Recruiters' Perceptions and Use of Applicant Résumé Information: Screening the Recent Graduate

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Despite résumés being evaluated as an initial step in most employment decisions for professional-level job openings, researchers have not adequately examined the influence that applicants' résumé qualifications may have on recruiters' initial impressions of applicants' employability. Based on prior research, we hypothesised that recruiters' perceptions of job applicant employability will be associated with varying levels of job applicants' academic qualifications, work experience, and extracurricular activities as reported on applicants' résumés. Experienced recruiters (N = 244) evaluated 122 actual applicant résumés of recent or soon-to-be college graduates. Results supported our hypotheses, indicating that recruiters' perceptions of applicants' academic qualifications, work experience, and extracurricular activities interacted to predict recruiters' perceptions of applicants' employability.

Alors que les curriculum vitae sont évalués lors de l'étape initiale de la plupart des procédures de recrutement pour pourvoir des nouveaux emplois d'un niveau professionnel élevé, les chercheurs n'ont pas suffisamment étudié l'influence des qualifications inscrites dans le curriculum vitae sur les premières impressions des recruteurs quant à l'employabilité des candidats. Basée sur une recherche antérieure, notre hypothèse pose que les perceptions des recruteurs de l'employabilité des candidats à un emploi varieraient selon les qualifications

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académiques du candidat, l'expérience professionnelle et les activités extraprofessionnelles telles qu'elles sont présentées dans le curriculum vitae. Des recruteurs expérimentés (N=244) ont évalué 122 curriculum vitae de candidats réels récemment ou sur le point d'être diplômés de l'université. Les résultats confirment nos hypothèses. Les perceptions des recruteurs quant aux qualifications universitaires des candidats, leur expérience professionnelle et leurs autres activités interagissent et permettent de prédire les perceptions que les recruteurs ont de l'employabilité des candidats.

INTRODUCTION

Employee selection has been an important issue to practitioners and academic researchers in both the United States and European-based communities (Anderson, Lievens, van Dam, & Ryan, 2004; Salgado, 2001). Although the employment interview and its use in selection has attracted much attention from researchers (e.g. Huffcutt & Arthur, 1994; Huffcutt, Conway, Roth, & Stone, 2001; McDaniel, Whetzel, Schmidt, & Maurer, 1994), an important question has yet to be fully explored—how and why do certain job applicants get invited for pre-employment interviews and/or testing in the first place?

Most likely, job applications and résumés play a major role in determining who is subsequently invited for additional screening. Schmidt and Zimmerman (2004), for example, remarked that the employment interview was virtually a part of every hiring process and, yet, they noted résumés are used even more frequently in selection (p. 553). In support, earlier researchers (Dipboye, Fontenelle, & Garner, 1984; Pannone, 1994) have also suggested that the prescreening of applicants' résumés by recruiters is an important phase of the personnel selection process. Indeed, we are hard pressed to think of an organisation that chooses not to initially screen applicants' résumés to determine if the applicants possess requisite knowledge, skills, abilities, and other characteristics required for employment. Yet, despite the universality of résumé screening and resources devoted to it in pre-employment screening, we still lack a solid understanding regarding the résumé evaluation process (Brown & Campion, 1994; Thoms, McMasters, Roberts, & Dombkowski, 1999).

In most employment contexts, for every applicant interviewed, there are several who submitted résumés but were excluded from the applicant pool for any number of reasons. Consequently, understanding how recruiters integrate applicants' résumé information is critical because a decision not to invite applicants to preliminary interviews is equivalent to a rejection. Such a research gap between recruitment researchers and practitioners is particularly striking given that personnel selection models have identified résumé screening and evaluation as the initial stage of pre-employment (Dipboye, 1992; Dipboye, Smith, & Howell, 1994) and applicants' reactions to résumé evaluation have been found to be very positive across American and European samples (Marcus, 2003; Moscoso & Salgado, 2004; Steiner & Gilliland, 1996).

Furthermore, given that employment guidelines exist in both the United States (*Principles for the Validation and Use of Personnel Selection Procedures*, 2003; *Uniform Guidelines on Employee Selection Procedures*, 1978) and Europe (*European Employment Guidelines*, 2003) concerning employment decision procedures, more research devoted to investigating pre-employment assessments, particularly résumé evaluation, is needed.

For this reason, the purpose of the present study was to investigate relationships between recruiters' pre-interview assessments of applicant résumé information and estimates of applicants' employability for relevant job openings. In examining the linkages between recruiters' pre-interview assessments and employability ratings, this study contributes to the literature in several ways. First, most prior résumé research has focused on simple relationships between applicants' résumé qualifications and recruiters' impressions, thereby overlooking more complex, interactive models (Ogilvie & Schmitt, 1979; Thoms et al., 1999). It is likely, however, that as recruiters process the content reported on applicants' résumés, recruiters' perceptions of résumé content interact in ways that may increase or decrease applicants' chances of further consideration. As a result, we focus on the interaction effects of résumé content instead of only simple associations between résumé content and employability ratings. We suggest such an exploration contributes to a better understanding of how recruiters process and interpret applicants' résumé qualifications when forming initial impressions of applicant employability.

Second, prior research has apparently failed to distinguish between recruiters' judgments regarding the relevance, i.e. the importance of résumé item information in recruiters' perceptions of applicants, and the actual presence of specific résumé information reported by applicants. In this study, we assessed both level of importance and actual presence of résumé content and examined their relationships with recruiters' employability ratings. Finally, whereas earlier studies have relied primarily on experimental data, we employed a field methodology using experienced recruiters and actual applicants' résumés. Thus, in the present research, we sought to extend previous work by examining how interactions among academic qualifications, work experience, and extracurricular activity information appearing on new labor market applicants' actual résumés was associated with actual recruiters' ratings of applicants' employability. As such, this study represents one of the first forays into the interactive effects of résumé content on recruiter employability ratings.

RECRUITER EMPLOYABILITY JUDGMENTS

Several social cognitive theories may explain how résumé content categories are used in the pre-screening process to guide recruiters' evaluation processes. One important theory is that of attribution theory (Fiske & Taylor, 1991;

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Heider, 1958), which posits that people draw upon certain informational cues in an attempt to determine whether the ultimate cause of behavior is due to internal (dispositional) or external (situational) factors. This theory plays a key role in selection whereby hiring personnel are actively seeking information about an applicant's skills and abilities. Previous research suggests that attribution theory is helpful in explaining conclusions drawn by hiring personnel in employment interviews (e.g. Silvester, 1997), from applications (e.g. Dipboye et al., 1984) and letters of recommendation (e.g. Knouse, 1983). Similarly, we suggest that recruiters use résumé information to form causal judgments regarding whether or not applicants possess certain work-related skills and abilities. That is, recruiters use résumé information to draw conclusions about applicants' abilities, motivation, personality, and job fit. Many recruiters are likely to engage in a fundamental attribution error (Ross, 1977) in concluding that the presence (or absence) of certain résumé information is due solely to applicant dispositional factors. Thus, the presence or absence of information, regardless of its relation to actual skills or abilities, may weigh heavily in a recruiter's overall assessment of employability (Knouse, 1988).

In a similar vein, social-cognitive researchers have shown that cognitive schemas (also referred to as cognitive maps and schemata) also influence selection decisions. Schemas are developed from previous experiences and represent the organisation of knowledge that helps individuals derive understanding of their environment (Hodgkinson, 2003). In addition, schemas include the features or attributes associated with a particular category of membership. Specifically, role schemas contain sets of organised knowledge of role expectations, that is, how the observer expects an individual occupying a certain role to behave. Once an individual, such as a job applicant, is placed into a role, observers' role schemas are frequently used for evaluation and serve as a basis to predict future behavior of the individual. A key responsibility of the recruiter is to determine the fit of the applicant to the job. In doing so, it is likely that recruiters not only combine résumé information to attribute certain characteristics to and make causal judgments about applicants (Brown & Campion, 1994), but also employ role schemas when determining applicants' suitability for a specific job position. That is, recruiters utilise their developed schemas to match their implicit understanding of the job requirements to information presented in an applicant's résumé.

HYPOTHESES DEVELOPMENT

Over the last three decades, studies have consistently identified relationships between types of information generally reported on résumés and recruiters' perceptions of applicant employability (Bright & Hutton, 2000; Campion, 1978; Hakel, Dobmeyer, & Dunnette, 1970; Knouse, 1994; Thoms et al., 1999). For

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example, Singer and Bruhns' (1991) lab study examined the effects of applicants' academic qualifications and work experience. After reviewing manipulated applicants' résumés and a videotaped interview, hiring managers placed the greatest weight on applicants' work experience. Applicants with high levels of work experience and high academic achievement were most likely to be hired, and applicants with low work experience and high academic achievement were least likely to be hired. However, Singer and Bruhns' study did not include applicants' extracurricular activities, a major source of résumé content, and managers in their study viewed a videotaped, mock interview prior to making applicant evaluations. More recently, Nemanick and Clark (2002) studied the effects that extracurricular activities listed on résumés have on résumé judges' attributions of applicants. In a lab study using student judges, they found the number of activities, type of activities (i.e. professional vs. social), and number of leadership positions held interacted to influence perceived applicant quality.

Although all three résumé categories (academic qualifications, work experience, and extracurricular activities) would appear to relate positively with recruiters' employability ratings (Brown & Campion, 1994), it seems probable that recruiters will attribute more weight to entry-level applicants' academic qualifications. Of the information typically reported in résumés, academic credentials (i.e. grades) are most frequently used within personnel selection for entry-level positions (Rynes, Orlitzky, & Bretz, 1997). Researchers have suggested that the frequent use of grade point average (GPA) is due to recruiters' beliefs that GPA partially reflects intelligence, motivation, and other abilities needed on the job (Roth & Bobko, 2000; Schmit, Ryan, Stierwalt, & Powell, 1995; Wolfe & Johnson, 1995). Results from career planning studies have also supported the importance of academic qualifications when screening applicant résumés. Oliphant and Alexander (1982), for instance, found that résumés reporting GPAs were rated higher than résumés not providing GPAs, and résumés indicating higher GPAs were judged better than those listing lower ones (Thoms et al., 1999).

Though academic qualifications are likely to weigh heavily in recruiter evaluations, there is ample reason to expect that applicants' extracurricular activities will also exhibit a strong, positive association with recruiters' employability ratings. Campion (1978) found applicants' memberships in professional societies and social fraternities/sororities predicted recruiters' ratings of applicants on overall impression, personal liking, and chances of further consideration. Nemanick and Clark (2002) reported that several extracurricular activities listed on résumés influenced judges' attributions of applicants' favorability. Moreover, extracurricular activities' positive linkage with employability ratings is expected because recruiters attribute leadership, interpersonal skill, and motivational qualities to applicants with numerous extracurricular activities (Brown & Campion, 1994; Rubin, Bommer, & Baldwin, 2002).

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Finally, given that most entry-level applicants' prior work experience is either limited or irrelevant (Kinicki & Lockwood, 1985), recruiters are likely to focus more on applicants' academic qualifications and extracurricular activities. Furthermore, Rynes et al. (1997) reported that recruiters, when hiring for entry-level positions, preferred applicants who were believed to be more open to new types of experience. Consequently, recruiters actually preferred applicants who had not been exposed to previous employers' policies and procedures because these applicants were judged as more trainable. However, when relevant work experience information is available to potential employers, a few studies have reported it positively influenced hiring decisions (e.g. Hakel et al., 1970; Hough, 1984). As a result, work experience reported on applicants' résumés appears to positively correlate with recruiters' judgments of applicants' employability, but not to the extent that academic qualifications or extracurricular activities do.

In sum, because the purpose of the employment selection process is to identify competent, well-rounded applicants to fill job positions (Werbel & Gilliland, 1999), applicants who create an impression of competence by reporting superior academic qualifications, numerous extracurricular activities, and extensive job-related work experience should be perceived by recruiters as possible job candidates and, therefore, receive the highest employability ratings. Despite a long line of inquiry, however, only Hakel et al.'s (1970) study, conducted more than three decades ago, investigated the influence of all three major résumé content areas (i.e. academic qualifications, work experience, and extracurricular activities) simultaneously. That is, most studies have explored one or two of the major content areas, while few studies have examined the simultaneous influence of these content areas. Thus, we propose a straightforward test of these main effects of résumé content on recruiters' judgments of employability. Following previous research, we believe that all three résumé content areas are likely to demonstrate positive relationships with employability ratings. Based on the above rationale and research presented, we offer the following hypothesis:

Hypothesis 1: Applicants' reported academic qualifications, work experience and extracurricular activities will be positively associated with recruiters' assessments of applicant employability.

Beyond simple main effects, it remains unclear whether recruiters combine résumé information in a manner that their overall employability judgments depend, at least in part, on the joint influence of multiple aspects of résumé content, e.g. academic qualifications, work experience, extracurricular activities (Thoms et al., 1999). In fact, researchers (e.g. Hitt & Barr, 1989; Mullins, 1982) have suggested that this pre-screening process may be more complex than previously assumed. Despite these propositions, only limited

evidence from experimental work has documented a more complex configuration of résumé content and employability judgments. For example, Knouse (1994) systematically manipulated résumé content in order to examine the effects of education and work experience on recruiters' hiring recommendations. His results indicated that recruiters' perceptions of applicants' education and work experience interacted such that recruiters were (a) most likely to hire applicants with irrelevant education but relevant work experience. (b) less likely to hire applicants reporting relevant education and irrelevant experience, and (c) least likely to hire applicants with both irrelevant education and work experience. Whereas Knouse's (1994) study only considered academic qualifications and work experience, Hakel et al. (1970) reported that recruiters' evaluations of applicants partly depended on combinations of all three résumé content areas. In their experimental study, recruiters judged résumés portraying applicants with average grades, excellent work experience, and appropriate interests as lower than résumés reporting high grades, poor work experience, and inappropriate interests.

Based on the above research, it seems likely that recruiters weight each content area differently in screening applicants. To date, however, little evidence exists that suggests how much weight recruiters may give to any particular area or how recruiters combine their evaluations of various résumé content. Naturally, interactions between the content areas are likely to exist as recruiters attempt to compare their implicit schema of "qualified employee" against the résumé information presented. Yet, the nature of these interactions is equivocal. For example, when evaluating the recent graduate, it would seem logical that recruiters may give academic qualifications substantial weight. However, research shows that graduate recruiters espouse to want applicants with superior interpersonal skills (Rynes, Trank, Lawson, & Ilies, 2003) and frequently equate involvement in extracurricular activities with interpersonal skill (Rubin et al., 2002). How a recruiter would treat an applicant with a profile of high academic qualifications and little extracurricular involvement, for example, is unknown.

Finally, when decision-makers must choose among applicants for whom they have differing amounts of information, they devalue negative and missing information and prefer applicants with complete information as long as the applicants are rated at least average on the focal attribute (i.e. attribute information missing for the other applicants; Highhouse & Hause, 1995). Webster (1964) similarly noted that a single negative characteristic may bar an applicant from being considered, but no number of positive characteristics could guarantee acceptance. Because applicants use the résumé as a self-promoting technique to paint as positive an image as possible in terms of their qualifications, some applicants choose to withhold information typically reported because it is assumed to do more harm than good (i.e. a low grade point average). Interestingly, because résumé information is self-reported,

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applicants who chose not to report résumé information were rated less suitable than applicants who reported such information (Stone & Stone, 1987). Thus, in the case of "below-average" résumés, it might be expected that the net effect on applicants' employability will be devalued. On the other hand, even though recruiters perceive one or two of the three résumé categories on applicant résumés as weak, applicants might still receive high employability ratings from recruiters. This is particularly true when recruiters are seeking to maximise person–organisation (P–O) fit or the match between the applicant's and organisation's personality, values, and cultural experiences (Judge & Cable, 1997). Under these circumstances, it could be expected that recruiters more heavily weight information that allows for P–O attributions in spite of evidence that might suggest poor fit to the job. For example, an applicant with stellar academic qualifications but no extracurricular activities and little work experience may be rated lower on employability than an applicant with modest academic achievement and significant leadership roles in extracurricular activities.

To summarise, limited research has demonstrated that the level of complexity involved in making employability judgments based on résumé content may be more complicated than previously believed (e.g. Hakel et al., 1970; Knouse, 1994). Thus, we propose that all three categories of résumé content areas (i.e. academic qualifications, work experience, and extracurricular activities) will serve to counterbalance one another, even acting in a multiplicative way and will be associated with résumé reviewers' ratings of applicant employability. Because the findings regarding how recruiters weigh résumé information is limited in quantity and to experimental settings, no direction is specified in the following hypothesis. Moreover, our hypothesis should be considered exploratory in nature as our logic considers multiple interaction possibilities. We therefore suggest:

Hypothesis 2: Recruiters' perceptions of categories of résumé content will interact and correlate with recruiters' perceptions of job applicant employability.

METHOD

Participants

Job Applicant Résumés. Résumés were solicited from 172 students enrolled in one of four senior-level, college of business courses. Because the study was concerned with recruiters' perceptions of entry-level applicants, study participants (a) had to submit a prepared résumé, (b) were business majors in their final semester prior to graduation, and (c) were preparing to contact potential employers or had already contacted/interviewed with employers. In order to maintain our sample of business students, 36 résumés from

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non-business academic majors were eliminated from the study. An additional 14 résumés were excluded because they were judged as being hastily prepared in order to gain the extra-credit points awarded to those who submitted résumés. These steps resulted in 122 useable job applicant résumés. Because participation was rewarded with extra credit, tests for differences between participants in the study and those choosing not to participate were conducted. No significant differences were found between study participants and non-participants for the demographic variables of gender, age, race, and academic major. Differences were found between the two groups concerning their plans to search for a job in the next 6 months with study participants indicating that they were more likely to search for a job.

The applicant résumé sample (N=122) was 50 per cent female, 90 per cent Caucasian, and they averaged 22 years of age (SD = 1.4). Over 80 per cent indicated that they would be seeking full-time employment in the next 6 months; 71 per cent reported having previously interviewed for a full-time job (number of initial interviews, M=1.8; SD = 1.8), and over half (51%) were currently interviewing for full-time employment. In addition, 45 per cent of the applicants reported having experienced follow-up interviews (M=0.9; SD = 1.2), and 43 per cent had at least one previous job offer (M=0.8; SD = 1.2).

Résumé Reviewers. After communicating with a number of different professional associations, we purchased a mailing list from the Society of Human Resource Management (SHRM) as the SHRM database appeared to offer the best opportunity for sampling experienced recruiters. In total, 5,000 recruiters living in one of five southeastern states were contacted by mail. We specifically selected recruiters living in Alabama, Florida, Georgia, Mississippi, or Tennessee. Because the applicants' résumés being evaluated were from a large university, centered geographically close to these states, it was presumed that recruiters from these states would be familiar with the target university. Furthermore, because diversity among organisations and recruiters would strengthen the generalisability of our study results, we solicited participation from recruiters in service and manufacturing organisations, government and nonprofit organisations, and small (less than 500 employees) as well as large (more than 10,000 employees) organisations.

SHRM required that we send an officially approved solicitation letter to SHRM members; no initial mailing of a questionnaire was permitted. Only after the solicited recruiters contacted the principal author to volunteer their time, could we then send each recruiter a packet containing a description of the study, one applicant résumé, an applicant-rating booklet and questionnaire, and a self-addressed, stamped return envelope. Approximately 4 per cent of the solicitation letters mailed were returned marked "Returned to Sender" or "Insufficient Address". Therefore, of those initially contacted, 321

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(7%) recruiters responded to the solicitation letter by volunteering to participate. Although this response rate is low, we believe it is due, in part, to requirements mandated by the database owner, SHRM. Overall, our return rate and recruiters' characteristics are comparable to those attained in other studies utilising the SHRM database (cf. Rynes & Rosen, 1995).

The first 244 recruiters who volunteered were subsequently sent a survey packet. However, 54 withdrew for an overall participation rate of 78 per cent. We replaced these 54 recruiters by randomly selecting from those who had previously volunteered. The remaining 23 recruiters were thanked for volunteering but not used in the study. The final sample consisted of 244 human resource professionals specialising in recruitment and represented a variety of organisations including services (48%), manufacturing (19%), government or nonprofit (16%), and other (18%). Over 60 per cent of the résumé reviewers were employed by a large organisation (1,000 or more employees) and reported a mean organisational tenure of 75 months (SD = 78.1). They represented a wide variety of job titles, with the most common category being Human Resource Manager (29%). Résumé reviewers were primarily female (68%) and averaged 39 years of age (SD = 9.5). Most were college graduates (92%), with 40 per cent reporting an advanced degree. Over half of the participants (53%) indicated that they spent at least 25 per cent of their time reviewing job applicants' résumés.

Procedures and Measures

Once recruiters volunteered to participate, we mailed them a survey packet that included a position-hiring scenario, a randomly selected applicant résumé, and measures for gathering demographic data, assessing the relevance and presence of résumé items, and for making an employability rating for the applicant represented by the résumé. This procedure was followed for all 122 applicant résumés until two recruiters had independently evaluated the same applicant résumé.

Position-Hiring Scenario. Because job applicants' résumés specified a variety of academic majors, it was important to develop a Position-Hiring Scenario that was applicable for any of these majors (A.M. Ryan, personal communication, 5 March 2002; P. Thoms, personal communication, 5–7 March 2002). Recruiters were asked to "Assume that in your organisation, there are open, entry-level positions suitable for recent graduates from schools and colleges of business. Such positions are open in each department or functional area of your organisation, that is, accounting, human resources, marketing, information systems, etc." Then, recruiters were told, "Now, read the résumé that was enclosed with the Résumé Rating Booklet. Consider that you have just received this résumé from a new college graduate

who is applying for one of your open positions that fits his/her major field of study as indicated on his/her résumé." The position-hiring scenario's directions specified that recruiters were to assume that this scenario applied to them as recruiters for their current organisations. Recruiters were encouraged to refer back to the hiring scenario if needed.

Résumé Scoring Measure. To assess applicants' résumé qualifications, past studies (Cable & Gilovich, 1998; Cole, Feild, & Giles, 2003a) have used modified versions of the scoring form developed by Brown and Campion (1994). Based on their review of the literature and actual applicant résumés, Brown and Campion identified 22 items common to résumés and typically encountered by recruiters. In the current study, 17 of Brown and Campion's (1994) 22 résumé items were included in our résumé scoring instrument. Three items ("dorm advisor", "recreational sports participant", and "varsity athletics captain") were eliminated as they were not reported by applicants in our study. Two additional items overlapped, "individual job achievements" and "work awards", and therefore we eliminated the item judged by recruiters in Brown and Campion's (1994) study to have the lowest mean reported use—"work awards". Finally, the item "job-related degree" was excluded because applicants' academic major was included as a control variable.

In order to assess the relative *influence* of the 17 résumé items (see Appendix), recruiters were asked to indicate the extent to which each item influenced their decisions when screening applicants for professional, entry-level positions (1 = no influence; 5 = considerable amount of influence; Brown & Campion, 1994). An exploratory factor analysis (EFA) using principal components analysis and varimax rotation was performed on the 17 items. Based on the factor extraction criteria of (a) an inflection point in the plot of the eigenvalues and (b) eigenvalues > 1.0, 15 résumé items loaded on one of three factors (explaining 56.6% of common variance) reflecting the original three résumé categories, i.e. academic qualifications, work experience, and extracurricular activities, reported by Brown and Campion (1994).

In the final section of the résumé rating booklet, recruiters were asked to rate the extent to which each of the 17 résumé items was *present* on the résumé (1 = none; 5 = considerable amount; Brown & Campion, 1994). An EFA using principal components analysis and varimax rotation was performed on recruiters' presence ratings of the 17 items. Using the same factor extraction criteria, 13 résumé items loaded on one of three factors (explaining 52.6% of common variance) reflecting the original three résumé categories

¹ Multiple factor analyses were performed on the study measures. The results are available upon request from the study's first author.

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reported by Brown and Campion (1994). As in the earlier EFA, the résumé items "has computer experience" and "knows a foreign language" were found to be problematic. Two additional cross-loading items were identified ("stated having earned college expenses" and "worked part-time while in college") in the present EFA. Based on these analyses, only the 13 items that loaded consistently in both exploratory factor analyses were retained for subsequent analyses. The number of résumé items composing each composite measure and its internal consistency were (a) *academic qualifications* (n = 4 items) importance ($\alpha = .85$) and presence ($\alpha = .71$), (b) *work experience* (n = 4 items) importance (n = .59) and presence (n = .59) and presence (n = .59) and presence (n = .79).

Employability Rating. The employability rating measure was interposed between the influence and presence ratings in order to minimise any "spillover" effects that the influence ratings might have on the presence ratings. The four items composing the measure were chosen based on their frequent use in previous selection decision research (e.g. Cable & Judge, 1997; Kristof-Brown, 2000; Singer & Bruhns, 1991). An example item is "How likely is it that you would be interested in interviewing the applicant?" (1 = extremely unlikely; 6 = extremely likely). The final item asked recruiters, "Taking everything into consideration regarding the applicant's résumé, what is your overall evaluation of the candidate?" (1 = very negative; 6 = very positive). When we subjected the four items to a principal components EFA with varimax rotation, the items loaded on a single factor that explained 86 per cent of the variance ($\alpha = .94$). Cable and Judge (1997) reported similar items loaded on a single factor explaining 87 per cent of common variance ($\alpha = .93$). Due to differences among scale anchors for the four items, responses were standardised before scale scores were computed.

Control Variables. We controlled for five pertinent personal characteristics in our data analyses. Recruiters' gender, age, and education level have been reported to have significant effects on recruiters' evaluations of applicants (Graves & Powell, 1995; Hitt & Bar, 1989) and were, therefore, controlled in our analyses. In addition, because résumé information could vary depending on applicants' academic major, it was used as a control variable. Finally, given that applicant gender has been found to affect recruiters' perceptions of applicant résumé content (Cole, Feild, & Giles, 2003b) and overall hiring recommendations (Olian, Schwab, & Haberfeld, 1988), applicants' gender was also controlled in our analyses.

As we noted earlier, we are unaware of any résumé research that has systematically controlled for recruiters' personal biases regarding the importance of certain résumé information. It could be that during résumé screening, for example, an applicant's résumé reporting information believed by the

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recruiter as particularly important might cause the recruiter to become more attracted to the applicant. As a result of this biased attraction, a more positive evaluation than warranted by the presence of résumé information is likely. Therefore, we controlled for recruiters' ratings of résumé information importance in our data analyses using the relative influence ratings described as a part of the résumé scoring instrument.

RESULTS

Means, standard deviations, and intercorrelations among the study variables appear in Table 1. Prior to our testing of the study hypotheses, it was important to establish that recruiters were in general agreement regarding their judgments of résumé content. Following the recommendations of James, Demaree, and Wolf (1993), we calculated the within-group agreement (r_{wg}) for each (n = 122) recruiter rating pair on all rating criteria. Recruiters demonstrated acceptable levels of agreement on each criterion, which included (a) academic qualifications importance (mean $r_{wg} = .75$) and presence (mean $r_{wg} = .81$), (b) work experience importance (mean $r_{wg} = .80$) and presence (mean $r_{wg} = .72$), (c) extracurricular activities importance (mean $r_{wg} = .79$) and presence (mean $r_{wg} = .79$), and (d) employability rating (mean $r_{wg} = .76$).

Study hypotheses were tested using hierarchical moderated regression analysis. Recruiter and applicant demographic control variables were entered in the first step. In the second step, we entered recruiters' ratings of résumé item influence as an additional control. In step three, the main effects of academic qualifications, work experience, and extracurricular activity presence were entered. In steps four and five, we included the two-way and three-way interactions respectively. Following the recommendations of Aiken and West (1991), we first created mean-centered interaction scores for academic qualifications, work experience, and extracurricular activities. Second, we multiplied the interaction scores to create single interaction terms yielding three two-way interactions and one three-way interaction term. According to Aiken and West (1991), the mean-centering procedure reduces the multicollinearity associated with the multiplicative construction of the cross-product terms, although it should be noted that such a procedure alone does not eliminate the chances for multicollinearity to exist.

Results of the hierarchical regression analysis are reported in Table 2. As shown in step 2, ratings of specific résumé content's influence on recruiters' evaluations accounted for incremental variance ($\Delta R^2 = .04$, p < .05) in applicants' employability ratings. Hypothesis 1 predicted applicants' academic achievements, work experience, and extracurricular activities would be positively associated with recruiters' assessment of applicant employability. As shown in Table 2 (see step 3), applicants' résumé content as rated by the recruiters accounted for unique variance ($\Delta R^2 = .17$, p < .01) in recruiters'

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TABLE 1 Intercorrelations Among Study Variables

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11
Demographic controls													
1. Gender $(0 = male)^a$	0.68	0.47											
2. Age ^a	39.22	9.37	18										
3. Education ^a	3.35	0.66	15	.07									
4. Academic major ^b	4.57	2.61	07	03	01								
5. Gender $(0 = \text{male})^b$	0.51	0.50	.03	.04	.04	.18							
Résumé item influence controls													
6. Academic qualifications	3.59	0.78	03	.23	01	14	.07						
7. Work experience	3.99	0.63	.11	09	.06	.03	.04	.08					
8. Extracurricular activity	2.94	0.69	.06	.10	.05	09	.06	.53	.35				
Predictors													
9. Academic qualifications	2.48	1.21	04	.10	.14	.02	.15	.12	16	.00			
10. Work experience	2.67	1.00	.05	03	18	.03	13	09	.03	.01	.06		
11. Extracurricular activity	2.54	1.16	.02	.03	06	.10	.11	06	.03	07	.32	.18	
Criterion													
12. Employability rating	-0.03	0.87	.08	.17	08	.00	.03	09	08	.03	.26	.21	.38

Note: N = 233-237. Correlations greater than .13 are significant at p < .05, and correlations greater than .17 are significant at p < .01.

^a Self-reported by recruiters.

^b Self-reported by applicants.

TABLE 2 Hierarchical Moderated Regression Analyses for Recruiters' Judgments of Applicants' Résumé Qualifications Predicting Applicant Employability

Variable		Employability rating eta
Step 1: Controls		
Recruiter gender ^a		.10
Recruiter age ^a		.17**
Recruiter education ^a		02
Academic major ^b		06
Applicant gender ^b		.00
ΔR^2 after Step 1	.05	
Step 2: Résumé item influence controls		
Academic qualifications		16*
Work experience		08
Extracurricular activity		.15*
ΔR^2 after Step 2	.04*	
Step 3: Résumé content main effects		
Academic qualifications		.16*
Work experience		.12
Extracurricular activity		.32**
ΔR^2 after Step 3	.17**	
1		
Step 4: Two-way interactions		23**
Academic qualifications × Work experience Academic qualifications × Extracurricular activity		23 · · 07
Work experience × Extracurricular activity		07 01
work experience \times Extracumcular activity ΔR^2 after Step 4	.04**	01
•	.04	
Step 5: Three-way interaction		
Academic qualifications × Work experience ×		.14*
Extracurricular activity		
ΔR^2 after Step 5	.02*	•
R^2		.31
Adjusted R^2		.26
Overall F		6.45**

Note: N = 233. Only final model results are reported. All tests are two-tailed.

employability rating, over and above the demographic controls and recruiters' ratings of résumé content importance. Furthermore, applicants' academic qualifications (β = .16, p < .05) and extracurricular activities (β = .32, p < .01) were positively associated with employability ratings. Thus, Hypothesis 1 was partially supported.

^a Self-reported by recruiters.

^b Self-reported by applicants.

^{*} p < .05; ** p < .01.

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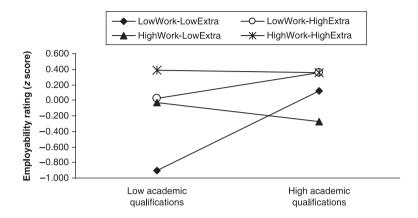


FIGURE 1. Interaction of Academic Qualifications × Work Experience (Work) × Extracurricular Activities (Extra) on Employability Ratings.

Hypothesis 2 predicted that recruiters' perceptions of applicants' employability would be associated with varying levels of applicants' academic qualifications, work experience, and extracurricular activities as reported on applicants' résumés. The two-way and three-way interaction terms are reported in steps 4 and 5 respectively (see Table 2). The three-way interaction term, academic qualifications \times work experience \times extracurricular activities, explained incremental variance in recruiters' employability ratings ($\Delta R^2 = .02$, $\beta = .14$, p < .05) beyond that accounted for by the control variables, the three main effects, and the three two-way cross-product terms. Thus, in line with Hypothesis 2, recruiters' perceptions of applicant employability jointly depended on the content reported in all three résumé categories. To gain a better understanding of the significant three-way interaction, we made a graphical plot that is shown in Figure 1.

As would be expected, applicant résumés judged as being low in all three résumé content areas received the lowest employability rating. On the other hand, applicant résumés judged as being high in all three content categories received one of the highest employability ratings. Consistent with past research, we also expected that academic qualifications would exhibit a strong and positive association with recruiters' employability ratings. Depicted in Figure 1, applicant résumés rated high on academic qualifications, despite being rated low in the other two résumé content areas, continued to receive a positive employability rating (and academic qualifications exhibited the steepest slope). This suggests that academic qualifications reported on résumés have a strong effect on recruiters' perceptions of applicant employability.

Of particular interest, however, are applicant résumés rated by recruiters as employable in spite of low ratings on a résumé content category. In

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comparison to applicant résumés depicting outstanding amounts of all three content categories, an inspection of Figure 1 shows there are several combinations of résumé content that received equally high employability ratings. For example, despite little work experience, résumés depicting exceptional academic qualifications and extensive extracurricular activities received a nearly identical, positive employability rating. Finally, despite the presence of low academic qualifications, recruiters judged applicants reporting high amounts of work experience and extracurricular activities as being highly employable.

DISCUSSION

Although résumés are arguably the most widely used selection tool and despite recruiters' responsibilities as organisational gatekeepers, few studies have investigated how recruiters process applicant résumé information during pre-employment selection decisions. Moreover, the research that does exist has either focused solely on résumé categories' main effects, or examined the joint effects of academic qualifications and work experience. While this research has provided a better understanding of the résumé evaluation process, résumé research does not fully explain the particulars of how résumé categories influence recruiters' perceptions that lead to hiring recommendations. The current study was an attempt to extend earlier research by integrating all three of the main résumé categories and investigating interactive models that explain how applicants' résumé information ultimately leads to invitations for initial interviews. Results of this study suggest the process is more complex than previously assumed and points to the impact that recruiters' attributions regarding applicants' résumé content can have on ratings of applicant employability.

The primary contribution of the present study is that it helps to illuminate the underlying relationships between recruiters' evaluation of applicants' résumés and subsequent employability ratings. More specifically, the significant three-way interaction should be of particular interest. This finding suggests that recruiters' impressions of applicant employability apparently depended on the joint influence of all three résumé content categories. In a few instances, applicant achievements in certain résumé information categories even compensated for résumé categories where applicants were perceived as being weaker. For example, recruiters rated résumés portraying applicants with high academic qualifications and low work experience and few extracurricular activities very positively. This is presumably due to the weight given to academic qualifications during résumé evaluation (Roth & Bobko, 2000). Similar conclusions can be drawn regarding the positive evaluations given for applicants reporting only strong extracurricular activities (Rubin et al., 2002). When applicants' résumés were perceived as reporting

both high levels of academic qualifications and extracurricular activities, employability ratings were further heightened. Consequently, although appearing to be well rounded in all content areas undoubtedly enhances applicants' chances of further consideration, the differential role played among résumé content categories in the résumé screening process is one of the more interesting results of this study.

What may be occurring as part of recruiters' perceptions and integration of applicants' résumé content is that applicant information begins to counterbalance itself. When an applicant is above average in all résumé categories, there is no one aspect of résumé content that distinguishes, or sets apart, this applicant. Conversely, when applicants' résumé information within one category significantly exceeds the quality of information reported in other categories, contrast effects may occur as part of the recruiter's evaluation of the applicants' résumé information. For example, an entry-level applicant may have been extremely active in professional societies, college clubs, and student government. Because of these interests and accompanying responsibilities, there may not have been sufficient time for a job and, at times, their academic work may also have suffered. From a recruiter's perspective, the applicant's superior extracurricular activity information may not only compensate for average or below-average academic performance and work experience, it may actually heighten recruiters' positive impressions of the applicant because the applicant may be perceived as having a specialised skill set.

A second contribution of the present study is that it differentiated between recruiters' ratings of résumé item importance and résumé item presence. Earlier research by Knouse (1994) has shown that résumé content's relevance to the job position has a direct effect on recruiters' employability ratings. Nonetheless, résumé rating strategies are likely more complex in that recruiters are forced to simultaneously examine the presence of résumé content and how important that content is for the target job. The present study attempted to capture this complexity and found that recruiters' ratings of résumé content's importance and the perceived amount of résumé content reported on the applicant résumé accounted for incremental variance in employability ratings. Therefore it seems that recruiters not only look for résumé item presence but also consider how important particular items are for successful job performance. Given our findings, future résumé evaluation studies could benefit greatly by incorporating recruiters' perceptions of the importance of résumé content in addition to item presence in predicting employability ratings. Along similar lines, it is quite possible that in the process of rating résumés, recruiters may employ compensatory decisionmaking strategies without any conscious thought to accurate or appropriate weighting of content that is specific to the résumé itself. That is, at what point does a high level of academic achievement, for instance, override a

complete lack of work experience or extracurricular involvement? Future studies should attempt to open this "black box" of résumé evaluations by allowing a sample of recruiters to overtly determine for a set of résumés the particular weightings applied to each of the applicants' résumés. Such a study would help to understand more fully the actual cognitive processes involved in arriving at employability decisions.

Interestingly, an examination of the mean importance ratings showed that recruiters ranked work experience as the most important followed by academic qualifications and extracurricular activities. Yet, when it comes to making an actual judgment of employability, the regression coefficients tell a different story. Specifically, after controlling for applicant and recruiter demographics, these main effects show that importance ratings of extracurricular activities were positively related to employability whereas work experience was non-significant and education importance was negatively related to employability. These counter-intuitive findings are consistent with previous research that has shown that recruiters often espouse or endorse ordering of criteria as important or essential in the abstract but then utilise an alternative ordering when making actual judgments. Rynes and her colleagues (Rynes et al., 2003) found, for example, that although recruiters espoused to want people skills and evidence of behavioral coursework, those skills and background as evidenced on a résumé played little role in ratings of employability. Future studies should attempt to better understand this intriguing relationship between recruiters' implicit judgments and explicit rationale.

Limitations

A potential limitation of the present study is that the generalisability of the findings may only hold for entry-level applicants applying for positions requiring business degrees. Future research should consider using applicant résumés that contain a more diverse set of academic majors. It is interesting to note that the extracurricular activities' résumé category exhibited the strongest main effect on recruiters' employability ratings. Perhaps recruiters view most business positions as requiring a high degree of interpersonal skill and, for this reason, recruiters placed considerable emphasis on extracurricular activities. It may be that academic qualifications have more impact when recruiters are screening applicants for jobs in engineering and scientific fields. This possibility also argues for using a more varied assortment of applicant résumés and asking recruiters to make their employability ratings for jobs in various occupational areas requiring very different skills (i.e. sales, information technology, and engineering).

We are also unsure if these results would generalise to entry-level applicants applying for positions in European-based companies. We are unaware of

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any studies that have investigated whether entry-level applicants' résumés from the United States differ in some way compared to similar applicants from European countries. In a similar vein, it might be that recruiters evaluate applicants' résumés differently when provided a set of résumés from international applicants. As noted earlier, missing information significantly lessens an applicant's chances of further consideration. For instance, in some cultural settings (e.g. German-speaking Europe), attaching a photograph to a résumé is expected. Applicants who apply for a job, but are unaware of this practice, would not likely remain in consideration because of this missing information. Additional study of such issues in various cultural contexts may help to further our understanding of résumé evaluation practices. While this study's results suggest that certain résumé categories are particularly influential for entry-level applicants, future research should focus on not only the statistical relationships between résumé categories and hiring recommendations but also on the manner in which recruiters from various countries integrate these information sources when evaluating applicants' résumés.

Another limitation is that the presence ratings of applicants' résumé content and employability ratings were collected from the same source. In spite of the potential for common method variance, the phenomenon under study required an ecologically valid coding scheme. In the real world of recruiting, for example, recruiters when screening résumés make their recommendations on the basis of their own attributions about the applicant's competence, not someone else's attributions of applicant competence. Furthermore, the significant three-way interaction should lessen any common method variance concerns (Evans, 1985). A further study limitation involves the internal consistency estimates for the work experience importance and presence variables. In the present study, both coefficient alphas were lower than we would have expected and thus a few points are worth noting. First, the estimates were close in magnitude to conventional cutoffs for reliability in research (.60 and .70; Murphy & Davidshofer, 2005; Nunnally & Bernstein, 1994). Second, whereas coefficient alpha underestimates the true internal consistency reliability (Nunnally & Bernstein, 1994), Drewes (2000) has provided a procedure to estimate the maximal reliability of a weighted composite. Following his suggested procedure, we estimated the maximal reliability of the four item importance and presence variables to be .88 and .82, respectively. Drewes' procedure further allows the identification of the "poor" performing items. In a post-hoc analysis, we omitted the two most problematic work experience items and computed our moderated regression analysis. The post-hoc results were identical to those reported using the four-item variables. Thus, on the whole it appears that the low internal consistency estimates did not adversely affect our study results. Indeed, our findings may be interpreted as a conservative estimate of the true three-way

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interaction given the attenuated reliabilities; however, we acknowledge that the low coefficient alpha estimates are a study limitation that should be considered when interpreting our findings.

Despite these limitations, the present study has strengths. Most importantly, the current study used experienced recruiters and actual applicants' résumés in an authentic pre-employment evaluation setting. The use of a field study has not been a common methodology in prior résumé evaluation research—probably due to a loss of experimental control. We acknowledge a lack of control in the current study, but the use of a field setting does provide a more realistic test of the hypothesised interaction than can be typically found in a laboratory study. By employing actual applicant résumés and recruiters, external validity of the study was enhanced. Consequently, we suggest that the findings of the present study may have more real-world generalisability for both applicants and employer organisations.

In all, the most important question involves whether a job offer is extended to an applicant. Dipboye (1994) stated that recruiters' recommendations are one of the most important factors considered by managers when they make their final hiring decisions. In support, Cable and Judge (1997) reported a correlation of .64 (p < .05) between recruiters' hiring recommendations (after the initial interview) and organisational hiring decisions. Assuming that résumé evaluation is conducted as a step prior to conducting the initial job interview, the current study's results contribute to this line of research by exploring how recruiters process applicants' résumé information when making decisions on whom to invite to these initial interviews.

REFERENCES

- Aiken, L.S., & West, S.G. (1991). Multiple regression: Testing and interpreting interactions. Newbury Park, CA: Sage.
- Anderson, N., Lievens, F., van Dam, K., & Ryan, A.M. (2004). Future perspectives on employee selection: Key directions for future research and practice. *Applied Psychology: An International Review*, 53, 487–501.
- Bright, J.E.H., & Hutton, S. (2000). The impact of competency statements on résumés for short-listing decisions. *International Journal of Selection and Assessment*, 8, 41–53.
- Brown, B.K., & Campion, M.A. (1994). Biodata phenomenology: Recruiters' perceptions and use of biographical information in résumé screening. *Journal of Applied Psychology*, 79, 897–908.
- Cable, D.M., & Gilovich, T. (1998). Looked over or overlooked? Prescreening decisions and postinterview evaluations. *Journal of Applied Psychology*, 83, 501– 508
- Cable, D.M., & Judge, T.A. (1997). Interviewers' perceptions of person-organization fit and organizational selection decisions. *Journal of Applied Psychology*, 82, 546– 561.
- © 2007 The Authors. Journal compilation © 2007 International Association of Applied Psychology.

- Campion, M.A. (1978). Identification of variables most influential in determining interviewers' evaluations of applicants in a college placement center. *Psychological Reports*, 42, 947–952.
- Cole, M.S., Feild, H.S., & Giles, W.F. (2003a). Using recruiter assessments of the presence of résumé information to predict applicant mental ability and Big Five personality dimensions. *International Journal of Selection and Assessment*, 11, 78– 88.
- Cole, M.S., Feild, H.S., & Giles, W.F. (2003b). Interaction of recruiter and applicant gender in résumé evaluation: A field study. *Sex Roles*, *51*, 597–608.
- Dipboye, R.L. (1992). Selection interviews: Process perspectives. Cincinnati, OH: SouthWestern.
- Dipboye, R.L. (1994). Structured and unstructured selection interviews: Beyond the job-fit model. *Research in Personnel and Human Resources Management*, 12, 79–123.
- Dipboye, R.L., Fontenelle, G.A., & Garner, K. (1984). Effects of previewing the application on interview process and outcomes. *Journal of Applied Psychology*, 69, 118–128.
- Dipboye, R.L., Smith, C.S., & Howell, W.C. (1994). *Understanding industrial and organizational psychology: An integrated approach*. Fort Worth, TX: Harcourt Brace.
- Drewes, D.W. (2000). Beyond the Spearman-Brown: A structural approach to maximal reliability. *Psychological Methods*, 5, 214–227.
- European Employment Guidelines (2003). Retrieved 28 September 2004 from: http://europa.eu.int/comm/employment_social/employment_strategy/prop_2003/adopted_guidelines_2003_en.htm
- Evans, M.G. (1985). A Monte Carlo study of the effects of correlated method variance in moderated multiple regression analysis. *Organizational Behavior and Human Decision Processes*, 36, 305–323.
- Fiske, S.T., & Taylor, S.E. (1991). *Social cognition* (2nd edn.). New York: McGraw-Hill. Graves, L.M., & Powell, G.N. (1995). The effect of sex similarity on recruiters' evaluations of actual applicants: A test of the similarity-attraction paradigm. *Personnel Psychology*, 48, 85–98.
- Hakel, M.D., Dobmeyer, T.W., & Dunnette, M.D. (1970). Relative importance of three content dimensions in overall suitability ratings of job applicants' résumés. *Journal of Applied Psychology*, *54*, 65–71.
- Heider, F. (1958). The psychology of interpersonal relations. Hillsdale, NJ: Lawrence Erlbaum.
- Highhouse, S., & Hause, E.L. (1995). Missing information in selection: An application of the Einhorn-Hogarth ambiguity model. *Journal of Applied Psychology*, 80, 86–83.
- Hitt, M.A., & Barr, S.H. (1989). Managerial selection decision models: Examination of configural cue processing. *Journal of Applied Psychology*, 74, 53–61.
- Hodgkinson, G.P. (2003). The interface of cognitive and industrial, work and organizational psychology. *Journal of Occupational and Organizational Psychology*, 76, 1–25.
- Hough, L.M. (1984). Development and evaluation of the "accomplishment record" method of selecting and promoting professionals. *Journal of Applied Psychology*, 69, 135–146.
- $\ \, \ \, \ \,$ $\ \, \ \, \ \,$ $\ \, \ \,$ $\$ $\ \,$ $\ \,$ $\$ $\ \,$ $\$ $\ \,$ $\$ $\ \,$ $\ \,$ $\$ $\ \,$ $\$ $\ \,$ $\$ $\ \,$ $\$ $\ \,$ $\$ $\ \,$ $\$ $\ \,$ $\$ $\ \,$ $\$ $\ \,$ $\$ $\$ $\ \,$ $\$ $\$ $\$ $\$ $\$ $\$ $\$ $\ \,$ $\$

- Huffcutt, A.I., & Arthur, W. (1994). Hunter and Hunter (1984) revisited: Interview validity for entry-level jobs. *Journal of Applied Psychology*, 79, 184–190.
- Huffcutt, A.I., Conway, J.M., Roth, P.L., & Stone, N.J. (2001). Identification and meta-analytic assessment of psychological constructs measured in employment interviews. *Journal of Applied Psychology*, 86, 897–913.
- James, L.R., Demaree, R.G, & Wolf, G. (1993). An assessment of within-group interrater agreement. *Journal of Applied Psychology*, 78, 306–309.
- Judge, T.A., & Cable, D.M. (1997). Applicant personality, organizational culture, and organizational attraction. *Personnel Psychology*, 50, 359–394.
- Kinicki, A.J., & Lockwood, C.A. (1985). The interview process: An examination of factors recruiters use in evaluating job applicants. *Journal of Vocational Behavior*, 26, 117–125.
- Knouse, S.B. (1983). The letter of recommendation: Specificity and favorability of information. *Personnel Psychology*, *36*, 331–341.
- Knouse, S.B. (1988). The role of attribution theory in personnel employment selection: A review of the recent literature. *Journal of General Psychology*, 116(2), 183–196.
- Knouse, S.B. (1994). Impressions of the résumé: The effects of applicant education, experience, and impression management. *Journal of Business and Psychology*, 9, 33–45.
- Kristof-Brown, A.L. (2000). Perceived applicant fit: Distinguishing between recruiters' perceptions of person–job fit and person–organization fit. *Personnel Psychology*, *53*, 643–671.
- McDaniel, M.A., Whetzel, D.L., Schmidt, F.L., & Maurer, S.D. (1994). The validity of employment interviews: A comprehensive review and meta-analysis. *Journal of Applied Psychology*, 79, 599–616.
- Marcus, B. (2003). Attitudes towards personnel selection methods: A partial replication and extension in a German sample. *Applied Psychology: An International Review*, 52, 515–532.
- Moscoso, S., & Salgado, J.F. (2004). Fairness reactions to personnel selection techniques in Spain and Portugal. *International Journal of Selection and Assessment*, 12, 187–196.
- Mullins, T.W. (1982). Interviewer decisions as a function of applicant race, applicant quality and interviewer prejudice. *Personnel Psychology*, *35*, 163–174.
- Murphy, K.R., & Davidshofer, C.O. (2005). *Psychological testing: Principles and applications*. Englewood Cliffs, NJ: Prentice Hall.
- Nemanick, R.C., & Clark, E.M. (2002). The differential effects of extracurricular activities on attributions in résumé evaluation. *International Journal of Selection* and Assessment, 10, 206–217.
- Nunnally, J.C., & Bernstein, I.H. (1994). *Psychometric theory* (3rd edn.). New York: McGraw-Hill.
- Ogilvie, J.R., & Schmitt, N. (1979). Situational influences on linear and nonlinear use of information. *Organizational Behavior and Human Performance*, 23, 292–306.
- Olian, J.D., Schwab, D.P., & Haberfeld, Y. (1988). The impact of applicant gender compared to qualifications on hiring recommendations: A meta-analysis of experimental studies. *Organizational Behavior and Human Decision Processes*, 41, 180–195.
- © 2007 The Authors. Journal compilation © 2007 International Association of Applied Psychology.

- Oliphant, V.N., & Alexander, III, E.R. (1982). Reactions to résumés as a function of résumé determinateness, applicant characteristics, and sex of raters. *Personnel Psychology*, *35*, 829–842.
- Pannone, R. (1994). Blue collar selection. In G.S. Stokes, M.D. Mumford, & W.A. Owens (Eds.), *Biodata handbook: Theory, research, and use of biographical information in selection and performance prediction* (pp. 261–273). Palo Alto, CA: Consulting Psychologists Press.
- Ross, L. (1977). The intuitive psychologist and his shortcomings: Distortions in the attribution process. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 10; pp. 174–221). New York: Academic Press.
- Roth, P.L., & Bobko, P. (2000). College grade point average as a personnel selection device: Ethnic group differences and potential adverse impact. *Journal of Applied Psychology*, 85, 399–406.
- Rubin, R.S., Bommer, W.H., & Baldwin, T.T. (2002). Using extracurricular activity as an indicator of interpersonal skill: Prudent evaluation or recruiting malpractice? *Human Resource Management*, 41, 441–454.
- Rynes, S.L., & Rosen, B. (1995). A field study of factors affecting the adoption and perceived success of diversity training. *Personnel Psychology*, 48, 247–270.
- Rynes, S.L., Orlitzky, M.O., & Bretz, R.D. (1997). Experienced hiring versus college recruiting: Practices and emerging trends. *Personnel Psychology*, 50, 309–339.
- Rynes, S.L., Trank, C.Q., Lawson, A.M., & Ilies, R. (2003). Behavioral coursework in business education: Growing evidence of a legitimacy crisis. *Academy of Management Learning & Education*, 2, 269–283.
- Salgado, J.F. (2001). Some landmarks of 100 years of scientific personnel selection at the beginning of the new century. *International Journal of Selection and Assessment*, 9, 3–8.
- Schmidt, F.L., & Zimmerman, R.D. (2004). A counterintuitive hypothesis about employment interview validity and some supporting evidence. *Journal of Applied Psychology*, 89, 553–561.
- Schmit, M.J., Ryan, A.M., Stierwalt, S.L., & Powell, A.B. (1995). Frame-of-reference effects on personality scale scores and criterion-related validity. *Journal of Applied Psychology*, 80, 607–620.
- Silvester, J. (1997). Spoken attributions and candidate success in graduate recruitment interviews. *Journal of Occupational and Organizational Psychology*, 70, 61–73.
- Singer, M.S., & Bruhns, C. (1991). Relative effect of applicant work experience and academic qualification on selection interview decisions: A study of between-sample generalizability. *Journal of Applied Psychology*, 76, 550–559.
- Society for Industrial and Organizational Psychology (2003). *Principles for the validation* and use of personnel selection procedures. Bowling Green, OH: Society for Industrial and Organizational Psychology.
- Steiner, D.D., & Gilliland, S.W. (1996). Fairness reactions to personnel selection techniques in France and the United States. *Journal of Applied Psychology*, 81, 134–141.
- Stone, D.L., & Stone, E.F. (1987). Effects of missing application blank information on personnel selection decisions: Do privacy protection strategies bias the outcome? *Journal of Applied Psychology*, 72, 452–456.
- $\ \, \ \, \ \,$ $\ \, \ \, \ \,$ $\ \, \ \,$ $\$ $\ \,$ $\ \,$ $\$ $\ \,$ $\$ $\ \,$ $\$ $\ \,$ $\ \,$ $\$ $\ \,$ $\$ $\ \,$ $\$ $\ \,$ $\$ $\ \,$ $\$ $\ \,$ $\$ $\ \,$ $\$ $\ \,$ $\$ $\ \,$ $\$ $\$ $\ \,$ $\$ $\$ $\$ $\$ $\$ $\$ $\$ $\ \,$ $\$

- Thoms, P., McMasters, R., Roberts, M.R., & Dombkowski, D.A. (1999). Résumé characteristics as predictors of an invitation to interview. *Journal of Business and Psychology*, 13, 339–356.
- Uniform Guidelines on Employee Selection Procedures (1978). Federal Register, 43, 38290–38314.
- Webster, E.C. (1964). *Decision making in the employment interview*. Montreal: Industrial Relations Center, McGill University.
- Werbel, J.D., & Gilliland, S.W. (1999). Person–environment fit in the selection process. *Research in Personnel and Human Resources Management*, 17, 209–243.
- Wolfe, R.N., & Johnson, S.D. (1995). Personality as a predictor of college performance. *Educational and Psychological Measurement*, *55*, 177–185.

APPFNDIX

Academic Qualifications Grade point average in major Overall grade point average Received scholastic awards

Received scholastic awards Dean's List membership

Work Experiences

Exhibited individual job achievements Has held supervisory position Has full-time work experience Has held an organisational internship

Extracurricular Activities

Member of professional societies Member of college clubs Has held elected offices Member of social fraternity or sorority Volunteered for community activities

Eliminated Résumé Items

Has computer experience Knows a foreign language Stated having earned college expenses Worked part-time while in college