SCREENING-ORIENTED RECRUITMENT MESSAGES: ANTECEDENTS AND RELATIONSHIPS WITH APPLICANT POOL QUALITY

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The ability of firms to attract qualified job applicants is a critical component of the human resource management process. However, while a large body of research has examined the relationship between firm recruitment practices and applicant pool attributes, very little research has investigated what factors are associated with organizational decision makers' utilization of specific recruitment tactics. We draw on labor economics, sociological, and agency theoretical perspectives to make predictions regarding the use of screening-oriented recruitment messages in actual web-based job advertisements. Results suggest that perceptions of labor supply, recruiting firm reputation, and the use of quality-based compensation incentives are associated with use of screening-oriented messages, which in turn are associated with applicant pool quality. These findings hold important theoretical insights into the factors shaping firm recruitment activity and provide practical strategic implications for managing firm recruitment objectives. © 2012 Wiley Periodicals, Inc.

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Questions about the means by which organizations recruit talent are critical and continue to be explored by researchers and practitioners (Breaugh, Macan, & Grambow, 2008; Ployhart, 2006; Rynes & Cable, 2003; Weddle, 2005). The initial applicant pools generated during recruitment efforts place boundaries on the quality of eventual hires and have implications for the success of later human resource management (HRM) practices (Barber, 1998; Terpstra & Rozell, 1997). Thus, the strategies and techniques adopted by organizational decision makers during the initial phases of the recruitment process can have important implications for their ability to develop a talented workforce.

A large body of research has developed examining the effect that different types of recruitment messages have on recruitment

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outcomes (Barber, 1998; Breaugh et al., 2008; Chapman, Uggerslev, Carroll, Piasentin, & Jones, 2005). However, less effort has been dedicated to understanding the factors associated with the types of recruitment messages organizations adopt when they recruit. Recent literature reviews highlight the need for such work, with Rynes and Cable (2003, p. 71) stating that "it seems essential to know how such decisions are being made and whether differences in decision strategies are associated with differences in recruiting success" (see also Barber, 1998; Breaugh & Starke, 2000). More fundamentally, Taylor and Collins (2000, p. 325) recognize the dearth of studies examining antecedents of recruitment strategies in general, stating that "if recruitment researchers are unaware of the way organizations try to attract employees . . . it would be very difficult for them to conduct studies that prove relevant for employers."

The use of screening-oriented messages has the potential benefit of reducing organizational screening costs by generating relatively smaller, higher-quality, or better-fitting applicant pools—outcomes that are starting to receive more attention.

We examine the conditions under which organizational decision makers are most likely to utilize a *screening orientation* in their initial recruitment communications. Consistent with Stevens (1998) and Williamson, Lepak, and King (2003) and in the context of job advertisements, we refer to a screening orientation as using job advertisements to facilitate *evaluation* and *screening* of job applicants based on their qualifications. However, in our context, we further operationalize screening orientation as detailing specific requirements of position vacancies in order to educate prospective applicants as to whether or not they are likely to be selected for and eventually succeed in a job. Ostensibly, a screening orientation thus allows job seekers to *self-evaluate* their suitability for a given vacancy and, in turn, *self-select out* (i.e., refrain from applying) if their skills, abilities, or preferences do not match what the position specifically demands or provides.

Extant recruitment research has largely focused on ways to maximize job-seeker attraction in an effort to generate large applicant pools (Allen, Mahto, & Otondo, 2007; Barber, 1998; Breaugh & Starke, 2000; Carlson, Connerley, & Mecham, 2002; Ployhart, 2006; Rynes & Cable, 2003; also Stevens's [1998] and Williamson et al.'s [2003] discussion of recruitment orientation). However, the use of screening-oriented messages has the potential benefit of reducing organizational screening costs by generating relatively smaller, higher-quality, or better-fitting applicant pools—outcomes that are starting to receive more attention (e.g., Carlson et al., 2002; Collins & Han, 2004; Dineen & Noe, 2009; Turban & Cable, 2003). Yet, recruiters have not typically been incentivized to generate these types of recruitment outcomes (e.g., Hirschman, 2003).

Thus, contributions of this study include examining conditions under which organizational decision makers are likely to use screening-oriented recruitment messages, and the relationship between the use of these types of messages and applicant pool quality. Research into the antecedents of various HRM strategies is not without precedent. For example, work attributes (e.g., skill requirements, training opportunities, and wages) and firm attributes (e.g., firm strategy, organizational structure, technology, and industry) have been found to be significant determinants of whether firms utilize various HRM practices (e.g., performance appraisal systems, compensation strategies, and training practices; Jackson, Schuler, & Rivero, 1989; Wilk & Cappelli, 2003). In this study, we extend this body of research by framing recruiters as a type of organizational agent. Prior research suggests that the decisions and behaviors of organizational agents (e.g., top management team members) are influenced by intrafirm and external environmental conditions (e.g., Larraza-Kintana, Wiseman, Gomes-Mejia, & Welbourne, 2007). Thus, we examine how internal and external contextual factors relate to recruiters' choice of recruitment practices—specifically, the use of screening-oriented messages.

We investigate these issues by examining the types of messages organizational agents

(i.e., recruiters) use when posting job advertisements on web-based job boards (e.g., www.careerbuilder.com). We focus on web-based job boards because the ability to attract applicant pools that are relatively smaller and of higher quality than they have typically been is particularly important in a web-recruitment context. Specifically, the use of the web for recruitment purposes has been identified as having many advantages, such as lower recruitment costs and greater access to job seekers than traditional print mediums (Cober, Brown, Keeping, & Levy, 2004). However, web-based recruitment also has its disadvantages, one being a tendency for relatively larger numbers of unqualified people to apply for advertised positions (Chapman & Webster, 2003; Lievens & Harris, 2003). This is mainly because the costs in terms of time and effort to apply for jobs via the web have been sharply reduced compared to traditional means such as visiting individual organizations or mailing paper applications. For example, one source estimates that job seekers might be able to apply online for up to 600 jobs in a single day (Sumser, 2004). This suggests less judiciousness on the part of these job seekers in terms of where they apply, which further suggests increased likelihood of unqualified applications. Consistent with this logic, in one study 71 percent of recruiters claimed that the majority of the applications they received from web-based job advertisements did not match the job descriptions ("Internet Misuse," 2003; see also Maher, 2003).

It is possible that the large number of unqualified applicants to web-based job advertisements stems from a propensity to develop ads that "sell" vacancies to job seekers to encourage as many as possible to apply regardless of qualification levels, rather than encouraging unqualified applicants to refrain from applying through the use of screening-oriented messages (Dineen & Noe, 2009). It is particularly crucial to encourage poorly fitting job seekers to refrain from applying to increase processing efficiency, minimize the number of applicants that must be rejected (to decrease legal risk), and reduce the costs of identifying suitable job candidates (Cappelli, 2001; Dineen & Noe, 2009). Thus, the findings of this study promise to have important practical implications for best leveraging web-based technologies to generate applicant pools consisting of higher proportions of qualified applicants.

Theory and Hypotheses

Drawing on the economics, sociology, and agency theory literatures, we hypothesize that three factors will relate to whether organizational decision makers utilize screening-oriented recruitment messages in web-based job advertisements: (1) labor supply, (2) firm reputation, and (3) firms' incentive plans. We theorize that each of these factors can relate to use of screening-oriented recruitment messages and that the use of these types of recruitment messages will be associated with higher-quality applicant pools. We discuss each of these hypothesized relationships in greater detail.

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Antecedents of a Screening Orientation

Labor Supply

Labor market attributes have long been recognized as important macroeconomic factors that can shape firm HRM practices. Labor market factors, such as the supply of labor, place constraints on firms' efforts to attract and select employees (Rynes & Barber, 1990). Thus, traditional macroeconomic theory would suggest that firm HRM practices should vary according to labor supply for a firm's particular jobs (Jackson & Schuler, 1995). For example, when unemployment levels for certain jobs are low, firms may be forced to use more expensive and intensive recruitment methods (Hanssens & Levien, 1983), increase the geographic scope of their recruitment activities (Malm, 1955), use more lenient selection procedures (Bennett, Blum, & Roman, 1994), or raise

salaries and benefits (Lakhani, 1988) associated with those jobs. Consistent with this logic and similar to conceptual work considering interview focus (Rynes, 1989), we expect that recruiters' perceptions of labor supply for particular jobs will relate to the types of recruitment messages utilized in web-based job advertisements. In particular, when a low supply of talent for particular jobs is perceived to exist, recruitment messages may be geared toward encouraging as many prospective applicants as possible to apply for corresponding job vacancies. Conversely, if the supply of talent for a job is perceived to exceed demand, then recruiters may decide that the organization can afford to be more selective in whom to recruit and, as a result, may be more likely to utilize screening-oriented recruitment messages designed to encourage unqualified and poorly fitting applicants to self-evaluate and ultimately self-select out of the applicant pool for a particular job. Therefore, we predict:

Hypothesis 1: Perceived labor supply for particular jobs will be positively related to the adoption of screening-oriented recruitment messages in job advertisements.

Organizational Reputation

In addition to external environmental factors such as labor supply, firm-level attributes may also relate to the types of recruitment messages organizations utilize when recruiting prospective applicants (Rynes & Barber, 1990; Rynes, Orlitzky, & Bretz, 1997). One firm attribute that may be particularly relevant in relating to firms' recruitment communications is organizational reputation. Reputation has been defined as a perceptual representation of a firm's overall appeal compared to other leading rivals (Fombrun, 1996). Theoretically, a favorable reputation is valuable because it provides information to a firm's constituents (e.g., consumers, investors, and prospective employees), which in turn reduces their uncertainty about engaging in economic exchange with the firm (Fombrun, 1996). Thus, firms may develop more or less reputational capital that can enhance their marketplace standing.

In our context, we examine reputation in terms of likely employment quality offered to prospective employees by a firm. Conceptually, organizational reputation may relate to the approach taken to recruitment messaging in two ways. First, economic and signaling theories suggest that a favorable organizational reputation may serve as a signal to prospective employees that an organization would provide good working conditions and be a desirable employer (Shapiro, 1982; Spence, 1973). Such a signal may be used by job seekers when deciding to apply to such an organization, given the uncertainty associated with having to choose among a multitude of opportunities with little information. Second, institutional theory suggests that organizational reputation reflects the social standing of an organization within an organizational field. Firms with more favorable reputations are likely to be more publicly recognized as providing desirable, higher-quality employment experiences to their employees, thereby validating them as suitable employers (Rindova, Williamson, Petkova, & Sever, 2005).

Taken together, these two perspectives suggest that the more favorable an organization's reputation, the greater the likelihood that prospective applicants will develop a positive evaluation of the organization. Social identity theory further suggests that self-concept is shaped in part by organizational membership (Ashforth & Mael, 1989). Thus, in order to enhance their self-esteem and personal prominence, job seekers are likely to be more attracted to firms with more (as opposed to less) favorable reputations (Turban & Cable, 2003). Consistent with this logic, past research has found that job seekers are more likely to pursue jobs at firms with more favorable reputations (Belt & Paolillo, 1982; Gatewood, Gowan, & Lautenschlager, 1993). Furthermore, Turban and Cable (2003) found that organizational reputation had a direct effect on organization applicant pool attributes, such that organizations with more favorable reputations had both larger

numbers of applicants and higher-quality applicants.

To the extent that organizational reputation enhances applicant attraction, decision makers in firms with more favorable (compared to less favorable) reputations are likely to utilize screening-oriented recruitment messages to a greater extent in their job advertisements. Because these firms tend to garner greater attention from prospective applicants and are already likely viewed as desirable employers, there may be little need to utilize recruitment messages designed to sell the organization. Moreover, because firms with favorable reputations generally attract large numbers of applicants, there may be practical value in utilizing screening-oriented messages that encourage individuals to self-select out of the applicant pool in order to more efficiently manage application traffic. Based on this logic, we predict:

Hypothesis 2: Organizational reputation will be positively related to the adoption of screening-oriented recruitment messages.

Firms' Incentive Plans

Recruitment strategies do not operate in isolation from other HRM practices. Indeed, Rynes and Barber (1990, p. 302) note that other HRM practices used by organizations "act as constraints that influence the relative viability of alternative attraction strategies." One specific instance where this may be particularly important is the HRM practices organizations utilize to manage their recruiting staff. Recruiters are agents hired by organizations (either internally or externally) to develop and implement organizations' HRM strategies. However, it may sometimes be difficult to closely monitor recruiters' actions (Barber, 1998). Furthermore, similar to other types of organizational agents, it is possible for recruiters to develop goals and objectives that may or may not coincide with those of the organizations for which they work (Barber, 1998). In particular, recruiters are likely to adopt those strategies that will be easiest for them to accomplish and produce the greatest personal financial benefit.

Agency theory predicts that in situations where it is difficult to monitor agents' behavior and there is the potential for agents and principals (i.e., firm owners) to have conflicting goals, formal organizational structures such as employment contracts play an important role in governing agents' behaviors (Eisenhardt, 1989). In the case of governing recruiters' approach to recruitment, compensation policies or employment contracts containing merit-based pay and/or commission plans tied to applicant pool characteristics may play an important role in relating to the types of recruitment practices utilized by recruiters and in determining more proximal hiring outcomes. Specifically, these practices should be geared toward *recruiting qualified job seekers*, which incorporates both attracting quality applicant pools and ultimately hiring quality applicants. Hirschman (2003, p. 88) denotes these two dimensions, stating, "Top performance for recruiters generally means attracting and landing superior job candidates. . . ." To the extent that recruiters' financial incentives are tied to the quality of applicants and eventual hires they generate for organizations, it is likely that they will adopt recruitment strategies to filter out underqualified applicants (Hirschman, 2003). Thus, based on agency theory, we predict that when organizations tie some portion of their recruiters' compensation to measures of applicant pool quality and the quality of eventual hires, the firm's job advertisements will be more likely to contain screening-oriented messages.

Because firms with favorable reputations generally attract large numbers of applicants, there may be practical value in utilizing screening-oriented messages that encourage individuals to self-select out of the applicant pool in order to more efficiently manage application traffic.

Hypothesis 3: Use of compensation policies incentivizing applicant pool and new hire quality will be positively related to the adoption of screening-oriented recruitment messages.

The Relationship Between Screening Orientation and Applicant Pool Quality

Increasing the proportion of qualified, compared to unqualified, applicants can have several advantages to organizations, such as reducing recruitment costs and exposure to legal risk, increasing the speed of the recruitment process, and increasing the quality of hired employees (e.g., Breaugh & Starke, 2000; Cappelli, 2001; Dineen & Noe, 2009; Ployhart, 2006; Rynes & Cable, 2003; Taylor & Collins, 2000). Fortunately, since Barber (1998) noted the lack of studies examining applicant pool characteristics as dependent variables and Carlson et al. (2002) called for more work in this area, some progress has been made in linking recruitment content to applicant pool outcomes. For example, Collins and Han (2004) found early recruitment practices (e.g., sponsorships, employee endorsements, general or detailed recruitment advertisements), corporate advertising, and firm reputation had direct effects on applicant pool quality and quantity. Dineen and Noe (2009) examined the effects of customizing information in a web-based recruitment context on applicant pool fit. This study addressed the possibility that applicant self-screening may occur through the provision of customized fit information. Holtbrugge, Friedmann, and Puck (2010) examined personnel marketing (e.g., focusing on a wider geographical area, applying a wider spectrum of recruitment instruments, or active labor market research) and employer image as predictors of the number of qualified applicants.

It is likely that a screening orientation in recruitment communication will increase job seekers' awareness of whether they are qualified for the position, and thus facilitate self-selection out of the hiring process if they find they are unsuitable.

Kristof-Brown, Zimmerman, and Johnson (2005) note that job-seeker fit perceptions are sometimes based on irrelevant or inaccurate vacancy information, suggesting a greater likelihood of dysfunctional application decisions by unqualified individuals, which in turn yield lower percentages of qualified applicants. One reason why unqualified individuals may apply for a position is that companies sometimes use job or organizational descriptions that lack specific and relevant content (Feldman & Klaas, 2002). However, even when these descriptions do include specific information, the information does not always assist job seekers in evaluating their suitability for positions, and thus does not assist them in self-screening out of a hiring process should they find they are unsuitable. It is likely that a screening orientation in recruitment communication will increase job seekers' awareness of whether they are qualified for the position, and thus facilitate self-selection out of the hiring process if they find they are unsuitable. In turn, their application decisions will be more consistent with actual position features and requirements, yielding a higher proportion of qualified to unqualified applicants. Thus:

Hypothesis 4: Adoption of screening-oriented recruitment messages will be positively related to the proportion of qualified compared to unqualified applicants.

Method

Sample and Procedure

Data for this study were obtained from two sources. First, professional recruiters were invited through two recruiting industry listserves (Electronic Recruiting Exchange and Rocket-Hire) to participate in a web-based survey if they were currently posting at least one job advertisement on a web-based job board. In responding to the survey, recruiters were asked to provide sufficient information to allow the research team to retrieve for coding purposes one advertisement as it appeared on the web. Recruiters were also asked to provide their perceptions of the labor market for this advertised position, describe the means by which they were compensated, evaluate the quality of the applications they had received for the advertised job, describe the workforce planning time

orientation of the organization reflected in the job advertisement, and indicate whether they had personally written the job advertisement (i.e., whether a respondent had posted the job advertisement but had not necessarily written the advertisement). A total of 143 recruiters responded to the survey, of which we were able to locate 87 (61 percent) of the associated job advertisements. Of these, three had received no job applications to date and were excluded. An additional four cases were excluded due to incomplete survey responses. Thus, the final sample consisted of 80 matched recruiter responses and actual advertisements representing 78 companies. Sixteen percent of participants were third-party recruiters, meaning they were contracted by firms to specifically recruit for the positions in question. Over 75 percent of the job advertisements comprised jobs (e.g., associate account manager, investment advisor representative, process engineer, production technician) in professional industries such as finance and insurance, health care, information services, and scientific/technical services. The remaining advertisements were from industries such as manufacturing and arts and entertainment. There were no significant differences in any of the recruiter-assessed study variables, including applicant pool size or quality, between the 80 recruiter responses that were successfully matched with a job advertisement and those that were not, nor were there any significant differences in the main study variables across industries.

Second, we recruited 203 undergraduate business students from a large southeastern US university through a research experience program and asked each to complete a survey rating the screening orientation of three job advertisements retrieved by the research team as well as the reputations of the companies represented in those job advertisements. When completing the job advertisement evaluation, the student raters were told to first notice the name of the company indicated on the job advertisement. Without reading any of the other information about this job/company, the students were asked to write the name of this company in a space provided and then answer questions about their perceptions of the company's reputation. Thus, we clearly directed the students to consider the reputation of the company first, before viewing any information contained in the job advertisements. After rating the firm's reputation, students were instructed to read the job advertisement and then answer several questions about the content of the job advertisement. Each of the 80 job advertisements was evaluated by an average of seven students, allowing for an assessment of interrater agreement.

Measures

Perceived Labor Supply

Perceived labor supply was measured on the recruiter survey with a reverse-coded item created for the purposes of this study. Specifically, using a 1–5 Likert-type scale (1 = strongly disagree and 5 = strongly agree), recruiters were asked the extent to which they agreed with the statement "Given the availability of workers, it is very difficult to fill this position."

We clearly directed the students to consider the reputation of the company first, before viewing any information contained in the job advertisements.

Quality-Based Compensation

The extent to which recruiters' compensation was tied to applicant pool and new hire quality was assessed with two items on the recruiter survey. Using a 1–5 Likert-type scale (1 = strongly disagree and 5 = strongly agree), recruiters were asked to indicate the extent to which they agreed with the statements "My compensation includes a component by which I am rewarded for generating high quality applicant pools" and "My compensation includes a component by which I am rewarded for hiring the best person for the job, regardless of cost." These items map onto Hirschman's (2003, p. 88) conceptualization of recruiter success (i.e., "attracting" high-quality applicant pools and "landing" the best person for the job). The Cronbach's alpha for this measure was .71.

Organizational Reputation

Organizational reputation was assessed using students' responses to four items. Using a −3 to 3 Likert-type scale (−3 = low, 0 = neutral, and 3 = high), students evaluated (1) "the reputation of this organization as being an excellent employer," (2) "the reputation of this firm for providing excellent job opportunities," (3) "the reputation of this company for providing an exceptional work environment," and (4) "the status of this firm as a top employer compared to other organizations." The Cronbach's alpha for this measure was .94. Because multiple students evaluated each advertisement, we calculated R_{wg} values for the reputation measure. Mean (.84) and median (.91) values fell within prescribed limits. Reputation ratings were thus aggregated across student raters and assigned to the focal job advertisement.

Screening Orientation

Students assessed the screening orientation of each job advertisement using four items that were developed based on the ideas put forth by Breaugh and Mann (1984) and Turban and Dougherty (1992). Using a 1–5 Likert-type scale (1 = strongly disagree and 5 = strongly agree), students were asked the extent to which they agreed with the following: (1) "A primary goal of this job posting is to screen out unqualified job applicants, or applicants who otherwise would not be a good fit," (2) "The information in this position posting is useful in allowing job seekers to decide if they would be adequately qualified for the position," (3) "This job posting contains information that attempts to screen out unqualified applicants," and (4) "This job posting provides information meant to discourage unqualified people from applying for the position." The Cronbach's alpha for this measure was .88. R_{wg} values again fell within prescribed limits (mean = .70, median = .84), justifying aggregation across student raters and subsequent assignment of the mean value to the focal advertisement.

To better illustrate the concept of screening orientation we provide in Table I examples of job advertisements that fell at the mean level, +1 SD, and –1 SD in terms of screening orientation by these student raters. As shown in Table I, the low screening-oriented job advertisement includes some information on job requirements but contains more text highlighting the benefits of working at the advertised company. Conversely, the high screening-oriented job advertisement contains an extensive amount of information on job activities and the knowledge, skills, and abilities needed to complete these activities. This is consistent with our theorizing that a high (compared to low) screening-oriented job advertisement will provide job seekers with information those job seekers can use to *self-evaluate* their suitability for a given vacancy and, in turn, *self-select out* (i.e., refrain from applying) if their attributes did not match the positions' specific requirements (Williamson et al., 2003).

Applicant Pool Quality

Prior research has asked recruiters to estimate the quality of a firm's *overall* applicant pool across jobs (Collins & Han, 2004). However, as opposed to adopting this broad approach, we asked study participants to indicate the total number of qualified and unqualified applications received to date for the specific job advertisement in question. We believe this approach is more consistent with the conceptual focus of this study. Participants reported a range of qualified applications from 0 to 1,000 (mean = 45) and unqualified applications ranged from 0 to 6,000 (mean = 175). However, a large majority of pool sizes were small, with less than 5 percent of respondents reporting receipt of more than 300 of either type and 85 percent reporting receipt of 100 or fewer. We then generated a percentage of qualified to unqualified applications from these numbers (e.g., if a respondent reported receipt of 20 qualified and 60 unqualified applications, the applicant pool quality score was .25). A key

TABLE 1 Example Job Advertisements Illustrating Varying Levels of Screening Orientation[a]

−1 standard deviation from the mean level of screening orientation:

This job reports to the Vice President. Relocation is negotiable and travel occasionally. This is a Full-Time position, working 1st Shift.

Help us grow green! Prime career opportunity to be on the partnership track of a leading design firm where sustainable design is always on the forefront! ____, Inc., an expanding, national, multi-disciplined firm has the following position available: ARCHITECT

Job Skills/Requirements:
Registration plus 5+ yrs exp with demonstrated skills in production & team leadership on commercial, institutional and govt facilities. Military facility design knowledge a plus.

Additional Information/Benefits:
Partnership track opportunity! Excellent benefits package, competitive compensation with possible sign-on bonus for ideal candidate.

Benefits: Medical Insurance, Life Insurance, Dental Insurance, Vision Insurance, Paid Vacation, Paid Sick Days, Paid Holidays, Short Term Disability, Long Term Disability, 401K Plan, Special Incentive Plans

Mean level of screening orientation:

____, Inc. provides a comprehensive travel search engine and directory that helps consumers research their travel plans via the web. As a company, we are a small group of passionate professionals with the energy of a start-up and the stability of a profitable enterprise. We are looking for a smart and experienced Senior Software Engineer/Team Lead to join a small group of talented engineers who are passionate about building a great travel web site. The qualified individual will have a proven track record delivering high quality results, while thriving in a quickly paced environment. The individual will be responsible for all aspects of software engineering, from design to implementation and maintenance. In addition to being personally responsible for writing Java code in a Linux environment, you will frequently also be responsible for leading project teams of 1–3 developers.

Skills Required:
Demonstrated experience as a hands-on developer simultaneously managing small server-side software teams developing web applications, 10+ years of software development experience, BS or MS in Computer Science, Passion to build great software, Organized and detail oriented, Strong analytical and problem-solving skills, Sense of humor preferred.

Desired Skills:
At least 3–5 years' experience with Java, XSL/XML, and Linux, preceded by extensive object oriented coding experience. SQL experience a plus, Apache Web Server/Tomcat Apps Server.

Please take a minute in your email to tell us something that you're passionate about, or that motivates you. It is also helpful if you can include salary information for your last two jobs. References, while optional, are also welcome.

To apply, email a Word version of your resume to _____.

+1 standard deviation from the mean level of screening orientation:

_____ is a shared service organization providing customer service, test publishing, software development, quality assurance and technical support to the ____ VUE and ____ Assessments businesses. ____ is an Equal Opportunity Employer M/F/V/D.

Implement designs following ____ coding standards:
Maintain and support mission-critical applications as necessary, develop design models from requirements models using class diagrams, interaction diagrams, and other UML diagrams, develop business and requirements artifacts that effectively model the customer's requirements using use cases, activity diagrams, and other UML diagrams, understand and develop database Entity Relationship Diagrams. Perform object to relational mapping to support the database model in an object oriented design, participate in requirements, design, and code reviews, write and execute unit tests, participate in group improvement activities and initiatives to improve quality.

(*Continued*)

TABLE I Example Job Advertisements Illustrating Varying Levels of Screening Orientation[a] (*Continued*)

Bachelor's degree in Computer Science, MIS, a technology discipline, or equivalent, six or more years of related experience required. Specific experience in that time as follows: 3+ years' Java development experience, 3+ years' experience in Object-oriented Analysis and Design, 1+ years' experience developing business applications using SQL and relational database systems, understands the concepts of business objects, layered design, data access objects, and design patterns, knowledgeable in SQL, UML, JUnit, Stored Procedures and Triggers, and Iterative development, experience with the following is desired but not required: JNI, Swing, J2EE, PSP/TSP, ability to think technically and analytically, ability to effectively and efficiently communicate in both written and verbal formats with internal and external contacts, must be a self-starter and work well with a team.
RESPOND HERE! Respond immediately by accessing the following dedicated online response form which will allow you to cut and paste your resume. This form will go directly and immediately to the hiring authority for this position.

[a]Company names have been removed.

advantage of this approach is that it provides an indication of the quality of the applicant pool as it exists at any point in time during the recruitment process and is not dependent on having received all possible applications. Also, the measure does not simply account for the number of qualified applications received, but rather accounts for the fact that overall pool quality is enhanced when either (1) additional qualified job seekers apply or (2) fewer unqualified applicants apply.

Control Variables

Firms with a longer-term workforce planning time orientation might not be so concerned with the specific people they recruit, given that such recruits can grow and be developed over time. Thus, recruiters working for firms with longer-term workforce planning time orientations may be less likely to adopt a screening orientation and may also generate lower-quality applicant pools. To account for this possibility in our analyses, we controlled for the effect of workforce planning time orientation on screening orientation and applicant pool quality. Workforce planning time orientation was measured using two items on the recruiter survey: "To what extent does your organization's [client organization's] workforce planning strategy focus on the next 5 years" and "To what extent does your organization's [client organization's] workforce planning strategy focus on more than 5 years into the future" (alpha = .95). In addition, study respondents chose to place the focal job advertisements on the web. However, these advertisements were not necessarily designed or written by the respondents. Thus, we controlled for whether or not the respondent was actually the advertisement writer when examining screening orientation and applicant pool quality. This was measured by asking individuals, "Were you the person who actually wrote this position posting?" Finally, given that quality differences may be partly a function of the size of the applicant pool, we controlled for applicant pool size (a sum of the qualified and unqualified application numbers reported by the recruiters) when examining applicant pool quality.

Results

The means, standard deviations, and correlations among the study variables are presented in Table II. To test simultaneously the proposed relationships, we estimated a path model using Measured Variable Path Analysis in LISREL 8.53 (Jöreskog & Sörboom, 2001), which allows for the estimation of the relative importance of alternative paths of influence and also measures the direct and

TABLE II Means, Standard Deviations, and Correlations Among Study Variables

Variable	M	SD	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) Workforce planning time orientation	2.12	1.17	.95						
(2) Advertisement developer *(0 = no; 1 = yes)*	.60	.49	.05						
(3) Applicant pool size	226.81	897.82	−.07	−.00					
(4) Perceived labor supply	2.24	1.13	.02	−.15	−.01				
(5) Organizational reputation	.26	.55	.04	−.10	.09	.04	.94		
(6) Quality-based compensation	1.96	1.25	.05	.26*	−.05	.06	.15	.71	
(7) Screening orientation	3.59	.58	−.19*	−.19	−.01	.22*	.26**	.18	.88
(8) Applicant pool quality	.29	.25	.02	.18	−.09	.09	.09	.13	.15

$N = 80$. Coefficient alphas for relevant variables appear on the diagonal.
$^{**}p < .01$; $^{*}p < .05$ (one-tailed).

indirect (i.e., mediating) effects that one variable has on another (Shook, Ketchen, Hult, & Kacmar, 2004). LISREL provides both an overall assessment of the fit of a hypothesized path model to the data, and tests of individual hypotheses. Following the procedures recommended by James, Mulaik, and Brett (1982), we controlled for measurement error in the organizational reputation, quality-based compensation, screening orientation, and workforce planning time orientation measures by setting the variables' error terms equal to their variances multiplied by one minus their Cronbach's alpha scores, and the variables' lambda matrix value was set equal to the square root of their Cronbach's alpha scores.

Before discussing tests of the specific hypotheses from the path model, it is important to evaluate the overall fit of the theoretical model to the data. Consistent with the recommendations of Kline (1998), we assessed the overall fit of the model to the data using the chi-square statistic, goodness-of-fit index (GFI, which describes the overall proportion of explained variance), adjusted GFI (AGFI, which adjusts the proportion of variance explained for model complexity), and the standardized root mean square residual (SRMR). A nonsignificant chi-square statistic, GFI and AGFI scores greater than .90, and an SRMR of less than .10 suggest that the model is a good fit to the data (Kline, 1998). The chi-square for the hypothesized model was nonsignificant, χ^2 (19, N = 80) = 14.39, p = .76; the GFI was .96; the AGFI was .93; and the SRMR was .07. Based on these results, we concluded that the hypothesized model adequately fit the data.

Figure 1 contains the standardized maximum-likelihood parameter estimates, significance levels, and R^2 values for the hypothesized model. Hypothesis 1 predicted that perceived labor supply would be positively related to the use of screening-oriented recruitment messages. Consistent with this prediction, perceived labor supply had a significant positive relationship with screening orientation (γ = .19). Thus, Hypothesis 1 was supported. Hypothesis 2 predicted that organizational reputation would be positively related to the use of screening-oriented recruitment messages. Consistent with this prediction, organizational reputation had a significant positive relationship with screening orientation (γ = .23). Thus, Hypothesis 2 was supported. Consistent with Hypothesis 3, there was a significant, positive path coefficient between quality-based compensation and screening orientation (γ = .32). Thus, Hypothesis 3 was supported. Finally, consistent with Hypothesis 4, the adoption of a screening orientation in job advertisements was positively related to the proportion of qualified to unqualified

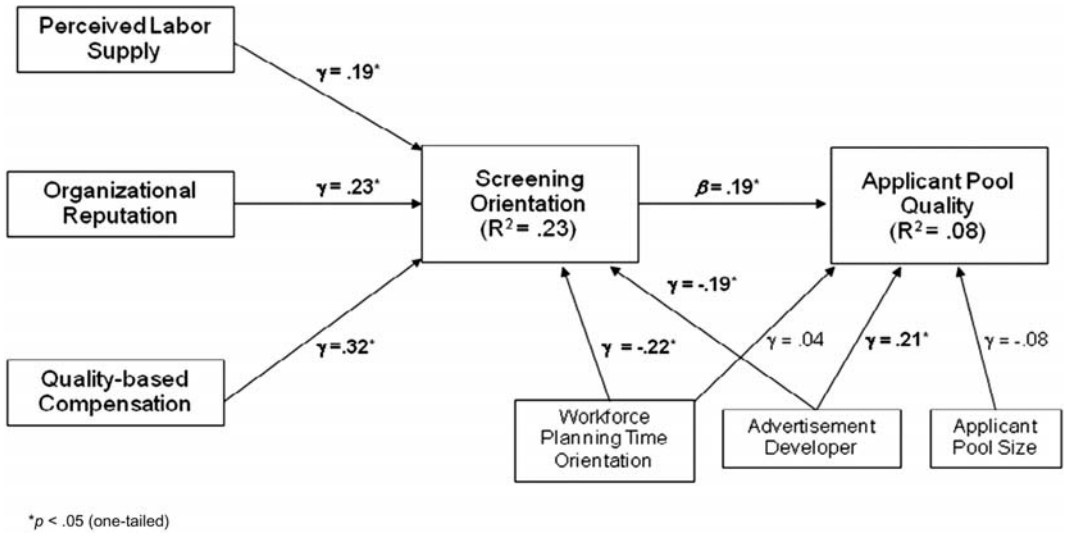

FIGURE 1. Structured Path Coefficients for the Hypothesized Model

applicants in applicant pools (i.e., applicant pool quality; β = .19). In terms of the control variables, workforce planning time orientation and whether the respondent was the advertisement developer were both negatively related to the adoption of a screening orientation (γ = −.22 and −.19, respectively; see Figure 1). Advertisement developer was significantly related to applicant pool quality (γ = .21). However, workforce planning time orientation and applicant pool size did not have a significant direct effect on applicant pool quality. Overall, the theorized variables explained 23 percent of the variance in screening orientation and 8 percent of the variance in applicant pool quality.[1]

Discussion

This study responds to calls for more attention to the antecedents of recruitment approaches (Breaugh & Starke, 2000; Rynes & Cable, 2003) by examining how external environment and firm attributes relate to the types of recruitment messages organizational decision makers utilize in their web-based job advertisements. It also addresses the important question of how to get higher-quality applicant pools at a time when finding top talent continues to be a key organizational concern (Dineen & Noe, 2009; Ployhart, 2006). Specifically, using two sets of respondents and separately measured independent and dependent variables, the study examines antecedents of the adoption of a screening orientation to initial recruitment communications that are grounded in labor economics, reputation, and agency theory perspectives, with support found for all three perspectives.

Specifically, results indicated that labor supply perceptions, firm reputation, and applicant pool quality-based compensation incentives are each positively related to adopting a screening orientation. In turn, a screening orientation was found to relate to higher-quality applicant pools, assessed in terms of recruiters' reports of numbers of qualified and unqualified applicants for actual web-based job advertisements. Overall, it appears that labor supply perceptions, firm reputation, and applicant quality-based incentives are indirectly related to higher-quality applicant pools through their relationship with screening orientation.

Theoretical Implications

The positive relationship between labor supply perceptions and screening orientation follows from traditional macroeconomic theory, which suggests that firms adjust their

strategies to account for the supply of labor. Adjustments might range from changes in production to changes in the methods used to attract (or possibly deter) larger numbers of applicants for jobs (e.g., Bennett et al., 1994; Hanssens & Levien, 1983; Malm, 1955). In the present context, it appears that when a larger supply of labor for particular jobs is perceived to exist, recruitment messages tend to be developed to include more of a screening orientation. By providing specific information geared toward assisting job seekers in self-evaluating and self-screening, such an orientation encourages only the most qualified job seekers to apply. With a larger labor supply, firms run the risk of attracting larger numbers of unqualified applicants from this larger overall labor pool should messages without a screening orientation be employed.

The finding that quality-based incentives were related to the use of screening-oriented messages is consistent with the agency theory prediction that formal organizational policies can relate to the actions of organization agents in situations where these agents are not constantly monitored. Barber (1998, p. 144) states, "We have even less research focusing on the actions of organizational agents—those individuals who carry out the organization's recruitment strategies. . . . The lack of research taking the agents' perspective is a potentially serious omission, as one cannot presume that agents . . . are willing or able to behave in a manner consistent with the organization's goals and intentions." Therefore, this finding provides initial evidence that the use of agency theory may provide important insight into why recruiters adopt certain types of recruitment messages and also suggests a potential means by which organizations can manage recruiter agency concerns. Specifically, this type of HRM practice appears to motivate recruiters, who are agents of the firm, to be more or less likely to use screening language that impacts applicant pool attributes. Thus, recruiter incentives tied to particular outcomes appear to have a clear impact on how recruiters attempt to acquire employees. This suggests that future research on recruiter incentives may hold promise for understanding recruiter behaviors and their resulting impact on firm recruitment outcomes.

The reputation finding is consistent with arguments posed by researchers who maintain that organizational characteristics rather than position characteristics might be related to HRM practices in general and recruitment strategizing in particular (e.g., Jackson et al. 1989; Stevens, 1998; Terpstra & Rozell, 1993). Furthermore, the findings offer greater insight into the mechanisms by which organizations may reap recruitment benefits from having favorable organizational reputations. The findings suggest that recruiters representing firms with more (as opposed to less) favorable reputations were more likely to use screening-oriented messages, which in turn was associated with higher-quality applicant pools. Presumably, recruiters representing firms with more favorable reputations used screening-oriented messages because of the belief that the reputation of these firms would allow them to attract enough prospective applicants without having to sell the organization. Thus, firms with more favorable reputations may develop a competitive advantage by having the discretion to use recruitment practices that attract better applicants, an important HRM outcome since applicant quality can influence the effectiveness of subsequent HRM practices (Barber, 1998; Terpstra & Rozell, 1997).

Our results provide evidence that the use of screening-oriented recruitment messages can relate to an increase in applicant pool quality via an increase in the proportion of qualified to unqualified applicants for jobs. It is likely that job seekers who are exposed to screening-oriented messages are able to make more informed self-selection decisions. Some scholars have questioned whether providing realistic information might cause the best candidates to self-select out of a recruitment process (Barber, 1998; Bretz & Judge, 1998). However, our results provide initial evidence showing that a screening orientation enhances rather than detracts from applicant pool quality. A possible explanation for these differing results is that screening-oriented communication does not necessarily translate into

presenting negative information. By contrast, most of the screening-oriented advertisements in this sample did not present negative information, but rather presented factual, impartial information with which job seekers might make more informed decisions (see Table I). Although not assessed in the current study, additional advantages of a screening orientation might include reduced job-seeker search costs, perceived honesty of recruitment messages, and reduced consumer skepticism. For example, Feldman, Bearden, and Hardesty (2006) found that perceived truthfulness and informativeness of job advertisements, and overall positivism toward the company, were enhanced when more specific, as compared to general, messages were presented.

One practical implication of this research is for companies to align recruiter incentives with the type of applicant pools desired, especially if higher-quality rather than higher-quantity applicant pools are desired.

Practical Implications

The study results indicate that recruiter incentives are related to initial recruitment message orientation. One practical implication of this research is for companies to align recruiter incentives with the type of applicant pools desired, especially if higher-quality rather than higher-quantity applicant pools are desired. There exists both the propensity for web-based recruitment to generate lower-quality applicant pools (Lievens & Harris, 2003) and a concomitant dearth of quality-based incentives for recruiters despite their increased attention in practitioner outlets (Hirschman, 2003; Sullivan, 2007). It thus appears that an opportunity exists for companies to capitalize and gain competitive advantage in their use of the web to recruit, as well as for HRM professionals to align their programs with overall company strategy (e.g., Boudreau & Ramstead, 2003). Recruiter incentive programs may also help organizations attract and retain the most competent and aggressive recruiters (Hirschman, 2003; Sullivan, 2007).

Our findings further highlight the practical advantages that firms with more (compared to less) favorable reputations can have in the recruitment process (e.g., Gatewood et al., 1993; Turban & Cable, 2003). In particular, firms with more favorable reputations seem more likely to utilize the type of recruitment messages that generate higher-quality applicant pools. Our results do not allow us to tease out the causal link between reputation and the use of screening-oriented messages. Nonetheless, this finding does illustrate the tangible benefits of organizational reputation and provides justification for the expenses associated with reputation-building efforts. In particular, while prior research has highlighted how reputation may directly attract applicants, our study suggests that reputation may also be associated with the decisions of internal employees (i.e., recruiters), such that they tend to utilize more effective recruitment messages.

Limitations and Future Research

This study has several limitations that may be fruitful areas for future research to examine. First, we focused on how three factors—labor supply, organizational reputation, and compensation practices—relate to the types of recruitment messages used by organizational recruiters, and we were able to explain 23 percent of the variance in screening orientation using these factors. However, future research could build upon this effort by examining how other factors might shape recruitment message orientation. For example, prior research has found that social network and institutional factors influence firm hiring behavior (e.g., Williamson & Cable, 2003). As such, these perspectives may also provide insight into the types of recruitment messages adopted by organizational decision makers. Also, employment brand image (Cable & Turban, 2001), company policy toward issues such as pay or training levels (e.g., Wilk & Cappelli, 2003), or shifts in company policy such as specific diversity initiatives may relate to the adoption of a particular message orientation. In terms of potential antecedents of applicant pool quality, screening orientation explained 8 percent of the variance. However, other scholars have

examined message aesthetics, information customization, and corporate advertising as additional predictors of applicant pool quality (e.g., Collins & Han, 2004; Dineen, Ling, Ash, & DelVecchio, 2007; Dineen & Noe, 2009). These might be fruitfully incorporated with the factors examined in the present study.

Second, given the different organizations represented in our sample, it was not possible to establish a common definition of what constituted a quality applicant pool, as this is likely to vary by company. It was therefore our belief that this judgment was best left up to the individual respondents' perceptions of what "quality" comprised for their particular companies. However, future research could build upon our work by using multiple raters per company to rate applicant pool quality. It is also possible that it may have been more difficult for recruiters to estimate numbers of qualified applicants for large applicant pools due to cognitive limitations. To address this concern, we examined the correlation between screening orientation and applicant pool quality among those cases in the top and bottom third of the distribution of applicant pool size. Results were similar, thus reducing concerns that our results were biased by our manner of measurement. However, future studies might complement recruiters' subjective evaluations of applicant pool quality with objective data on applicant performance in the selection process to determine the impact of using screening orientation on both initial and long-term recruitment outcomes.

Third, future work might be designed to better assess causality among these variables. While our conceptual reasoning implies the causal model we propose, the current methodological design does not allow us to make a concrete claim to causality. Fourth, a larger sample size would have been more optimal. As mentioned, we initially surveyed 143 recruiters but were only able to actually locate and use matched job advertisements for 80 of these recruiters.

Other avenues for future work in this area might include an examination of whether the strategic importance of a position to an organization influences the type of recruitment message used. Also, based on our labor supply finding, we encourage researchers to continue examining this perspective in concert with other important factors such as those that we have modeled. For example, an even stronger test of the labor economics perspective might include a measure of labor demand for specified positions or archival labor force metrics. However, it is likely that labor supply perceptions, rather than actual labor supply, are more strongly linked to the actions of recruiters in using appropriate recruitment messages.

Future studies might complement recruiters' subjective evaluations of applicant pool quality with objective data on applicant performance in the selection process to determine the impact of using screening orientation on both initial and long-term recruitment outcomes.

It is also conceivable that industry prestige (e.g., tobacco versus entertainment) might shape the messages used to advertise jobs. In a similar vein, we only focus on recruitment messages posted on web-based job boards. However, it may be of value to examine how well our theoretical model explains the adoption of screening-oriented recruitment messages in other recruitment media (e.g., broadcast, print, or social media) and what impact recruitment message orientation has on the attributes of the applicant pools generated by these media. Finally, this study only focuses on the screening orientation of recruitment messages. However, organizational decision makers sometimes adopt dual-purpose messages that include both screening- and selling-oriented aspects (Barber, Hollenbeck, Tower, & Phillips, 1994; Williamson et al., 2003). Thus, it would be interesting to examine what factors influence the adoption of this orientation and how these types of messages shape applicant pool attributes.

Conclusion

This study contributes to the recruitment literature by addressing calls for investigations of how contextual factors relate to firm

recruitment strategies. The results of this study also provide empirical evidence that the use of screening-oriented messages can relate to enhanced applicant pool quality. A methodological strength of our study lies in the separate assessment of independent and dependent variables using data from recruiters and prospective applicants. We also extend prior research by examining recruitment in a web-based context, which despite being the primary means by which employers advertise employment opportunities, has been largely underresearched to date. Finally, our study integrates extant recruitment research with economic and sociological theories. Thus, our article addresses calls for stronger theoretical development in research examining the role of technology in recruitment (Anderson, 2003). Overall, we believe our article offers important insights into how organizations can develop recruitment messages that produce positive recruitment outcomes.

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Note

1. We conducted an additional path analysis that included direct paths from the three independent variables to the applicant pool quality dependent variable to assess the potential for partial mediation. None of the three additional paths were significant and the chi-square change for the new nested model was not significant ($\Delta\chi^2$ (3, $N = 80$) = .97, $p = .81$), suggesting a better model fit of the fully mediated model depicted in Figure 1.

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