

What Can We Uncover about Applicants Based on Their Resumes? A Field Study

Michael S. Cole
University of St. Gallen

Hubert S. Feild & William F. Giles
Auburn University

When used as an initial screening tool, applicants' resumes provide employers a convenient and cost-effective means for assessing applicants' qualifications in areas such as education, work experience, and special skills. In the current study, we investigated if recruiters' judgments of the presence of information reported on applicants' resumes was related to applicants' general mental ability and Big Five personality dimensions. Two hundred and eighty-four recruiters assessed the extent to which specific items were present on the resumes of actual job applicants (N = 321). Results showed relationships between recruiters' assessments regarding applicants' resume information and applicants' mental ability and personality traits. Implications for the use of resume information in the selection process are discussed.

Although some have argued the employment interview is the most frequently employed selection technique (e.g., Arvey, 1979), the biographical information provided on resumes is typically evaluated before or as part of every interview process (Dipboye, Fontenelle, & Garner, 1984; Levine & Flory, 1975; Pannone, 1994). As early as the 1970s, for example, it was estimated that one billion resumes and applications were screened each year (Levine & Flory, 1975). More recently, some employers have reported screening from 50,000 to 120,000 resumes in a year's time to fill thousands of open positions (Hays, 1999; Stross, 1996; Useem, 1999). Consequently, reviewing applicants' resumes has become a common practice among organizations filling entry-level positions and especially for those considering large numbers of applicants competing for a limited number of job openings (Gatewood & Feild, 2001; Hutchinson, 1984).

Despite its universality and given the time and resources devoted to resume screening in personnel decisions, researchers have noted their surprise that little empirical research has examined the relationships between resume content and such predictors of job performance as mental ability and personality (Ash, Johnson, Levine, & McDaniel, 1989; Bright & Hutton, 2000; Brown & Campion, 1994; Cole, Field, & Giles, 2003; Harvey-Cook & Taffler, 2000; Thoms, McMasters, Roberts, & Dombkowski, 1999). In fact, the scant research available is particularly disturbing, given that the *Uniform Guidelines on Employee Selection Procedures* (1978) declare that employment decisions must be based on job-related criteria. Because of its extensive use, research investigating resume data is desperately needed.

Theoretical Perspective

The basis for examining applicants' resume biodata is a logical extension of the ecology model (Mumford & Stokes, 1992) and other supporting literature (e.g., Holland, 1997; Owens, 1976). According to Mumford and Stokes (1992), the ecology model of biodata characterizes life experiences as a longitudinal progression of interactions between a person's resources (e.g., skills, abilities, human capital), a person's affordances (e.g., needs, desires, choices), and the environment. As a person engages in activities, the environment will present a variety of situations, some of which will satisfy the person's needs and values (Mumford & Stokes, 1992). Because people have a limited amount of time and resources, they begin to select among situations in such a way that patterns emerge and personal attributes needed for affordance maintenance are developed.

Based on the ecology model, one could conceive these experiences translate into activities encountered during the course of one's undergraduate career and later; some of these incidents are reflected in information reported on a graduating senior's resume. Therefore, students' underlying psychological traits such as cognitive ability and conscientiousness interact with situational demands to condition students' behavior and experiences that occur during college life (cf. Mumford, Costanza, Connelly, & Johnson, 1996). As observed by Caldwell and Burger (1998), students engaging in more group or social activities while in college may be more extraverted while those achieving more during college might be more conscientious. College experiences are important developmental exercises (e.g., Howard, 1986), and, therefore, may be useful in characterizing or predicting certain students' psychological attributes, such as abilities, interests, and personality.

Although not a typical biodata instrument per se, resume biodata are special in that they are used by applicants to paint as "rosy" a picture as possible in terms of applicant qualifications. Furthermore, because it is self-reported, resume content is a summary of what applicants' deem are their most important life experiences (e.g., education and work experience) believed to be applicable to a work context. Thus, resume information is a specific form of biographical information and, as such, the information reported on resumes will be labeled resume biodata within the remainder of this research. Such a rationale parallels that of Mael (1991), when he noted that the core attribute of biographical information is the reporting of historical events that have shaped the individual's behavior and identity.

Benefits of Resumes in Selection

Studying resumes from a recruiters' perspective is important for several reasons. First, the screening of resumes is fundamental to the selection process because it excludes unqualified applicants from further screening and helps to establish recruiters' impressions (Cable & Gilovich, 1998; Kristof-Brown, 2000). Ugbah and Majors (1992) reported that when selecting college graduates for entry-level positions, recruiters believed applicants' paper credentials (e.g., resume, work experience, and level of education) were most important, followed by applicants' interviewing behaviors and social attributes (e.g., personality and motivation).

Second, when using applicants' resumes as a pre-employment screening tool, employers assume that information reported on the resume is linked to important, job-relevant attributes such as abilities (e.g., mental ability) or personality characteristics (e.g., conscientiousness, Ash et al., 1989). Moreover, basic personality tendencies and applied social skills have been found to be the most frequently rated constructs during employment interviews (Huffcutt, Conway, Roth, & Stone, 2001). Because applicants typically mail or send their resumes electronically, if resume information were linked to these important applicant constructs (e.g., personality and mental ability), substantial savings could accrue to an organization before investing in more-expensive, time-consuming selection techniques requiring on-site applicant presence.

Researching resume biodata is important for several additional reasons as well. First, the types of information reported on a resume (e.g., academic qualifications, work experience, social/extracurricular history) provide employers with a rich source of information that is historical, easily checked, and, consequently, less prone to faking and distortion (Becker & Colquitt, 1992). Second, resume information generally possesses substantial face validity from an applicant's perspective. Applicants expect to submit a resume, and, therefore, resumes may also offer employing organizations benefits involving legal focal points (i.e., perceived fairness). For instance, rejected applicants are likely to be less aggrieved, and consequently less likely to publicly criticize the organization or initiate legal action after being eliminated from a selection process that is perceived as fair (Elkins & Phillips, 2000). In summary, the literature suggests biographical information as reflected by resume content may provide employers an inexpensive, fair, and quick selection tool that may predict certain applicants' abilities, dispositions, and work attitudes across a variety of jobs.

Purpose of Present Research

Despite the proposed benefits accompanying the use and integration of resumes as part of the selection process, there is little empirical research to guide practice. For example, there does not appear to be any empirical evidence as to what specific resume biodata items are related to applicant traits (e.g., mental ability, extraversion). Yet, recruiters act as employment gatekeepers, deciding which applicants should remain "active" versus those to exclude from further consideration. For this reason, the main purpose of this research is to examine the linkages between resume biodata information and applicant attributes. Specifically, this research will investigate if recruiters' ratings of the presence of specific resume biodata are associated with six, job-relevant attributes—general mental ability and Big Five personality dimensions.

Method

For this research, data collected for the current study were combined with data collected from an earlier pilot study. In the first study, applicants ($N = 99$) completed general mental ability and Big Five personality dimension inventories and experienced recruiters ($N = 40$) were randomly assigned a set of 10 applicants' resumes so that four recruiters provided ratings for each of the applicants' resumes

($N = 99$). Recruiters rated the extent to which specific resume biodata were present on the applicants' resumes. In the current study, recruiters ($N = 244$) were assigned one applicant resume so that two recruiters provided ratings for each of the applicants' resumes ($N = 122$). Similar to the pilot study, recruiters rated the extent to which applicants reported specific resume biodata on their resume and applicants completed general mental ability and Big Five personality dimension inventories. To increase the reliability of recruiters' ratings, recruiters' ratings who judged the same applicant(s) were first averaged and then correlated with applicants' self-reported traits.

Job Applicants

Job applicant participants were College of Business seniors in their final semester before graduation. To be eligible to participate, students were asked to submit their current resume to the first author and then complete a mental ability and personality inventory at the end of the academic term. The applicant sample was approximately half (49%) men, 89% Caucasian, averaged 22 years of age ($SD = 1.9$), and 96% indicated they would be graduating within the next 6 months.

Resume Reviewers

Experienced resume reviewers were recruited from an employer contact list maintained by the College of Business at the university where the studies were conducted (Study 1) and from the Society of Human Resource Management (SHRM) mailing list (Study 2). A letter was initially mailed to recruiters soliciting their participation. If interested, the potential resume reviewer was asked to contact the first author and, then, once contacted the first author mailed a packet containing a description of the study, the standardized resume biodata scoring form, the resume(s), and a self-addressed, stamped envelope. Resume reviewers were primarily women (66%), averaged 39 years of age ($SD = 9.4$), with 39% reporting having an advanced graduate degree (i.e., master's degree or doctorate). In addition, the majority of recruiters (55%) reported spending at least 25% or more of their time reviewing job applicants' resumes.

Measures

General Mental Ability

The Wonderlic Personnel Test (WPT) was used to assess applicant general mental ability and administered to the job applicant sample at the end of the academic semester. The WPT is a paper-and-pencil test composed of three types of items: vocabulary, arithmetic reasoning, and spatial relations. It is a timed-test with individuals having 12 minutes to complete 50 items (*Wonderlic Personnel Test Manual*, 1999). The scores from the WPT have been shown to be psychologically equivalent to other measures of mental ability exhibit high levels of reliability (internal consistency = .88; test-retest = .88, alternate form = .84; *Wonderlic*

Personnel Test Manual, 1999). Thus, the WPT is widely used and generally accepted as a construct valid measure of cognitive ability. The national average score for entry-level applicants in their mid-20s is 22.3 ($SD = 7.7$; *Wonderlic Personnel Manual*, 1999). In the current study, the job applicants' Wonderlic mean score was 24.9 ($SD = 5.9$).

Personality

The NEO Five-Factor Inventory (NEO-FFI; Costa & McCrae, 1992) was used to assess job applicants' Big Five personality dimensions. The NEO-FFI is an abridged version of the *NEO PI-R: Form S*. It is a prepared booklet containing 12-item scales for each of the FFM dimensions. The domains assessed were *Neuroticism*, *Extraversion*, *Openness to Experience*, *Agreeableness*, and *Conscientiousness*. Similar to prior studies (e.g., Caldwell & Burger, 1998) coefficient alphas for the five scales ranged from .71 to .87. Respondents indicated their agreement or disagreement with the items using a five-point rating scale, where 1 = strongly disagree; 5 = strongly agree.

Resume Scoring Form

Recruiters in both studies described earlier were asked to judge the extent to which applicants reported resume biodata items on their resumes using a slightly modified version of the scoring form developed by Brown and Campion (1994). Based on a literature review, reviews of actual employment resumes, and interviews with employment recruiters, Brown and Campion (1994) identified specific biodata items common to resumes developed by undergraduate students seeking full-time employment. Based on Brown and Campion's work, recruiters in our studies were asked to make judgments regarding the extent to which a biodata topic was present on a resume (1 = none/did not mention; 5 = considerable amount).

Results

As shown in Table 1, there are a number of resume biodata items significantly associated with applicants' traits. With regard to the resume biodata concerning education, both items involving grade point average (e.g., overall and minor GPA) were positively associated with applicants' conscientiousness scores. Characterized as purposeful, determined, and reliable, persons high in conscientiousness are probably able to better manage their academic responsibilities and attain more academic and professional achievements (cf. Ferguson, Sanders, O'Hehir, & James, 2000). Additionally, one resume biodata item, listed relevant courses, was negatively related with extraversion.

Two work experience items related to the study criteria. The resume item, has supervised others, had a negative relationship with agreeableness and conscientiousness. As for these negative relationships, various interpretations are possible. One might be that work experience inculcates students with the perception that assertiveness is more valuable than agreeableness in the job setting, and they

therefore reposition themselves toward being more assertive. Another possibility is that more assertive students may be willing to test the unfamiliar surroundings and challenges inherent in a new work environment, while more agreeable students may prefer the safety of the known academic setting. Contrastly, held a summer internship was positively correlated with agreeableness and conscientiousness.

Honors/extracurricular activities had the greatest number of significant relationships (i.e., 12) in the analyses. Membership in professional societies was positively correlated with conscientiousness. The duties and responsibilities associated with organizational membership may attract more conscientiousness individuals. Membership in college clubs and social fraternities/sororities were also positively associated with conscientiousness and extraversion. Moreover, membership in college clubs and a social fraternity/sorority was also negatively correlated with neuroticism. Conceivably, persons with neurotic tendencies may find the close-knit living arrangements and other communal aspects of clubs and fraternity/sorority membership unappealing. The resume biodata item, i.e., elected offices held, was negatively related to neuroticism and positively correlated with extraversion. In addition, volunteering for community affairs was positively related with extraversion. College students have to enjoy group or social activities in order to have the requisite motivation to serve community clientele who are often markedly different from themselves (e.g., children in daycare settings and elderly persons in assisted-living facilities). Finally, received scholastic award(s) was correlated with general mental ability and conscientiousness. As one might expect, students who are bright and responsible are likely to be more capable of earning academic accolades.

There were differences among the resume topics in terms of their effectiveness for predicting mental ability and the Big Five personality factors. Being a member of college clubs and in a social fraternity/sorority had the greatest number of significant relationships (i.e., three) with the six individual difference measures, whereas supervised others, held a summer internship, and received scholastic award(s) each had two significant relationships. Five other resume biodata items were correlated with one of the six criteria. Finally, thirteen additional correlations between resume content and the criteria were marginally significant. In terms of the extent to which mental ability and the Big Five factors correlated with the resume items, conscientiousness had relationships with nine resume items, extraversion with seven, general mental ability with six, neuroticism with five, agreeableness with four, and openness to experiences had only one relationship.

Discussion

Most job applicants applying for professional positions submit a resume as the first step in the employee selection process. Therefore, the purpose of the present study was to investigate the relationships between recruiters' assessments of applicants' resume biodata and applicant attributes. In addition to using actual recruiters as well as collecting and using actual applicant resumes, applicants also completed self-report inventories that assessed general mental ability and Big Five personality dimensions. As a result, the present investigation possesses external

generalizability and provides empirical evidence regarding the linkages between resume biodata and known predictors of job performance, i.e., general mental ability and Big Five personality dimensions.

Table 1
Correlations of Job Applicant Resume Biodata Items with General Mental Ability and Big Five Personality Dimensions

Applicant resume biodata item ^a	Descriptive Statistic			General mental ability	Big Five Personality Factor				
	N	M	SD		N	E	O	A	C
<i>Education:</i>									
College major	122	4.6	0.68	-.07	.01	.07	.03	-.07	.05
Overall grade point average	122	2.6	1.63	.05	-.12	-.11	-.09	-.02	.28**
Grade point average in major	122	3.1	1.70	.14	-.01	-.14	.08	-.05	.19*
Earned % college expenses	221	1.6	1.03	.12	-.07	-.02	-.06	-.02	-.05
Has computer experience	221	3.1	1.53	.04	-.01	-.11	-.10	-.11	.03
Knows foreign language(s)	221	1.5	1.05	-.05	-.05	-.03	.04	-.08	.10
Listed relevant courses	122	2.7	1.53	.03	.03	-.23*	-.07	-.01	-.04
<i>Work experience:</i>									
Has full-time work experience	221	2.9	1.12	.08	-.03	-.05	-.03	-.10	-.08
Has supervised others	221	2.1	1.18	.12	.12	-.09	.00	-.16*	-.22**
Exhibited job achievement(s)	221	2.7	1.10	.13	-.11	.06	-.00	.04	.07
Has held summer internship	221	2.2	1.24	.02	-.12	.13	.00	.15*	.20**
Worked (part-time) while in college	221	3.6	1.00	.13	-.07	.08	.01	-.11	.07
<i>Honors/extracurricular activities:</i>									
Was member of professional societies	221	2.7	1.35	-.04	-.06	.12	.03	.04	.23**
Was member of college clubs	221	2.7	1.35	-.12	-.18**	.23**	.02	.01	.21**
Was member of fraternity/sorority	221	2.2	1.46	.02	-.15*	.20**	-.07	.02	.16*
Has held elected office(s)	221	2.1	1.29	-.06	-.15*	.26**	.01	.00	.12
Was athletics captain	99	1.9	0.64	-.07	-.02	.00	-.05	.03	-.02
Received scholastic award(s)	221	2.2	1.39	.13*	.00	.02	.06	.01	.16*
Was on the Dean's list	221	1.7	1.15	.07	.05	-.09	.01	.06	.05
Volunteered for community activities	221	2.1	1.29	.04	-.02	.15*	.11	.05	.05

Note. All tests are two-tailed. * $p < .05$. ** $p < .01$.

^a Classified according to Brown and Campion (1994). Recruiters' ratings of the extent to which resume biodata items were present on applicants' resumes (1 = None/Did Not Mention; 5 = Considerable Amount).

In the current study, we chose to use recruiters' judgments of the presence of resume content and applicants' self-reported traits. We feel this approach is important for several reasons. First, a study of the linkages between resume content and applicant attributes offers the most straightforward way of predicting applicant attributes. Second, assuming the relationships reported here are found in future research, guidance could be provided to recruiters concerning which resume items

are associated with desired applicant characteristics. For example, it is recruiters' responsibility to focus on getting to know applicants wishing to work for the employing organization. Typically, recruiters use the employment interview to confirm applicants possess the knowledge, skills, and abilities purported on their resumes. Skilled recruiters also use the interview to assess applicants' personalities, social skills, motivation, and fit with the organization's values. However, because applicants consciously attempt to manage recruiters' impressions, it is unlikely that recruiters are able to form unbiased, accurate perceptions of applicants' subjective attributes during the interview (Barrick, Patton, & Haugland, 2000). Therefore, the employment of applicants' resumes to aid recruiters' impression formations before biases or errors in judgment manifest themselves may provide potential benefit to organizations.

Our results also suggest recruiters should be trained to identify and judge types of resume biodata items that are indicators of applicants' job-relevant traits rather than making broad generalizations about applicants based on unsystematic reviews of resume content. Considering the vast empirical evidence showing that general mental ability and conscientiousness are consistent, valid predictors of job performance (Schmidt & Hunter, 1998), these data suggest recruiters should focus on resume items related to academic achievement. Recent studies have also shown extraversion and neuroticism to be related to certain job families (e.g., managers and sales representatives). To the extent that a job requires applicants who are stable and extraverted, our results indicate recruiters should balance the emphasis placed on social/extracurricular activities and academic achievements.

Although historically scrutinized for employment interviews' low reliability and validity (e.g., Arvey & Campion, 1982), studies using structured interview formats have reported increased reliability and predictive validity (Schmidt & Hunter, 1998). Therefore, it is suggested through incorporating additional structure in the resume evaluation process and training recruiters, organizations could increase recruiters' ability to reliably assess applicants' resume content and decrease rating biases. Other reasons notwithstanding, the legal defensibility of a structured resume evaluation process makes it an attractive alternative to the status quo. A structured resume screening process might include requiring all relevant biodata be reported, allowing recruiters to evaluate the same types of resume biodata content across resume screenings, using standardized rating scales, giving resume evaluation training, and incorporating note taking (see, for example, structured procedures employed by Pulakos, Schmitt, Whitney, & Smith, 1996; Stevens, 1998).

Conclusion

Hopefully, these results will provide guidance to researchers and practitioners interested in further refining resume biodata into a set of easily scored items associated with applicants' traits known to predict job performance. It should be noted that while the recruiter participants' personal demographics are heterogeneous (increasing generalizability), applicants consisted of business majors from a large university located in the southeastern part of the United States. As a result, it is important for future researchers to use a more diverse sample of applicants.

Furthermore, the next phase of this research should focus on investigating the impact of training on recruiters' accuracy to reliably identify specific resume content associated with job-relevant attributes.

References

- Arvey, R. D. (1979). Unfair discrimination in the employment interview: Legal and psychological aspects. *Psychological Bulletin*, *86*, 736-765.
- Arvey, R. D., & Campion, J. E. (1982). The employment interview: A summary and review of recent research. *Personnel Psychology*, *35*, 281-322.
- Ash, R. A., Johnson, J. C., Levine, E. L., & McDaniel, M. A. (1989). Job applicant training and work experience evaluation in personnel selection. *Research in Personnel and Human Resources Management*, *7*, 183-226.
- Barrick, M. R., Patton, G. K., & Haugland, S. N. (2000). Accuracy of interviewer judgments of job applicant personality traits. *Personnel Psychology*, *53*, 925-951.
- Becker, T. E., & Colquitt, A. L. (1992). Potential versus actual faking of a biodata form: An analysis along several dimensions of item type. *Personnel Psychology*, *45*, 389-406.
- Bright, J. E. H. & Hutton, S. (2000). The impact of competency statements on resumes 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 resume 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.
- Caldwell, D.F., & Burger, J.M. (1998). Personality characteristics of job applicants and success in screening interviews. *Personnel Psychology*, *51*, 119-125.
- Cole, M. S., Feild, H. S., & Giles, W. F. (2003). Using recruiter assessments of the presence of resume information to predict applicant mental ability and Big Five personality dimensions. *International Journal of Selection and Assessment*, *11*, 78-88.

- Costa, P. T. Jr, & McCrae, R. R. (1992). *The revised NEO personality inventory (NEO – PI – R) and NEO five – factor inventory (NEO – FFI) professional manual*. Odessa, FL: Psychological Assessment Resources.
- 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.
- Elkins, T. J., & Phillips, J. S. (2000). Job context, selection decision outcome, and the perceived fairness of selection tests: Biodata as an illustrative case. *Journal of Applied Psychology*, 85, 479-484.
- Ferguson, E., Sanders, A., O’Hehir, F., & James, D. (2000). Predictive validity of personal statements and the role of the five-factor model of personality in relation to medical training. *Journal of Occupational and Organizational Psychology*, 73, 321-344.
- Gatewood, R. D., & Feild, H. S. (2001). *Human resource selection*. (5th ed.). Fort Worth, TX: Harcourt Publishers.
- Harvey-Cook, J. E. & Taffler, R. J. (2000). Biodata in professional entry-level selection: Statistical scoring of common format applications. *Journal of Occupational and Organizational Psychology*, 73, 103-118.
- Hays, S. (1999). Capitol One is renowned for innovative recruiting strategies. *Workforce*, 78, 92-94.
- Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and work environments*. Odessa, FL: Psychological Assessment Resources.
- Howard, A. (1986). *College experiences and managerial performance*. *Journal of Applied Psychology Monograph*, 71(3), 530-552.
- 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.
- Hutchinson, H. L. (1984). Personnel administrators’ preferences for resume content. *Journal of Business Communication*, 21, 5-14.
- 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.

- Levine, E. L., & Flory, A. (1975). Evaluation of job applications – A conceptual framework. *Public Personnel Management, 4*, 378-385.
- Mael, F. A. (1991). A conceptual rationale for the domain and attributes of biodata items. *Personnel Psychology, 44*, 763-792.
- Mumford, M. D., & Stokes, G. S. (1992). Developmental determinants of individual action: Theory and practice in the application of background data. In M. D. Dunnette (2nd ed.), *The handbook of industrial and organizational psychology* (pp. 1-78). Palo Alto, CA: Consulting Psychologists Press.
- Mumford, M. D., Costanza, D. P., Connelly, M. S., & Johnson, J. F. (1996). Item generation procedures and background data scales: Implications for construct and criterion-related validity. *Personnel Psychology, 49*, 361-398.
- Owens, W. A. (1976). Background data. In M. D. Dunnette (Eds.), *Handbook of industrial and organizational psychology*. New York: Rand McNally.
- 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, Inc.
- Pulakos, E. D., Schmitt, N., Whitney, D., & Smith, M. (1996). Individual differences in interviewer ratings: The impact of standardization, consensus discussion, and sampling error on the validity of a structured interview. *Personnel Psychology, 49*, 85-102.
- Schmidt, F. L., & Hunter, J. E. (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. *Journal of Applied Psychology, 124*, 262-274.
- Stevens, C. K. (1998). Antecedents of interview interactions, interviewers' ratings, and applicants' reactions. *Personnel Psychology, 51*, 55-85.
- Stross, R. E. (1996). Microsoft's big advantage-hiring only the supersmart. *Fortune*. November 25, 159-162.
- Thoms, P., McMasters, R., Roberts, M. R., & Dombkowski, D. A. (1999). Resume characteristics as predictors of an invitation to interview. *Journal of Business and Psychology, 13*, 339-356.
- Ugbah, S. D., & Majors, R. E. (1992). Influential communication factors in employment interviews. *Journal of Business Communication, 29*, 145-159.

Uniform Guidelines on Employee Selection Procedures. (1978). Federal Register, 43, 38290-38314.

Useem, J. (1999). For sale online: You. *Fortune*. July 5, 67-78.

Wonderlic Personnel Test Manual, (1999). *Wonderlic Personnel Test & scholastic level exam user's manual*. Libertyville, IL: Wonderlic, Inc.

Author Notes

Questions regarding this article should be addressed to:

Michael S. Cole
University of St. Gallen
Institute for Leadership and Human Resource Management
Dufourstrasse 48
CH-9000 St. Gallen
Switzerland
Tel: +41 (0)71 224 2378
Michael.Cole@unisg.ch