.06	.06	.55	.50
17. Engineering degree	-.09	-.49	—	-.19	-.03	-.04	.03	-.03	-.01	-.05	-.02	.00	.32	.47
18. Law degree	-.01	-.25	-.07	—	.02	.01	-.01	.03	-.04	.01	-.04	-.08	.01	.28
19. Job tenure	-.02	-.03	.05	.00	.00	.46	-.10	.04	-.08	-.05	-.04	-.05	3.17	3.00
20. Organizational tenure	-.01	-.07	.08	.02	.25	—	-.03	.04	-.07	-.07	-.02	-.06	7.15	6.87
21. International experience	.10	.03	.05	-.03	.01	-.03	—	-.02	.13	.06	-.04	.07	.63	.48
22. Neuroticism	-.01	-.02	-.03	.08	-.02	-.04	-.01	-.02	-.38	-.18	-.18	-.39	25.59	5.56
23. Extroversion	-.01	-.03	.00	-.03	-.02	.00	-.01	-.42	.23	.10	.33	.33	43.48	4.79
24. Openness	.07	-.13	-.02	.05	-.02	-.03	.05	-.10	.24	.11	.06	.06	40.02	4.89
25. Agreeableness	-.02	-.02	-.03	-.02	-.04	.02	-.07	-.30	.32	.09	.12	.12	40.31	4.59
26. Conscientiousness	.00	.02	.02	-.02	-.01	.03	.03	-.35	.29	.00	.18	.18	47.30	4.80

Note. Correlations above the diagonal are from the European sample, correlations below the diagonal are from the U.S. sample. Decimals omitted from correlations. For the U.S. sample, because an accomplishment (i.e., employability) rating was only available for roughly half ($N = 818$) of the sample, all correlations were computed using pairwise deletion. Except for employability, correlations $\geq |.07|$ are significant at $p < .01$; those $\geq |.05|$ are significant at $p < .05$. With employability, correlations $\geq |.10|$ are significant at $p < .01$; those $\geq |.07|$ are significant at $p < .05$. For the European sample, correlations $\geq |.07|$ are significant at $p < .05$; those $\geq |.05|$ are significant at $p < .01$; those $\geq |.07|$ are significant at $p < .05$.

TABLE 2
Direct, Indirect, and Total Effects of Big Five Traits on Career Success: U.S. Sample

Big Five Trait	Extrinsic success				Intrinsic success		
	Remuneration	Ascendancy	CEO proximity	Employability rating	Job satisfaction	Life satisfaction	Career satisfaction
Neuroticism							
Direct	-.30**	-.21**	-.10	-.03	-.42**	-.42**	-.41**
Indirect	-.01	.00	.00	-.02	.01	-.01	.02
Total	-.31**	-.21**	-.10	-.05	-.41**	-.43**	-.39**
Extraversion							
Direct	.04	.08	.10	.14	.20*	.22*	.16*
Indirect	.01	.07**	.02	.00	-.01	-.01	.02
Total	.05	.15	.12	.14	.19*	.21*	.18*
Openness							
Direct	-.02	-.03	.01	.03	-.10	-.09	-.05
Indirect	.06**	-.04*	.00	.01	.04**	-.01	.01
Total	.04	-.07	.01	.04	-.06	-.10	-.04
Agreeableness							
Direct	-.24**	-.14**	-.14**	-.15**	-.19**	-.09	-.20**
Indirect	-.08**	-.05**	-.03	-.01	.00	.03*	.02
Total	-.32**	-.19**	-.17**	-.16**	-.19**	-.06	-.18**
Conscientiousness							
Direct	-.07	-.05	-.01	-.04	-.23**	-.15**	-.12*
Indirect	.03	.00	.00	-.01	.01	-.02	-.01
Total	-.04	-.05	-.01	-.05	-.22**	-.17**	-.13*

* $p < .05$ (two-tailed).

** $p < .01$ (two-tailed).

TABLE 3
Direct, Indirect, and Total Effects of Big Five Traits on Career Success: European Sample

Big Five Trait	Extrinsic success			Intrinsic success		
	Remuneration	Ascendancy	CEO proximity	Job satisfaction	Life satisfaction	Career satisfaction
Neuroticism						
Direct	-.05	.03	-.07	-.28**	-.29**	-.19**
Indirect	-.01	.01	.00	.00	.01	.02
Total	-.06	.04	-.07	-.28**	-.28**	-.17**
Extroversion						
Direct	.26**	.22**	.30**	.33**	.25**	.32**
Indirect	.05*	.04**	.02	.00	-.02	.00
Total	.31**	.26**	.32**	.33**	.23**	.32**
Openness						
Direct	-.02	-.03	-.10*	-.17**	-.15**	-.09
Indirect	-.02	-.02	.00	.00	.00	.00
Total	-.04	-.05	-.10*	-.17**	-.15**	-.09
Agreeableness						
Direct	-.11*	-.02	-.17**	-.10	-.03	-.05
Indirect	-.06**	-.03	-.04*	.00	.03*	.01
Total	-.17**	-.05	-.21**	-.10	.00	-.04
Conscientiousness						
Direct	-.02	-.04	-.18**	-.20**	.04	-.01
Indirect	.01	.00	.01	.00	-.02	.00
Total	-.01	-.04	-.17**	-.20**	.02	-.01

* $p < .05$ (two-tailed).

** $p < .01$ (two-tailed).

TABLE 4
Direct Effects of Motivation and Human Capital Variables on Career Success: U.S. Sample

	Extrinsic success			Intrinsic success			
	Remuneration	Ascendancy	CEO proximity	Employability rating	Job satisfaction	Life satisfaction	Career satisfaction
Motivational variables							
Evenings worked	.18**	.05	.05	.05	-.01	.00	.02
Hours worked	.11**	.07*	.02	.05	.05	-.02	.02
Hours of work desired	.10**	-.01	.02	.00	.00	.06	-.02
Work centrality	.00	.03	.01	-.05	.04	-.16**	-.04
Human capital variables							
Director	.13**	.03	.02	.04	.03	-.01	.02
Graduate degree	-.01	-.14**	-.05*	.00	.06	.04	.03
Education quality	.10**	-.04	.01	.09**	-.01	.00	.02
Ivy League graduate	.15**	-.05	-.01	.05	.01	.03	.00
Business degree	.07	.08*	.11**	-.03	-.10*	-.04	-.08*
Engineering degree	.02	.08*	.02	-.02	-.03	-.02	-.02
Law degree	.13**	-.01	.06*	-.15**	-.04	-.03	-.08*
Job tenure	-.04	-.04	.06*	.00	-.02	-.04	-.09*
Organizational tenure	.07*	-.01	-.16**	-.01	-.03	.07*	.04
International experience	.11**	.09**	.05*	.01	-.03	.04	-.05

Note. Table entries are standardized path coefficients.

* $p < .05$ (two-tailed).

** $p < .01$ (two-tailed).

TABLE 5
Direct Effects of Motivation and Human Capital Variables on Career Success: European Sample

	Extrinsic success			Intrinsic success		
	Remuneration	Ascendancy	CEO proximity	Job satisfaction	Life satisfaction	Career satisfaction
Motivational variables						
Evenings worked	.16**	.07*	.07*	-.02	-.08*	.00
Hours worked	.13**	.08*	.06	.03	-.04	.08
Hours of work desired	.05	.01	.03	.00	-.02	-.09*
Work centrality	.01	-.04	.02	-.01	-.19**	-.04
Human capital variables						
Graduate degree	.06*	-.03	.06*	.02	.01	.00
Economics degree	.15**	.09**	.06	.00	.00	.05
Engineering degree	.02	-.02	.02	-.07	-.01	-.04
Law degree	.04	-.01	-.01	-.03	-.03	-.05
Job tenure	.15**	-.15**	.14**	-.02	-.02	-.06
Organizational tenure	.10**	.22**	.00	.11**	.05	.07
International experience	.03	.06*	.06*	.03	.04	-.01

Note. Table entries are standardized path coefficients.

* $p < .05$ (two-tailed).

** $p < .01$ (two-tailed).

TABLE 6
Direct Effects of the Big Five Traits on Motivation and Human Capital Variables: Both Samples

	Motivation variables				Human capital variables						
	Evenings worked	Hours worked	Hours desired	Work centrality	Graduate degree	Business degree	Engineer degree	Law degree	Job tenure	Organiz. tenure	Inter. experience
U.S. sample											
Neuroticism	.03	.11*	-.09	.02	.01	-.05	-.07	.12*	-.10	-.04	-.06
Extraversion	.15*	.22**	.14*	-.06	-.34**	.02	-.01	-.02	-.04	.00	-.06
Openness	.04	.06	.02	.14**	.24**	-.17**	-.02	.08	-.01	-.05	.10*
Agreeableness	-.14**	-.16**	-.17**	-.12*	.11*	-.03	-.07	.02	-.07	.01	-.12*
Conscientiousness	.01	.07	.00	.12**	.10*	.00	.01	.04	-.02	.01	.07
European Sample											
Neuroticism	.04	-.04	-.16**	-.03	-.04	.02	-.07	-.03	-.02	-.02	.08
Extraversion	.15**	.15**	.13**	.03	-.07	.06	-.01	-.02	-.07	-.03	.16**
Openness	.03	-.01	-.07	.00	.09*	-.06	-.07	.03	-.04	-.08*	.05
Agreeableness	-.12*	-.06	-.12*	-.08	.09*	-.08	-.04	-.05	-.07	-.02	-.07
Conscientiousness	.01	.05	.04	.12**	-.03	.07	-.02	-.10*	-.02	-.05	.06

Note. Table entries are standardized path coefficients. Due to space constraints, minimal significant effects, and that the effects are not available for the European sample, the path coefficients for director, quality of major, and Ivy League-degree are not shown.

* $p < .05$ (two-tailed).

** $p < .01$ (two-tailed).

For there to be indirect effects between personality and career success, a necessary (although not sufficient) requirement is significant associations between career success and the motivation and human capital variables. Therefore, we first establish the existence and pattern of associations between career success and motivation or human capital variables in Tables 4 and 5. Then, we proceed to the key question of this study—whether, and in what way, the Big Five traits associate with extrinsic and intrinsic career success.

Motivation and Human Capital Variables Associated with Career Success

Extrinsic career success. For the U.S. executives (Table 4), remuneration positively associated with the motivation and many of the human capital variables (e.g., education quality, organizational tenure, international experience). The European pattern (Table 5) was similar to the U.S. sample, although job tenure was significant for the European sample, and international experience was nonsignificant. Motivation and human capital significantly related to ascendancy, although not as consistently as remuneration, and with some interesting contrasts between the two samples. International experience was positively associated with ascendancy in both samples, and having a graduate degree was negatively associated with ascendancy among the U.S. executives, perhaps reflecting that those with graduate degrees enter more technical career paths. Job tenure was negatively associated, and organization tenure positively associated with ascendancy among the European but not the U.S. executives. For European managers, rapid promotion means spending less time in each job, but careers may span fewer organizations. Motivation variables showed weak positive associations with CEO proximity in both samples, while human capital variables were significant and positive. In both samples, greater CEO proximity associated with international experience and job tenure (less job switching after reaching high levels). Having a graduate degree associated negatively with CEO proximity among the U.S. executives, but positively for the Europeans. The employability measure was available for the U.S. sample only (Table 4) and showed few relationships with motivation and human capital variables. The search firm raters may have tried to capture fewer observable characteristics to complement the existing information available in the search firm records.

Intrinsic career success (job, life, and career satisfaction). Motivation and human capital variables were only moderately associated with intrinsic career success, in both samples. Work centrality was most consistent, negatively associating with life satisfaction in both samples, perhaps reflecting an overemphasis on work. Among U.S. executives a business degree associated with lower job satisfaction, and lower career satisfaction was associated with a business or law degree and greater job tenure (perhaps due to a career plateau). Organization tenure, in contrast, positively associated with life satisfaction for U.S. executives, and job satisfaction for Europeans.

Overall, the relationships in Tables 4 and 5 support prior research (e.g., Judge et al., 1995) and reveal interesting distinctions between the United States and Europe. The results suggest that the extended career success model of Fig. 1

captured associations between human capital, motivation, and career success that are sufficient to support indirect personality effects through motivation and human capital. We now discuss the indirect and direct effects for each personality dimension.

Neuroticism and Career Success

Among the extrinsic success measures, neuroticism associated negatively with remuneration and ascendancy, in the U.S. sample (Table 2), partially supporting Hypothesis 1a, and solely through direct effects, failing to support the hypothesized indirect effects. This was not the case in the European sample (Table 3), where neuroticism had nonsignificant direct, indirect, and total associations with all extrinsic success measures. The nonsignificant indirect effects in both samples are not explained by weak relationships between human capital and career success, but by mixed and nonsignificant effects of neuroticism on both motivation and human capital variables (Table 6).

For intrinsic success, European and U.S. results were more similar, and consistent with the U.S. extrinsic success pattern. Tables 2 and 3 show significant direct and total negative effects for neuroticism with all intrinsic career success measures, for both samples, supporting Hypothesis 1b, but failing to support the hypothesized indirect effects.

Extroversion and Career Success

Extroversion also associated quite differently with extrinsic career success between the two samples. Among the U.S. managers (Table 2), extroversion had little direct or indirect association with extrinsic career success. In contrast, for the Europeans (Table 3) all of the total and direct effects were significant and positive, as were two of three indirect effects. Thus Hypothesis 2a was supported for the European but not for the U.S. executives. The contrast between the two samples suggests that extroversion is more consistently and directly rewarded among the Europeans, both directly and through human capital and motivation. However, both samples revealed a significant indirect positive effect on ascendancy. For the U.S. executives, this seems to reflect a path through greater hours worked and less likelihood of having a graduate degree. For the Europeans, the path from extroversion to both ascendancy and remuneration also reflects greater evenings and hours worked, but uniquely reflects greater international experience.

The results for intrinsic success and extroversion were more consistent between Europe and the United States. Tables 2 and 3 show that intrinsic success positively associates with extroversion, supporting Hypothesis 2b, and the effects were solely direct.

Openness and Career Success

Openness revealed the fewest significant total effects, and the least consistent pattern of all the personality dimensions. Among the Europeans, effects were direct and negative on CEO proximity and both job and life satisfaction. Among U.S. executives, the effects were indirect and positive for remuneration but negative

for ascendancy. The positive indirect effect on remuneration seems to reflect a path through greater international experience. The weak negative indirect effect on ascendancy seems to reflect a path through having a graduate degree and not having a business degree, offset by having international experience.

Agreeableness and Career Success

Tables 2 and 3 reveal agreeableness to be associated negatively with extrinsic career success. For both samples agreeableness exhibited negative direct, indirect, and total associations with remuneration. CEO proximity was negatively associated with agreeableness, with direct effects among U.S. executives, and both direct and indirect effects among the Europeans. Among the U.S. executives, this was also true for ascendancy and for the direct effect on employability and CEO proximity. In general, more agreeable executives achieve less extrinsic success, over and above any effects on human capital and motivation variables. Among the Europeans, the indirect effects for both remuneration and CEO proximity seem to reflect a path through which more agreeable managers work fewer evenings and less frequently have a business degree, offset by more frequently having a graduate degree. Among the U.S. sample, the negative indirect effects on extrinsic success seem to reflect a path through which more agreeable managers have lower desired and actual work time, are more likely have a graduate degree, and have less international experience.

The two samples differ regarding agreeableness and intrinsic success, with negative direct effects among the U.S. executives for job and career satisfaction, but nonsignificant effects for the Europeans. Being more agreeable seems to associate with dissatisfaction for U.S. managers, beyond its effects on their human capital and motivation, while European managers' satisfaction seems unaffected.

Conscientiousness and Career Success

The bottom sections of Tables 2 and 3 contain the results for the final personality dimension—conscientiousness. Conscientiousness effects were all negative, and only direct, with a different pattern between the two samples. For the U.S. workers, conscientiousness reveals negative associations with all intrinsic success dimensions, but none of the extrinsic dimensions. For the Europeans, the negative associations reached significance for one extrinsic success factor—CEO proximity—and one intrinsic success factor—job satisfaction. These results failed to support Hypothesis 3 for the U.S. sample and were contradictory to the hypothesis for the Europeans. The lack of indirect effects failed to support the second part of Hypothesis 3 regarding mediation.

DISCUSSION

This study set out to extend prior research associating career success with motivational and human capital variables by: (1) Broadening the set of career success indicators to include CEO proximity, employability ratings, and life satisfaction; (2) Incorporating a comprehensive array of enduring personality traits to

complement the traditional array of human capital and motivation factors; and (3) Comparing European and U.S. managers. Each of these extensions provided unique new insights into career success, with some surprising findings.¹

Extending the Dimensions of Career Success

Adding CEO proximity revealed a different pattern from the two more typically studied career success variables. It exhibited fewer significant direct and indirect relationships than remuneration or ascendancy, suggesting that the array of motivation, human capital, and personality variables is more relevant to more “externally” anchored career success measures than to hierarchical position “internal” to the current organization. CEO proximity did reveal a different relationship with openness and conscientiousness, comparing the U.S. and European samples, which is especially interesting because these variables are so infrequently studied.

Employability ratings were available only for the U.S. sample, and the direct and indirect effects with employability ratings were similar to remuneration and ascendancy, but reached statistical significance only for agreeableness. It would appear that future research might strive to create better measures of this construct.

Life satisfaction behaved, for the most part, similarly to job and career satisfaction, although revealing a stronger negative relationship with work centrality (Table 4), perhaps because it captured tendencies to overemphasize work. The similarity between life and job/career satisfaction patterns revealed here reinforces previous research, and may be especially true for managers and executives, who may well have a closer association between job, career, and life outcomes. This is not to say that life satisfaction is not a useful career success measure, but we may expect it to behave more distinctly among other types of workers.

Are Personality Effects Mediated by Human Capital and Motivation?

Our results revealed far more significant direct than indirect effects, but a number of interesting indirect effects emerged. Generally, the indirect effects were more prevalent for extrinsic success dimensions than intrinsic. This is logical, given that extrinsic success elements are more objective, and thus can be more easily tied to the objective motivation and human capital variables through remuneration and promotion patterns. The effects of motivation and human capital variables on career success outcomes replicated prior research, and were similar in both samples, suggesting ample potential for personality to associate indirectly with career success through these variables.

¹ We did not include three categories of variables from the Judge et al. (1995) study (demographic, organizational, and industry/region) in the LISREL model. The model already included 230 and 167 freed parameters for the U.S. and European samples, respectively. Adding the 22 additional control variables would more than double the number of estimated parameters, which would violate Bentler's (1985) recommended rule of thumb of five observations for every estimated parameter. To investigate the effect of including all the control variables on the results, we regressed each career success variable on all the variables in the Judge et al. study, as well as the Big Five traits. The results for the Big Five traits were similar to those reported here. Only 7 of 65 links changed significance across the two samples, and no significant hypothesized linkage in the LISREL model became nonsignificant when the additional control variables were added.

Generally, the motivation variables of desired and actual time-worked, and having a graduate degree were most often related to the personality dimensions. Work centrality associated with more personality dimensions among U.S. managers than European managers. International experience presented an interesting contrast, in that it was significantly more likely for U.S. managers who had higher openness and lower agreeableness, while among Europeans it was more likely only for more extroverted managers. This supports prior suggestions that openness associates with taking international assignments, but only for the U.S. sample.

Agreeableness and extroversion presented the most consistent indirect effects across both samples. Agreeableness generally associated negatively with extrinsic success (remuneration and CEO proximity in Europe, remuneration and ascendancy in the United States), while extroversion revealed several positive indirect effects with extrinsic success. For both traits, the indirect effects reflected associations with actual and desired time worked (negative for agreeableness, positive for extroversion). This supports propositions (e.g., Tharenou, 1997) that individuals seek out situations consistent with their personality traits. Extroverted managers may seek work because it offers opportunities to engage in extrovert-like behaviors, while agreeable managers avoid work that conflicts with agreeable behaviors. This is supported by the finding that agreeableness (negatively) and extroversion (positively) associated with satisfaction among these executives. This result is consistent with earlier findings regarding Type A personality, which is frequently associated with longer working hours (Dearborn & Hastings, 1987; Tang, 1986) and lower agreeableness.

The positive indirect effect of openness on remuneration for the U.S. sample reflected a path through greater international experience, which also was consistent with prior research (Montagliani & Gialcone, 1998; Spreitzer et al., 1997). Interestingly, the negative indirect association between openness and ascendancy in the U.S. sample is consistent with prior research linking openness to greater academic achievement. In this case, more open individuals were more likely to have a graduate degree which, in this sample, negatively associated with ascendancy.

In sum, the model in Fig. 1 provides insights into the underlying structure of the relationship between personality and career success by explicitly incorporating the indirect effects through human capital and motivation. This provides a more detailed explanation for previously observed patterns of personality and career success. Moreover, this greater detail was frequently distinctive between the European and U.S. samples. It appears that future personality research might profitably incorporate indirect effects, and future research on motivation and human capital and career success would benefit from incorporating dispositions.

Direct Personality and Career Success Associations

Conscientiousness has been shown to consistently and positively relate to job performance (Barrick & Mount, 1991; Salgado, 1997; Tett et al., 1991), but our findings for career success revealed a different pattern. Conscientiousness had nonsignificant associations with most extrinsic success elements, and the only significant effect was negative (CEO proximity for Europeans). Why the difference?

Perhaps high-level executives have not been well represented in previous research. Also, performance ratings are not strongly correlated with career success in prior research. One facet of conscientiousness (achievement) might positively relate to extrinsic career success while the other facet (dependability) may negatively or insignificantly relate, producing an overall nonsignificant effect. We analyzed the two facets separately, and found that results did not support this pattern. Conscientiousness appeared simply to make little positive or negative difference in extrinsic executive success.

An even more striking difference from prior research on job performance is our finding that conscientiousness consistently and *negatively* related to all intrinsic success measures in the U.S. sample, and to job satisfaction among Europeans. Because conscientiousness did not negatively affect extrinsic success, this does not appear to be a simple reaction to lower career rewards. Rather, it suggests that aspects of executive work may directly create discomfort or unease among more conscientious individuals. Perhaps it is difficult to be dependable, organized, and goal-directed as an executive, due to conflicting demands, constant change, and shifting priorities. The fact that European managers exhibited this negative effect only for job satisfaction may reflect less generalizing from their job to their career or life. Future research may profitably focus on exploring sources of dissatisfaction among executives beyond extrinsic rewards, whether these sources vary with conscientiousness, and whether this varies by nationality.

Agreeableness might, at first glance, be considered a valuable trait at work, but our results found agreeableness to be among the most consistently negative influences on extrinsic success in both samples. This is consistent with earlier results regarding affability and ascendancy (Howard & Bray, 1988). It is also consistent with prior observations that agreeableness may be seen among executives as naïve, docile, and likely to follow rather than lead. The value of comparing the United States and Europe was reinforced by the results for agreeableness and intrinsic success. There was a corresponding negative direct effect on intrinsic success for the U.S. sample, but not for the Europeans. If European management systems, compared to those of the U.S., emphasize a desire to reduce ambiguity, build consensus, and limit managerial autonomy (e.g., Hammer, 1999), then more agreeable managers may find the European executive environment a better fit, and less consistently frustrating, stressful, or unpleasant.

For neuroticism and extroversion, unlike conscientiousness and agreeableness, the results were more consistent with prior research and theory, with neuroticism negatively associated with intrinsic success and extroversion positively associated with intrinsic success. This is consistent with prior research showing that neuroticism associates with negative reactions to life and work situations particularly when they are demanding or stressful, and that extroversion reflects a general tendency to experience positive emotions. They also support the proposition that extroverts may be more favorably received, or more compatible with managerial or executive roles (e.g., Aryee et al., 1994; Bretz & Judge, 1994).

There also were intriguing differences for neuroticism and extroversion between Europe and the United States. Neuroticism negatively associated with extrinsic

success for the U.S. sample but not for the Europeans, while extroversion positively associated with extrinsic success for the Europeans but not for the U.S. sample. These findings suggest that certain traits are either more effective or perceived as important in the respective cultures. Magnus, Diener, Fujita, and Pavot (1993) have found that individuals who score high on neuroticism and extroversion experience more actual negative and positive life events, respectively, suggesting that individuals choose situations that reinforce their dispositional tendencies. American executives higher in neuroticism may place themselves in situations where failure, anxiety, and disappointment are likely, and vice versa for extroverted Europeans. American companies also may reward positive self-image (low neuroticism), while sociability and energy (high extroversion) are rewarded more by European companies. This is consistent with the idea that the United States is lower on uncertainty avoidance, perhaps making self-confidence more important in an environment of ambiguity and more deviant ideas. It is also consistent with the higher “collectivist” and more collaborative and multi-constituent management environment in Europe, which may make sociability and energy key success factors. Although we cannot fully account for these differences, they reinforce the importance of exploring cross-cultural generalizability. Future research should attempt to replicate these findings and, if replicated, explain the differences between the U.S. and European results.

Limitations

With regard to our measures, the employability ratings were taken from an existing search firm system; we cannot definitively identify its underlying construct. Contrary to our other measures, the reliability of agreeableness was low among the Europeans, although this did not preclude finding both direct and indirect effects with the extrinsic success variables.

Common method variance is always a concern when variables are measured in a single survey, but many of the linkages in our model reflected variables that were measured with archival data (e.g., remuneration and employability rating for the U.S. sample). Our results were consistent regardless of whether variables were measured with the same source. Moreover, Crampton and Wagner (1994) found measures of career advancement to be relatively free from effect size inflation due to common method variance.

Our samples were large, but reflected a relatively low response rate. Respondents and nonrespondents were not different with respect to archival career success measures, but this does not preclude personality differences. The fact that we sampled a large number of executives employed across many organizations and industries bolsters the generalizability of the results. It is possible that our findings may not generalize to nonmanagerial samples, so further research to replicate the findings in other samples is advisable.

Obviously, career success is a process that unfolds over time, and our study was cross-sectional. Personality effects may depend on career stage and the time interval studied. Such temporal effects may well offer valuable enhancements to our present results. One potential limitation of cross-sectional designs—that the

independent and dependent variables are reciprocally related—seems less of a problem. The Big Five personality traits have strong genetic origins and are quite stable over time (Costa & McCrae, 1988; Digman, 1989; McCrae & John, 1992). Thus, it seems reasonable to suggest that the relationship runs from personality to career success, not vice versa.

Future research should investigate other possible mediating influences, such as executive influence behaviors, career management strategies, and self- (or task-) efficacy, and their relationships to personality. This may illuminate the effectiveness of different individual career management strategies, and organizational career development programs. Longitudinal analysis of personality as it affects mobility patterns, attitudes, and career outcomes also appears fruitful, in light of the significant cross-sectional results reported here.

Finally, our comparison between Europe and the United States revealed interesting differences, but “static group comparisons” allow limited control over unobserved factors that correlate with national differences (Dowling, Welch, & Schuler, 1999; Malpass, 1977). Consistent with prior recommendations (Malpass, 1977), we included the array of motivation and human capital variables, which seemed to capture several underlying differences between European and U.S. managers. The consistency of our findings across multiple success measures and the fidelity of the indirect effects with existing theory and research are encouraging. Our findings vividly demonstrate the value of future research incorporating direct measures of labor markets, cultures, social values, and traditions.

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