Information Exchange Article

Validity of Résumé Reviewers' Inferences Concerning Applicant Personality Based on Résumé Evaluation

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Recruiters infer personal traits from job applicants' resumé and use these inferences in evaluating job applicants' employability. No research to date, however, has determined if resumé reviewers' inferences of applicants' personality drawn solely from resumé biographical data are valid. In the present study, resumé reviewers ($N = 52$) examined one of two applicant resúmes and then described the applicant's personality based on the Big 5 taxonomy. Validities of reviewers' inferences concerning applicant personality were assessed by correlating resumé reviewers' judgments with applicants' self-reported Big 5 personality scores. Results suggested that valid personality inferences are possible based solely on resumé evaluation. We also found evidence suggesting that attending a brief training session may enhance reviewers' accuracy when inferring applicants' personality from resumé information.

Introduction

Resumé evaluation has been identified as the initial phase of personnel selection, and, as a result, it is a practice used even more frequently than employment interviews (Dipboye & Jackson, 1999). On this basis, resumé reviewers serve as an organization's gatekeepers whose primary task involves deciding which job applicants will receive further consideration and which will be turned away. Indeed, this conception seems not far from the truth. Cable and Judge (1997) found, for example, that recruiters' impressions of applicants' employability were correlated ($r = .64$) with an organization's decision to offer a job. Results such as these have prompted researchers to design studies to empirically determine what it is about applicants that influence recruiters' impressions of their employability. In particular, one piece of applicant information that has received such attention is the role of applicants'

resumé data in recruiters' employability evaluations (e.g., Brown & Campion, 1994; Thoms, McMasters, Roberts, & Dombkowski, 1999).

Researchers have suggested that applicants' resumé information is a specific type of biographical data (biodata), in that resumé biodata represents a culmination of applicants' life experiences (e.g., education and work experience) deemed applicable for a work context (Brown & Campion, 1994; Rubin, Bommer, & Baldwin, 2002). Analogous to validated, job-specific biodata instruments, resumé biodata are believed to be useful in characterizing or predicting applicants' psychological attributes, such as abilities, interests, and personality. For instance, studies have found that the resumé biodata reported on applicants' resúmes is significantly correlated with applicants' dispositions and personality (Cole, Feild, & Giles, 2003b; Rubin *et al.*, 2002). Research has also shown recruiters' inferences of applicants' dispositional traits based solely on resumé review impact their judgments regarding applicant employability (Brown & Campion, 1994; Cole, Feild, Giles, & Harris, 2004). Despite extant research that has shown recruiters form impressions of applicants' personal traits during resumé evaluation and, subsequently, employ these

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inferences to form first impressions of applicants' suitability, apparently no study has been conducted on the validity of such inferences.

The present study was designed to address this gap in the literature. Specifically, the main purpose was to examine the validity of resumé reviewers' inferences of applicants' personality following a review of applicants' resúmes. A second purpose was to determine if a brief training program on inferring applicant personality from resumé information might enhance the validity of resumé reviewers' inference making.

To address these objectives, we asked a group of undergraduates to review one of two actual applicant resúmes and judge the extent to which 25 personality adjectives (based on the Big 5 taxonomy) accurately described the applicant's personality. The resumé reviewers judged the applicant's personality at two points in time (time 1 and, 8 weeks later, time 2). In between these two time periods (4 weeks after time 1), the resumé reviewers were trained to make them more aware of information commonly reported on applicant resúmes and that has been found to be correlated with applicants' personality (Cole, Feild, & Giles, 2003a, 2003b). We then examined the correlations between the resumé reviewers' inferences of applicant personality (pre- and post-training) and applicants' self-reported scores on a personality inventory.

Method

Participants

Resumé reviewers were 52 undergraduates enrolled in a capstone strategic management course in a college of business. Participants' gender was roughly equal (56% male), 85% were Caucasian, and averaged 21 years of age ($SD = 1.2$). Most (73%) reported having previously interviewed for a full-time job, with 62% of participants having received at least one job offer.

Stimulus Material and Task

The study's stimulus materials were (a) the resúmes of two job applicants and (b) a position hiring scenario and resumé rating booklet. As part of an earlier study, graduating seniors provided us with their actual resumé and completed the NEO-FFI (Costa & McCrae, 1992) personality inventory. From this group of resúmes, we selected two to include in this study.

The position-hiring scenario began by stating that this hiring scenario could occur in many organizations. Resumé reviewers were told to review the hypothetical situation and to do the following:

Step 1: Assume that you are employed as a college recruiter for a large organization that has successfully hired previous graduates from [university name]. Once again, you have

been asked to review [university name] graduating senior resúmes for a managerial trainee position. In addition, to help you with your screening duty, your HR department has provided you with a job description of the managerial trainee position.

Step 2: Now, read the job description to familiarize yourself with the knowledge, skills, and abilities needed to successfully perform the job. Then, assume you are the recruiter and assume that you have just received this resumé from a new college graduate who is applying for the open position. The applicant resumé is enclosed with your resumé-rating booklet.

Resumé Reviewers' Inferred Applicant Personality Traits

In Step 3, resumé reviewers were told to think about the extent to which the information reported on the resumé reflects the applicant's personality. Reviewers judged the applicant's personality attributes using adjective trait rating scales developed to assess the Big 5 taxonomy of personality. Reviewers indicated the extent to which 25 personality adjectives (five per personality trait) described the applicant (1 = strongly disagree; 6 = strongly agree).

Costa and McCrae (1992) reported that 21 of the 25 adjectives correlated ($p < .001$) with their respective Big 5 personality dimension ($p = .49$). The remaining four adjectives were taken directly from Goldberg's (1992) inventory. Past studies (e.g., Barrick, Patton, & Haugland, 2000) have chosen similar adjectives to examine the validity of observers' ratings of individuals' personality. Previous research (available from the first author) has shown that the adjective trait rating scales were internally consistent, exhibited acceptable test-retest reliability coefficients, and displayed convergent validity with the NEO-FFI (Costa & McCrae, 1992), a widely used Big 5 personality inventory.

The independent variables in the study were applicants' Big 5 personality traits as inferred by the resumé reviewers and measured by the 25 adjective traits. The traits were neuroticism ($\alpha_{\text{time 1}} = .60$, $\alpha_{\text{time 2}} = .65$), extraversion ($\alpha_{\text{time 1}} = .89$, $\alpha_{\text{time 2}} = .92$), openness to experience ($\alpha_{\text{time 1}} = .88$, $\alpha_{\text{time 2}} = .87$), agreeableness ($\alpha_{\text{time 1}} = .84$, $\alpha_{\text{time 2}} = .82$), and conscientiousness ($\alpha_{\text{time 1}} = .87$, $\alpha_{\text{time 2}} = .88$). Intraclass correlation coefficients (ICC1) for recruiters rating the same applicant resumé at time 1 and time 2 were: neuroticism, .03 and .07; extraversion, .13 and .33; openness to experience, .39 and .36; agreeableness, .15 and .00; and conscientiousness, .18 and .38, respectively.

Applicants' Personality Traits

The dependent variables were applicants' Big 5 personality trait scores assessed by the NEO-FFI (Costa & McCrae, 1992). The NEO-FFI contains 12-item scales for each of

five personality traits. Reliability and validity information can be found in Costa and McCrae (1992). Applicant 1's self-reported scores on the personality inventory were neuroticism (2.8), extraversion (3.0), openness to experience (3.2), agreeableness (4.1), and conscientiousness (4.0); applicant 2's self-reported scores were neuroticism (1.6), extraversion (4.6), openness to experience (4.2), agreeableness (3.5), and conscientiousness (4.7).

Procedure

During a regular class period (time 1), participants were given at random an envelope that contained one of the two applicant resumés, the position-hiring scenario, and the resumé rating booklet. Four weeks later, the students were "trained" to be cognizant of resumé information and the relationships of certain resumé items with applicants' personality traits. After an additional four weeks (time 2), the students again received an envelope that contained the identical applicant resumé as time 1, the position-hiring scenario, and the resumé-rating booklet.

The Training

A 45-min lecture was developed specifically for the current study. We covered topics related to Big 5 personality traits, resumé screening, and the association between resumé information and applicants' personality. Content of the training was based on empirical studies examining resumé items' relationships with applicants' subjective attributes and personality traits (Brown & Campion, 1994; Cole *et al.*, 2003a, 2003b; Rubin *et al.*, 2002).

Data Analysis

We first computed the correlation (validity) coefficients between resumé reviewers' inferences of applicants' personality and applicants' self-reported personality. To enable the computation, we first needed to assign the applicant's self-reported personality scores to each independent observer who made personality inferences based on one of the two applicant's resumés. That is, resumé recruiters that were randomly assigned applicant 1's resumé were also assigned applicant 1's self-reported personality scores and resumé recruiters that were randomly assigned applicant 2's resumé were similarly assigned applicant 2's self-reported personality scores. With the resumé reviewers' personality inferences correctly matched with the appropriate self-reported personality scores, we then computed validity coefficients based on resumé reviewers' inferences (both before and after training) and the applicants self-reports.

We also wished to empirically determine if the after training validity coefficients were significantly higher than their before training counterpart. Because the validity coefficients we wished to contrast were computed across

the same individuals, we used a test for dependent correlations (Bobko, 1995, pp. 43–57).

Results

Correlation or validity coefficients between resumé reviewers' inferences of applicants' personality based solely on their review of applicants' resumés and applicants' self-reported personality scores are shown in Table 1. Validity coefficients are shown for resumé reviewers' personality inferences both before and after they participated in resumé review training. Even before the training occurred, there was evidence that the resumé reviewers made valid inferences of two applicant personality traits. Reviewers' inferences of applicants' openness to experience ($r = .44$, $p < .01$) and conscientiousness ($r = .33$, $p < .01$) were correlated with applicants' personality self-reports.

Table 1 shows that the validity coefficients associated with two personality traits improved significantly when compared to their before-training coefficients. Testing the equality of the dependent correlations showed that the validity coefficients concerning extraversion ($t = 3.34$, $p < .01$) and conscientiousness ($t = 2.63$, $p < .01$) improved after training and were significantly and positively correlated with applicants' personality self-reports. Resumé reviewers' inference of neuroticism showed the most dramatic improvement ($t = 8.52$, $p < .01$); the validity of the inference changed from a negative validity coefficient to a positive one. However, the neuroticism coefficient was

Table 1. Validity coefficients (r) for resumé reviewers' inferences of applicants' personality

Applicant personality trait	Validity of resumé reviewer ratings before training		Validity of resumé reviewer ratings after training	
	N^a	r^b	N^a	r^b
Neuroticism	52	<u>-.19</u>	49	<u>.21</u>
Extraversion	52	.22	49	<u>.39**</u>
Openness to experience	52	.44**	49	<u>.44**</u>
Agreeableness	52	<u>-.26*</u>	49	<u>-.11</u>
Conscientiousness	52	<u>.33**</u>	49	<u>.45**</u>

Notes: All tests are two-tailed. ^aSample size represents number of resumé reviewers. ^bAn underlined validity coefficient indicates that the before and after validity coefficients for a specific personality trait are significantly different ($p < .05$). A bolded and underlined validity coefficient indicates that the before and after validity coefficients for a specific personality trait are significantly different ($p < .01$). * $p < .05$. ** $p < .01$.

not statistically significant. Reviewers' inference regarding applicants' agreeableness also improved ($t = 2.26, p < .05$), but, like neuroticism, it remained inaccurate as suggested by the nonsignificant validity coefficient.

These latter findings raise two important considerations. First, although the before and after training validity coefficients for neuroticism showed a dramatic change of nearly 40 points of correlation and showed a change in sign (in the expected direction), it is possible that this finding was the result of chance. Second, the sample used for our analyses was small and, therefore, the effects of sampling error must be considered when interpreting the present study's findings.

Discussion

A decade has passed since Brown and Campion's (1994) call for research on the validity of recruiters' inferences of applicant personality drawn from resumé information. To our knowledge, no published study has addressed Brown and Campion's call by designing a study to empirically determine if valid personality inferences are possible based solely on resumé evaluation. We, therefore, conducted a study as an initial effort to address the issue. Results suggest that valid personality inferences may be possible. The present findings further imply that knowing what to look for on an applicant's resumé might help one's ability to make valid inferences.

Research is needed to determine if our results will generalize to actual, organizational recruiter samples. If organizational recruiters were able to make valid personality inferences, various practical implications could be anticipated. First, because applicants typically mail or send their resumés electronically, if resumé information were linked to applicant's personality, substantial savings could accrue to an organization before investing in more-expensive, time-consuming selection techniques requiring on-site applicant presence. Second, resumé information generally possesses substantial face validity from an applicant's perspective. Applicants expect to submit a resumé, and, therefore, resumés may also offer employing organizations benefits involving legal focal points and perceived fairness (cf. Elkins & Phillips, 2000). Third, personnel selection research has increasingly focused on the importance of person-job, person-team, and person-organization fit (Anderson, Lievens, van Dam, & Ryan, 2004). In their review, Anderson *et al.* (2004) posed the following query, "how can organizations select for person-job, person-team, and person-organization fit concurrently" (p. 493). Our position is that resumé biodata may be a pragmatic, prescreening method to evaluate applicants' fit at each of these levels.

Clearly, more substantive research designs are needed to determine if the present findings generalize to an actual employment situation. Such future research should address the limitations of the present study. First, a control group was

not included and, therefore, we cannot be certain that the training was in fact the reason why resumé reviewers' inferences improved at time 2. Second, resumé reviewers were undergraduate students with little or no personnel selection experience. Previous studies, however, have found little difference between student volunteers and professional raters in tasks such as ours which mimic the early stages of the employment selection procedure (e.g., Watkins & Johnston, 2000). Nonetheless, we look forward to future research that extends the present findings to an organizational sample.

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