

2-11-2008

Pre-employment Knowledge: Measurement and Relationship to Recruitment Methods and Previous Job and Organizational Exposure

Nancy Kathleen Frye
University of Missouri-St. Louis

Follow this and additional works at: <https://irl.umsl.edu/dissertation>



Part of the [Psychology Commons](#)

Recommended Citation

Frye, Nancy Kathleen, "Pre-employment Knowledge: Measurement and Relationship to Recruitment Methods and Previous Job and Organizational Exposure" (2008). *Dissertations*. 559.
<https://irl.umsl.edu/dissertation/559>

This Dissertation is brought to you for free and open access by the UMSL Graduate Works at IRL @ UMSL. It has been accepted for inclusion in Dissertations by an authorized administrator of IRL @ UMSL. For more information, please contact marvinh@umsl.edu.

Pre-employment Knowledge: Measurement and Relationship to Recruitment Methods and
Previous Job and Organizational Exposure

N. Kathleen Frye
M.A., Industrial and Organizational Psychology, University of Missouri-St. Louis, 2001
B.S., Psychology, University of Missouri-Columbia, 1997

A Dissertation

Submitted to the Graduate School of the
University of Missouri-St. Louis
In Partial Fulfillment of the Requirements for the Degree

Doctor of Philosophy

In

Industrial and Organizational Psychology

December, 2007

Advisory Committee

James Breugh, Ph.D.
Chairperson

Therese Macan, Ph.D.
Mark Tubbs, Ph.D.
Haim Mano, Ph.D.

Abstract

This study investigated pre-employment knowledge in relation to recruitment methods, job exposure, and organization exposure. In addition, this study investigated a new approach to the measurement of pre-employment knowledge. Specifically, it utilized an agreement approach to measurement (i.e., applicants' responses were compared to job incumbents') and examined pre-employment knowledge in terms of three subcategories: job, people, and organizational knowledge. Participants completed a questionnaire when they applied for the job. The questionnaire contained measures of recruitment methods, job exposure, and organization exposure, and the three types of pre-employment knowledge. Some support was found for the hypothesis that applicants who used an employee referral have better factual job pre-employment knowledge than applicants who used an advertisement. Some support was also found for the notion that the more useful applicants found the recruitment sources they used, the better their factual pre-employment knowledge and their attribute organization pre-employment knowledge. No support was found for job exposure being related to job pre-employment knowledge or for organization exposure being related to people or organization pre-employment knowledge. When results were examined using the individual pre-employment knowledge items, there was some support for a few of the hypotheses. The results for three of the items indicated a relationship between recruitment methods and pre-employment knowledge agreement. The results for one of the items indicated a relationship between organization exposure and pre-employment knowledge agreement. Results for four of the items indicated a relationship with the overall usefulness of recruitment methods and pre-employment knowledge agreement. Finally, results for three of the items indicated a relationship with the usefulness of employee referrals and pre-employment knowledge agreement. Implications and limitations of the findings are discussed.

Pre-employment Knowledge: Measurement and Relationship to Recruitment Methods and Previous Job and Organizational Exposure

Over the last 25 years, the topic of employee recruitment has received considerable research attention (Rynes & Cable, 2003). Researchers have examined recruitment in relation to a variety of variables: realistic job previews (Phillips, 1998), recruiter characteristics (e.g., Chapman, Uggerslev, Carroll, Piasentin, & Jones, 2005; Powell, 1984; Turban & Dougherty, 1992), person-organization fit (Cable & Judge, 1996; Saks & Ashforth, 1997), and applicant self-selection (e.g., Bretz & Judge, 1998; Rynes, Bretz, & Gerhart, 1991).

In 1991, Rynes stated that attracting applicants is the main objective of recruitment. Recently, researchers and practitioners have recognized that the recruitment process not only serves to attract applicants, but also serves to increase a job seeker's employer knowledge (Cable & Turban, 2001). Therefore, more research attention has been focused on how applicants acquire knowledge about an open position and whether that information is perceived as being realistic (e.g., Cable, Aiman-Smith, Mulvey, & Edwards, 2000; Cable and Turban, 2001; Williams, Labig, & Stone, 1993). Most researchers have concluded that recruitment practices can impact applicant pre-employment knowledge (e.g., Cable & Turban, 2001; Collins & Stevens, 2002; Wilk, 2004).

Purpose of the Present Study

The present study investigated three ways in which applicants may gain realistic pre-employment knowledge: recruitment methods, job exposure, and organization exposure. In addition, this study addressed measurement concerns regarding pre-employment knowledge. A more thorough discussion of the purposes of this study and the limitations of previous research are provided below.

Obtaining Pre-employment Knowledge

The first purpose of this study is to examine how applicants may gain realistic pre-employment knowledge. Breugh (2006) suggested that organizations can recruit applicants who have realistic information utilizing two methods. First, they can provide applicants with accurate information through their recruitment methods (e.g., job advertisements). Second, they can target applicants who already have some exposure to the job and the organization (e.g., rehires, those that have a family member that works for the organization). The present study examined how recruitment methods (i.e., employee referrals, direct applicants, advertisements, and employment agencies), job exposure (the extent the applicant has previous exposure to the type of position for which he/she has applied) and organizational exposure (the extent the applicant has previous exposure to the organization) relate to pre-employment knowledge. Exploring what leads to pre-employment knowledge is important because accurate perceptions of what the position entails has been shown to lead to beneficial outcomes such as less turnover, less absenteeism, and higher job satisfaction (e.g., Griffith, Hom, Fink, & Cohen, 1997; Moser, 2005; Saks, 1994; Williams et al., 1993).

Measurement Issues

A second purpose of this study is to improve upon the measurement of pre-employment knowledge. To date, researchers have attempted to measure pre-employment knowledge in a number of ways: met expectations (e.g., Breugh & Mann, 1984; Blau, 1990; Griffith et al., 1997; Saks, 1994; Werbel & Landau, 1996), the number of methods used (Vecchio, 1995), and specificity and breadth (Quaglieri, 1982). While advancements have been made in the literature, these measurement approaches often suffer from at least one of three limitations.

The first limitation of the past measurement of pre-employment knowledge is that research has examined this variable too broadly. Recently the literature has recognized that there is value in examining pre-employment knowledge in terms of the specific facets that it may entail. Specifically, Cable and Turban (2001) suggested that pre-employment knowledge consists of three components: organization information (the objective aspects of the organization such as size, geographical dispersion as well as less objective aspects such as organizational values and culture), job information (knowledge about the attributes of a specific job at the firm applicants might be interested in obtaining), and people information (the type of individuals who comprise the organization). The present study examined recruitment methods, job exposure, and organization exposure as they relate to pre-employment knowledge concerning organization, people, and job pre-employment knowledge (see Figure 1).

A second limitation of the measurement of pre-employment knowledge is that pre-employment knowledge has often been measured after the participant is hired (Williams et al., 1993). Because of the length of time that may elapse between the time in which the applicant encounters the recruitment method and the administration of the measure, many other factors (e.g., the socialization process) besides recruitment methods could affect the applicant's recollection of pre-employment knowledge. In addition, applicants may be treated differently depending on the recruitment method they used. For example, employee referrals could receive more information about the organization in an interview simply because they have learned the basic information about the organization from the person who referred them. Thus, they may be likely to ask more in-depth questions than an applicant who used a method that did not provide much information. While pre-employment knowledge can be measured at several points in time (e.g., after hire, after an interview), in order to determine the direct relationship of recruitment

methods and pre-employment knowledge, measurement of pre-employment knowledge should occur closer to when the applicant encounters the recruitment method. The present study measured pre-employment knowledge when the applicant applied for the position.

A final limitation of the way pre-employment knowledge has been measured in previous studies is that participants have been asked to report their perceptions of their pre-employment knowledge (i.e., the degree to which they thought they knew about the job). Because participants reported their perceptions of how much they knew about the job, we know little about their true pre-employment knowledge and how recruitment methods relate to this knowledge.

Research could benefit from measuring pre-employment knowledge in a different manner than has typically been the case. Specifically, I believe pre-employment knowledge should be measured by asking applicants about specific characteristics of the organization, people, and job and comparing their responses to the responses of job incumbents.

Williams et al. (1993) recognized that "...most studies comparing the effects of formal and informal recruitment methods have not directly measured applicants' pre-employment knowledge (p. 163)". Williams et al. improved upon the measurement of pre-employment knowledge by measuring pre-employment knowledge at initial application and asking applicants how much they thought they knew about the specific characteristics of the job and organization (e.g., pay, benefits, working conditions, and hospital reputation). Despite these improvements, Williams et al. concluded that "...our perceptual measure of the amount of pre-employment organizational knowledge possessed by applicants did not assess whether that information was accurate (p. 171)." They suggested a better measure of pre-employment knowledge would be to compare applicants' pre-employment ratings with the ratings of job incumbents on the same measure.

Cable et al. (2000) utilized the measurement approach suggested by Williams et al. (1993). They examined the relationship of information methods (e.g., product advertisements, company brochures/videos, word of mouth, prior work experience) and applicants' culture beliefs. They surveyed both executives and job applicants of an organization using the Organizational Cultural Profile scale. While Cable et al. improved upon the methodology utilized by past studies, their findings did not support the majority of their hypotheses. This may have been due to the use of executives as the comparison group. The culture literature has found that executive beliefs do not always match the beliefs of those in the lower levels of the organization. This may partially be due to executives' unwillingness to be candid (Martin, 2002).

Summary of the Present Study

To address the above issues, this study examined the conceptual model presented in Figure 1. This model addresses pre-employment knowledge as it relates to recruitment methods, job exposure, and organization exposure (Note: a participant could use both a recruitment method and have previous exposure to the job or organization. For example, a participant could be both a referral and have worked in a similar job). This study also measured knowledge in a different manner than previous studies. Specifically, pre-employment knowledge was broken into three dimensions: job, people, and organization. In addition, applicants' knowledge was compared to current job incumbents' knowledge of the job, people, and organization. Furthermore, pre-employment knowledge was measured when the applicant applied for the position. A more detailed discussion of each variable and the hypothesized relationships presented in Figure 1 is provided below.

Examination of a Conceptual Model

An applicant may gain pre-employment knowledge in a few ways: 1) through the method by which they learned about the position opening, 2) their previous exposure to the job, or 3) their previous exposure to the organization. When an applicant comes into contact with a recruitment method (i.e., newspaper advertisement, employment agency, employee referral, and direct applicant) they learn about various characteristics of the job, people, and the organization. To the extent the information provided by these methods is realistic, they may gain realistic pre-employment knowledge. Similarly, applicants can have previous exposure to a job (e.g., they previously worked in a similar job) and an organization (e.g., they previously worked for the organization). Such exposure may also determine the degree to which the applicant possesses realistic pre-employment knowledge.

Pre-employment Knowledge

For the purpose of this study, pre-employment knowledge is an agreement measure. Specifically, pre-employment knowledge is the correspondence between what the applicant believes to be true about the job/people/organization and what job incumbents believe to be true about the job/people/organization (adapted from Cable et al., 2000). Job incumbents were chosen as a comparison group because they are in closest proximity to the job and, therefore, are likely to have the most realistic view of the job, people, and organization. Job incumbent responses were averaged together and compared to the responses of applicants.

In addition to measuring pre-employment knowledge as agreement, two different measures of pre-employment knowledge agreement are examined: factual and attribute. Attribute pre-employment knowledge is used most often in recruitment studies. For the purposes of this study, attribute pre-employment knowledge is defined as the evaluative knowledge the applicant

has that is based on the job, organization, and people characteristics. However, because pre-employment knowledge is measured as agreement in this study, more objective items regarding pre-employment knowledge are included. These more objective items are represented in the factual pre-employment knowledge measure. The conceptual definition for factual pre-employment knowledge is the knowledge the applicant has about the job, organization, and people that is based on verifiable data. For the purposes of the hypotheses presented in this study, both attribute and factual measures of pre-employment knowledge are expected to have the same results.

Recruitment Methods

The recruitment literature often uses the terms recruitment sources and recruitment methods interchangeably (Breugh, 1992). For the purposes of clarity in this paper, recruitment sources concern the types of applicants the organization targets. Some examples of recruitment sources include rehires, retirees, former employees and the military. Recruitment methods concern the means by which the organization recruits desirable applicants. Some examples of recruitment methods include newspaper ads, job fairs, and internal job postings.

Recruitment methods differ in the amount of detail and realistic information they provide to job seekers (e.g., Breugh & Starke, 2000; Schwab, 1982; Taylor & Schmidt, 1983; Ullman, 1966). The recruitment literature suggests that certain methods lead to better post-hire outcomes (e.g., less turnover, less absenteeism, more positive work attitudes, higher job performance) than other methods (Zottoli & Wanous, 2000). Specifically, the most effective methods are employee referrals and internal job postings. The least effective methods are newspaper ads, school placement services, and employment agencies (Zottoli & Wanous, 2000). As portrayed in Figure 1, the recruitment methods that are focused upon in this study are: employee referrals, direct

applicants, advertisements, and employment agencies. For the purposes of this study, a person can be in one of these recruitment method categories whether they applied in person or they applied via the internet. For example, an employee that refers a candidate can either suggest that the applicant apply online or that he or she obtains an application from human resources. Similarly, one can be a direct applicant whether they walk into the organization and apply or visit the organization's web site and apply on-line.

The above recruitment methods (i.e., employee referrals, direct applicants, advertisements, and employment agencies) were chosen because they are the most commonly studied (Breaugh and Starke, 2000; Moser, 2005). Using these recruitment methods in this study allow for a comparison of the study's results to the results of previous studies that measured pre-employment knowledge differently. In addition to gathering data on employee referrals, direct applicants, advertisements, and employment agencies, data is gathered on other recruitment methods that are not as commonly researched (e.g., job fairs), but no hypotheses are presented regarding these specific methods.

Recruitment methods--> Pre-employment knowledge. The general conclusion of the recruitment research is that employee referrals and direct applicants obtain more realistic pre-employment knowledge than applicants who use recruitment advertisements and employment agencies. Specifically, research suggests that employee referrals gain more information than applicants who use other methods because the person who referred the applicant may provide the applicant with more realistic information (Breaugh, 1992). In addition, direct applicants may have more information about the job/people/organization than other recruitment methods users because they spend more time learning about the job on their own (Kirnan, Farley, Geising, 1989). Both Breaugh and Mann (1984) and Werbel and Landau (1996) found that employee

referrals had greater realistic expectations than employees recruited via newspaper advertisements or employment agencies, respectively. Quaglieri (1982) concluded that referrals and direct applicants felt they possessed more realistic and specific information than applicants recruited via newspaper advertisements, professional journals and employment agencies.

The literature has recognized that there is value in examining recruitment methods and pre-employment knowledge in terms of how specific recruitment methods relate to specific facets of pre-employment knowledge. As mentioned earlier in this paper, this study examined how organization, people, and job pre-employment knowledge related to recruitment methods. While many studies have examined recruitment methods and general pre-employment knowledge, a literature search revealed one study that investigated certain informational methods (i.e., sponsorship, publicity, word of mouth, advertisement) leading to job or organizational pre-employment knowledge (Collins & Stevens, 2002). Collins and Stevens (2002) tested a model in which they examined if informational practices and attitudes toward an organization were related. They found that publicity predicted attitudes toward the organization.

For the purposes of the present study, it seems logical that employee referrals will have a more realistic perception of all three types of knowledge because they have direct contact with someone from the organization. Referrers can provide the applicant with realistic information about organizational, people, and job characteristics (Cable & Turban, 2001). Direct applicants will have a realistic perception of organizational and job characteristics since they have spent time researching the organization and job on their own (Kirnan et al., 1989). However, their people knowledge will be less realistic than employee referrals since direct applicants are less likely to have contact with someone from the organization prior to applying. Those applicants who use newspaper advertisements and employment agencies, are predicted to have less

knowledge in all three areas, especially organization and people since the goal of these methods is to inform the applicant of the job opening (Wilk, 2004). Based on the above research and theory, the following is hypothesized:

Hypothesis 1a₁: Employee referrals will have higher levels of **factual job** and **organization** pre-employment knowledge agreement than those recruited via advertisements.

Hypothesis 1a₂: Employee referrals will have higher levels of **factual job** and **organization** pre-employment knowledge agreement than those recruited via employment agencies.

Hypothesis 1a₃: Direct Applicants will have higher levels of **factual job** and **organization** pre-employment knowledge agreement than those recruited via advertisements.

Hypothesis 1a₄: Direct Applicants will have higher levels of **factual job** and **organization** pre-employment knowledge agreement than those recruited via employment agencies.

Hypothesis 1b₁: Employee referrals will have higher levels of **factual people** pre-employment knowledge agreement than those recruited via advertisements.

Hypothesis 1b₂: Employee referrals will have higher levels of **factual people** pre-employment knowledge agreement than those recruited via employment agencies.

Hypothesis 1b₃: Employee referrals will have higher levels of **factual people** pre-employment knowledge agreement than those recruited via direct application.

Hypothesis 2a₁: Employee referrals will have higher levels of **attribute job** and **organization** pre-employment knowledge agreement than those recruited via advertisements.

Hypothesis 2a₂: Employee referrals will have higher levels of **attribute job** and **organization** pre-employment knowledge agreement than those recruited via employment agencies.

Hypothesis 2a₃: Direct Applicants will have higher levels of **attribute job** and **organization** pre-employment knowledge agreement than those recruited via advertisements.

Hypothesis 2a₄: Direct Applicants will have higher levels of **attribute job** and **organization** pre-employment knowledge agreement than those recruited via employment agencies.

Hypothesis 2b₁: Employee referrals will have higher levels of **attribute people** pre-employment knowledge agreement than those recruited via advertisements.

Hypothesis 2b₂: Employee referrals will have higher levels of **attribute people** pre-employment knowledge agreement than those recruited via employment agencies.

Hypothesis 2b₃: Employee referrals will have higher levels of **attribute people** pre-employment knowledge agreement than those recruited via direct application.

Job Exposure and Organization Exposure

Research has focused little attention on the extent that an applicant's previous exposure to the job and/or organization might influence pre-employment knowledge. Research that has examined exposure often groups exposure with recruitment methods and does not distinguish between organization exposure and job exposure. For example, studies have examined applicants who previously worked for the same organization in either the same or different job (Saks, 1994; Williams et al., 1993), applicants who have held a similar job for a different organization (e.g.,

Brooks, Cornelius, Greenfield, & Joseph, 1995; Greenhaus, Callanan, & Godshalk, 2000), applicants who held an internship with the same organization (Taylor, 1988; Cable et al., 2000), or applicants who have a family member or someone close to them that works for the organization (e.g., Saks, 1994; Gibson & Papa, 2000).

The present study treats job/organization exposure as separate variables from recruitment methods. Examining job and organization exposure in this way is important because it distinguishes between those who only have experience with the organization from those who only have experience with the job.

Job Exposure--->Pre-employment Knowledge. For the purposes of this study, job exposure was defined as the extent the applicant has previous exposure to the type of job for which he/she applied. Job exposure was examined by identifying the following degrees of exposure, from the most to least amount of exposure: those who worked in a similar position in a full-time capacity, those who worked in a similar position in a part-time or in a temporary capacity, those who have secondhand information about the job (e.g., talked with someone who worked in the job), and those that have almost no exposure to the job.

Job exposure is likely to have an impact on an applicant's pre-employment knowledge (Breugh, 2006). Research has demonstrated that those who have had similar jobs have greater self-concept crystallization, less role ambiguity, and more realistic expectations than those who have not held the job (e.g., Brooks et al., 1995; Bauer & Green, 1994; Greenhaus et al., 1983; Saks, 1994). If applicants have held a similar position in either a full or part-time capacity, they have had more direct experience with the job than applicants who have not worked in a similar job in the past. This exposure is likely to result in greater job pre-employment knowledge. Applicants who previously worked in the job full time know the job demands from their past

experience. Applicants who worked in the job, but worked in a part time or temporary capacity have pre-employment knowledge. However, their knowledge will be less than those who worked full time since their job demands may have been different. For example, working on one's feet for 20 hours a week can be a lot different than working on one's feet for 40 hours a week. In addition, while those who worked as a contractor or temporary employee may have a good idea of what the job entails, some job responsibilities may have been different due to reasons such as confidentiality.

Little research has examined the relationship of pre-employment knowledge when an applicant has secondhand information (e.g., talked with someone about the organization) about the job. However, those who have only secondhand exposure to the job lack direct experience with the job. Because they lack this experience, they are likely to have less realistic pre-employment knowledge than those who have worked in a similar job. Finally, those who report that they have almost no exposure to the job will have the least pre-employment knowledge agreement.

Because previous exposure to the job is likely to provide an applicant with more insight into the job, the following is hypothesized:

Hypothesis 3: Job Exposure and **Factual Job** Pre-employment Knowledge Agreement will be positively related.

Hypothesis 4: Job Exposure and **Attribute Job** Pre-employment Knowledge Agreement will be positively related.

Organization Exposure--->Pre-employment Knowledge. For the purposes of this study, organization exposure was defined as the extent the applicant has previous exposure to the organization. Organization exposure was examined by identifying the following degrees of exposure, from the most to least amount of exposure: those who worked full-time for the organization, those who worked in a part-time or temporary capacity for the organization, those who have secondhand information about the organization (e.g., talked with someone who worked for the organization), and those that have almost no exposure to the organization.

Organization exposure is likely to have an impact on applicant's pre-employment knowledge (Breugh, 2006). If applicants have worked for the organization in either a full time, part time or temporary capacity, they have had more direct experience with the organization than applicants who have not worked for the organization in the past. This exposure is likely to result in greater pre-employment knowledge regarding the organization and its people. Saks (1994) and Williams et al. (1993) found that rehires reported having greater pre-employment knowledge than those recruited through other sources of information.

With regards to applicants who have worked for the organization before, but not in a full-time or permanent position, they may have less exposure to the organization. Since they were working in a part time or temporary capacity, they may not have received as extensive exposure to the organization's values (Cable et al., 2000).

With regards to applicants who may have had secondhand exposure to the organization (e.g., they talked with someone about the organization), little research has been conducted. However, researchers have theorized that applicants who have talked with someone about the organization will have a better understanding of what the organization and people entail than those applicants who do not have secondhand information about the organization. In addition,

those who have direct experience with the organization will have more realistic pre-employment knowledge than those who only have secondhand information about the organization (e.g., Cable et al., 2000; Cable & Turban, 2001).

Because previous experience with the organization is likely to provide an applicant with more insight into the organization and its people, the following is hypothesized:

Hypothesis 5a: Organization Exposure and **Factual Organization** Pre-employment Knowledge Agreement will be positively related.

Hypothesis 5b: Organization Exposure and **Factual People** Pre-employment Knowledge Agreement will be positively related.

Hypothesis 6a: Organization Exposure and **Attribute Organization** Pre-employment Knowledge Agreement will be positively related.

Hypothesis 6b: Organization Exposure and **Attribute People** Pre-employment Knowledge Agreement will be positively related.

Exploratory Analysis: Continuous Recruitment Methods

In addition to examining how a categorical measure of recruitment methods is related to the different types of pre-employment knowledge agreement, participants were asked to rate how useful they found the recruitment method in providing information about the position. One benefit to examining recruitment methods in this way is that it allows for a comparison of this

study's methods and analyses to the methods and analyses used by Cable et al. (2000).

Therefore, this study also examined recruitment methods as a continuous variable, asking participants to rate the usefulness of referrals, advertisements, and employment agencies.

Since past research provides insufficient information to draw conclusions regarding a continuous measure of recruitment methods and pre-employment knowledge agreement, these relationships were examined on an exploratory basis. However, logic suggests two possibilities. The first possibility concerns the usefulness of recruitment methods as a whole. The more useful a participant finds all of the recruitment methods he/she used in gathering information about the position, the more likely he or she will have better pre-employment knowledge agreement. A second possible relationship concerns employee referrals. Since research suggests that referrals provide applicants with the most realistic information, one may conclude that the more useful an applicant sees a referral in providing information, the better pre-employment knowledge agreement he or she will have.

Method

Participants

Applicants. Participants were recruited through a large packaging distribution company in the Midwest. Participants were applying for the same job and knew which position for which they were applying. When the participants came in to attend a realistic job preview (RJP) and apply for the job, they were asked to complete a questionnaire containing scales for recruitment methods, job exposure, organization exposure, factual pre-employment knowledge, and attribute pre-employment knowledge *prior* to receiving the RJP.

Participation was voluntary. Participants were told that the study assesses the different recruitment methods the organization uses to recruit employees and the effectiveness of these

methods. They were assured that their responses were confidential and told that, while summaries of the results would be shared with the company, only members of the research team would view the individual questionnaires. In addition, participants were asked *not* to include their name anywhere on the questionnaire. A formal count of those who did not wish to complete the questionnaire was not tracked during participant recruitment. Anecdotally, about 75% of those asked to participate agreed to take a questionnaire and completed the questionnaire.

The mean age of those who responded to the survey was 23.76 years and the range was 18-48 years. 167 males and 61 females completed the survey. Race was reported as follows for those who participated in the study: 110 Caucasians, 96 African Americans, 2 Hispanics, 2 Native Americans, 2 Alaskan Native, 1 Asian, and 9 multiracial.

Job Incumbents. Participants were recruited through a human resource representative of the organization. Specifically, this representative provided a list of addresses for the job incumbents and questionnaires were sent to job incumbents of the position for which data was being collected. A business reply envelope was provided for the job incumbent to use in returning the questionnaire.

Participation was voluntary. Participants were told that the study was assessing the different methods the organization uses to recruit employees and the effectiveness of these methods. They were assured that their responses were confidential and told that only members of the research team would view the individual questionnaires. In addition, participants were asked *not* to include their name anywhere on the questionnaire.

The response rate for the job incumbent questionnaire was seven percent. One-hundred and twenty questionnaires were sent to job incumbents. Eight responses were received. One of the participants was removed from the study because the questionnaire was incomplete. All of

the participants were male. The mean age for this group was 22.24 years and the range was 19-33 years. Average tenure was 15.42 months and the range was 12-21 months. 5 of the respondents were Caucasian/White and 2 were African American.

Measures

All measures were reviewed by several fellow graduate students and other individuals who are currently working. All comments and concerns have been considered in the creation of these measures and the actual questionnaires. The individual measures are provided in appendices as listed in the following sections. The actual applicant questionnaire is displayed in Appendix G and the actual job incumbent questionnaire is displayed in Appendix H.

Recruitment Methods. This study measured recruitment methods in two ways: categorically and continuously. Each of these approaches is described in more detail below. See Appendix A for the actual recruitment methods measure.

For the purposes of testing the main hypotheses, recruitment methods was measured as a categorical variable. Participants were provided with a list of potential recruitment methods and asked to, first, mark the recruitment method by which they first learned about the position for which they were applying, second, mark all other recruitment methods by which they learned about the position. This was done in order to help decide whether someone would be classified as using an advertisement or employment agency in the event that a participant encountered both of these methods. Participants were classified as an advertisement if they marked that they used an advertisement (i.e., newspaper advertisement, advertisement posted internally, advertisement posted on an external company website, or advertisement posted on a website other than the company's) and 1) they did not mark that they were a direct applicant or employee referral, 2) they did not mark that they used an employment agency, and/or 3) they marked that they used an

employment agency, but they marked that an advertisement was the first recruitment method that informed them of the position opening. Participants were classified as an employment agency if they marked that they used an employment agency and 1) they did not mark that they were a direct applicant or employee referral, 2) they did not mark that they used an advertisement, and/or 3) they marked that they used an advertisement, but they marked that an employment agency was the first recruitment method that informed them of the position opening.

The classification of direct applicants and employee referrals did not consider the recruitment method that was encountered first because it may misrepresent the amount of information the participant has received. For example, if a participant marked an advertisement as the first recruitment method, but then marked an employee referral as another recruitment method that they used, then classifying them as an advertisement would not take into account the information received from the referral. This may end up skewing results in favor of the advertisement. Therefore, participants were classified as an employee referral if they marked employee referral in either step, regardless of the other recruitment methods they marked and they were classified as a direct applicant if they marked that they applied for the position without hearing of a specific position opening.

For the exploratory part of this study, recruitment methods was measured as a continuous variable. After participants identified which recruitment methods they used in learning about the position opening (the categorical piece of this study), they were asked to rate, from 1-7, the extent they found these methods useful, 1 being not at all useful in providing information and 7 being extremely useful in providing information.

To examine whether the more useful employee referrals perceive the information being, the better agreement they have with job, organization, and people knowledge, the rating provided

for the employee referral item was used. To examine whether the more useful applicants perceive the information provided by all of the recruitment methods they used the better agreement they have with job, organization, and people knowledge, the ratings for all the recruitment methods they used were added together and averaged.

Prior to administering either recruitment method measure, the human resources manager of the organization was asked to review the items for these measures to make sure that they were relevant to the position and organization. Base on this review, a clarification was added to the employee referral item: “A current employee told me about the position opening (**other than a Company X recruiter**)” and an item was added: “I talked with a Company X recruiter about the position opening”.

Organization Exposure. Organization exposure was measured using the items displayed in Appendix B. These items were developed for this study and assessed the degree of exposure the applicant had (e.g., if the applicant previously worked for the organization in either a full-time capacity or if the applicant has secondhand information about the organization). The items were reverse coded 1-4, 4 indicating the least exposure and 1 indicating the most exposure.

Job Exposure. Job exposure was measured using the items displayed in Appendix C. These items were developed for this study and assessed the degree of exposure the applicant had (e.g., if the applicant has worked in a similar position in either a full-time capacity or if the applicant has secondhand information about the job). The items were reverse coded 1-4, 4 indicating the least exposure and 1 indicating the most exposure.

Pre-employment knowledge: Factual. Factual Pre-employment knowledge was measured using the scale displayed in Appendix D. This scale was developed by adapting some items from Haueter, Macan, and Winter (2003) and creating some items specifically for this study. Items are

categorized into three dimensions: organization, people, and job information. This categorization is based on Cable and Turban's (2001) conceptualization of employer image. On both the survey for job incumbents and the survey for applicants, participants indicated the frequency with which each characteristic is likely to occur. Pre-employment knowledge for each dimension was then calculated by taking the applicant's average response for the dimension and subtracting it from the job incumbent mean rating for that same dimension. The absolute value of the result was then used in all analyses.

Interrater agreement for the job incumbents' responses was estimated using James, Demaree, and Wolf's (1993) interrater agreement coefficient (r_{wg}). Results are displayed in Table 1. The table displays variance, means, and agreement coefficients for composite pre-employment knowledge variables as well as the individual items. James, Demaree, and Wolf (1984) suggest that a r_{wg} of .70 is reasonable. Based on this guideline, the following measures had reasonable agreement: overall factual job pre-employment knowledge, overall factual organization pre-employment knowledge, item 1 for factual job pre-employment knowledge, item 4 for factual job pre-employment knowledge, item 2 for factual organization pre-employment knowledge, and item 3 for factual organization pre-employment knowledge.

Pre-employment knowledge: Attribute. Attribute pre-employment knowledge was measured using the scale displayed in Appendix E. This scale was developed by adapting items from earlier research (Harris & Fink, 1987; Powell, 1984; Turban, Forret, & Hendrickson, 1998). Items are categorized into three dimensions: organization, people, and job information. This categorization is based on Cable and Turban's (2001) conceptualization of employer image. On both the survey for the employees of the organization and the survey for applicants, participants indicated their agreement with the items. Pre-employment knowledge for each dimension was

then calculated by taking the applicant's average response for the dimension and subtracting it from the job incumbent mean rating for that same dimension. The absolute value of the result was then used in all analyses.

Interrater agreement for the job incumbents' responses was estimated using James et al. (1993) interrater agreement coefficient (r_{wg}). Results are displayed in Table 1. The table displays variance, means, and agreement coefficients for composite pre-employment knowledge variables as well as the individual items. The following measures had reasonable agreement: overall attribute people pre-employment knowledge, overall attribute job pre-employment knowledge, overall attribute organization pre-employment knowledge, item 1 for attribute people pre-employment knowledge, item 2 for attribute people pre-employment knowledge, item 1 for attribute job pre-employment knowledge, item 2 for attribute job pre-employment knowledge, item 2 for attribute organization pre-employment knowledge and item 3 for attribute organization pre-employment knowledge.

Other Variables

The author recognizes that some items appear in the survey that are not mentioned in the hypotheses (e.g., Have you worked as a temporary employee for the company?). These items appear because they may explain conflicting results, but no a priori hypotheses were made about them. Also, these items may be used in a future study.

Procedure

Applicants. Applicants were asked to participate in the study when they applied for the job. All applicants who expressed interest in participating were provided a questionnaire and cover letter explaining the importance of the study (see Appendix G for the actual questionnaire). The questionnaire included measures for recruitment methods, job exposure, organization

exposure, factual pre-employment knowledge, and attribute pre-employment knowledge. The cover letter explained that participation was voluntary and assured participants that their responses were confidential and asked participants not to provide their name anywhere on the questionnaire. Participants were asked to return the questionnaire directly to the investigator. For the first few sessions, if a participant was unable to complete the questionnaire prior to the RJP session, they were provided a business reply envelope with which to return the questionnaire to the investigator. However, the response rate for this was very low (only 2 were returned). Therefore, for all other sessions, if a participant was unable to complete the questionnaire prior to the RJP session, they were ask to return what they had completed and that their answers would still be useful to the study. This was done so that these responses could be included in the study versus the participant not returning the questionnaire.

Job Incumbents. Job incumbents completed the factual pre-employment knowledge and attribute pre-employment knowledge measures. Their responses were averaged together in order to compare their responses to the responses of applicants. Job Incumbents were chosen because they are likely to be the most knowledgeable about the job. Cover letters and questionnaires were distributed to the relevant employees at the same time they were being distributed to applicants (see Appendix H for the actual questionnaire). In the cover letter and instructions, it was stated that the questionnaire will be used for research purposes only and that responses are confidential.

The human resources representative provided the researcher with a list of addresses for employees so that the questionnaires could be distributed. Each questionnaire had the job title listed so the job incumbent would know for which job he/she is to complete the questionnaire. Upon completion of the questionnaire, employees were asked to return the questionnaire in a business reply envelope to the researcher via U.S. postal service.

Results

Preliminary Analysis

Means and standard deviations for organization exposure, job exposure, recruitment method usefulness, employee referral usefulness, the factual and attribute pre-employment knowledge agreement measures, and the individual pre-employment knowledge agreement items are displayed in Table 2. In addition, the means and standard deviations for applicants' responses to the factual and attribute pre-employment knowledge measures and applicants' responses to the individual pre-employment knowledge items are reported.

The means for organization exposure and job exposure indicate that participants had moderate exposure to the organization and job (exposure could range from 1 to 4, 1 indicating the most exposure). The means for recruitment method usefulness and employee referral usefulness indicate that participants felt that the recruitment methods were fairly useful (usefulness could range from 1-7, 1 indicating that the recruitment method did not provide useful information). For the overall pre-employment knowledge agreement measures, the mean agreement ranged from 1.46 to .44 indicating that applicants and job incumbents had reasonable agreement on these measures (possible pre-employment knowledge agreement ranges from zero to six, zero indicating perfect agreement). For the individual pre-employment knowledge agreement items, agreement ranged from 3.28-.73 indicating that some items had better agreement than others. Specifically, the third factual organization pre-employment knowledge item and the second factual job pre-employment knowledge item had the least agreement. All of the attribute organization pre-employment knowledge agreement items, all of the attribute people pre-employment knowledge agreement items, and the fourth factual job pre-employment knowledge agreement item were less than one, indicating reasonable agreement..

Applicant ratings on the overall pre-employment knowledge measures ranged from 3.95 (factual people pre-employment knowledge) to 5.81 (attribute organization pre-employment knowledge). For the individual items, applicant ratings ranged from 3.03 (the first factual job pre-employment knowledge item) to 6.27 (the third attribute organization pre-employment knowledge item). The factual pre-employment knowledge items ranged from 1-7 with 7 indicating that the particular item always happens. The attribute pre-employment knowledge items ranged from 1-7 with 7 indicating that the applicant agreed with the item.

Correlations for organization exposure, job exposure, recruitment method usefulness, employee referral usefulness and the factual and attribute pre-employment knowledge measures are displayed in Table 3. For a listing of the variables and the predicted direction of their relationship to pre-employment knowledge, please see Appendix I. For a listing of the measurement ranges for each variable, please see Table 21. Table 3 shows that the correlations between job exposure and organization exposure as well as recruitment method usefulness and employee referral usefulness are significant. The correlation for employee referral usefulness and factual people pre-employment knowledge is negative and significant. This correlation is in the predicted direction (Perfect pre-employment knowledge is zero.). However, the correlation for overall recruitment method usefulness and factual organization pre-employment knowledge is positive and significant. This correlation is not in the predicted direction.

Regarding the exposure measures, the correlations for organization exposure and the pre-employment knowledge agreement measures were not significant. In addition, the correlations for job exposure and the pre-employment knowledge agreement measures were also not significant. These results will be discussed in more detail when discussing hypothesized results.

Finally, the following pre-employment knowledge agreement measures were correlated: factual job and factual organization pre-employment knowledge, factual job and attribute job pre-employment knowledge, factual organization and attribute organization pre-employment knowledge, factual people and attribute organization pre-employment knowledge, attribute job and attribute organization pre-employment knowledge, attribute job and attribute people pre-employment knowledge, and attribute organization and attribute people pre-employment knowledge.

Agreement Measure Analysis

Before discussing the process that will be used to test each hypothesis, a limitation to analyses involving agreement measures that use absolute difference scores needs to be addressed. The absolute difference approach to agreement assumes that the slope for the group of applicants that score above the job incumbent mean is equal but opposite in direction from the slope for the group of applicants that score below the job incumbent mean. In other words, differences in either direction must indicate the same thing. If this is not the case, an absolute difference index reduces to an algebraic difference score (Edwards, 2002). In order to test for this assumption, this study will follow the approach taken by Cable et al. (2000) and examine all hypothesis for each subgroup separately (i.e., each hypothesis will be tested separately for those who score above the job incumbent mean rating and for those who score below the job incumbent mean). Following this analyses, the two subgroups will be tested to see if they are significantly different using the test for independent rs for when correlation analysis is used and a t-test for when ANOVA is used. If the subgroups are significantly different, then the assumption that the slopes of the two subgroups are equal but opposite in direction is violated and results should be interpreted separately for each subgroup. If the subgroups are not

significantly different, then the assumption is not violated and the subgroups can be combined for analyses.

Results for both the overall sample and the subgroups are reported when discussing results for each hypothesis. When one or both of the subgroups has significant results, the appropriate test is reported and a discussion of whether or not the subgroups are significantly different follows. However, if the sample size is small for a subgroup (i.e., less than 10 participants in a group for ANOVA analyses and less than 30 participants for correlation analyses), results are not reported.

Recruitment methods → *Pre-employment knowledge*.

Analysis of variance (ANOVA) was computed on each pre-employment knowledge agreement measure to compare the three recruitment methods (advertisements, direct applicants, employee referrals). ANOVA results as well as means and standard deviations are reported in Table 4. Results are presented for both the overall sample and the subgroups of those applicants who scored above the job incumbent mean rating and those applicants who scored below the job incumbent mean.

Regarding sample size for the overall sample, 206 participants completed the recruitment method measure and were coded as using an advertisement (n = 82), employment agency (n = 3), employee referral (n = 78), or direct applicant (n = 43). Due to the small sample size for the employment agency recruitment method, hypotheses regarding this recruitment method were dropped from the study. The final number of participants that reported using a recruitment method relevant to this study is 203. However, the sample size varies among pre-employment knowledge variables because not all 203 participants responded to all of the pre-employment knowledge items on the questionnaire.

To facilitate presentation of these results, each hypothesis is discussed separately. Since hypotheses regarding employment agencies were dropped from the study, results for Hypothesis 1a₂, Hypothesis 1a₄, Hypothesis 1b₂, Hypothesis 2a₂, Hypothesis 2a₄, and Hypothesis 2b₂ will not be discussed below.

Hypothesis 1a₁. Hypothesis 1a₁ stated the employee referrals would have higher levels of factual job and organization pre-employment knowledge agreement than those recruited via advertisements. When examining results for the overall sample this hypothesis is not supported. Per Edwards' (2002) concerns about agreement measures, the overall sample was divided into two subgroups for all analyses that involved pre-employment knowledge as a variable: those who scored below the job incumbent mean rating (group A) and those who scored above the job incumbent mean rating (group B). Because assignment to these groups is based on where the applicant fell in relation to the job incumbent mean, please note that the sample size for these groups can shift depending upon the variable and whether the result being reported is based on the composite variable or item level analysis.

When examining subgroup results, there is significance for the group B. A priori contrast for this group indicate that referrals ($M = 1.10$, $SD = 0.75$) had significantly lower scores on factual job pre-employment knowledge agreement than advertisements ($M = 1.37$, $SD = .90$), $t(176) = 1.94$, $p = 0.05$. Note that lower scores are desired because perfect pre-employment knowledge agreement equals 0. Significant differences among the subgroups could not be tested since the group A had less than 10 participants per cell.

With regard to factual organization pre-employment knowledge, subgroup results and a priori contrasts do not indicate support for Hypothesis 1a₁. Therefore, results indicate some

support for Hypothesis 1a₁ for factual job pre-employment knowledge but not factual organization pre-employment knowledge.

Hypothesis 1a₃. Hypothesis 1a₃ stated that direct applicants would have higher levels of factual job and organization pre-employment knowledge agreement than those recruited via advertisements. When examining results for the overall sample this hypothesis is not supported. When examining results for the subgroups, there is significance for the group B for factual job pre-employment knowledge agreement and recruitment methods. A priori contrast for this group indicate that direct applicants ($M = 1.50, SD = 0.84$) were not significantly different from advertisements ($M = 1.37, SD = .90$), $t(176) = -0.74, p > 0.05$. As discussed earlier, significant differences among the subgroups could not be tested since the group A had fewer than 10 participants per cell.

With regard to factual organization pre-employment knowledge, subgroup results or a priori contrast do not indicate support for Hypothesis 1a₃. In summary, results do not indicate support for Hypothesis 1a₃.

Hypothesis 1b₁. Hypothesis 1b₁ stated that employee referrals would have higher levels of factual people pre-employment knowledge agreement than those recruited via advertisements. When examining results for the overall sample and subgroups, this hypothesis is not supported.

Hypothesis 1b₃. Hypothesis 1b₃ stated that employee referrals would have higher levels of factual people pre-employment knowledge agreement than those recruited via direct application. When examining results for the overall sample and subgroups, this hypothesis is not supported.

Hypothesis 2a₁. Hypothesis 2a₁ stated that employee referrals would have higher levels of attribute job and organization pre-employment knowledge agreement than those recruited via

advertisements. When examining results for the overall sample and subgroups, this hypothesis is not supported.

Hypothesis 2a₃. Hypothesis 2a₃ stated that direct applicants would have higher levels of attribute job and organization pre-employment knowledge agreement than those recruited via advertisements. When examining results for the overall sample and subgroups, this hypothesis is not supported.

Hypothesis 2b₁. Hypothesis 2b₁ stated that employee referrals would have higher levels of attribute people pre-employment knowledge agreement than those recruited via advertisements. When examining results for the overall sample and subgroups, this hypothesis is not supported.

Hypothesis 2b₃. Hypothesis 2b₃ stated that employee referrals would have higher levels of attribute people pre-employment knowledge agreement than those recruited via direct application. When examining results for the overall sample and subgroups, this hypothesis is not supported.

Summary. In summary, Hypothesis 1a₁ was the only hypothesis with regard to categorical recruitment methods that received partial support.

Job Exposure → Pre-employment knowledge.

Correlation analysis was completed on each pre-employment knowledge agreement measure to examine its relationship with job exposure. Correlation results as well as means and standard deviations are reported in Table 5. Results are reported for both the overall sample and the subgroups of those applicants who scored above the job incumbent mean rating (group B) and those applicants who scored below the job incumbent mean (group A). Regarding sample size for the overall sample, 220 participants completed the job exposure measure. However, the

sample size varies among pre-employment knowledge variables because not all 220 participants responded to all of the pre-employment knowledge items on the questionnaire.

To facilitate presentation of these results, each hypothesis is discussed separately.

Hypothesis 3. Hypothesis 3 stated that job exposure and factual job pre-employment knowledge agreement would be positively related. For both the overall sample and subgroup data, correlation results do not support this hypothesis.

Hypothesis 4. Hypothesis 4 stated that job exposure and attribute job pre-employment knowledge agreement would be positively related. For both the overall sample and subgroup data, correlation results do not support this hypothesis.

Summary. In summary, neither of the job exposure hypotheses received support.

Organization Exposure → Pre-employment knowledge.

Correlation analysis was completed on each pre-employment knowledge agreement measure to examine its relationship with organization exposure. Correlation results as well as means, and standard deviations are reported in Table 6. Results are reported for both the overall sample and the subgroups of those applicants who scored above the job incumbent mean rating (group B) and those applicants who scored below the job incumbent mean (group A). Regarding sample size for the overall sample, 233 participants completed the organizational exposure measure. However, the sample size varies among pre-employment knowledge variables because not all 233 participants responded to all of the pre-employment knowledge items on the questionnaire.

To facilitate presentation of results, each hypothesis is discussed separately.

Hypothesis 5a. Hypothesis 5a stated that organization exposure and factual organization pre-employment knowledge agreement would be positively related. For both the overall sample and subgroup data, correlation results do not support this hypothesis.

Hypothesis 5b. Hypothesis 5b stated that organization exposure and factual people pre-employment knowledge agreement would be positively related. For both the overall sample and subgroup data, correlation results do not support this hypothesis.

Hypothesis 6a. Hypothesis 6a stated that organization exposure and attribute organization pre-employment knowledge agreement would be positively related. For both the overall sample and subgroup data, correlation results do not support this hypothesis.

Hypothesis 6b. Hypothesis 6b stated that organization exposure and attribute people pre-employment knowledge agreement would be positively related. For both the overall sample and subgroup data, correlation results do not support this hypothesis.

Summary. In summary, none of the organization exposure hypotheses received support.

Exploratory Analysis: Continuous Recruitment Methods → Pre-employment Knowledge.

Correlation analysis was completed on each pre-employment knowledge agreement measure to examine its relationship with the degree to which participants rated recruitment methods useful.

To facilitate presentation of these results, each possibility is discussed separately.

Overall Recruitment Method Usefulness. The first exploratory analysis that was suggested in the introduction concerned the usefulness of recruitment methods as a whole. Specifically, the more useful a participant found all of the recruitment methods that they used in gathering information, the more likely the participant would have better pre-employment knowledge agreement. The overall recruitment method usefulness variable was created by

computing the average usefulness ratings for each participant with regard to advertisements, employee referrals and direct applicants.

Table 7 presents means, standard deviations, and correlation results. The table shows results for when the sample is split into those applicants who scored above (group B) and below (group A) the job incumbent mean rating as well as results for correlations conducted on the overall sample. Regarding sample size for the overall sample, 159 participants rated the usefulness of the recruitment methods they used. However, the sample size varies among pre-employment knowledge variables because not all 159 participants responded to all of the pre-employment knowledge items on the questionnaire.

For the overall sample, significant results were found for factual organization pre-employment knowledge, $r = .20$, $p < .05$, attribute job pre-employment knowledge, $r = .21$, $p < .05$, and attribute organization pre-employment knowledge, $r = -.18$, $p < .05$. However, factual organization pre-employment knowledge and attribute job pre-employment knowledge had a positive correlation, which is not in the predicted direction (Perfect pre-employment knowledge is zero.).

For the subgroups, significant results were found for factual people pre-employment knowledge for both groups. However, for group B, the result was not in the predicted direction, $r = .36$, $p < .05$. Significant results were also found this group for factual organization pre-employment knowledge, $r = .25$, $p < .05$ and for attribute job pre-employment knowledge, $r = .22$, $p < .05$. However, the results were not in the predicted direction. Finally, results were significant and in the predicted direction for group A for attribute organization pre-employment knowledge, $r = -.23$, $p < .05$.

Per Edwards' (2002) concerns about agreement measures, a test of independent rs was conducted to determine if the correlations were significantly different from each other for the subgroups that were significant. Specifically, analyses were conducted to test the correlations for the two subgroups for the following variables: factual people pre-employment knowledge and attribute organization pre-employment knowledge. The correlations were significantly different from each other for both groups ($z = -3.66$, and -2.24 , $p < .05$, respectively), indicating that there were group differences for those who scored below the job incumbent mean rating and those who scored above the job incumbent mean rating for pre-employment knowledge. Therefore, results for these two variables should be interpreted based on the subgroup results. Note that group differences were not tested for factual organizational pre-employment knowledge and attribute job pre-employment knowledge because the sample size for one of the subgroups was less than thirty.

Summary. In summary, results indicate that there is some support for the notion that the more useful an applicant finds the recruitment methods they encountered, the better his/her attribute organization pre-employment knowledge and factual people pre-employment knowledge agreement.

Employee Referral Usefulness. The second exploratory analysis that was suggested in the introduction concerned the usefulness of employee referrals. Specifically, the more useful a participant found an employee referral in providing information, the more likely the participant would have better pre-employment knowledge agreement.

Table 8 presents means, standard deviations, and correlations. The table shows results for when the sample is split into those applicants who scored above (group B) and below (group A)

the job incumbent mean rating as well as results for correlations conducted on the overall sample. Regarding sample size for the overall sample, 55 participants rated the usefulness of employee referrals. However, the sample size varies among pre-employment knowledge variables because not all 55 participants responded to all of the pre-employment knowledge items on the questionnaire.

Significant results were not found for the overall sample. For the subgroup, significant results were found for factual people pre-employment knowledge for group A, $r=.42$, $p<.05$. However, this relationship is positive and not in the predicted direction.

Analyses were not conducted to test the significant difference among the correlations for Groups A and B regarding factual people pre-employment knowledge because the sample size for Group B was less than thirty.

Summary. In summary, there is no support for the notion that the more useful an applicant sees an employee referral, the better the factual people pre-employment knowledge.

Additional Analysis

Item Level Pre-employment Knowledge. While my original intent was to look at the hypotheses by scales, the alpha values (see table 9) for each scale are relatively low. Since this indicates that the items may not be measuring the same construct, the relationship of the independent variables to each of the individual pre-employment knowledge items was examined.

Table 10 presents means, standard deviations, and ANOVA results for recruitment methods. Results for the third factual job pre-employment knowledge item (“This job requires working with software programs”), the first factual people pre-employment knowledge item (“Employees socialize outside of work”), and the first attribute people pre-employment knowledge item (“Employees are courteous to one another”) were significant for both the overall

sample and at least one of the subgroups. The third attribute organization pre-employment knowledge item (“This organization has a good reputation.”) was significant for one of the subgroups.

The third factual job pre-employment knowledge item showed a significant difference for the overall sample. A priori contrasts indicate that referrals ($M = 1.68$, $SD = 1.65$) had significantly lower scores than advertisements ($M = 2.08$, $SD = 1.33$), $t(194) = 2.09$, $p < .05$. In addition, direct applicants ($M = 1.55$, $SD = 1.34$) had significantly lower scores than advertisements $t(194) = 2.33$, $p < .05$. Note that lower scores are desired because perfect pre-employment knowledge equals zero. For the subgroups, a priori contrasts for group B indicate that direct applicants ($M = .71$, $SD = .00$) had significantly lower scores than advertisements ($M = 2.28$, $SD = 1.31$), $t(167) = 2.52$, $p < .05$. The significant difference among the two subgroups was not examined because the sample size for the group A was less than 10 per cell.

The first factual people pre-employment knowledge item showed a significant difference for the overall sample. A priori contrasts indicate that employee referrals ($M = 1.50$, $SD = .89$) had significantly lower scores than advertisements ($M = 1.56$, $SD = .86$), $t(194) = -2.43$, $p < .05$. For the subgroups, a priori contrasts for group A indicate that direct applicants ($M = 2.03$, $SD = .88$) had significantly higher scores than advertisements ($M = 1.55$, $SD = .88$), $t(183) = -2.78$, $p < .05$. However, this is not in the predicted direction. Finally, a priori contrasts for group B indicated that direct applicants ($M = 1.04$, $SD = .58$) had significantly lower scores than advertisements ($M = 1.71$, $SD = .00$), $t(8) = 2.00$, $p < .05$. Regarding subgroup differences, group B ($M = 1.65$, $SD = .90$) was not significantly different than group A ($M = 1.16$, $SD = .52$), $t(195) = 1.76$, $p < 0.05$ indicating that results should be interpreted based on the overall sample.

The first attribute people pre-employment knowledge item showed a significant difference for the overall sample. A priori contrasts indicate that direct applicants ($M = 1.20$, $SD = .83$) had significantly higher scores than advertisements ($M = .84$, $SD = .52$), $t(190) = -2.89$, $p < .05$. This is not in the predicted direction. For the subgroups, a priori contrasts for group A indicate that referrals ($M = 1.41$, $SD = .65$) had significantly higher scores than advertisements ($M = 1.08$, $SD = .49$), $t(75) = -2.03$, $p < .05$. In addition, direct applicants ($M = 1.77$, $SD = .80$) had significantly higher scores than advertisements $t(75) = -3.64$, $p < .05$. However, neither of these differences are in the predicted direction. There were not any significant differences for group B. Regarding subgroup differences, group A ($M = 1.36$, $SD = .68$) had a significantly higher mean than group B ($M = .66$, $SD = .49$), $t(191) = 8.34$, $p < 0.01$ indicating that results should be interpreted separately for each subgroup.

Finally, the third attribute organization pre-employment knowledge item showed a significant difference for group A. Specifically, a priori contrasts indicated that direct applicants ($M = .58$, $SD = .33$) scored significantly lower than advertisements ($M = .69$, $SD = .67$), $t(89) = 2.46$, $p < .05$. Regarding subgroup differences, group A ($M = 1.06$, $SD = .64$) had a significantly higher mean than group B ($M = .29$, $SD = .00$), $t(190) = 12.07$, $p < 0.01$ indicating that results should be interpreted separately for each subgroup.

In summary, one of the three factual job pre-employment knowledge items, one of the three factual people pre-employment knowledge items and one of the three attribute organization pre-employment knowledge items showed support for the recruitment method hypotheses. No other pre-employment knowledge items provided support for the hypotheses.

Table 11 reports means, standard deviations, and correlation results for job exposure. Table 12 presents means, standard deviations, and correlation results for organization exposure.

The correlation for the first factual people pre-employment knowledge item (“Employees socialize outside of work”) and organization exposure was significant for group A, $r=.15$, $p<.05$. When this item was examined in the context of the overall sample, there was a significant correlation between the item and organization exposure, $r=.16$, $p<.05$. In addition, the correlation for the third factual people pre-employment knowledge item (“Employees engage in professional activities outside of work”) and organization exposure was significant for the group B, $r=-.16$, $p<.05$. However, the relationship is not in the predicted direction. (Perfect pre-employment knowledge equals 0 and the exposure measures are reverse coded). No other significant results were found.

Per Edwards’ (2002) concerns about agreement measures, analyses were conducted to determine if the correlations were significantly different from each other for the subgroups that were significant. Specifically, a test of independent r s conducted to test the correlations for Group A & B for the third factual people pre-employment knowledge measure. The correlations were not significantly different from each other ($z = 1.90$, $p > .05$), indicating that there were not group differences for those who scored below the job incumbent mean rating or those who scored above the job incumbent mean rating for pre-employment knowledge. Therefore, results should be interpreted based on the overall sample. This analysis was not conducted for the first factual people pre-employment knowledge item because group B had less than 30 participants.

In summary, one of the factual people pre-employment knowledge items may show some support for the organization exposure hypothesis. However, a test of the significant differences among groups could not be conducted due to small sample sizes.

Table 13 presents means, standard deviations, and correlation results for overall recruitment methods usefulness and pre-employment knowledge. The correlations for the second

factual people pre-employment knowledge item (“Employees have a lengthy tenure with this organization”) and overall recruitment method usefulness were significant when examining the subgroups. However, the correlation for group B was not in the predicted direction, $r=.32$, $p<.05$ (perfect pre-employment knowledge equals 0). The correlations for the subgroups were significantly different from each other ($z = -3.81$, $p < .05$) indicating that results should be interpreted based on the subgroup results.

The correlations for the second attribute organization pre-employment knowledge item (“This organization supports employee development.”) and overall recruitment method usefulness were significant when the overall sample and the subgroups were examined. However, the correlation for the group B was not in the predicted direction, $r=.28$, $p<.05$. The correlations among the two subgroups were significantly different from each other ($z = -3.30$, $p < .05$) indicating that results should be interpreted based on the subgroup results. In addition, when the results are looked at in the context of the overall sample, the relationship is significant and in the predicted direction.

The correlation for the third attribute organization pre-employment knowledge item (“This organization has a good reputation.”) and overall recruitment method usefulness is significant and in the predicted direction for group A, $r=-.33$, $p<.05$. The correlation for group B could not be computed because the agreement score was the same for every participant in this group. When the results are looked at in the context of the overall sample, the relationship is also significant and in the predicted direction.

The correlation for the second factual organization pre-employment knowledge item (“This organization has been growing in size.”) and overall recruitment method usefulness is significant and in the predicted direction for the overall sample, but not the subgroups.

The following correlations are significant, but not in the predicted direction for overall recruitment method usefulness when examining the group B: the correlation for the third factual people pre-employment knowledge item (“Employees engage in professional activities outside of work”), $r=.26$, $p<.05$, the first factual job pre-employment knowledge item (“This job requires working more than an 8 hour day.”), $r=.21$, $p<.05$, the third factual organization pre-employment knowledge item (“This organization offers work-family policies such as flexible work hours, job sharing, and ability to take work home.”), $r=.18$, $p<.05$, and the first attribute job pre-employment knowledge item (“The work activities are enjoyable”), $r=.17$, $p<.05$. Significant differences among correlations for the subgroups could not be computed for these items because one of the subgroups had less than thirty participants.

Finally, the following correlations are significant, but not in the predicted direction for overall recruitment method usefulness when examining results for the overall sample: the correlation for the third factual people pre-employment knowledge item (“Employees engage in professional activities outside of work.”), the first factual job pre-employment knowledge item (“This job requires working more than an 8 hour day.”), and the first attribute job pre-employment knowledge item (“Employees are courteous to one another”).

In summary, two of the three attribute organization pre-employment knowledge items, one of the three factual organization pre-employment knowledge items and one of the three factual people pre-employment knowledge items indicate support for the notion that the more useful an applicant finds the sources that he/she uses, the better their attribute organization pre-employment knowledge. None of the other pre-employment knowledge items indicate support for this notion.

Table 14 presents means, standard deviations, and correlations results for employee referral usefulness. The correlation for the first factual people pre-employment knowledge item (“Employees socialize outside of work”) and employee referral usefulness is significant and in the predicted direction for group A, $r=-.31$, $p<.05$. The significant difference among the subgroup correlations could not be tested because the sample size for the group B was less than 30. When the results were looked at for this item in the context of the overall sample, the relationship is significant, $r= -.30$, $p<.05$.

The correlation for the second factual people pre-employment knowledge item (“Employees have lengthy tenure with this organization”) and employee referral usefulness was significant and in the predicted direction for group A, $r=-.39$, $p<.05$. In addition, when the results were looked at for this item in the context of the overall sample, the relationship is significant, $r=-.34$, $p<.05$. The correlations among the two subgroups could not be tested because the sample size was less than 30 for one of the subgroups.

Finally, the correlation for the third attribute organization pre-employment knowledge item (“This organization has a good reputation.”) and employee referral usefulness is significant and in the predicted direction for the overall sample. Significance was not found for the subgroups.

In summary, two of the three factual people pre-employment knowledge items indicate support for the notion that the more useful an applicant finds an employee referral, the better their pre-employment knowledge. In addition one of the three attribute organization pre-employment knowledge items support this notion. None of the other pre-employment knowledge items provided significant results in the predicted direction.

Job and Organization Exposure by Recruitment Method. Additional analyses beyond what were hypothesized were examined concerning job and organization exposure. Specifically, correlation analyses were broken out by recruitment method for pre-employment knowledge agreement. Table 15 presents correlations for job exposure. No significant correlations are reported. Table 16 presents correlations for organization exposure. Significant correlations are presented for employee referrals regarding attribute people pre-employment knowledge, the first attribute people pre-employment knowledge item (“Employees are courteous to one another”), and the third attribute people pre-employment knowledge item (“Employees have similar interests and values”). A significant correlation is also presented for direct applicants regarding attribute organization pre-employment knowledge. While these correlations are significant, they are not in the predicted direction. Perfect pre-employment knowledge agreement is zero and the exposure variables are reversed scored.

Knowledge Confidence. While not mentioned in the hypotheses, knowledge confidence was measured so that it could be used in analyses if results concerning pre-employment knowledge were not as expected. There were three questionnaire items: “In general, how confident are you about the accuracy of the information you have regarding the **job**? In general, how confident are you about the accuracy of the information you have regarding the **organization**? In general, how confident are you about the accuracy of the information you have regarding the **people** that work for the organization?” Analyses using these items were run for categorical recruitment methods, job exposure, organization exposure, and usefulness of recruitment methods.

Table 17 presents means, standard deviations, and ANOVA results for recruitment methods. The F-values for Job, Organization, and People confidence were not significant.

However, when examining the contrast test, a significant result was found for job confidence concerning advertisements and direct applicants. Direct applicants ($M = 5.13$, $SD = 1.18$) had significantly lower scores on knowledge confidence than advertisements ($M = 5.56$, $SD = 1.08$), $t(188) = 1.99$, $p < 0.05$. No other contrast tests were significant.

Table 18a and 18b presents means, standard deviations, and correlation results for job exposure and organization exposure, respectively. A significant result was found for organization exposure and organization knowledge confidence. This is in the predicted direction. (Exposure items were reverse coded.)

Table 19a and 19b presents means, standard deviations, and correlation results for overall recruitment method usefulness (i.e., how useful the applicant perceived all of the recruitment methods he/she used in providing information about the position opening) and employee referral usefulness (i.e., how useful the employee referral perceived the employee in providing information about the position opening), respectively. Overall recruitment method usefulness was significantly correlated with all three knowledge confidence variables. In addition, employee referral usefulness was significantly correlated with people knowledge confidence and organization knowledge confidence. These significant relationships are in the predicted direction.

In summary, the knowledge confidence variable provided some support for the hypotheses. Employee referrals had better job knowledge confidence than advertisements. Organization exposure was significantly correlated with organization knowledge confidence. Overall recruitment method usefulness was significantly correlated with all three knowledge confidence variables and employee referral usefulness was significantly correlated with people and organization knowledge confidence.

Factual and Attribute Knowledge Comparison. Because research typically uses the attribute pre-employment knowledge measure when investigating which recruitment methods provide the most accurate knowledge to the candidate, it is worthwhile to compare the attribute measure to the factual pre-employment knowledge measure that was created for this study. This was done using two different approaches to analyses. The first analysis used regression to compare factual knowledge and attribute knowledge where the dependent variable was exposure and the independent variables were the two knowledge measures. Table 20 presents the results for this analysis. No significant results were found indicating that one knowledge variable did not significantly predict exposure better than the other knowledge variable.

The second analysis that was used to compare factual knowledge and attribute knowledge was paired sample t-tests. Organization factual pre-employment knowledge and organization attribute pre-employment knowledge were significantly different. Attribute knowledge had the higher agreement ($M = .79, SD = 1.110$), $t(216) = 10.45, p < 0.01$ (Note that lower scores are desired because perfect pre-employment knowledge agreement equals 0.) People factual pre-employment knowledge and people attribute pre-employment knowledge were not significantly different ($M = -0.005, SD = .83$), $t(216) = -0.08, p > 0.05$ and job factual pre-employment knowledge and job attribute pre-employment knowledge were not significantly different ($M = -0.02, SD = 1.06$), $t(216) = -0.27, p > 0.05$.

Discussion

This study attempted to extend past research by investigating both measurement and theoretical issues concerning pre-employment knowledge. Specifically, this study 1) utilized an agreement approach to measuring pre-employment knowledge, 2) measured pre-employment knowledge at the time of application, 3) investigated the relationship of recruitment methods and

pre-employment knowledge, 4) investigated the relationship of past job exposure and pre-employment knowledge, and 5) investigated the relationship of past organization exposure and pre-employment knowledge.

While results were mixed, a few conclusions can be drawn. When examining results for the full pre-employment knowledge measures, there was some support for the hypothesis 1a₁, that applicants who use an employee referral have better factual job pre-employment knowledge than applicants who use an advertisement. Also, for the subgroup who scored below the job incumbent mean, the more useful an applicant found the recruitment sources they used, the better his/her factual people pre-employment knowledge and his/her attribute organization pre-employment knowledge. Finally, for this subgroup, the more useful an applicant found the employee referral they used, the better his/her factual people pre-employment knowledge.

Results supported the hypotheses a little better when examining the hypotheses in the context of the individual pre-employment knowledge items. Specifically, several of the items had relationships with the independent variables. The factual job pre-employment knowledge item “This job requires working with software programs” was related to recruitment methods. Specifically, referrals and direct applicants had better factual job pre-employment knowledge than advertisements. The factual people pre-employment knowledge item “Employees socialize outside of work” was related to recruitment methods (referrals had better factual people pre-employment knowledge than advertisements), organization exposure, and the usefulness of employee referrals. The attribute organization pre-employment knowledge item “This organization has a good reputation” was related to recruitment methods (direct applicants had better attribute organization pre-employment knowledge than advertisements), overall recruitment method usefulness, and employee referral usefulness. The attribute organization pre-

employment knowledge item “This organization supports employee development” and factual organization pre-employment knowledge item “This organization is growing in size” was correlated with overall recruitment method usefulness. Finally, the factual people pre-employment knowledge item “Employees have a lengthy tenure with this organization” was correlated with overall recruitment method usefulness and employee referral usefulness.

In addition to examining the correlations among pre-employment knowledge agreement and job and organization exposure, these correlations were also examined using the individual recruitment method categories. For job exposure, no significant relationships were found. For organization exposure, significant relationships were found for employee referrals and attribute people pre-employment knowledge as well as direct applicants and attribute organization pre-employment knowledge; however, these relationships are not in the predicted direction.

In addition to the pre-employment knowledge agreement variables, hypotheses were examined using a knowledge confidence measure in which applicants rated their confidence in their knowledge regarding the job, organization, and people. Employee referrals had better job knowledge confidence than advertisements. Those applicants who had more exposure to the organization reported higher confidence in their knowledge about the organization. In addition, the more useful an applicant felt that the recruitment methods he/she used were, the more confidence he/she had about his/her knowledge of the organization, people, and job. Finally, the more useful an applicant found the employee referral to be, the higher his/her people and organization knowledge confidence.

In addition to examining the hypothesized relationships, analyses were run to compare factual and attribute knowledge. Analyses did not indicate that one type of pre-employment knowledge predicted better than the other type of pre-employment knowledge with regards to

exposure. In addition, analyses did not indicate that the two measures were significantly different from each other. Future research could benefit from including both of the pre-employment knowledge agreement measures in recruitment methods studies and examining any differences they may present.

While this study found some significant results in the predicted direction, there were also several results in the unpredicted direction. For example, attribute job pre-employment knowledge was positively related to recruitment method usefulness, $r=.21$, $p < .05$ and factual people pre-employment knowledge was positively related to employee referral usefulness, $r=.42$, $p < .05$. Post hoc, it is difficult to understand why many of the results were in the unpredicted direction. Some reasons this may have occurred could be due to the job incumbent mean changing across the individual pre-employment knowledge items versus the composite pre-employment knowledge variables. Another explanation might be that the nature of the items did not match the audience (e.g., Employees participate in professional activities outside of work).

In summary, this study had mixed results for many of the hypothesis. Therefore, it is uncertain to what extent there is a relationship among recruitment methods and pre-employment knowledge agreement. In addition, because this study did not demonstrate a relationship among exposure and pre-employment knowledge agreement, it is uncertain if job or organization exposure contributes to an applicant's pre-employment knowledge.

Limitations and Directions for Future Research

While this study attempted to expand the recruitment method and pre-employment knowledge research, it has several limitations. Perhaps the main one is that the sample for this study did not have the characteristics intended when considering the pre-employment knowledge items that were included in this study. The sample was applying for an hourly job that did not

require a college degree. When items were created for the factual pre-employment knowledge scales, it was hoped that applicants would be for a professional, salaried position (e.g., “Employees engage in professional activities outside of work. e.g., seminars, local professional groups”). Furthermore, the attribute pre-employment knowledge items have typically been used in studies where the sample population was college students applying for positions that they would undertake once they graduated (e.g., Turban et al., 1998). At least six different organizations that had salary positions available for this study were contacted and asked to be part of this study. One of these organizations agreed to be part of the study; however, they did not have enough position openings for which to collect data. While the pool of applicants for the position that was used in this study was often college students, many of the applicants were not. Furthermore, many of the college students were at the early stages of their college career as opposed to close to graduation. Future research could benefit from a similar study in which participants are applying for a professional, salaried position.

A second limitation to this study concerns sample size for the job incumbent, applicant, and subgroup samples. The response rate for the job incumbent sample was disappointing. Ideally, questionnaires would have been distributed to the job incumbents at either the beginning or end of their shift. However, organizational constraints prevented doing so and questionnaires were mailed to their homes. While steps were taken to increase the response rate (i.e., the survey length was short and a business reply envelope was provided), only 8 of the 150 job incumbents that were asked to participate replied. However, despite this limitation, the agreement among job incumbents was still relatively good.

In addition to a small job incumbent sample, the sample size for applicants was disappointing with regards to the direct applicant and employment agency sample.

Unfortunately, only 3 participants reported using an employment agency so this category had to be dropped from the study. In order to have adequate power for an ANOVA with three groups (referrals, advertisements, direct applicants), a medium effect size, $\alpha = .05$, and power at 80 percent, 52 participants per group (156 total) were needed (Cohen, 1992). This sample size was met for employee referrals ($n = 78$) and advertisements ($n = 82$), but not direct applicants ($n = 43$). As many participants as possible were solicited. Participants were solicited from every recruitment session that the organization held for three months. After three months, the organization's recruitment focus move to a different position. Future research could benefit from a study that is able to obtain larger sample sizes for all four recruitment method categories.

A final concern regarding sample size is that, for some of the subgroups, sample size was low. In addition, when the overall sample is taken into consideration, some of the nonsignificant results could be due to Edwards concerns about absolute value difference scores (i.e., the assumption that the slope for the group of applicants that score above the job incumbent mean is equal but opposite in direction from the slope for the group of applicants that score below the job incumbent mean is violated). Since sample size was not adequate for many of the subgroups, the significant difference among the subgroups could not be examined. Therefore, we cannot determine if the non-significant results are due to the limitations of using an absolute difference score, the sample size being too small, or if there really is no relationship among the variables. Future research could benefit from a study that is able to obtain better sample sizes for those who score above and those who score below the job incumbent mean.

A third limitation to this study concerns generalizability. Since data was collected from one organization and one job, the results of this study cannot be applied across many different settings. As discussed earlier, many organizations were contacted and asked to participate in this

study. Two organizations agreed. However, one of the two organizations did not have enough job openings and applicants for participation in this study. Future research should further explore the relationship of recruitment methods, job exposure, organization exposure, and pre-employment knowledge by investigating multiple organizations and positions.

A fourth limitation to this study concerns participant motivation for two reasons. First, because participation was voluntary, participants may or may not have been fully engaged in completing the questionnaire. Hopefully, because the questionnaire was short and should have taken a small amount of time to complete (applicants should have taken approximately 15 minutes; job incumbents should have taken approximately 5 minutes), participant motivation was not an issue. Second, because applicants are asked to complete the questionnaire at time of application, there may be some degree of impression management. However, as outlined in the methods section, steps were taken to ensure confidentiality of responses and participants were not asked to provide their names on the questionnaire.

A fifth limitation to this study concerns that it is nonexperimental in design. The study is nonexperimental because it is virtually impossible to do realistic experimental studies in which the participant has enough at stake and enough interest in the job that they would behave like a true job applicant. However, because this study is nonexperimental, causal statements cannot be made from the data.

A final limitation of this study is that many more variables could be examined. However, the author chose the variables that she felt were the most important in investigating how applicants gain pre-employment knowledge and addressing measurement issues regarding pre-employment knowledge. This method of elimination was done so that these important issues would not be affected as well as to keep survey length to a minimum. Future research could

benefit from examining pre-employment outcomes of pre-employment knowledge agreement (e.g., person-organization fit, person-job fit, and attraction).

Implications

While the results of this study are mixed, some implications for research can still be suggested. An advantage to measuring pre-employment knowledge agreement, by comparing applicants' knowledge to the knowledge of job incumbents, was that it allowed for a measure that relied on more than applicants' judgment of what is realistic. Previous research has asked applicants, after they were employed, how realistic they felt their pre-employment knowledge was (e.g., Williams et al., 1993). By asking applicants about specific characteristics of the organization, people, and job and cross checking their responses with job incumbents' responses to the same measure it was hoped that we would be better able to determine the direct relationship of recruitment methods and pre-employment knowledge. However, because results were mixed at best, and due to the limitations outlined above, I cannot make any direct conclusions regarding the advantages of using a pre-employment knowledge agreement measure. Future research could still benefit from measuring pre-employment knowledge by comparing applicants' knowledge to the knowledge of job incumbents if the limitations outlined above are considered in designing the study.

One possible explanation for the mixed results could be that participants did not know enough about the job, organization, and people at the time that pre-employment knowledge was measured (when the participant applied for the job) and, therefore, guessed on many of the pre-employment knowledge items. This notion would lend support to the theory that applicants have better post-employment outcomes (e.g., less turnover) because of the differential treatment they receive due to the recruitment method that they used. For example, employee referrals could

receive more information about the organization in an interview because they have learned the basic information about the organization from the person who referred them. Future research could benefit from further exploring how an applicant's pre-employment knowledge might become more realistic over the course of the recruitment process, not just at the time of application, and the degree to which recruitment methods affect this relationship.

References

- Bauer, T.N. & Green, S. G. (1994). Effect of newcomer involvement in work-related activities: A longitudinal study of socialization. *Journal of Applied Psychology, 79*, 211-223.
- Blau, G. (1990). Exploring the mediating mechanisms affecting the relationship of recruitment source to employee performance. *Journal of Vocational Behavior, 37*, 303-320.
- Breaugh, J.A. (1992). *Recruitment: Science and Practice*. Boston: PWS-Kent.
- Breaugh, J.A. (2006). Employee Recruitment as a mechanism for improving person-organization fit. Unpublished manuscript.
- Breaugh, J.A. & Mann, R. B. (1984). Recruiting source effects: A test of two alternative explanations. *Journal of Occupational Psychology, 57*, 261-267.
- Breaugh, J. A. & Starke, M. (2000). Research on employee recruitment: So many studies, so many remaining questions. *Journal of Management, 26*, 405-434.
- Bretz, R.D. & Judge, T.A. (1998). Realistic job previews: A test of the adverse self-selection hypothesis. *Journal of Applied Psychology, 83*, 330-337.
- Brooks, L., Cornelius, A., Greenfield, E. & Joseph, R. (1995). The relation of career-related work or internship experiences to the career development of college seniors. *Journal of Vocational Behavior, 46*, 332-349.
- Cable, D.M., Aiman-Smith, L., Mulvey, P.W., & Edwards, J.R. (2000). The sources and accuracy of job applicants' beliefs about organizational culture. *Academy of Management Journal, 43*, 1076-1085.
- Cable, D.M. & Judge, T.A. (1996). Person-organization fit, job choice decisions, and organizational entry. *Organizational behavior and human decision processes, 67*, 294-311.

- Cable, D. M. & Turban, D. B. (2001). Establishing the dimensions, sources and value of job seekers' employer knowledge during recruitment. *Research in Personnel and Human Resources Management*, 20,115-163.
- Chapman, D.S., Uggerslev, K.L., Carroll, S.A., Piasentin, K.A., & Jones, D.A. (2005). Applicant attraction to organizations and job choice: A meta-analytic review of the correlates of recruiting outcomes. *Journal of Applied Psychology*, 90, 928-944.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112, 155-159.
- Collins, C.J., & Stevens, C.K. (2002). The relationship between early recruitment-related activities and the application decisions of new labor-market entrants: A brand equity approach to recruitment. *Journal of Applied Psychology*, 87, 1121-1133.
- Edwards, J.R. (2002). Alternatives to difference scores: Polynomial regression analysis and response surface methodology. In F. Drasgow & N. Schmitt (Eds.), *Measuring and Analyzing Behavior in Organizations: Advances in measurement and data analysis* (pp. 350-400), San Francisco, CA: Jossey-Bass.
- Gibson, M.K. & Papa, M.J. (2000). The mud, the blood, and the beer guys: Organizational osmosis in blue-collar work groups. *Journal of Applied Communication Research*, 28, 68-88.
- Griffeth, R. W., Hom, P.W., Fink, L.S., & Cohen, D.J. (1997). Comparative tests of multivariate models of recruiting sources effects. *Journal of Management*, 23, 19-36.
- Greenhaus, J. H., Callanan, G.A. & Godshalk, V.M (2000). Organizational Entry. *Career Management* (pp. 155-180), Orlando, FL: Dryden.
- Harris, M.M., & Fink, L.S. (1987). A field study of applicant reactions to employment opportunities: Does the recruiter make a difference? *Personnel Psychology*, 40, 765-784.

- Haueter, J.A., Macan, T.H., & Winter, J. (2003). Measurement of newcomer socialization: Construct validation of a multidimensional scale. *Journal of Vocational Behavior*, 63, 20-39.
- James, L.R., Demaree, R.G., & Wolf, G. (1993). R_{wg} : An Assessment of Within-Group Interrater Agreement. *Journal of Applied Psychology*, 78, 306-309.
- James, L.R., Demaree, R.G., & Wolf, G. (1984). Estimating Within-Group Interrater Reliability With and Without Response Bias. *Journal of Applied Psychology*, 69, 85-98.
- Kirnan, J.P., Farley, J.A., & Geisinger, K.F. (1989). The relationship between recruiting source, applicant quality, and hire performance: An analysis by sex, ethnicity, and age. *Personnel Psychology*, 42, 293-308.
- Martin, J. (2002). *Organizational Culture: Mapping the Terrain*. Thousand Oaks, CA: Sage Publications.
- Moser, K. (2005). Recruitment sources and post-hire outcomes: The mediating role of unmet expectations. *International Journal of Selection and Assessment*, 13, 188-197.
- Phillips, J. M. (1998). Effects of realistic job previews on multiple organizational outcomes: A meta-analysis. *Academy of Management Journal*, 41, 673-690.
- Powell, G.N. (1984). Effects of job attributes and recruiting practices on applicant decisions: a comparison. *Personnel Psychology*, 37, 721-732.
- Quaglieri, P.L. (1982). A note on variations in recruiting information obtained through different sources. *Journal of Occupational Psychology*, 55, 53-55.
- Rynes, S.L. (1991). Recruitment, job choice, and post-hire consequences: A call for new research directions. In M. Dunnette & L. Hough (eds.) *Handbook of Industrial and Organizational Psychology*. CA: Consulting Psychologists Press, Inc.

- Rynes, S.L., Bretz, R. D., Jr., & Gerhart, B. (1991). The importance of recruitment in job choice: A different way of looking. *Personnel Psychology*, 44, 487-521.
- Rynes, S.L. & Cable, D.M. (2003). Recruitment research in the twenty-first century. In W.C. Borman, D.R. Ilgen, and R.J. Klimoski (Eds). *Handbook of Psychology* (vol. 12, pp.55-76). Hoboken, N.J., John Wiley & Sons.
- Saks, A.M. (1994). A psychological process investigation for the effects of recruitment source and organization information on job survival. *Journal of Organizational Behavior*, 15, 225-244.
- Saks, A.M. & Ashforth, B.E. (1997). A longitudinal investigation of the relationships between job information sources, applicant perceptions of fit, and work outcomes. *Personnel Psychology*, 50, 395-426.
- Schwab, D. P. (1982). Organizational recruiting and the decision to participate. In K. M. Rowland, & G. R. Ferris (Eds.), *Personnel management* (pp. 103-128). Boston: Allyn and Bacon.
- Taylor, M.S. (1988). Effects of college internships on individual participants. *Journal of Applied Psychology*, 73, 393-401.
- Taylor, M.S. & Schmidt, D.W. (1983). A process-oriented investigation of recruitment source effectiveness. *Personnel Psychology*, 36, 343-354.
- Turban, D.B. & Dougherty, T.W. (1992). Influences of campus recruiting on applicant attraction to firms. *Academy of Management Journal*, 35, 739-765.
- Turban, D.B., Forret, M.L., & Hendrickson, C.L. (1998). Applicant attraction to firms: influences of organization reputation, job and organizational attributes, and recruiter behaviors. *Journal of Vocational Behavior*, 52, 24-44.

- Ullman, J.C. (1966). Employee referrals: Prime tool for recruiting workers. *Personnel*, 43, 30-35.
- Vecchio, R.P. (1995). The impact of referral sources on employee attitudes: Evidence from a national sample. *Journal of Management*, 21, 953-965.
- Werbel, J.D. & Landau, J. (1996). The effectiveness of different recruitment sources: A mediating variable analysis. *Journal of Applied Social Psychology*, 26, 1337-1350.
- Wilk, S. L. (2004). Organizational-Level Recruiting Sources: Implications for Worker Quality, Turnover, and Diversity. Poster session presented at the 19th Annual Conference of the Society for Industrial and Organizational Psychology, Chicago, IL.
- Williams, C.R., Labig, C.E., & Stone, T.H. (1993). Recruitment sources and posthire outcomes for job applicants and new hires: A test of two hypotheses. *Journal of Applied Psychology*, 78, 163-172.
- Zottoli, M.A. & Wanous, J.P. (2000). Recruitment source research: Current status and future directions. *Human Resource Management Review*, 10, 353-382.

Appendix A
Recruitment Methods

Directions: Please complete the following three steps:

Step 1: In **column 1**, mark an X next to the one source in which you first learned about the position you applied for.

Step 2: Sometimes applicants learn about a position from one source, and then gather more information about the position using other sources. In **column 2**, please mark an X next to other sources you used to learn about the position.

Step 3: In **column 3**, using the 1-7 scale below, please indicate the extent you found each of the sources you checked in step 1 and step 2 useful in providing information about the position.

Did not Provide
Useful Information
About the Position

Provided Somewhat
Useful Information
About the Position

Provided Extremely
Useful Information
About the Position

1 2 3 4 5 6 7

Column 1 (Step 1)	Column 2 (Step 2)	Column 3 (Step 3)	
First Source Encountered (Mark only One)	Other Sources Encountered (Mark all that apply)	Usefulness of the sources you marked in column 1 and 2 (see scale above)	
			1) Newspaper Advertisement
			2) Advertisement posted internally either through the organization's <u>Internal</u> (i.e. intranet) Website, a bulletin board, or a memo.
			3) Advertisement posted on the organization's <u>External</u> (i.e. internet) Website
			4) Advertisement posted on a Website other than the organization's (e.g., Monster.com, Hotjobs.com, America's Job Bank) (Which Website? _____)
			5) Employment Agency
			6) Career Fair/Job Fair
			7) I talked with a COMPANY X recruiter about the position opening
			8) A current employee told me about the position opening (other than a COMPANY X recruiter)
			9) I walked into the organization and applied for the position without seeing or hearing about the position from any of the sources listed on this page.
			10) I applied for the position via the company's website without seeing or hearing about the position from any of the sources listed on this page.
			11) Other (please indicate) _____

Reminder!!!: Please be sure you complete all three steps.

Appendix B

Organization Exposure

(The items were reversed coded 1-4, 4 indicating the least exposure and 1 indicated the most exposure)

Directions: We are interested in the extent that you have prior exposure to the **organization** to which you applied. Please indicate the highest degree of exposure you have had by placing an X next to the **ONE** item that best describes your situation.

- ___ 1) I have previously worked for this organization as a full time employee. IF YOU MARKED THIS ITEM, PLEASE SKIP TO QUESTION #7
- ___ 2) I have previously worked for this organization in a part-time, temporary, or other non-full time capacity (For example, I worked in an intern, *co-op*, temporary employee, contractor or part- time position). IF YOU MARKED THIS ITEM, PLEASE SKIP TO QUESTION #5
- ___ 3) *Beyond the information I received from the recruitment source(s) I used, (e.g., advertisement, referral, employment agency), I have only secondhand information concerning this organization (For example, I talked with someone about the organization, saw a product advertisement, saw or read news stories, or read about the organization on the internet). IF YOU MARKED THIS ITEM, PLEASE SKIP TO QUESTION #6*
- ___ 4) *Beyond the information I received from the recruitment source(s) I used, (e.g., advertisement, referral, employment agency), I know almost nothing about this organization. IF YOU MARKED THIS ITEM, PLEASE SKIP TO QUESTION #7*

The following items will be used if results indicate unexpected findings or in a future study:

5) If you placed an X next to #2, please indicate which of the following items describes your situation by placing an X next to that item (**you may mark more than one**):

- ___ I had/have an internship with the organization. (**please indicate how long, in MONTHS** ___)
- ___ I had/have a co-op position with the organization. (**please indicate how long, in MONTHS** ___)
- ___ I work/worked as a contractor with the organization. (**please indicate how long, in MONTHS** ___)
- ___ I work/worked as a temporary employee with the organization. (**please indicate how long, in MONTHS** ___)
- ___ I work/worked in a part-time position with the organization. (**please indicate how long, in MONTHS** ___)
- ___ other (please indicate _____)(**please indicate how long, in MONTHS** ___)

6) If you placed an X next to #3, please indicate which of the following items describes your situation by placing an X next to that item (**you may mark more than one**):

_____ I talked with someone about the organization (please indicate who e.g., family member, friend, professor/teacher, current employee _____).

_____ I saw a product advertisement from the organization.

_____ I saw or read news stories about the organization.

_____ I read about the organization on web sites other than the organization's web site.

_____ I read about the organization on their web site.

_____ Other (please indicate _____).

Appendix C
Job Exposure

(The items were reversed coded 1-4, 4 indicating the least exposure and 1 indicated the most exposure)

Directions: We are interested in the extent that you have prior exposure to the **position** for which you applied. Please indicate the highest degree of exposure you have had by placing an X next to the **ONE** item that best describes your situation.

- _____ 7) I have worked/am working in a similar full-time position to the one for which I applied. IF YOU MARKED THIS ITEM, PLEASE SKIP TO QUESTION #X (referred to the first factual job pre-employment knowledge item)
- _____ 8) I have worked/am working in a similar position to the one in which I applied, but in a part-time capacity (e.g., part-time employee, temporary employee, contractor). IF YOU MARKED THIS ITEM, PLEASE SKIP TO QUESTION #11
- _____ 9) *Beyond the information I received from the recruitment source(s) I used (e.g., advertisement, referral, employment agency), I have only secondhand information about the position (e.g., talked with someone who has worked in a similar position, talked about the position in class). IF YOU MARKED THIS ITEM, PLEASE SKIP TO QUESTION #12*
- _____ 10) *Beyond the information I received from the recruitment source(s) I used (e.g., advertisement, referral, employment agency), I know almost nothing about this position. IF YOU MARKED THIS ITEM, PLEASE SKIP TO QUESTION #X (referred to the first factual job pre-employment knowledge item)*

The following items will be used if results indicate unexpected findings or in a future study:

11) If you placed an X next to #8, please indicate which of the following items describes your situation by placing an X next to that item (**you may mark more than one**):

- _____ I worked/work in the position part-time. (**please indicate how long, in MONTHS** _____)
- _____ I worked/work in the position as a temporary employee.(**please indicate how long, in MONTHS** _____)
- _____ I worked/work in the position as a contractor. (**please indicate how long, in MONTHS** _____)
- _____ other (please indicate _____).(please indicate how long, in MONTHS _____)

12) If you placed an X next to #9, please indicate which of the following items describes your situation by placing an X next to that item (**you may mark more than one**):

- _____ I talked with someone who has worked in the position (please indicate your relationship to this person e.g., family member, friend, co-worker _____).
- _____ I've discussed this position in courses that I've taken.
- _____ other (please indicate _____).

Appendix D

Pre-employment Knowledge: Factual*

*Directions: The following questions ask about your perceptions of the job and the organization. Using the 1-7 scale below, please indicate the frequency with which each characteristic is likely to occur by placing the appropriate number on the line before that statement. **Note: Although you may not have all the information you desire about the position you are applying for, please answer ALL THE QUESTIONS based on what you currently think the job and organization will be like.***

Never	Almost Never	Some of the time	Neutral	Most of The Time	Almost Always	Always
1	2	3	4	5	6	7

Employee Information, Factual**

- _____ 13) Employees socialize outside of work.
- _____ 14) Employees have a lengthy tenure with this organization.
- _____ 15) Employees engage in professional activities outside of work (e.g., seminars, local professional groups).

Job Information, Factual**

- _____ 16) This job requires working more than an 8 hour day.
- _____ 17) This job requires working with customers or other people who are not employed by the organization.
- _____ 18) This job requires working with software programs.
- _____ 19) This job requires employees to be on their feet most of the time.

Organization Information, Factual**

- _____ 20) This organization allows employees to participate in management decisions.
- _____ 21) This organization has been growing in size.
- _____ 22) This organization offers work-family policies such as flexible work hours, job sharing, and ability to take work home.

Appendix E

Pre-employment Knowledge: Attributes***

Directions: The following questions ask about your perceptions of the job and the organization. Using the 1-7 scale below, please indicate the extent to which you *AGREE* or *DISAGREE* by placing the appropriate number on the line before that statement. **Note: Although you may not have all the information you desire about the position you are applying for, please answer ALL THE QUESTIONS based on what you currently think the job and organization will be like.**

Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

Employee Information, Attribute**

- _____ 23) Employees are courteous to one another.
- _____ 24) Employees offer each other help when needed.
- _____ 25) Employees have similar interests and values.

Job Information, Attribute**

- _____ 26) The work activities are enjoyable.
- _____ 27) This job allows employees to use their abilities.
- _____ 28) The pay for this job is competitive.

Organization Information, Attribute**

- _____ 29) This organization provides job security.
- _____ 30) This organization supports employee development.
- _____ 31) This organization has a good reputation.

* Some items adapted from Haueter, J.A., Macan, T.H., & Winter, J. (2003). Measurement of newcomer socialization: Construct validation of a multidimensional scale. *Journal of Vocational Behavior*, 63, 20-39.

** Information provided in headers will not be provided to participants

*** Items adapted from: Harris, M.M., & Fink, L.S. (1987). A field study of applicant reactions to employment opportunities: Does the recruiter make a difference? *Personnel Psychology*, 40, 765-784.; Powell, G.N. (1984). Effects of job attributes and recruiting practices on applicant decisions: a comparison. *Personnel Psychology*, 37, 721-732.; Turban, D.B., Forret, M.L., & Hendrickson, C.L. (1998). Applicant attraction to firms: influences of organization reputation, job and organizational attributes, and recruiter behaviors. *Journal of Vocational Behavior*, 52, 24-44. Turban, D.B., Campion, J.E. & Eyring, A.R. (1995). Factors related to job acceptance decisions of college recruits. *Journal of Vocational Behavior*, 47, 193-213.

Appendix F

Additional Questionnaire Items

Applicant Additional Items

1) Name of the position(s) for which you are applying:

2) If you are applying for more than one position, please tell us what position you would prefer to obtain _____

IF YOU ARE APPLYING FOR MORE THAN ONE POSITION, PLEASE ANSWER ALL FURTHER QUESTIONS THINKING ABOUT THE POSITION YOU LISTED IN QUESTION #2: [THIS WILL APPEAR AT THE BEGINNING OF THE SURVEY]

3) Date you applied for the preferred position: Month _____ Day _____ Year _____

4) How did you apply for this position?

Internet Application _____ Hard Copy Application _____

5) Other than how you heard about the position opening, have you received a realistic job preview* of the position for which you're applying (ex. An explanation of both the positive and negatives of the job).

_____ YES

_____ NO

Directions: Please tell us a little about yourself. (Remember that none of your individual responses will be shared with COMPANY X. Your responses will be used for research purposes only. However, if you would prefer not to answer the demographic questions, your responses to the rest of the questionnaire will still be of use to us.)

6) Age _____

7) Sex ___ M ___ F

8) Race (please check all that apply)

African American

Alaskan Native

Asian

Caucasian/White

Hispanic

Native American

Other (please specify _____)

9) If a current employee told you about the job opening, do you have the perception that you received more information about the position than if you found out about the opening another way?

_____ YES _____ NO _____ Not Applicable

10) If you applied without seeing an advertisement and/or without hearing about the job opening from another employee, do you feel that you spent more time researching the position than if you had found out about the position opening another way?

_____ YES _____ NO _____ Not Applicable

Directions: The following questions ask about your confidence in the accuracy of the information that you have received about the position opening. Using the 1-7 scale below, please indicate the extent to which you feel confident by placing the appropriate number on the line before that statement.

Not At All Confident	Unconfident	Somewhat Unconfident	Neutral	Somewhat Confident	Confident	Very Confident
1	2	3	4	5	6	7

_____ 11) In general, how confident are you about the accuracy of the information you have regarding the **job**?

_____ 12) In general, how confident are you about the accuracy of the information you have regarding the **organization**?

_____ 13) In general, how confident are you about the accuracy of the information you have regarding the **people** that work for the organization?

*wording "realistic job preview" may be changed to be consistent with the organization's terminology

Job Incumbent Additional Items

Directions: Please tell us a little about yourself. (Remember that none of your individual responses will be shared with COMPANY X. Your responses will be used for research purposes only. However, if you would prefer not to answer the demographic questions, your responses to the rest of the questionnaire will still be of use to us.)

1) Age _____

2) Sex ___ M ___ F

3) Race (please check all that apply)

- African American
- Alaskan Native
- Asian
- Caucasian/White
- Hispanic
- Native American
- Other (please specify _____)

4) How long have you been in POSITION X? _____ Months

5) Using the scale below, rate the extent that you feel you are familiar with POSITION X by circling the appropriate number.

Not At All Familiar	Unfamiliar	Somewhat Unfamiliar	Neutral	Somewhat Familiar	Familiar	Very Familiar
1	2	3	4	5	6	7

Appendix G

Applicant Survey



8001 Natural Bridge Road
St. Louis, Missouri 63121-4499
Undergraduate Office: 314-516-5888
Graduate Office: 314-516-5885
Fax: 314-516-6420
Web: <http://www.umsl.edu/business>

Dear Applicant:

Currently, many organizations are notifying potential job candidates of job openings using a variety of methods. Some examples of these methods include newspaper advertisements, internet advertisements, job fairs, and employee referrals. We are conducting a study to better understand the methods by which organizations recruit employees and the effectiveness of these methods.

We need your help in conducting this study. This project is a joint effort between **COMPANY X** and researchers at the **University of Missouri-St. Louis**. This project is the foundation of a Dissertation and is being conducted by Kathleen Frye (graduate student) and Jim Breough (professor). You are being asked to participate in this research because you recently applied for the **Package Handler Position at COMPANY X**.

Your participation in this research involves completing a short questionnaire. Please complete the attached questionnaire as soon as possible. We know that your time is valuable; therefore, we've made completing the questionnaire as simple as possible. Most people complete it in approximately **15 minutes**. By completing and returning the attached questionnaire, you will make a valuable contribution to the knowledge base in the recruitment area of research.

Participation in this study is voluntary. Completion of this questionnaire implies that you have given consent to participate in this study. If you decide to participate, you are free to withdraw at anytime without affecting your relationship with the University or COMPANY X.

It is important that you respond to this questionnaire based on what you currently know about the position. Please do not seek out additional information about the position while completing this questionnaire. **In completing the questionnaire, please do NOT provide your name anywhere on the questionnaire.**

The success of our study depends on your generosity in devoting a few minutes to complete the questionnaire. Thank you in advance for your assistance. When you have completed the questionnaire, please seal it in the postage paid envelope provided and place it in the mail.

We would be happy to answer any questions you might have. Please feel free to contact Kathleen Frye at nkf2fd@umsl.edu. Also available is a list of Frequently Asked Questions that is attached to this letter.

Sincerely,
Kathleen Frye
Principle Investigator

Jim Breough
Faculty Advisor



FREQUENTLY ASKED QUESTIONS

Are my responses confidential and private?

Yes, participation is completely confidential. Your name will not be associated with the answers you provide on the questionnaire. Kathleen Frye and Professor Jim Breaugh will analyze all the information that you and others provide. None of your individual answers will be shown to anyone other than the members of the UM-St. Louis research team. If the results of this research are published, discussed in conferences, or presented to COMPANY X, only group summaries of the questionnaire results will be provided.

What if I am a Potential COMPANY X or current UMSL employee?

You may choose not to participate, or to stop your participation in this research at anytime. Your participation in this research is, in no way, part of your duties, and your refusal to participate will not in any way affect your employment (potential or current) with COMPANY X or UMSL. Furthermore, the benefits, privileges, or opportunities associated with your potential or current employment at either organization will not be affected. You will not be offered or receive any special consideration if you participate in this research.

What if I am a UMSL student?

You may choose not to participate, or to stop your participation in this research, at anytime. This decision will not affect your class standing or grades at UMSL. You will not be offered or receive any special consideration if you participate in this research.

What are the potential risks to taking part in the research?

There are no known risks to participating in this study.

Can I withdraw from the study?

You can choose whether to be in this study. If you volunteer to be in this study, you may withdraw at anytime without consequences of any kind. You also may refuse to answer any questions you do not want to answer and still remain in the study.

What is the purpose of this research?

The purpose of this research is to better understand the methods in which organizations recruit applicants and the effectiveness of these methods.

What procedures are involved?

If you agree to participate in this research, you can expect to complete a short questionnaire. The questionnaire should take about 15 minutes to complete. Approximately 500 participants may be involved in this research at the University of Missouri-St. Louis.

Who should I contact if I have questions?

The researchers conducting this study are Kathleen Frye and Jim Breaugh. If you have questions at anytime, you may contact Kathleen Frye at nkf2fd@umsl.edu.

What are my rights as a research participant?

If you have any questions about your rights as a research participant, you may call the Chairperson of the Institutional Review Board at (314) 516-5897.

Overall Directions: This study examines the methods by which organizations recruit employees and the effectiveness of these methods. To help us get a better understanding of this concept, please answer the questions below. There are no right or wrong answers. All the information you provide will remain confidential; none of your individual answers will be shown to anyone other than members of the UM-St. Louis research team. This questionnaire should take approximately 15 minutes to complete. Thank you again for your participation.

Please tell us a little about the position you are applying for:

1) Name of the position(s) for which you are applying:

2) If you are applying for more than one position, please tell us what position you would prefer to obtain

IF YOU ARE APPLYING FOR MORE THAN ONE POSITION, PLEASE ANSWER ALL FURTHER QUESTIONS THINKING ABOUT THE POSITION YOU LISTED IN QUESTION #2:

3) Date you applied for the preferred position:

Month____ Day_____ Year_____

4) How did you apply for this position?

Internet Application _____ Hard Copy Application _____ Other_____

Please continue on the next page.

Directions: Please complete the following three steps:

Step 1: In **column 1**, mark an X next to the one source in which you first learned about the position you applied for.

Step 2: Sometimes applicants learn about a position from one source, and then gather more information about the position using other sources. In **column 2**, please mark an X next to other sources you used to learn about the position.

Step 3: In **column 3**, using the 1-7 scale below, please indicate the extent you found each of the sources you checked in step 1 and step 2 useful in providing information about the position.

Did not Provide
Useful Information
About the Position

1

2

3

Provided Somewhat
Useful Information
About the Position

4

5

6

Provided Extremely
Useful Information
About the Position

7

Column 1 (Step 1)	Column 2 (Step 2)	Column 3 (Step 3)	
First Source Encountered (Mark only One)	Other Sources Encountered (Mark all that apply)	Usefulness of the sources you marked in column 1 and 2 (see scale above)	
			1) Newspaper Advertisement
			2) Advertisement posted internally either through the organization's <u>Internal</u> (i.e. intranet) Website, a bulletin board, or a memo.
			3) Advertisement posted on the organization's <u>External</u> (i.e. internet) Website
			4) Advertisement posted on a Website other than the organization's (e.g., Monster.com, Hotjobs.com, America's Job Bank) (Which Website? _____)
			5) Employment Agency
			6) Career Fair/Job Fair
			7) I talked with a COMPANY X recruiter about the position opening
			8) A current employee told me about the position opening (other than a COMPANY X recruiter)
			9) I walked into the organization and applied for the position without seeing or hearing about the position from any of the sources listed on this page.
			10) I applied for the position via the company's website without seeing or hearing about the position from any of the sources listed on this page.
			11) Other (please indicate) _____

Reminder!!!: Please be sure you complete all three steps.

Please continue on the next page.

Directions: We are interested in the extent that you have prior exposure to the **organization** to which you applied. With regard to items 5a-d, please indicate the highest degree of exposure you have had by placing an X next to the **ONE** item that best describes your situation.

___ 5a) I have previously worked for this organization as a full time employee. IF YOU MARKED THIS ITEM, PLEASE SKIP TO THE TOP OF PAGE 4

___ 5b) I have previously worked for this organization in a part-time, temporary, or other non-full time capacity (For example, I worked in an intern, co-op, temporary employee, contractor or part-time position). IF YOU MARKED THIS ITEM, PLEASE SKIP TO QUESTION #6

___ 5c) Beyond the information I received from the recruitment source(s) I used, (e.g., advertisement, referral, employment agency), I have only secondhand information concerning this organization (For example, I talked with someone about the organization, saw a product advertisement, saw or read news stories, or read about the organization on the internet). IF YOU MARKED THIS ITEM, PLEASE SKIP TO QUESTION #7

___ 5d) Beyond the information I received from the recruitment source(s) I used, (e.g., advertisement, referral, employment agency), I know almost nothing about this organization. IF YOU MARKED THIS ITEM, PLEASE SKIP TO THE TOP OF PAGE 4

6) If you placed an X next to #5b please indicate which of the following items describes your situation by placing an X next to that item (**you may mark more than one**):

___ I had/have an internship with the organization. (**please indicate how long, in MONTHS** ___)

___ I had/have a co-op position with the organization. (**please indicate how long, in MONTHS** ___)

___ I work/worked as a contractor with the organization. (**please indicate how long, in MONTHS** ___)

___ I work/worked as a temporary employee with the organization. (**please indicate how long, in MONTHS** ___)

___ I work/worked in a part-time position with the organization. (**please indicate how long, in MONTHS** ___)

___ other (please indicate _____)(**please indicate how long, in MONTHS** ___)

7) If you placed an X next to #5c, please indicate which of the following items describes your situation by placing an X next to that item (**you may mark more than one**):

___ I talked with someone about the organization (please indicate who e.g., family member, friend, professor/teacher, current employee _____).

___ I saw a product advertisement from the organization.

___ I saw or read news stories about the organization.

___ I read about the organization on web sites other than the organization's web site.

___ I read about the organization on their web site.

___ Other (please indicate _____).

Please continue on the next page.

Directions: We are interested in the extent that you have prior exposure to the **position** for which you applied. With regard to items 8a-d, please indicate the highest degree of exposure you have had by placing an X next to the **ONE** item that best describes your situation.

- ___ 8a) I have worked/am working in a similar full-time position to the one for which I applied. IF YOU MARKED THIS ITEM, PLEASE SKIP TO THE TOP OF PAGE 5
- ___ 8b) I have worked/am working in a similar position to the one in which I applied, but in a part-time capacity (e.g., part-time employee, temporary employee, contractor). IF YOU MARKED THIS ITEM, PLEASE SKIP TO QUESTION #9
- ___ 8c) *Beyond the information I received from the recruitment source(s) I used, (e.g., advertisement, referral, employment agency), I have only secondhand information about the position (e.g., talked with someone who has worked in a similar position, talked about the position in class).* IF YOU MARKED THIS ITEM, PLEASE SKIP TO QUESTION #10
- ___ 8d) *Beyond the information I received from the recruitment source(s) I used, (e.g., advertisement, referral, employment agency), I know almost nothing about this position.* IF YOU MARKED THIS ITEM, PLEASE SKIP TO THE TOP OF PAGE 5

9) If you placed an X next to #8b, please indicate which of the following items describes your situation by placing an X next to that item (**you may mark more than one**):

- ___ I worked/work in the position part-time. (**please indicate how long, in MONTHS** ___)
- ___ I worked/work in the position as a temporary employee. (**please indicate how long, in MONTHS** ___)
- ___ I worked/work in the position as a contractor. (**please indicate how long, in MONTHS** ___)
- ___ other (please indicate _____). (**please indicate how long, in MONTHS** ___)

10) If you placed an X next to #8c, please indicate which of the following items describes your situation by placing an X next to that item (**you may mark more than one**):

- ___ I talked with someone who has worked in the position (**please indicate your relationship to this person e.g., family member, friend, co-worker** _____).
- ___ I've discussed this position in courses that I've taken.
- ___ other (**please indicate** _____).

Please continue on the next page.

Directions: The following questions ask about your perceptions of the job and the organization. Using the 1-7 scale below, please indicate the frequency with which each characteristic is likely to occur by placing the appropriate number on the line before that statement. **Note: Although you may not have all the information you desire about the position you are applying for, please answer ALL THE QUESTIONS based on what you currently think the job and organization will be like.**

Never	Almost Never	Some of the time	Neutral	Most of The Time	Almost Always	Always
1	2	3	4	5	6	7

- _____ 11) Employees socialize outside of work.
- _____ 12) Employees have a lengthy tenure with this organization.
- _____ 13) Employees engage in professional activities outside of work (e.g., seminars, local professional groups).
- _____ 14) This job requires working more than an 8-hour day.
- _____ 15) This job requires working with customers or other people who are not employed by the organization.
- _____ 16) This job requires working with software programs.
- _____ 17) This job requires employees to be on their feet most of the time.
- _____ 18) This organization allows employees to participate in management decisions.
- _____ 19) This organization has been growing in size.
- _____ 20) This organization offers work-family policies such as flexible work hours, job sharing, and ability to take work home.

Please continue on the next page.

Directions: The following questions ask about your perceptions of the job and the organization. Using the 1-7 scale below, please indicate the extent to which you **AGREE** or **DISAGREE** by placing the appropriate number on the line before that statement. **Note: Although you may not have all the information you desire about the position you are applying for, please answer ALL THE QUESTIONS based on what you currently think the job and organization will be like.**

Strongly Disagree		Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

- _____ 21) Employees are courteous to one another.
- _____ 22) Employees offer each other help when needed.
- _____ 23) Employees have similar interests and values.
- _____ 24) The work activities are enjoyable.
- _____ 25) This job allows employees to use their abilities.
- _____ 26) The pay for this job is competitive.
- _____ 27) This organization provides job security.
- _____ 28) This organization supports employee development.
- _____ 29) This organization has a good reputation.

Directions: The following questions ask about your confidence in the accuracy of the information that you have received about the position opening. Using the 1-7 scale below, please indicate the extent to which you feel confident by placing the appropriate number on the line before that statement.

Not At All Confident			Neutral			Very Confident
1	2	3	4	5	6	7

- _____ 30) In general, how confident are you about the accuracy of the information you have regarding the **job**?
- _____ 31) In general, how confident are you about the accuracy of the information you have regarding the **organization**?
- _____ 32) In general, how confident are you about the accuracy of the information you have regarding the **people** that work for the organization?

Please continue on the next page.

Directions: Please tell us a little about yourself. (Remember that none of your individual responses will be shared with COMPANY X. Your responses will be used for research purposes only. However, if you would prefer not to answer the demographic questions, your responses to the rest of the questionnaire will still be of use to us.)

33) If a current employee told you about the job opening, do you have the perception that you received more information about the position than if you found out about the opening another way?

_____ YES _____ NO _____ Not Applicable

34) If you applied without seeing an advertisement and/or without hearing about the job opening from another employee, do you feel that you spent more time researching the position than if you had found out about the position opening another way?

_____ YES _____ NO _____ Not Applicable

35) Age _____

36) Sex ___ M ___ F

37) Race (please check all that apply)

- African American
- Alaskan Native
- Asian
- Caucasian/White
- Hispanic
- Native American
- Other (please specify _____)

38) Other than how you heard about the position opening, have you received a realistic job preview of the position for which you're applying (ex. An explanation of both the positive and negatives of the job).

_____ YES
_____ NO

If you have any comments you would like to share with us regarding the information you provided in the survey, please let us know what they are:

When you have completed this questionnaire, please seal it in the postage paid envelope provided and place it in the US mail.

Thank you for your time!

Appendix H

Job Incumbent Survey



8001 Natural Bridge Road
St. Louis, Missouri 63121-4499
Undergraduate Office: 314-516-5888
Graduate Office: 314-516-5885
Fax: 314-516-6420
Web: <http://www.umsl.edu/business>

October 3, 2006

Dear Job Incumbent:

Currently, many organizations are recruiting employees through a variety of methods. Some examples of these methods include newspaper advertisements, internet advertisements, job fairs, and employee referrals. We are conducting a study to better understand the methods by which organizations recruit employees and the effectiveness of these methods. This project is a joint effort between **COMPANY X** and researchers at the **University of Missouri-St. Louis**. This project is the foundation of a Dissertation and is being conducted by Kathleen Frye (graduate student) and Jim Breugh (professor).

We need your help in conducting this study. One manner in which the effectiveness of recruitment methods can be assessed is to examine how accurate the potential employees' knowledge of the position is. In order to determine the accuracy of their knowledge, we need to know what working in the **Package Handler Position** is like. The attached questionnaire asks you about various aspects of the Package Handler Position. Please answer the questionnaire based on your knowledge of this position.

Your participation in this research involves completing a short questionnaire. Please complete the attached questionnaire as soon as possible. We know that your time is valuable; therefore, we've made completing this questionnaire as simple as possible. Most people complete it in approximately **5 minutes**. By completing and returning the attached questionnaire, you will make a valuable contribution to the knowledge base in the recruitment area of research.

Participation in this study is voluntary. Completion of this questionnaire implies that you have given consent to participate in this study. If you decide to participate, you are free to withdraw at anytime without affecting your relationship with the University or **COMPANY X**.

It is important that you respond to this questionnaire honestly. **In completing the questionnaire, please do NOT provide your name anywhere on the questionnaire.**

The success of our study depends on your generosity in devoting a few minutes to complete the questionnaire. Thank you in advance for your assistance. When you have completed the questionnaire, please seal it in the postage paid envelope provided and place it in the mail.

We would be happy to answer any questions you might have. Please feel free to contact Kathleen Frye at nkf2fd@umsl.edu. Also available is a list of Frequently Asked Questions that is attached to this letter.

Sincerely,

Kathleen Frye
Principle Investigator

Jim Breugh
Faculty Advisor



FREQUENTLY ASKED QUESTIONS

Are my responses confidential and private?

Yes, participation is completely confidential. Your name will not be associated with the answers you provide on the questionnaire. Kathleen Frye and Professor Jim Breaugh will analyze all the information that you and others provide. None of your individual answers will be shown to anyone other than the members of the UM-St. Louis research team. If the results of this research are published, discussed in conferences, or presented to COMPANY X, only group summaries of the questionnaire results will be provided.

What if I am a COMPANY X or current UMSL employee?

You may choose not to participate, or to stop your participation in this research at anytime. Your participation in this research is, in no way, part of your duties, and your refusal to participate will not in any way affect your employment (potential or current) with COMPANY X or UMSL. Furthermore, the benefits, privileges, or opportunities associated with your potential or current employment at either organization will not be affected. You will not be offered or receive any special consideration if you participate in this research.

What if I am a UMSL student?

You may choose not to participate, or to stop your participation in this research, at anytime. This decision will not affect your class standing or grades at UMSL. You will not be offered or receive any special consideration if you participate in this research.

What are the potential risks to taking part in the research?

There are no known risks to participating in this study.

Can I withdraw from the study?

You can choose whether to be in this study. If you volunteer to be in this study, you may withdraw at anytime without consequences of any kind. You also may refuse to answer any questions you do not want to answer and still remain in the study.

What is the purpose of this research?

The purpose of this research is to better understand the methods in which organizations recruit applicants and the effectiveness of these methods.

What procedures are involved?

If you agree to participate in this research, you can expect to complete a short questionnaire. The questionnaire should take about 5 minutes to complete. Approximately 500 participants may be involved in this research at the University of Missouri-St. Louis.

Who should I contact if I have questions?

The researchers conducting this study are Kathleen Frye and Jim Breaugh. If you have questions at anytime, you may contact Kathleen Frye at nkf2fd@umsl.edu.

What are my rights as a research participant?

If you have any questions about your rights as a research participant, you may call the Chairperson of the Institutional Review Board at (314) 516-5897.

QUESTIONNAIRE

Page 1 of 3

Overall Directions: This study examines the methods in which organizations recruit employees and the effectiveness of these methods. To help us get a better understanding of this concept, please answer the questions below. There are no right or wrong answers. All the information you provide will remain confidential; none of your individual answers will be shown to anyone other than members of the UM-St. Louis research team. This questionnaire should take approximately 5 minutes to complete. Thank you again for your participation.

Directions: The following questions ask about your perceptions of the job and the organization. Using the 1-7 scale below, please indicate the frequency with which each characteristic is likely to occur by placing the appropriate number on the line before that statement. **Note: Please answer ALL THE QUESTIONS based on what you currently know about the job and organization.**

Never	Almost Never	Some of the time	Neutral	Most of The Time	Almost Always	Always
1	2	3	4	5	6	7

- _____ 1) Employees socialize outside of work.
- _____ 2) Employees have a lengthy tenure with this organization.
- _____ 3) Employees engage in professional activities outside of work (e.g., seminars, local professional groups).
- _____ 4) This job requires working more than an 8-hour day.
- _____ 5) This job requires working with customers or other people who are not employed by the organization.
- _____ 6) This job requires working with software programs.
- _____ 7) This job requires employees to be on their feet most of the time.
- _____ 8) This organization allows employees to participate in management decisions.
- _____ 9) This organization has been growing in size.
- _____ 10) This organization offers work-family policies such as flexible work hours, job sharing, and ability to take work home.

Please continue on the next page.

Directions: The following questions ask about your perceptions of the job and the organization. Using the 1-7 scale below, please indicate the extent to which you *AGREE* or *DISAGREE* by placing the appropriate number on the line before that statement. **Note: Please answer ALL THE QUESTIONS based on what you currently know about the job and organization.**

Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

- _____ 11) Employees are courteous to one another.
- _____ 12) Employees offer each other help when needed.
- _____ 13) Employees have similar interests and values.
- _____ 14) The work activities are enjoyable.
- _____ 15) This job allows employees to use their abilities.
- _____ 16) The pay for this job is competitive.
- _____ 17) This organization provides job security.
- _____ 18) This organization supports employee development.
- _____ 19) This organization has a good reputation.

Please continue on the next page.

Directions: Please tell us a little about yourself. (Remember that none of your individual responses will be shared with COMPANY X. Your responses will be used for research purposes only. However, if you would prefer not to answer these questions, your responses to the rest of the questionnaire will still be of use to us.)

20) Using the scale below, rate the extent that you feel you are familiar with the Package Handler Position by circling the appropriate number.

Not At All Familiar	Unfamiliar	Somewhat Unfamiliar	Neutral	Somewhat Familiar	Familiar	Very Familiar
1	2	3	4	5	6	7

21) How long have you been in X Position? _____ Months

22) What shift are you currently working?

_____ Sunrise (3am - 8am)	_____ Day (11:30am – 4:30pm)
_____ Twilight (4:30pm – 9:30 pm)	_____ Night (10pm – 3am)

23) Age _____

24) Sex ___ M ___ F

25) Race (please check all that apply)

- African American
- Alaskan Native
- Asian
- Caucasian/White
- Hispanic
- Native American
- Other (please specify _____)

Directions: If you have any comments you would like to share with us regarding the information you provided in the survey, please let us know what they are:

When you have completed this questionnaire, please seal it in the postage paid envelope provided and place it in the US mail.

Thank you for your time!

Appendix I

Direction of Predicted Relationships

1. Categorical Recruitment Methods and Pre-employment Knowledge Agreement
 - a. Perfect agreement equals 0
 - b. The lower the mean, the better the agreement
2. Job Exposure and Pre-employment Knowledge Agreement
 - a. Perfect agreement equals 0
 - b. Job Exposure is reversed scored
 - c. Positive Relationship
3. Organization Exposure and Pre-employment Knowledge Agreement
 - a. Perfect agreement equals 0
 - b. Organization Exposure is reversed scored
 - c. Positive Relationship
4. Overall Recruitment Method Usefulness and Pre-employment Knowledge Agreement
 - a. Perfect agreement equals 0
 - b. Negative Relationship
5. Employee Referral Usefulness and Pre-employment Knowledge Agreement
 - a. Perfect agreement equals 0
 - b. Negative Relationship
6. Categorical Recruitment Methods and Knowledge Confidence
 - a. The higher the mean, the better the Knowledge Confidence
7. Job Exposure and Knowledge Confidence
 - a. Job Exposure is reversed scored
 - b. Negative Relationship
8. Organization Exposure and Knowledge Confidence
 - a. Organization Exposure is reversed scored
 - b. Negative Relationship
9. Overall Recruitment Method Usefulness and Knowledge Confidence
 - a. Positive Relationship
10. Employee Referral Usefulness and Knowledge Confidence
 - a. Positive Relationship

Table 1

Interrater Agreement of Job Incumbents

Pre-employment Knowledge Variable	Variance	Mean Job Incumbent Rating	R _{wg}
By Measure			
Factual People Pre-employment Knowledge	1.29	4.24	0.68
Factual Job Pre-employment Knowledge	0.23	2.89	0.94
Factual Organization Pre-employment Knowledge	0.24	3.38	0.94
Attribute People Pre-employment Knowledge	0.63	5.67	0.84
Attribute Job Pre-employment Knowledge	1.13	3.95	0.72
Attribute Organization Pre-employment Knowledge	0.32	6.10	0.92
By Item			
Factual People Pre-employment Knowledge 1	2.24	5.29	0.44
Factual People Pre-employment Knowledge 2	1.48	4.86	0.63
Factual People Pre-employment Knowledge 3	1.95	2.57	0.51
Factual Job Pre-employment Knowledge 1	0.62	1.43	0.85
Factual Job Pre-employment Knowledge 2	2.24	1.71	0.44
Factual Job Pre-employment Knowledge 3	1.57	1.71	0.61
Factual Job Pre-employment Knowledge 4	0.24	6.71	0.94
Factual Organization Pre-employment Knowledge 1	2.57	2.29	0.36
Factual Organization Pre-employment Knowledge 2	0.57	6.71	0.86
Factual Organization Pre-employment Knowledge 3	0.14	1.14	0.97
Attribute People Pre-employment Knowledge 1	0.91	5.71	0.77
Attribute People Pre-employment Knowledge 2	0.57	6.29	0.86
Attribute People Pre-employment Knowledge 3	2.33	5.00	0.42
Attribute Job Pre-employment Knowledge 1	0.62	3.57	0.85
Attribute Job Pre-employment Knowledge 2	0.91	4.29	0.77
Attribute Job Pre-employment Knowledge 3	4.67	4.00	-0.17
Attribute Organization Pre-employment Knowledge 1	1.62	5.57	0.60
Attribute Organization Pre-employment Knowledge 2	1.00	6.0	0.75
Attribute Organization Pre-employment Knowledge 3	0.24	6.71	0.94

Table 2

Means and Standard Deviations for Study Variables

Variable	Agreement Rating		Applicant Rating		N
	M	SD	M	SD	
Organization Exposure	--	--	3.15	.54	233
Job Exposure	--	--	2.94	.94	220
Recruitment Method Usefulness	--	--	5.47	1.36	159
Employee Referral Usefulness	--	--	5.44	1.30	55
Factual People Pre-employment Knowledge	.44	.65	3.95	0.94	234
Factual Job Pre-employment Knowledge	1.20	.85	4.05	0.91	234
Factual Organization Pre-employment Knowledge	1.46	.87	4.70	1.07	235
Attribute People Pre-employment Knowledge	.74	.60	5.23	0.84	231
Attribute Job Pre-employment Knowledge	1.20	.77	5.08	0.87	231
Attribute Organization Pre-employment Knowledge	.68	.60	5.81	0.86	230
Factual People Pre-employment Knowledge 1	1.66	.93	3.78	1.15	238
Factual People Pre-employment Knowledge 2	1.02	.83	4.34	1.21	235
Factual People Pre-employment Knowledge 3	1.46	.97	3.72	1.33	236
Factual Job Pre-employment Knowledge 1	1.75	1.30	3.03	1.49	238
Factual Job Pre-employment Knowledge 2	2.20	1.62	3.76	1.81	234
Factual Job Pre-employment Knowledge 3	1.78	1.22	3.27	1.49	236
Factual Job Pre-employment Knowledge 4	.86	.88	6.13	1.09	238
Factual Organization Pre-employment Knowledge 1	1.71	1.04	3.73	1.39	235
Factual Organization Pre-employment Knowledge 2	1.00	.97	5.98	1.18	236
Factual Organization Pre-employment Knowledge 3	3.28	1.76	4.40	1.81	236
Attribute People Pre-employment Knowledge 1	.94	.69	5.55	1.16	231
Attribute People Pre-employment Knowledge 2	.91	.76	5.67	1.01	231
Attribute People Pre-employment Knowledge 3	.98	.71	4.46	1.09	231
Attribute Job Pre-employment Knowledge 1	1.28	.96	4.71	1.13	231
Attribute Job Pre-employment Knowledge 2	1.27	.80	5.26	1.14	231
Attribute Job Pre-employment Knowledge 3	1.43	1.04	5.28	1.21	231
Attribute Organization Pre-employment Knowledge 1	.92	.60	5.46	1.10	231
Attribute Organization Pre-employment Knowledge 2	.73	.79	5.68	1.03	231
Attribute Organization Pre-employment Knowledge 3	.73	.75	6.27	0.95	230

Table 3
Correlations for Study Variables

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Organization Exposure ^a	--									
2. Job Exposure ^a	.23**	--								
3. Recruitment Method Usefulness ^b	-.13	.02	--							
4. Employee Referral Usefulness ^c	-.13	-.08	.65**	--						
5. Factual Job Pre-employment Knowledge ^a	.01	.06	.12	-.18	--					
6. Factual Organization Pre-employment Knowledge ^a	-.12	-.04	.20*	-.05	.31**	--				
7. Factual People Pre-employment Knowledge ^a	.01	-.11	-.06	-.35*	-.03	.06	--			
8. Attribute Job Pre-employment Knowledge ^a	-.13	-.01	.21	.11	.16*	.26*	.10	--		
9. Attribute Organization Pre-employment Knowledge ^a	.01	-.02	-.18	-.16	-.11	-.13	.19**	-.28**	--	
10. Attribute People Pre-employment Knowledge ^a	-.06	.04	-.05	-.22	-.08	-.10	.12	-.19**	.30**	--

* $p < .05$. ** $p < .01$

^aN = 199 ^bN = 150 ^cN = 42

Table 4

Relationships between Recruitment Methods and Pre-employment Knowledge

Variable	Advertisement		Employee Referral		Direct Applicant		ANOVA	
	M	SD	M	SD	M	SD	df	F
Overall Sample One-way ANOVA								
Factual Job Pre-employment Knowledge (n=80, 71, 41)	1.32	.89	1.06	.76	1.34	.90	2,189	2.16
Factual Organization Pre-employment Knowledge (n=81, 72, 42)	1.41	.86	1.62	.85	1.39	.87	2,191	1.44
Factual People Pre-employment Knowledge (n=81, 72, 42)	.69	.65	.65	.61	.83	.57	2,192	1.20
Attribute Job Pre-employment Knowledge (n=78, 67, 39)	1.31	.79	1.13	.80	1.26	.70	2,181	1.06
Attribute Organization Pre-employment Knowledge (n=77, 67, 39)	.65	.50	.64	.56	.62	.46	2,180	.06
Attribute People Pre-employment Knowledge (n=78, 67, 39)	.67	.57	.76	.57	.88	.64	2,181	1.68
Subsample One-way ANOVA ^a								
Factual Job Pre-employment Knowledge								
Group B (n=75, 68, 36)	1.37	.90	1.10	.75	1.50	.84	2,176	3.22*
Factual Organization Pre-employment Knowledge								
Group B (n=70, 63, 36)	1.55	.83	1.76	.79	1.55	.82	2,166	1.29
Factual People Pre-employment Knowledge								
Group A (n=47, 49, 28)	.78	.62	.74	.65	.85	.49	2,121	.26
Group B (n=34, 23, 14)	.57	.67	.46	.46	.81	.73	2,68	1.39
Attribute Job Pre-employment Knowledge								
Group B (n= 78, 65, 36)	1.31	.79	1.14	.81	1.34	.68	2,176	1.09
Attribute Organization Pre-employment Knowledge								
Group A (n=45, 42, 23)	.71	.60	.70	.66	.72	.54	2,107	.02
Group B (n=32, 25, 16)	.57	.31	.55	.30	.46	.26	2,70	.71
Attribute People Pre-employment Knowledge								
Group A (n=50, 53, 26)	.76	.59	.83	.59	1.03	.68	2,126	1.72
Group B (n=28, 14, 13)	.52	.50	.50	.36	.59	.45	2,52	.14

^aGroup A refers to applicants whose scores on pre-employment knowledge fell below the job incumbent mean rating and group B refers to applicants whose scores on pre-employment knowledge were above the job incumbent mean rating.

* p < .05.

Table 5

Relationships between Job Exposure and Job Pre-employment Knowledge

Variable	r	Job Exposure		Knowledge	
		M	SD	M	SD
Overall Sample					
Factual Job Pre-employment Knowledge (n = 218)	.07	2.94	.94	1.21	.85
Attribute Job Pre-employment Knowledge (n = 207)	.02	2.93	.93	1.22	.75
Subsamples ^a					
Factual Job Pre-employment Knowledge					
Group B (n = 204)	.06	2.95	.92	1.27	.85
Attribute Job Pre-employment Knowledge					
Group B (n = 196)	-.02	2.94	.92	1.25	.75

^aGroup A refers to applicants whose scores on pre-employment knowledge fell below the job incumbent mean rating and group B refers to applicants whose scores on pre-employment knowledge were above the job incumbent mean rating.

* p < .05.

Table 6

Relationships between Organization Exposure and Pre-employment Knowledge

Variable	r	Organizational Exposure		Knowledge	
		M	SD	M	SD
Overall Sample					
Factual People Pre-employment Knowledge (n = 225)	-.001	3.13	.53	.74	.65
Factual Organization Pre-employment Knowledge (n = 227)	-.11	3.14	.53	1.48	.87
Attribute People Pre-employment Knowledge (n = 221)	-.09	3.15	.54	.73	.60
Attribute Organization Pre-employment Knowledge (n = 220)	-.03	3.15	.54	.66	.58
Subsamples ^a					
Factual People Pre-employment Knowledge					
Group A (n = 137)	.03	3.18	.55	.84	.63
Group B (n = 88)	-.12	3.06	.49	.59	.65
Factual Organization Pre-employment Knowledge					
Group B (n = 196)	-.11	3.14	.53	1.63	.82
Attribute People Pre-employment Knowledge					
Group A (n = 153)	-.10	3.14	.57	.82	.63
Group B (n = 68)	-.06	3.16	.48	.50	.45

^aGroup A refers to applicants whose scores on pre-employment knowledge fell below the job incumbent mean rating and group B refers to applicants whose scores on pre-employment knowledge were above the job incumbent mean rating.

*p <.05

Table 7

Relationships between Recruitment Methods Usefulness and Pre-employment Knowledge

Variable	r	Usefulness		Knowledge	
		M	SD	M	SD
Overall Sample					
Factual People Pre-employment Knowledge (n = 153)	-.06	5.48	1.37	.66	.57
Factual Job Pre-employment Knowledge (n = 155)	.12	5.47	1.38	1.21	.82
Factual Organization Pre-employment Knowledge (n = 154)	.20*	5.46	1.37	1.5	.85
Attribute People Pre-employment Knowledge (n = 148)	-.05	5.52	1.34	.72	.57
Attribute Job Pre-employment Knowledge (n = 148)	.21*	5.52	1.34	1.24	.72
Attribute Organization Pre-employment Knowledge (n = 147)	-.18*	5.52	1.34	.63	.51
Subsamples ^a					
Factual People Pre-employment Knowledge					
Group A (n = 96)	-.24*	5.18	1.40	.71	.54
Group B (n = 57)	.36*	5.99	1.15	.57	.62
Factual Job Pre-employment Knowledge					
Group B (n = 144)	.14	5.47	1.37	1.28	.81
Factual Organization Pre-employment Knowledge					
Group B (n = 135)	.25*	5.48	1.35	1.64	.80
Attribute People Pre-employment Knowledge					
Group A (n = 102)	-.05	5.43	1.34	.80	.60
Group B (n = 46)	.06	5.71	1.32	.52	.45
Attribute Job Pre-employment Knowledge					
Group B (n = 143)	.22*	5.5	1.35	1.26	.72
Attribute Organization Pre-employment Knowledge					
Group A (n = 88)	-.23*	5.17	1.32	.70	.60
Group B (n = 59)	.15	6.05	1.19	.53	.30

^aGroup A refers to applicants whose scores on pre-employment knowledge fell below the job incumbent mean rating and group B refers to applicants whose scores on pre-employment knowledge were above the job incumbent mean rating.

* p < .05.

Table 8

Relationships between Employee Referral Usefulness and Pre-employment Knowledge

Variable	r	Usefulness		Knowledge	
		M	SD	M	SD
Overall Sample					
Factual People Pre-employment Knowledge (n = 49)	-.25	5.41	1.32	.51	.40
Factual Job Pre-employment Knowledge (n = 52)	-.15	5.48	1.32	1.02	.66
Factual Organization Pre-employment Knowledge (n = 52)	.09	5.48	1.32	1.63	.85
Attribute People Pre-employment Knowledge (n = 51)	-.12	5.43	1.32	.67	.49
Attribute Job Pre-employment Knowledge (n = 51)	.11	5.43	1.32	1.19	.66
Attribute Organization Pre-employment Knowledge (n = 51)	-.10	5.43	1.32	.55	.52
Subsamples ^a					
Factual People Pre-employment Knowledge Group A (n = 33)	.42*	5.09	1.35	.54	.42
Factual Job Pre-employment Knowledge Group B (n = 49)	-.15	5.47	1.32	1.07	0.64
Factual Organization Pre-employment Knowledge Group B (n = 48)	.06	5.54	1.24	1.72	.81
Attribute People Pre-employment Knowledge Group A (n = 41)	-.20	5.44	1.38	.74	.51
Attribute Job Pre-employment Knowledge Group B (n = 50)	.10	5.44	1.33	1.20	.66
Attribute Organization Pre-employment Knowledge Group A (n = 33)	-.14	5.15	1.42	.55	.62

^aGroup A refers to applicants whose scores on pre-employment knowledge fell below the job incumbent mean rating and group B refers to applicants whose scores on pre-employment knowledge were above the job incumbent mean rating.

* $p < .05$.

Table 9

Alphas for Pre-employment Knowledge

Pre-employment Knowledge Variable	Alpha
Factual People Pre-employment Knowledge	0.64
Factual Job Pre-employment Knowledge	0.45
Factual Organization Pre-employment Knowledge	0.53
Attribute People Pre-employment Knowledge	0.67
Attribute Job Pre-employment Knowledge	0.60
Attribute Organization Pre-employment Knowledge	0.79

Table 10

Relationships between Recruitment Methods and Individual Pre-employment Knowledge Items

Variable	Advertisement		Employee Referral		Direct Applicant		ANOVA	
	M	SD	M	SD	M	SD	df	F
Overall Sample One-way ANOVA								
Factual Job Pre-employment Knowledge 1 (n = 80, 71, 41)	1.71	1.27	1.68	1.27	2.13	1.23	2,194	1.96
Factual Job Pre-employment Knowledge 2 (n = 80, 71, 41)	2.31	1.79	1.98	1.29	2.50	1.78	2,192	1.53
Factual Job Pre-employment Knowledge 3 (n = 80, 71, 41)	2.08	1.33	1.68	1.05	1.55	1.34	2,194	3.50*
Factual Job Pre-employment Knowledge 4 (n = 81, 74, 42)	.95	.91	.83	.77	.85	.99	2,194	.41
Factual Organization Pre-employment Knowledge 1 (n = 81, 71, 42)	1.65	.90	1.82	1.11	1.72	1.08	2,194	.50
Factual Organization Pre-employment Knowledge 2 (n = 81, 71, 42)	1.05	.92	.93	.95	.99	.82	2,194	.33
Factual Organization Pre-employment Knowledge 3 (n = 81, 71, 42)	3.28	1.78	3.50	1.75	3.19	1.68	2,194	.53
Factual People Pre-employment Knowledge 1 (n = 81, 72, 42)	1.56	.86	1.50	.89	1.96	.89	2,194	4.07*
Factual People Pre-employment Knowledge 2 (n = 81, 72, 42)	.97	.82	.98	.86	.98	.72	2,192	.01
Factual People Pre-employment Knowledge 3 (n = 81, 72, 42)	1.45	1.03	1.39	.81	1.47	1.01	2,193	.11
Attribute Job Pre-employment Knowledge 1 (n = 78, 67, 39)	1.38	.97	1.09	.94	1.36	.99	2,190	1.98
Attribute Job Pre-employment Knowledge 2 (n = 78, 67, 39)	1.30	.82	1.19	.76	1.43	.81	2,190	1.22
Attribute Job Pre-employment Knowledge 3 (n = 78, 67, 39)	1.47	1.06	1.39	1.02	1.53	.99	2,190	.24
Attribute Organization Pre-employment Knowledge 1 (n = 77, 67, 39)	.90	.51	.95	.56	.86	.65	2,190	.32
Attribute Organization Pre-employment Knowledge 2 (n = 77, 67, 39)	.68	.67	.73	.82	.68	.69	2,190	.10
Attribute Organization Pre-employment Knowledge 3 (n = 77, 67, 39)	.69	.67	.66	.59	.58	.33	2,189	.47
Attribute People Pre-employment Knowledge 1 (n = 78, 67, 39)	.84	.52	.92	.68	1.20	.83	2,190	4.15*
Attribute People Pre-employment Knowledge 2 (n = 78, 67, 39)	.84	.72	.96	.82	1.00	.76	2,190	.770
Attribute People Pre-employment Knowledge 3 (n = 78, 67, 39)	.91	.75	1.01	.67	1.03	.66	2,190	.53
Subsample One-way ANOVAs								
Factual Job Pre-employment Knowledge 1 Group B (n = 75, 68, 36)	1.95	1.24	1.95	1.24	2.31	1.16	2,164	1.25
Factual Job Pre-employment Knowledge 2 Group B (n = 75, 68, 36)	2.44	1.80	2.18	1.27	2.80	1.76	2,170	1.70
Factual Job Pre-employment Knowledge 3 Group B (n = 75, 68, 36)	2.28	1.31	1.87	1.05	1.67	1.16	2,167	3.71*
Factual Job Pre-employment Knowledge 4 Group A (n = 44, 38, 20)	1.51	.93	1.34	.79	1.46	1.16	2,99	.33

Group B (n = 37, 36, 22)	.29	.00	.29	.00	.29	.00	2,92	---
Factual Organization Pre-employment Knowledge 1								
Group B (n = 70, 63, 36)	1.89	.81	2.02	1.04	1.98	1.04	2,159	.30
Factual Organization Pre-employment Knowledge 2								
Group B (n = 70, 63, 36)	.29	.00	.29	.00	.29	.00	2,83	---
Factual Organization Pre-employment Knowledge 3								
Group B (n = 70, 63, 36)	3.58	1.56	3.80	1.50	3.63	1.52	2,178	.83
Factual People Pre-employment Knowledge 1								
Group A (n = 47, 49, 28)	1.55	.88	1.55	.90	2.03	.88	2,183	4.62*
Group B (n = 34, 23, 14)	1.71	.00	.71	.00	1.04	.58	2,8	12.37**
Factual People Pre-employment Knowledge 2								
Group A (n = 47, 49, 28)	1.25	.77	1.36	.85	1.11	.53	2,111	.85
Group B (n = 34, 23, 14)	.60	.74	.39	.44	.81	.91	2,78	2.00
Factual People Pre-employment Knowledge 3								
Group A (n = 47, 49, 28)	.82	.45	1.17	.52	.90	.52	2,25	1.45
Group B (n = 34, 23, 14)	1.56	1.07	1.43	.84	1.57	1.05	2,165	.36
Attribute Job Pre-employment Knowledge 1								
Group B (n = 78, 65, 36)	1.39	.97	1.12	.97	1.38	1.00	2,182	1.60
Attribute Job Pre-employment Knowledge 2								
Group B (n = 78, 65, 36)	1.51	.74	1.46	.67	1.64	.69	2,147	.67
Attribute Job Pre-employment Knowledge 3								
Group B (n = 78, 65, 36)	1.65	1.00	1.60	.95	1.64	.86	2,160	.05
Attribute Organization Pre-employment Knowledge 1								
Group A (n = 45, 42, 23)	1.10	.51	1.26	.54	1.16	.80	2,78	.57
Group B (n = 32, 25, 16)	.77	.48	.72	.46	.65	.42	2,109	.57
Attribute Organization Pre-employment Knowledge 2								
Group A (n = 45, 42, 23)	.78	.77	.95	.96	1.00	.75	2,101	.66
Group B (n = 32, 25, 16)	.56	.50	.47	.51	.38	.50	2,86	.83
Attribute Organization Pre-employment Knowledge 3								
Group A (n = 45, 42, 23)	1.21	.75	1.08	.65	.80	.29	2,89	3.06*
Group B (n = 32, 25, 16)	.29	.00	.29	.00	.29	.00	2,97	---
Attribute People Pre-employment Knowledge 1								
Group A (n = 50, 53, 26)	1.08	.49	1.41	.65	1.77	.80	2,75	6.76**
Group B (n = 28, 14, 13)	.70	.49	.59	.46	.74	.51	2,112	1.00
Attribute People Pre-employment Knowledge 2								
Group A (n = 50, 53, 26)	.88	.83	1.02	.90	1.07	.83	2,148	.63
Group B (n = 28, 14, 13)	.71	.00	.71	.00	.71	.00	2,39	---

Attribute People Pre-employment Knowledge 3

Group A (n = 50, 53, 26)	.96	.71	1.09	.66	1.00	.65	2,139	.48
Group B (n = 28, 14, 13)	.78	.85	.76	.66	1.09	.70	2,48	.74

^aGroup A refers to applicants whose scores on pre-employment knowledge fell below the job incumbent mean rating and group B refers to applicants whose scores on pre-employment knowledge were above the job incumbent mean rating.

* $p < .05$. ** $p < .01$

Table 11

Relationships between Job Exposure and Individual Job Pre-employment Knowledge Items

Variable	r	Job Exposure		Knowledge	
		M	SD	M	SD
Overall Sample					
Factual Job Pre-employment Knowledge 1 (n = 220)	-.04	2.94	.94	1.75	1.30
Factual Job Pre-employment Knowledge 2 (n = 218)	.06	2.94	.94	2.20	1.64
Factual Job Pre-employment Knowledge 3 (n = 219)	.02	2.94	.94	1.79	1.22
Factual Job Pre-employment Knowledge 4 (n = 220)	-.07	2.94	.94	.83	.86
Attribute Job Pre-employment Knowledge 1 (n = 207)	.03	2.93	.93	1.29	.96
Attribute Job Pre-employment Knowledge 2 (n = 207)	.02	2.93	.93	1.29	.78
Attribute Job Pre-employment Knowledge 3 (n = 207)	.06	2.93	.93	1.46	1.04
Subsample ^a					
Factual Job Pre-employment Knowledge 1					
Group A (n = 42)	----	3.02	0.92	0.43	0.00
Group B (n = 178)	-.02	2.92	0.94	2.06	1.25
Factual Job Pre-employment Knowledge 2					
Group B (n = 194)	.00	2.99	0.89	2.39	1.64
Factual Job Pre-employment Knowledge 3					
Group A (n = 35)	----	2.83	1.12	0.71	0.00
Group B (n = 184)	.00	2.96	0.90	1.99	1.23
Factual Job Pre-employment Knowledge 4					
Group A (n = 108)	.01	2.83	0.98	1.40	0.94
Group B (n = 112)	----	3.04	0.88	0.29	0.00
Attribute Job Pre-employment Knowledge 1					
Group B (n = 191)	.00	2.94	0.93	1.31	0.98
Attribute Job Pre-employment Knowledge 2					
Group A (n = 48)	.02	2.96	0.97	0.64	0.70
Group B (n = 159)	.03	2.92	0.92	1.48	0.69
Attribute Job Pre-employment Knowledge 3					
Group A (n = 35)	.06	3.09	0.95	0.49	0.89
Group B (n = 172)	.11	2.90	0.92	1.66	0.95

^aGroup A refers to applicants whose scores on pre-employment knowledge fell below the job incumbent mean rating and group B refers to applicants whose scores on pre-employment knowledge were above the job incumbent mean rating.

* p < .05.

Table 12

Relationships between Organization Exposure and Individual Pre-employment Knowledge Items

Variable	r	Organizational Exposure		Knowledge	
		M	SD	M	SD
Overall Sample					
Factual People Pre-employment Knowledge 1 (n = 228)	.16*	3.14	.53	1.64	.94
Factual People Pre-employment Knowledge 2 (n = 226)	-.03	3.13	.53	1.01	.82
Factual People Pre-employment Knowledge 3 (n = 227)	-.09	3.14	.53	1.47	.98
Factual Organization Pre-employment Knowledge 1 (n = 227)	.03	3.14	.53	1.74	1.04
Factual Organization Pre-employment Knowledge 2 (n = 227)	.05	3.14	.53	.97	.95
Factual Organization Pre-employment Knowledge 3(n = 227)	-.10	3.14	.53	3.28	1.78
Attribute People Pre-employment Knowledge 1 (n = 221)	-.12	3.15	.54	.94	.70
Attribute People Pre-employment Knowledge 2 (n = 221)	-.05	3.15	.54	.90	.75
Attribute People Pre-employment Knowledge 3 (n = 221)	-.02	3.15	.54	.96	.71
Attribute Organization Pre-employment Knowledge 1 (n = 221)	-.02	3.15	.54	.91	.60
Attribute Organization Pre-employment Knowledge 2 (n = 221)	-.05	3.15	.54	.71	.77
Attribute Organization Pre-employment Knowledge 3 (n = 220)	.01	3.15	.54	.70	.71
Subsamples ^a					
Factual People Pre-employment Knowledge 1 Group A (n = 214)	.15*	3.15	0.53	1.67	0.95
Factual People Pre-employment Knowledge 2 Group A (n = 132)	-.06	3.16	0.55	1.29	0.77
Group B (n = 94)	-.07	3.10	0.49	0.62	0.71
Factual People Pre-employment Knowledge 3 Group A (n = 35)	.20	3.03	0.75	1.00	0.50
Group B (n = 192)	-.16*	3.16	0.48	1.56	1.03
Factual Organization Pre-employment Knowledge 1 Group A (n = 46)	-.06	3.09	0.46	0.68	0.49
Group B (n = 181)	.01	3.15	0.54	2.00	0.98
Factual Organization Pre-employment Knowledge 2 Group A (n = 122)	.04	3.16	0.58	1.55	0.96
Group B (n = 105)	----	3.11	0.47	0.29	0.00
Factual Organization Pre-employment Knowledge 3 Group B (n = 207)	-.12	3.14	0.53	3.58	1.56
Attribute People Pre-employment Knowledge 1 Group A (n = 86)	-.06	3.07	0.61	1.4	0.74
Group B (n = 135)	-.08	3.20	0.49	0.65	0.48
Attribute People Pre-employment Knowledge 2 Group A (n = 174)	-.06	3.16	0.54	0.95	0.84
Group B (n = 47)	----	3.13	0.54	0.71	0.00
Attribute People Pre-employment Knowledge 3 Group A (n = 160)	-.04	3.16	0.56	1.01	0.69
Group B (n = 61)	.01	3.13	0.5	0.84	0.76
Attribute Organization Pre-employment Knowledge 1 Group A (n = 91)	-.03	3.20	0.52	1.19	0.68

Frye, N. Kathleen, 2007, UMSL, p.101

Group B (n = 130)					
Attribute Organization Pre-employment Knowledge 2					
Group A (n = 123)	-.07	3.12	0.55	0.72	0.46
Group B (n = 98)	-.08	3.17	0.55	0.89	0.90
Attribute Organization Pre-employment Knowledge 3					
Group A (n = 106)	-.03	3.12	0.52	0.49	0.50
Group B (n = 114)	-.08	3.21	0.63	1.13	0.83
	----	3.10	0.44	0.29	0.00

^aGroup A refers to applicants whose scores on pre-employment knowledge fell below the job incumbent mean rating and group B refers to applicants whose scores on pre-employment knowledge were above the job incumbent mean rating.

* p < .05.

Table 13

Relationships between Recruitment Methods Usefulness and Pre-employment Knowledge

Variable	r	Usefulness		Knowledge	
		M	SD	M	SD
Overall Sample					
Factual People Pre-employment Knowledge 1 (n =156)	-.17*	5.47	1.37	1.58	.90
Factual People Pre-employment Knowledge 2 (n =154)	-.11	5.49	1.37	.92	.75
Factual People Pre-employment Knowledge 3 (n =155)	.24**	5.46	1.37	1.46	.94
Factual Job Pre-employment Knowledge 1 (n =156)	.17*	5.47	1.37	1.63	1.21
Factual Job Pre-employment Knowledge 2 (n =155)	.10	5.47	1.38	2.19	1.58
Factual Job Pre-employment Knowledge 3 (n =155)	.03	5.47	1.38	1.82	1.17
Factual Job Pre-employment Knowledge 4 (n =156)	-.70	5.47	1.37	.70	.66
Factual Organization Pre-employment Knowledge 1 (n =154)	.10	5.46	1.37	1.74	1.05
Factual Organization Pre-employment Knowledge 2 (n =154)	-.32**	5.46	1.37	.96	.88
Factual Organization Pre-employment Knowledge 3 (n =154)	.11	5.46	1.37	3.35	1.75
Attribute People Pre-employment Knowledge 1 (n =148)	.02	5.52	1.34	.95	.69
Attribute People Pre-employment Knowledge 2 (n =148)	-.10	5.52	1.34	.84	.73
Attribute People Pre-employment Knowledge 3 (n =148)	.03	5.52	1.34	.95	.65
Attribute Job Pre-employment Knowledge 1 (n =148)	.19*	5.52	1.34	1.26	.95
Attribute Job Pre-employment Knowledge 2 (n =148)	.14	5.52	1.34	1.30	.80
Attribute Job Pre-employment Knowledge 3 (n =148)	.13	5.52	1.34	1.51	.98
Attribute Organization Pre-employment Knowledge 1 (n =148)	-.03	5.52	1.34	.90	.57
Attribute Organization Pre-employment Knowledge 2 (n =148)	-.17*	5.52	1.34	.68	.77
Attribute Organization Pre-employment Knowledge 3 (n =147)	-.31**	5.52	1.34	.62	.55
Subsamples ^a					
Factual People Pre-employment Knowledge 1 Group A (n = 149)	-.16	5.41	1.37	1.61	.91
Factual People Pre-employment Knowledge 2 Group A (n = 86)	-.29*	5.22	1.37	1.20	.66
Group B (n = 68)	.32*	5.82	1.30	.57	.70
Factual People Pre-employment Knowledge 3 Group B (n = 133)	.26**	5.53	1.32	1.56	.96
Factual Job Pre-employment Knowledge 1 Group B (n = 127)	.21*	5.48	1.35	1.90	1.18
Factual Job Pre-employment Knowledge 2 Group B (n = 136)	.16	5.41	1.37	2.39	1.58
Factual Job Pre-employment Knowledge 3 Group B (n = 130)	-.01	5.52	1.31	2.03	1.17
Factual Job Pre-employment Knowledge 4 Group A (n = 68)	-.13	5.44	1.25	1.24	.70
Group B (n = 88)	----	5.50	1.46	.29	.00
Factual Organization Pre-employment Knowledge 1 Group A (n = 31)	.16	5.27	1.67	.61	.48
Group B (n = 123)	.06	5.51	1.29	2.02	.96
Factual Organization Pre-employment Knowledge 2 Group A (n = 82)	-.21	5.08	1.32	1.54	.86
Group B (n = 72)	----	5.90	1.31	.29	.00

Factual Organization Pre-employment Knowledge 3					
Group B (n = 139)	.18*	5.44	1.36	3.69	1.47
Attribute People Pre-employment Knowledge 1					
Group A (n = 55)	.09	5.45	1.14	1.42	.74
Group B (n = 93)	.03	5.56	1.45	.67	.49
Attribute People Pre-employment Knowledge 2					
Group A (n = 118)	-.10	5.44	1.34	.87	.81
Group B (n = 30)	----	5.81	1.33	.71	.00
Attribute People Pre-employment Knowledge 3					
Group A (n = 111)	-.01	5.44	1.30	.97	.61
Group B (n = 37)	.15	5.73	1.45	.89	.77
Attribute Job Pre-employment Knowledge 1					
Group B (n = 137)	.17*	5.54	1.31	1.30	.96
Attribute Job Pre-employment Knowledge 2					
Group A (n = 31)	.26	5.33	1.40	.48	.54
Group B (n = 117)	.09	5.56	1.32	1.52	.71
Attribute Job Pre-employment Knowledge 3					
Group B (n = 128)	----	5.78	1.29	.29	.00
Attribute Organization Pre-employment Knowledge 1					
Group A (n = 61)	-.11	5.21	1.28	1.16	.62
Group B (n = 87)	.19	5.73	1.35	.72	.46
Attribute Organization Pre-employment Knowledge 2					
Group A (n = 78)	-.26*	5.14	1.36	.87	.90
Group B (n = 70)	.28*	5.93	1.18	.47	.50
Attribute Organization Pre-employment Knowledge 3					
Group A (n = 64)	-.33*	5.18	1.34	1.05	.60
Group B (n = 83)	----	5.78	1.29	.29	.00

^aGroup A refers to applicants whose scores on pre-employment knowledge fell below the job incumbent mean rating and group B refers to applicants whose scores on pre-employment knowledge were above the job incumbent mean rating.

* p < .05 ** p < .01.

Table 14

Relationships between Employee Referral Usefulness and Pre-employment Knowledge

Variable	r	Usefulness		Knowledge	
		M	SD	M	SD
Overall Sample					
Factual People Pre-employment Knowledge 1 (n = 52)	-.30*	5.48	1.32	1.42	.88
Factual People Pre-employment Knowledge 2 (n = 50)	-.34*	5.44	1.33	.83	.55
Factual People Pre-employment Knowledge 3 (n = 51)	.17	5.45	1.32	1.45	.74
Factual Job Pre-employment Knowledge 1 (n = 52)	-.06	5.48	1.32	1.39	1.11
Factual Job Pre-employment Knowledge 2 (n = 52)	-.25	5.48	1.32	1.93	1.15
Factual Job Pre-employment Knowledge 3 (n = 52)	.05	5.48	1.32	1.68	.95
Factual Job Pre-employment Knowledge 4 (n = 52)	.08	5.48	1.32	.73	.69
Factual Organization Pre-employment Knowledge 1 (n = 52)	-.01	5.48	1.32	1.84	1.10
Factual Organization Pre-employment Knowledge 2 (n = 52)	-.16	5.48	1.32	.85	.81
Factual Organization Pre-employment Knowledge 3 (n = 52)	.16	5.48	1.32	3.55	1.73
Attribute People Pre-employment Knowledge 1 (n = 51)	.09	5.43	1.32	.85	.69
Attribute People Pre-employment Knowledge 2 (n = 51)	-.13	5.43	1.32	.81	.77
Attribute People Pre-employment Knowledge 3 (n = 51)	-.16	5.43	1.32	.98	.62
Attribute Job Pre-employment Knowledge 1 (n = 51)	.11	5.43	1.32	1.11	.90
Attribute Job Pre-employment Knowledge 2 (n = 51)	-.01	5.43	1.32	1.25	.76
Attribute Job Pre-employment Knowledge 3 (n = 51)	.01	5.43	1.32	1.51	.90
Attribute Organization Pre-employment Knowledge 1 (n = 51)	.08	5.43	1.32	.89	.57
Attribute Organization Pre-employment Knowledge 2 (n = 51)	-.11	5.43	1.32	.61	.85
Attribute Organization Pre-employment Knowledge 3 (n = 51)	-.32*	5.43	1.32	.57	.43
Subsamples ^a					
Factual People Pre-employment Knowledge 1 Group A (n = 50)	-.31*	5.48	1.31	1.45	.89
Factual People Pre-employment Knowledge 2 Group A (n = 30)	-.39*	5.10	1.37	1.09	.43
Factual People Pre-employment Knowledge 3 Group B (n = 45)	.19	5.56	1.20	1.50	.75
Factual Job Pre-employment Knowledge 1 Group B (n = 42)	-.18	5.60	1.23	1.62	1.13
Factual Job Pre-employment Knowledge 2 Group B (n = 44)	-.26	5.43	1.30	2.15	1.11
Factual Job Pre-employment Knowledge 3 Group B (n = 44)	.06	5.48	1.21	1.86	.93
Factual Organization Pre-employment Knowledge 1 Group B (n = 44)	-.06	5.52	1.23	2.07	1.01
Factual Organization Pre-employment Knowledge 3 Group B (n = 48)	.09	5.54	1.24	3.84	1.48
Attribute People Pre-employment Knowledge 1 Group B (n = 31)	.06	5.61	1.28	.55	.44
Attribute People Pre-employment Knowledge 2 Group A (n = 45)	-.14	5.40	1.34	.82	.81
Attribute People Pre-employment Knowledge 3 Group A (n = 42)	-.04	5.31	1.33	1.02	.60
Attribute Job Pre-employment Knowledge 1					

Group B (n = 45)	.06	5.60	1.21	1.16	.94
Attribute Job Pre-employment Knowledge 2					
Group B (n = 40)	.04	5.40	1.26	1.51	.65
Attribute Job Pre-employment Knowledge 3					
Group B (n = 44)	.07	5.39	1.32	1.70	.79
Attribute Organization Pre-employment Knowledge 1					
Group B (n = 32)	.34	5.63	1.07	.68	.44
Attribute Organization Pre-employment Knowledge 2 (n<30)					
Attribute Organization Pre-employment Knowledge 3 (n<30)					

^aGroup A refers to applicants whose scores on pre-employment knowledge fell below the job incumbent mean rating and group B refers to applicants whose scores on pre-employment knowledge were above the job incumbent mean rating.

* p < .05 ** p < .01.

Table 15

Correlations between Job Exposure and Job Pre-employment Knowledge by Recruitment Method^a

Variable	Advertisement	Employee Referral	Direct Applicant
Factual Job Pre-employment Knowledge (n = 74, 70, 39)	.01	.09	.22
Attribute Job Pre-employment Knowledge (n = 72, 66, 36)	-.15	.08	.00
Factual Job Pre-employment Knowledge 1 (n = 75, 70, 39)	-.15	.03	.10
Factual Job Pre-employment Knowledge 2 (n = 74, 70, 39)	.01	.14	.12
Factual Job Pre-employment Knowledge 3 (n = 75, 70, 39)	-.02	-.03	.10
Factual Job Pre-employment Knowledge 4 (n = 75, 70, 39)	-.03	.18	-.14
Attribute Job Pre-employment Knowledge 1 (n = 72, 66, 36)	-.09	.12	-.08
Attribute Job Pre-employment Knowledge 2 (n = 72, 66, 36)	-.14	.10	.19
Attribute Job Pre-employment Knowledge 3 (n = 72, 66, 36)	.02	.02	.17

*p <.05

^aJob Exposure is reverse coded; perfect pre-employment knowledge is zero

Table 16

Correlations between Organization Exposure and Pre-employment Knowledge

Variable	Advertisements	Employee Referral	Direct Applicant
Factual People Pre-employment Knowledge (n = 78, 68, 40)	.12	.04	.03
Factual Organization Pre-employment Knowledge (n = 78, 71, 40)	-.20	-.07	.04
Attribute People Pre-employment Knowledge (n = 75, 71, 38)	.08	-.44**	-.03
Attribute Organization Pre-employment Knowledge (n = 74, 71, 38)	.23	-.08	-.33*
Factual People Pre-employment Knowledge 1 (n = 78, 71, 40)	.21	.16	.16
Factual People Pre-employment Knowledge 2 (n = 78, 69, 40)	.04	.08	-.21
Factual People Pre-employment Knowledge 3 (n = 78, 70, 40)	-.17	.02	-.18
Factual Organization Pre-employment Knowledge 1 (n = 78, 71, 40)	.02	.02	.17
Factual Organization Pre-employment Knowledge 2 (n = 78, 71, 40)	.16	.04	.15
Factual Organization Pre-employment Knowledge 3 (n = 78, 71, 40)	-.21	-.06	.11
Attribute People Pre-employment Knowledge 1 (n = 75, 71, 38)	.13	-.29*	-.20
Attribute People Pre-employment Knowledge 2 (n = 75, 71, 38)	.09	-.23	-.04
Attribute People Pre-employment Knowledge 3 (n = 75, 71, 38)	.08	-.25*	.00
Attribute Organization Pre-employment Knowledge 1 (n = 75, 71, 38)	.02	-.11	-.13
Attribute Organization Pre-employment Knowledge 2 (n = 75, 71, 38)	.18	-.09	-.25
Attribute Organization Pre-employment Knowledge 3 (n = 75, 71, 38)	.19	.01	.15

*p <.05, **p<.01

^aOrganization Exposure is reverse coded; pre-employment knowledge is reverse coded

Table 17

Relationships between Recruitment Methods and Knowledge Confidence

Variable	Advertisement		Employee Referral		Direct Applicant		ANOVA	
	M	SD	M	SD	M	SD	df	F
Job Knowledge Confidence (n = 77, 74, 40)	5.56	1.08	5.39	1.12	5.13	1.18	2,188	1.98
Organization Knowledge Confidence (n = 77, 73, 41)	5.49	1.21	5.53	1.13	5.41	1.07	2,188	.14
Employee Knowledge Confidence (n = 77, 73, 40)	5.17	1.20	5.10	1.35	4.95	1.13	2,187	.41

* p<.05.

Table 18a

Relationships between Job Exposure and Job Knowledge Confidence

Variable	r	Job Exposure		Confidence	
		M	SD	M	SD
Job Knowledge Confidence (n = 204)	-.02	2.92	.94	5.33	1.20

* p<.05.

Table 18b

Relationships between Organization Exposure and People and Organization Knowledge Confidence

Variable	r	Organization Exposure		Confidence	
		M	SD	M	SD
People Knowledge Confidence (n = 216)	-.10	3.15	.54	5.08	1.29
Organization Knowledge Confidence (n = 217)	-.14*	3.15	.54	5.47	1.89

* p < .05.

Table 19a

Relationships between Recruitment Methods Usefulness and Knowledge Confidence

Variable	r	Job Exposure		Knowledge	
		M	SD	M	SD
People Knowledge Confidence (n = 144)	.18*	5.53	1.34	5.03	1.23
Job Knowledge Confidence (n = 145)	.20*	5.53	1.33	5.50	1.11
Organization Knowledge Confidence (n = 144)	.25**	5.53	1.34	5.60	1.07

* p < .05 ** p < .01

Table 19b

Relationships between Employee Referral Usefulness and Knowledge Confidence

Variable	r	Job Exposure		Knowledge	
		M	SD	M	SD
People Knowledge Confidence (n = 50)	.31*	5.42	1.33	4.96	1.34
Job Knowledge Confidence (n = 51)	.14	5.43	1.32	5.55	1.12
Organization Knowledge Confidence (n = 50)	.32*	5.42	1.33	5.58	1.05

* p < .05.

Table 20

Summary of Simple Regression Analyses for Pre-employment Knowledge Variables Predicting Exposure

Job Pre-employment Knowledge Variables Predicting Position Exposure			
Variable	<i>B</i>	<i>SE B</i>	β
Job Factual Pre-employment Knowledge	.08	.08	.07
Job Attribute Pre-employment Knowledge	-.03	.09	-.02
R^2		.01	
F		.486	
Organization Pre-employment Knowledge Variables Predicting Organization Exposure			
Variable	<i>B</i>	<i>SE B</i>	β
Organization Factual Pre-employment Knowledge	-0.08	0.04	-0.12
Organization Attribute Pre-employment Knowledge	-0.01	0.06	-0.01
R^2		0.02	
F		1.56	
People Pre-employment Knowledge Variables Predicting Organization Exposure			
Variable	<i>B</i>	<i>SE B</i>	β
People Factual Pre-employment Knowledge	0.02	0.06	0.03
People Attribute Pre-employment Knowledge	-0.08	0.06	-0.09
R^2		0.01	
F		0.81	

* $p < .05$

Table 21

Measurement Ranges for Variables

Variable	Measurement Range
Job Exposure	1-4, 1 indicates the highest degree of exposure
Organization Exposure	1-4, 1 indicates the highest degree of exposure
Overall Recruitment Method Usefulness	1-7, 7 indicates that the method was very useful
Employee Referral Usefulness	1-7, 7 indicates that the method was very useful
Knowledge Confidence	1-7, 7 indicates very confident
Factual People Pre-employment Knowledge	.24-3.24, .24 indicates perfect agreement
Factual Job Pre-employment Knowledge	.11-4.11, .11 indicates perfect agreement
Factual Organization Pre-employment Knowledge	.38-3.62, .38 indicates perfect agreement
Attribute People Pre-employment Knowledge	.33-4.67, .33 indicates perfect agreement
Attribute Job Pre-employment Knowledge	.05-3.05, .05 indicates perfect agreement
Attribute Organization Pre-employment Knowledge	.10-5.10, .10 indicates perfect agreement
Factual People Pre-employment Knowledge 1	.29-4.29, .29 indicates perfect agreement
Factual People Pre-employment Knowledge 2	.14-3.86, .14 indicates perfect agreement
Factual People Pre-employment Knowledge 3	.43-4.43, .43 indicates perfect agreement
Factual Organization Pre-employment Knowledge 1	.43-5.57, .43 indicates perfect agreement
Factual Organization Pre-employment Knowledge 2	.29-5.29, .29 indicates perfect agreement
Factual Organization Pre-employment Knowledge 3	.29-5.29, .29 indicates perfect agreement
Factual Job Pre-employment Knowledge 1	.29-5.71, .29 indicates perfect agreement
Factual Job Pre-employment Knowledge 2	.29-4.41, .29 indicates perfect agreement
Factual Job Pre-employment Knowledge 3	.29-5.71, .29 indicates perfect agreement
Factual Job Pre-employment Knowledge 4	.14-5.86, .14 indicates perfect agreement
Attribute People Pre-employment Knowledge 1	.29-4.71, .29 indicates perfect agreement
Attribute People Pre-employment Knowledge 2	.29-5.29, .29 indicates perfect agreement
Attribute People Pre-employment Knowledge 3	0-4, 0 indicates perfect agreement
Attribute Job Pre-employment Knowledge 1	.43-3.43, .43 indicates perfect agreement
Attribute Job Pre-employment Knowledge 2	.29-3.29, .29 indicates perfect agreement
Attribute Job Pre-employment Knowledge 3	0-3, 0 indicates perfect agreement
Attribute Organization Pre-employment Knowledge 1	.43-4.57, .43 indicates perfect agreement
Attribute Organization Pre-employment Knowledge 2	0-5, 0 indicates perfect agreement
Attribute Organization Pre-employment Knowledge 3	.29-5.71, .29 indicates perfect agreement

Figure 1. Proposed relationships of the type of recruitment method used, job exposure, organization exposure, and pre-employment knowledge.

