

Singapore Management University Institutional Knowledge at Singapore Management University

Research Collection Lee Kong Chian School Of
Business

Lee Kong Chian School of Business

12-2007

Investigating web-based recruitment sources: Employee testimonials vs word-of-mouth

Greet VAN HOYE
Ghent University

Filip LIEVENS
Singapore Management University, filiplievens@smu.edu.sg
DOI: <https://doi.org/10.1111/j.1468-2389.2007.00396.x>

Follow this and additional works at: https://ink.library.smu.edu.sg/lkcsb_research

Part of the [Human Resources Management Commons](#), and the [Organizational Behavior and Theory Commons](#)

Citation

VAN HOYE, Greet and LIEVENS, Filip. Investigating web-based recruitment sources: Employee testimonials vs word-of-mouth. (2007). *International Journal of Selection and Assessment*. 15, (4), 372-382. Research Collection Lee Kong Chian School Of Business.
Available at: https://ink.library.smu.edu.sg/lkcsb_research/5683

This Journal Article is brought to you for free and open access by the Lee Kong Chian School of Business at Institutional Knowledge at Singapore Management University. It has been accepted for inclusion in Research Collection Lee Kong Chian School Of Business by an authorized administrator of Institutional Knowledge at Singapore Management University. For more information, please email libIR@smu.edu.sg.

Investigating Web-Based Recruitment Sources: Employee testimonials vs word-of-mouse

Greet Van Hoye and Filip Lievens

Department of Personnel Management, Work and Organizational Psychology, Ghent University, Henri Dunantlaan 2, 9000 Ghent, Belgium. E-mail: greet.vanhoye@ugent.be

Published in International Journal of Selection and Assessment, December 2007, 15 (4), 372-382

<https://doi.org/10.1111/j.1468-2389.2007.00396.x>

Creative Commons Attribution-Noncommercial-No Derivative Works 4.0 License.

Submitted version

Abstract

Although the internet has dramatically changed recruitment practices, many web-based recruitment sources have not yet been investigated. The present study examines the effects of web-based employee testimonials and web-based word-of-mouth (i.e., ‘word-of-mouse’) on organizational attraction. The source credibility framework is used to compare these company-dependent and company-independent recruitment sources. In a sample of potential applicants for a head nurse position, word-of-mouse was associated with higher organizational attractiveness than web-based employee testimonials. However, potential applicants were more attracted when testimonials provided information about individual employees than about the organization. Conversely, word-of-mouse was associated with higher organizational attractiveness and more organizational pursuit behavior when it focused on the organization instead of on employees. Most of these effects were mediated by credibility perceptions.

1. Introduction

Over the last decade the internet has dramatically changed recruitment practices. For organizations, the internet provides an efficient and less costly means to provide more job and organizational information to potential applicants in a much more dynamic and consistent way than was the case in the past (Cober, Brown, Blumental, Doverspike, & Levy, 2000; Lievens & Harris, 2003). Internet recruitment has also substantially affected how potential applicants look for a job (Van Rooy, Alonso, & Fairchild, 2003). In the past, job seekers had to consult newspapers or contact acquaintances to locate a suitable job opening. In the internet age, however, job seekers can immediately search through thousands of available job openings.

Apart from the speed and quantity of the information provided through the internet, potential applicants also have a broader array of information available. On the one hand, there is a wealth of company-supplied information, which is typically placed on job boards or company websites (Lievens & Harris, 2003). Examples are job ads and employee testimonials (Geisheker, 2001). On the other hand, there also exists a lot of information about jobs and companies that is 'going around' on the internet (Dellarocas, 2003). Job seekers can easily and quickly search for such independent information about an organization from diverse sources such as employees' weblogs, chatrooms, electronic bulletin boards, and independent websites presenting company information (e.g., <http://www.vault.com.libproxy.smu.edu.sg>).

Paralleling these developments in practice, there is a growing trend in recruitment research to examine pre-hire sources of employment information other than recruitment advertising (Collins & Stevens, 2002; Van Hove & Lievens, 2005). In fact, prior recruitment research has paid a lot of attention to official company information sources whereas more independent sources of information have largely been ignored (Cable & Turban, 2001; Rynes & Cable, 2003; Saks, 2005; Taylor & Collins, 2000). Similarly, previous research on web-based recruitment has focused on investigating how the characteristics of official recruitment websites affect various reactions of potential applicants (Cober, Brown, Levy, Cober, & Keeping, 2003; Dineen, Ash, & Noe, 2002; Lievens & Harris, 2003; Tong, Duffy, Cross, Tsung, & Yen, 2005; Williamson, Lepak, & King, 2003). Along these lines, Cable and Turban (2001) suggested that:

Any information source, ranging from company's brand advertisement to friends' word of mouth, has the potential to affect job seekers' employer knowledge (Cable, Aiman-Smith, Mulvey, & Edwards, 2000). Unfortunately, several sources of organizational information suggested by the marketing literature have been relatively ignored in past recruitment research. (p. 132)

The present study starts to fill these gaps in recruitment research. Specifically, the source credibility framework (Eisend, 2004; Pornpitakpan, 2004) is applied to compare company-dependent sources of employment information to company-independent sources and to investigate their effects in a web-based environment. In addition, we examined whether the content of the recruitment message can moderate this source effect. In this study, company-dependent recruitment source is operationalized through web-based employee testimonials, whereas company-independent recruitment source is operationalized through web-based word-of-mouth.

2. Study background

2.1. Company-dependent vs company-independent recruitment sources

Both on and off the internet, potential applicants receive employment information from a broad array of different sources including advertising, recruiters, publicity, and word-of-mouth. A key distinction can be made between company-dependent and company-independent recruitment sources (Cable & Turban, 2001). Company-dependent sources such as advertising are part of the organization's recruitment activities and can be directly controlled to communicate a positive message to potential applicants. Conversely, company-independent sources such as word-of-mouth can be influenced only indirectly through other recruitment activities and can contain positive as well as negative information.

The source credibility framework can be applied to predict differential outcomes for these two main types of recruitment sources. This framework postulates that more credible sources of information are more persuasive in both changing attitudes and gaining behavioral compliance (Eisend, 2004; Pornpitakpan, 2004). Perceived credibility consists of the perceived accuracy, appropriateness, and believability of the communicated information (Allen, Van Scotter, & Otondo, 2004; Eisend, 2004; Pornpitakpan, 2004). This theory implies that recruitment sources vary in the degree to which potential applicants perceive them as providing credible employment information, which in turn might explain their different effects on recruitment outcomes (Allen *et al.*, 2004; Breugh & Starke, 2000; Cable & Turban, 2001; Fisher, Ilgen, & Hoyer, 1979). Compared with company-dependent sources, company-independent sources might be perceived as providing more credible information because they do not have the explicit purpose to promote the organization (Fisher *et al.*, 1979; Van Hoyer & Lievens, 2005).

Recruitment advertising represents the most typical example of a company-dependent recruitment source and can be defined as any paid form of non-personal presentation and promotion of an organization as an employer by the organization itself (Highhouse & Hoffman, 2001; Kotler & Keller, 2005). Examples include recruitment brochures and job opportunities webpages. In contrast to independent sources, recruitment advertising has received a considerable amount of research attention, demonstrating that it can influence organizational attraction (Barber & Roehling, 1993; Cable & Turban, 2001; Highhouse & Hoffman, 2001).

As a typical example of a company-independent recruitment source, word-of-mouth can be defined as an interpersonal communication, independent of the organization's recruitment activities, about an organization as an employer or about specific jobs (Bone, 1995; Cable *et al.*, 2000; Collins & Stevens, 2002; Van Hoyer & Lievens, 2005). Examples include conversations with friends and advice from independent experts. Even though word-of-mouth is typically associated with face-to-face communication, it can be provided through all sorts of media such as the telephone or the internet

(Dellarocas, 2003; Herr, Kardes, & Kim, 1991; Smith & Vogt, 1995). In fact, the importance of web-based word-of-mouth (i.e., ‘word-of-mouse’) has increased in practice, as shown by the emergence of e-mails, weblogs, chatrooms, electronic bulletin boards, and independent websites presenting interpersonal company information (Dellarocas, 2003). Although knowledge about word-of-mouth as a recruitment source is still scarce, a few studies have indicated that word-of-mouth can influence organizational attraction (Collins & Stevens, 2002; Van Hoye & Lievens, 2005, 2007).

The inability to directly control word-of-mouth represents both an advantage and a disadvantage. While it contributes to its credibility as a company-independent recruitment source (Van Hoye & Lievens, 2005), it makes it difficult, if not impossible, for organizations to convey their recruitment message through word-of-mouth in exactly the way they want to. Using employee testimonials in recruitment advertising might help to address this problem by combining the advantages of a company-dependent recruitment source that can be directly controlled to promote a favorable image, with the characteristics of word-of-mouth as an interpersonal information source. In fact, employee testimonials can be seen as company-controlled imitations of word-of-mouth.

Marketing research suggests that the use of testimonials can increase the credibility and persuasive power of advertising (Feick & Higie, 1992; Kotler & Keller, 2005; Mittelstaedt, Riesz, & Burns, 2000; Till, 1998). Hence, on recruitment websites organizations are increasingly having employees testify about their work experiences to inform and attract potential applicants (Geisheker, 2001). However, empirical research has lagged behind these new and innovative recruitment activities (Rynes & Cable, 2003; Saks, 2005; Taylor & Collins, 2000). On the one hand, Fisher *et al.* (1979) found that employees and friends as sources of employment information had comparable effects: both were more credible and influential than recruiters. On the other hand, it might be that the greater organizational control of employee testimonials leads to a loss in credibility and influence compared with word-of-mouth that is truly independent of the organization (Pornpitakpan, 2004; Van Hoye & Lievens, 2005). Along these lines, Highhouse, Hoffman, Greve, and Collins (2002) found that anecdotal information was less credible and attractive in a recruitment brochure than in a newspaper article. However, to our knowledge, no studies have yet scrutinized the effects of web-based employee testimonials on applicant attraction. Therefore, we do not know if these attempts to imitate word-of-mouse are successful or not. A key test of the effectiveness of employee testimonials would consist of comparing their effects on important attraction outcomes to word-of-mouth. Given that we wanted to examine the effects of web-based testimonials, we compared them with web-based word-of-mouth, to avoid medium-related confound. In addition, although word-of-mouth as a company-independent source can contain positive as well as negative information, company-dependent employee testimonials are typically positive. Therefore, only positive word-of-mouse was considered in the present study. On the basis of the source credibility framework, we expected that web-

based employee testimonials as a company-dependent recruitment source would be less credible and therefore less attractive than word-of-mouth as a company-independent source (Eisend, 2004; Pornpitakpan, 2004).

Hypothesis 1: Web-based word-of-mouth will lead to (a) higher organizational attractiveness, and (b) more organizational pursuit behavior than the web-based employee testimonial.

Hypothesis 2a: Web-based word-of-mouth will be perceived as a more credible recruitment source than the web-based employee testimonial.

Hypothesis 2b: The effect of recruitment source on (a) organizational attractiveness, and (b) organizational pursuit behavior will be mediated by credibility.

2.2. Recruitment message: Organization vs individual

The source credibility framework (Eisend, 2004; Pornpitakpan, 2004) not only proposes a main effect of source credibility but also postulates that the communicated message will moderate the effect of source credibility on persuasion. This implies that the credibility and impact of word-of-mouth and employee testimonials might vary as a function of the content of the recruitment message. The person–environment fit perspective can be applied to better understand the effect of the recruitment message as a moderating variable. In the context of recruitment, the person–environment fit perspective states that potential applicants are more attracted to work environments with characteristics compatible with their own characteristics (Kristof-Brown, Zimmerman, & Johnson, 2005). This implies that, to increase organizational attraction, an effective recruitment message should emphasize similarities between the characteristics of potential applicants and the work environment that the company can offer them. Although several aspects of the work environment can be communicated in such a targeted recruitment message, a main distinction can be made between messages describing the organization as a whole and messages describing the individuals working for the organization.

A recruitment message emphasizing the similarities between potential applicants and the organization itself is in line with a person–organization fit perspective, which suggests that potential applicants are more attracted to organizations with characteristics similar to their own (Kristof, 1996; Schneider, 1987). A large amount of research has provided support for the assumption that the effects of organizational characteristics on applicant attraction are moderated by individual difference variables (e.g., Cable & Judge, 1994, 1996; Judge & Bretz, 1992; Judge & Cable, 1997; Kristof-Brown *et al.*, 2005; Rentsch & McEwen, 2002; Turban & Keon, 1993).

A recruitment message describing the similarities between potential applicants and the organization's current employees is based on a person–group fit perspective, which proposes that potential applicants will be more attracted to organizations with employees similar to themselves (Kristof-Brown *et al.*, 2005). In contrast to the research attention for person–organization fit, there have been no studies investigating the effects of person–group fit in a recruitment context. However, previous research in other domains has repeatedly demonstrated that interpersonal similarity is related to attraction (see similar-to-me effect or the similarity–attraction hypothesis, Byrne, 1971; Cialdini, 2001; Strauss, Barrick, & Connerley, 2001; Van Vianen, 2005). In addition, social identity theory argues that people define their self-concepts by choosing membership in organizations consisting of people similar to themselves (Tsui, Egan, & O'Reilly, 1992).

In line with the source credibility framework (Eisend, 2004; Pornpitakpan, 2004), we expected that the recruitment message (organization vs individual) would moderate the effect of recruitment source (web-based employee testimonial vs web-based word-of-mouth) on credibility and organizational attraction. For the web-based testimonial, we hypothesized that the individual recruitment message would be more credible and therefore more effective. The employee testimonial is a company-dependent recruitment source that potential applicants are less likely to trust because it tries to ‘sell the organization’ (Breugh & Starke, 2000; Cable & Turban, 2001). However, this ulterior motive is probably less evident when the employee describes herself instead of the organization as a whole (Fisher *et al.*, 1979). Conversely, we expected that for word-of-mouth the recruitment message would be more credible and effective if it would focus on the organization. Although word-of-mouth is probably trusted more as a company-independent recruitment source, it is sometimes perceived as having less expertise than company-dependent recruitment sources (Cable & Turban, 2001). In particular, if information about individual employees is provided outside of the organizational context, potential applicants might think that this information is not representative either for all employees or for the organization as a whole. Therefore, potential applicants are probably less likely to generalize the individual recruitment message to their global perceptions of the organization than the organization message.

Hypothesis 3: The recruitment message will moderate the effect of recruitment source on (a) organizational attractiveness, and (b) organizational pursuit behavior: The web-based employee testimonial (word-of-mouth) will be more effective when the message focuses on the individual employee (organization).

Hypothesis 4a: The recruitment message will moderate the effect of recruitment source on credibility: The web-based employee testimonial (word-of-mouth) will be more credible when the message focuses on the individual employee (organization).

Hypothesis 4b: The interaction effect of recruitment source and recruitment message on (a) organizational attractiveness, and (b) organizational pursuit behavior will be mediated by credibility.

3. Method

3.1. Participants

A sample was drawn from the population of potential applicants targeted by hospitals recruiting head nurses or nursing managers (Barber, 1998). This is a particularly relevant population for studying recruitment issues because of the worldwide shortage of nurses. For instance, in the United States there was a 6% shortage of nurses in 2000, projected to expand to a 12% shortage by 2010 (Crow & Hartman, 2005). Therefore, 108 registered nurses following a graduate nursing management program at a Belgian university were asked to participate in a web-based recruitment simulation. Given that this degree would qualify them to work as a head nurse, we considered them to be potential applicants for such a position. The majority of our sample was female (80%), with an average age of 26 years [standard deviation (*SD*)=6.13]. Most potential applicants had already applied for a job in the past (88%), averaging five previous applications. The majority of the sample (78%) had some previous work experience. More than half of the potential applicants were currently employed (57%), mainly as a nurse (64%).

3.2. Design and procedure

A 2×2 between-subjects factorial design was applied with recruitment source (web-based employee testimonial or web-based word-of-mouth) and recruitment message (organization or individual) as experimental variables. Participants were randomly assigned to one of these four conditions.

The following recruitment simulation was used. Participants were asked to visit the website of a medium-sized regional hospital. The hospital website provided general background and employment information about the organization. The job opportunities page described a vacant position for a head nurse. To ensure that potential applicants visited all parts of the website, the pages making up the site were linked serially (Dineen *et al.*, 2002). After visiting the general hospital website, half of the potential applicants were presented with an employee testimonial that was part of the same website. The other half visited another website where they received word-of-mouth from a friend not employed by the hospital. In both cases, the recruitment message described either the organization or the employee. To enhance ecological validity, all materials were modeled after an actual hospital (recruitment) website as well as job advertisements and testimonials relevant for a position as a head nurse. To control for reputation, the name of the organization was changed into a fictitious name.

After visiting the website and being exposed to one of the four experimental conditions, potential applicants completed a web-based questionnaire to assess organizational attractiveness, organizational pursuit behavior, credibility, and some demographic variables. Finally, participants completed an online manipulation check. About 2 weeks after the simulation, potential applicants received a debriefing e-mail, explaining the study's purpose and revealing that it was a simulation. They also received feedback on their scores on the personality and preferred organization personality scales measured in a prestudy (see 'Materials').

3.3. Materials

As a manipulation of the experimental variable *recruitment source*, potential applicants were presented with either a web-based employee testimonial or web-based word-of-mouth. In the web-based testimonial condition, an additional page was added to the hospital website entitled 'Employee testimonials.' On this page, a head nurse working for the organization provided the recruitment message. In the word-of-mouth condition, participants visited a company-independent website where they received the same information from a friend also working as a head nurse, but in another organization. To avoid confound, a picture of the same person was presented in both conditions. The name and age of this person were kept constant as well. A woman was chosen because the prestudy indicated that the majority of our sample of nurses was female. To strengthen the manipulation, she was wearing a nurse's uniform and was standing against a neutral background in the testimonial condition. In the word-of-mouth condition, she was shown in a home environment wearing casual clothes.

To develop an adequate *recruitment message*, a prestudy with the same sample was conducted about a month before the main study. To be able to emphasize similarities with potential applicants' characteristics in a targeted recruitment message, a web-based questionnaire measured their individual and preferred organization personality (see 'Measures'). Three criteria were used to select the individual and organizational characteristics to base the recruitment message on. First, potential applicants had to score high on a given characteristic, as evidenced by high mean, minimum, and maximum scores. Second, potential applicants' scores had to be relatively homogeneous, as evidenced by a small *SD*. Third, given that we intended to compare a recruitment message describing the organization to a message focusing on the individual employee, we wanted to base both messages on the same personality factor to avoid confound. In terms of individual personality, Table 1 shows that agreeableness and conscientiousness best met the first two criteria. In terms of preferred organization personality, an organization's level of 'agreeableness' (e.g., whether the organization is socially oriented, supports and helps its employees, and invests in them, Van Oudenhoven, Prins, Bakker, Schipper, & Tromp, 2003) was associated with the highest mean score and the smallest *SD*. Therefore, in accordance with the third criterion, agreeableness was chosen as a basis for developing the content of the recruitment message. In support of the external

validity of our operationalization, previous research has found that employed nurses tend to score high on agreeableness *and* that agreeableness is positively associated with performance in nursing and other service-oriented jobs (Day & Bedeian, 1995; Frei & McDaniel, 1998). Consequently, the recruitment message was manipulated by describing either the organization as a whole high in agreeableness (e.g., ‘In the hospital, helping and supporting others is very important.’) or a head nurse high in agreeableness (e.g., ‘For a head nurse in the hospital, others come first.’). The specific wording of the recruitment message was based on items from the individual personality and preferred organization personality measures used in the prestudy.

Table 1. Internal consistencies, means, standard deviations (*SDs*), minima, and maxima of individual personality and preferred organization personality (*N*=108)

	α	<i>M</i>	<i>SD</i>	Minimum	Maximum
Individual personality					
Extraversion	.87	6.15	1.39	2.67	9.00
Agreeableness	.69	7.12	.95	4.33	8.67
Conscientiousness	.87	7.44	.98	3.00	9.00
Emotional stability	.92	5.78	1.76	1.67	9.00
Openness to experience	.71	6.80	1.12	2.33	8.67
Preferred organization personality					
Extraversion	.81	5.21	.93	2.00	7.00
Agreeableness	.87	6.08	.59	4.17	7.00
Conscientiousness	.82	5.65	.66	3.70	7.00
Emotional stability	.75	5.24	.75	3.50	7.00
Openness to experience	.89	5.95	.68	4.33	7.00

Note: Individual personality variables were rated on a nine-point bipolar scale. Preferred organization personality variables were rated on a seven-point scale, ranging from 1 = *completely disagree* to 7 = *completely agree*.

The combination of these two experimental variables resulted in four different versions of the recruitment communication.

3.4. Measures

3.4.1. Prestudy measures

First, the Big Five Bipolar Markers were used to draw up a personality profile of our sample of potential applicants (Goldberg, 1992; Mervielde, 1992). Each factor was measured by three nine-point bipolar items. All factor scales had acceptable internal consistencies (see Table 1). Second, the job and organizational preferences of our sample were assessed by the 43-item Organizational Big Five Inventory, which enables commensurate measurement with our measure of individual personality (Van Oudenhoven *et al.*, 2003). Five to 12 items per factor were assessed on a seven-point rating scale, ranging from 1=*completely disagree* to 7=*completely agree*. All factor scales had satisfactory internal consistencies (see Table 1).

3.4.2. Organizational attractiveness

Potential applicants' attitude toward the organization as an employer was measured by a five-item scale from Highhouse, Lievens, and Sinar (2003). An example item is 'For me, this organization would be a good place to work'. The items were rated on a seven-point rating scale, ranging from 1=*completely disagree* to 7=*completely agree*. The internal consistency of the scale was .93.

3.4.3. Organizational pursuit behavior

To have an indication of how many people would apply for a job in the hospital, potential applicants could provide their e-mail address if they wanted the hospital to contact them about current or future job opportunities. Answers were coded as 0=*did not provide e-mail* or 1=*provided e-mail*. A similar measure has been used in previous research to assess organizational pursuit behavior, which is related to the quantity of the applicant pool (Barber, 1998; Highhouse *et al.*, 2003). As already noted, in the debriefing e-mail people were told that e-mail addresses were not actually passed to the hospital because the recruitment communication was part of a simulation.

3.4.4. Credibility

A three-item scale adapted from Fisher *et al.* (1979) was used to measure the perceived credibility of the recruitment source. An example item is 'I feel this person is extremely trustworthy.' The items were rated on a seven-point rating scale, ranging from 1=*completely disagree* to 7=*completely agree*. The internal consistency of the scale was .81.

3.4.5. Demographic variables

Potential applicants were asked to fill out their age, gender, job search experience, work experience, employment status, and current job title.

4. Manipulation check

To check the successful manipulation of *recruitment source*, participants were asked to indicate whether the person providing the recruitment message was an employee of the organization or not. All potential applicants correctly perceived that this person was an employee in the testimonial condition or that this person was not an employee in the word-of-mouth condition, enabling an accurate comparison of web-based employee testimonials and web-based word-of-mouth.

The manipulation check also examined potential applicants' perceptions of the *recruitment message*. Specifically, they were asked to assess both the perceived agreeableness of the hospital and the perceived

agreeableness of its employees on one item, developed on the basis of the operationalization of the recruitment message. Both items were rated on a seven-point rating scale, ranging from 1=*completely disagree* to 7=*completely agree*. In line with our operationalization of the recruitment message, a first independent samples *t*-test indicated that the perceived agreeableness of the hospital was higher for the organization message ($M=5.35$, $SD=1.12$) than for the individual message ($M=4.06$, $SD=1.22$), $t(105)=-5.74$, $p<.01$, $\eta^2=.24$. A second independent samples *t*-test indicated that the perceived agreeableness of the hospital's employees was higher for the individual message ($M=5.40$, $SD=1.70$) than for the organization message ($M=3.87$, $SD=1.21$), $t(94)=5.33$, $p<.01$, $\eta^2=.21$.

5. Results

Means, *SDs*, and correlations among all variables are presented in Table 2. A multivariate analysis of variance (MANOVA) was conducted to analyze the effects of recruitment source and message on organizational attractiveness and credibility. Given that organizational pursuit behavior is a dichotomous variable, a logistic regression analysis was performed to examine the effects of recruitment source and message. In support of Hypotheses 1 and 2a, we found a multivariate main effect of recruitment source, $F(2, 103)=14.26$, $p<.01$, partial $\eta^2=.22$. The univariate main effect of recruitment source was significant for both organizational attractiveness, $F(1, 104)=9.27$, $p<.01$, partial $\eta^2=.08$, and credibility, $F(1, 104)=24.41$, $p<.01$, partial $\eta^2=.19$. Web-based word-of-mouth was associated with higher organizational attractiveness ($M=5.04$, $SD=1.15$) and was perceived as more credible ($M=5.52$, $SD=.85$) than the web-based employee testimonial ($M=4.34$, $SD=1.26$, and $M=4.60$, $SD=1.10$, respectively). The logistic regression analysis indicated that the effect of recruitment source on organizational pursuit behavior was not significant, $B=.14$, $Wald(1)=.42$, $p>.05$, $Exp(B)=1.16$. Therefore, Hypothesis 1 was partially supported, whereas Hypothesis 2a received full support.

Table 2. Means, standard deviations (*SDs*), and correlations between study variables ($N=108$)

Variable	<i>M</i>	<i>SD</i>	1	2	3	4
1. Recruitment source ^a	.51	.50	–			
2. Recruitment message ^b	.51	.50	.00	–		
3. Organizational attractiveness	4.69	1.25	.28**	.11	–	
4. Organizational pursuit behavior ^c	.64	.48	.03	.15	.29**	–
5. Credibility	5.07	1.08	.43**	-.09	.32**	.10

Note: All continuous variables were rated on a seven-point scale, ranging from 1 = *completely disagree* to 7 = *completely agree*. ^a0, web-based testimonial; 1, word-of-mouth. ^b0, individual; 1, organization. ^c0, did not provide e-mail; 1, provided e-mail. $p<.05$. ** $p<.01$.

In support of Hypotheses 3 and 4a, we found a multivariate interaction effect of recruitment source and message, $F(2, 103)=4.30$, $p<.05$, partial $\eta^2=.08$. Inspection of univariate results revealed that this interaction effect was significant for organizational attractiveness, $F(1, 104)=5.62$, $p<.05$, partial $\eta^2=.05$,

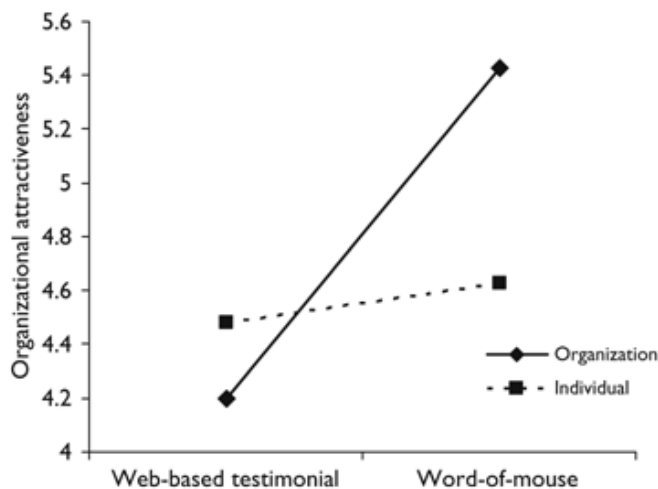
and for credibility, $F(1, 104)=4.81, p<.05$, partial $\eta^2=.04$. As shown in Table 3, the web-based testimonial was associated with higher organizational attractiveness and higher credibility when the recruitment message focused on the individual employee instead of on the organization. The reverse was true for word-of-mouth as potential applicants were more attracted and reported higher credibility when the recruitment message provided organization information instead of individual information. Figure 1 illustrates this interaction effect for organizational attractiveness. In addition, the logistic regression analysis indicated that the interaction effect of recruitment source and message on organizational pursuit behavior was also significant, $B=.66$, $Wald(1)=8.65, p<.01$, $Exp(B)=1.93$. More people applied when the web-based testimonial emphasized the employee (69%) instead of the organization (56%). For word-of-mouth, more people applied when the message focused on the organization (86%) than on the employee (44%). Therefore, full support was found for Hypotheses 3 and 4a. It should be noted that none of the multivariate or univariate main effects of recruitment message were significant.

Table 3. Means and standard deviations (SDs) of dependent variables by recruitment source and recruitment message ($N=108$)

	Web-based testimonial ($n = 53$)				Word-of-mouth ($n = 55$)			
	Organization ($n = 27$)		Individual ($n = 26$)		Organization ($n = 28$)		Individual ($n = 27$)	
	M	SD	M	SD	M	SD	M	SD
Organizational attractiveness	4.20	1.31	4.48	1.23	5.43	.92	4.63	1.23
Organizational pursuit behavior ^a	.56	.51	.69	.47	.86	.36	.44	.51
Credibility	4.30	1.15	4.91	.98	5.62	.83	5.42	.88

Note: All continuous variables were rated on a seven-point scale, ranging from 1 = completely disagree to 7 = completely agree. ^a0, did not provide e-mail; 1, provided e-mail.

Figure 1 Interaction effect of recruitment source and recruitment message on organizational attractiveness.



To test if credibility mediated the main effect of recruitment source (Hypothesis 2b) and the interaction effect of recruitment source and message (Hypothesis 4b), we followed the three-step procedure for analyzing mediating effects advocated by Baron and Kenny (1986). To establish mediation, three conditions must be met: (a) the independent variable should influence the mediating variable, (b) the independent variable should influence the dependent variables, and (c) the mediating variable should influence the dependent variables while controlling for the independent variable, whereas the influence of the independent variable on the dependent variables should be reduced when controlling for the mediating variable.

With respect to Hypothesis 2b, the MANOVA already indicated that although the first condition was met, the second condition was only established for organizational attractiveness. To test for the third condition, we regressed organizational attractiveness on recruitment source and credibility. Whereas organizational attractiveness was significantly influenced by credibility, $\beta=.25, p<.05$, the effect of recruitment source failed to reach statistical significance when controlling for credibility, $\beta=.18, p>.05$. This implies that the effect of recruitment source on organizational attractiveness was mediated by credibility, providing partial support for Hypothesis 2b.

With regard to Hypothesis 4b, the MANOVA and logistic regression analysis showed that the first two conditions were met. To test for the third condition, two regression analyses were performed with credibility and the interaction term of recruitment source and message as predictors and with organizational attractiveness and organizational pursuit behavior as respective dependent variables. For organizational attractiveness, a logistic regression analysis was carried out. While credibility influenced organizational attractiveness, $\beta=.29, p<.01$, the interaction term failed to reach statistical significance, $\beta=.17, p>.05$, indicating that credibility mediated the interaction effect of recruitment source and message on organizational attractiveness. However, credibility did not mediate this interaction effect on organizational pursuit behavior, as credibility did not have a significant effect, $B=.08, Wald(1)=.18, p>.05, Exp(B)=1.09$. Therefore, Hypothesis 4b was partially supported.

6. Discussion

In spite of the enormous impact of the internet on recruitment practices, there has been a lack of research on web-based sources of employment information other than official recruitment websites (Cable & Turban, 2001; Lievens & Harris, 2003; Rynes & Cable, 2003; Saks, 2005; Taylor & Collins, 2000). The current study contributes to the recruitment literature by examining web-based employee testimonials and web-based word-of-mouth as company-dependent and company-independent recruitment sources,

respectively. Given the dearth of previous research, the source credibility framework was applied to formulate hypotheses regarding the effects of recruitment source and message.

Our study yields several important conclusions. First, we found that potential applicants were more attracted to the organization when employment information was provided through word-of-mouth than through a web-based testimonial. In line with the source credibility framework (Eisend, 2004; Pornpitakpan, 2004), this effect was completely mediated by credibility. Specifically, potential applicants were more likely to believe the information they received from a company-independent source than from the employee testimonial on the company's own website. It seems that the greater organizational control of web-based testimonials causes them to be somewhat less credible and influential than web-based word-of-mouth (Cable & Turban, 2001; Fisher *et al.*, 1979; Van Hoye & Lievens, 2005). Therefore, our findings suggest that employee testimonials may not fully succeed in imitating word-of-mouth as an interpersonal source of employment information.

However, our results indicate that the content of the recruitment message can moderate the effect of recruitment source. In fact, a recruitment message about the organization as a whole was more effective for word-of-mouth whereas a message about individual employees was more effective for the web-based testimonial. This was a robust finding as it was observed for organizational attractiveness as well as for actual application behavior. The effect on attractiveness was completely mediated by credibility, providing support for the source credibility framework (Eisend, 2004; Pornpitakpan, 2004). For the web-based testimonial, potential applicants were more likely to believe the information that the employee provided about herself than about the organization as a whole, suggesting that the ulterior recruitment motive of trying to sell the organization was less obvious in case of an individual message (Fisher *et al.*, 1979). With respect to word-of-mouth, information at the organizational level was perceived as more credible than information at the individual level. This might indicate that potential applicants considered the message focusing on the employee to be less representative and thus less relevant for their organizational perceptions (Cable & Turban, 2001).

In terms of future research, our findings suggest that the source credibility framework (Eisend, 2004; Pornpitakpan, 2004) can be a useful theoretical framework for examining company-dependent and company-independent recruitment sources. First, it can be applied to study the effects of web-based sources of employment information other than employee testimonials and word-of-mouth. Examples include live chats with company recruiters and independent news sites. In fact, Zottoli and Wanous (2000) suggested that differences not only between categories of recruitment sources but also between and even within specific sources should be investigated. Second, other premises of the source credibility framework could be tested in future recruitment source research. For instance, apart from message content, the framework postulates that the effect of source credibility on persuasion can also be moderated

by other variables such as the timing of source identification and the type of organization (Pornpitakpan, 2004).

Given that this was the first study about web-based employee testimonials, more research is needed to understand their effects more fully. For instance, future research should investigate the impact of multiple employee testimonials on organizational attraction. Along these lines, the attribution theory might serve as a fruitful theoretical framework, especially the predictions concerning consensus information (Kelley & Michela, 1980). Furthermore, the effectiveness of web-based testimonials should be compared with other web-based recruitment sources, both company-dependent (e.g., online job ad) and company-independent (e.g., news site).

Our findings suggest that word-of-mouth can be a credible and influential recruitment source. Even though some other studies have also indicated that word-of-mouth can influence organizational attraction for potential applicants (Collins & Stevens, 2002; Van Hoye & Lievens, 2005, 2007), knowledge about the specific conditions under which word-of-mouth is most or least effective is still scarce. The current study starts to address this gap in the literature by showing that the effectiveness of web-based word-of-mouth can be increased by providing information about the organization as a whole instead of about employees. Along these lines, future research needs to gain a better understanding of which factors might influence the impact of word-of-mouth. Examples include sources' and recipients' motives for engaging in word-of-mouth (Mangold, Miller, & Brockway, 1999) and employer brand equity (Laczniak, DeCarlo, & Motley, 1996).

This study has some limitations that should be acknowledged. First, given the lack of previous research, we did not distinguish between different types of web-based word-of-mouth. With respect to future research, it might be interesting to examine the distinct effects of e-mails, weblogs, chatrooms, electronic bulletin boards, independent websites presenting interpersonal company information, and so forth. Second, our operationalization of recruitment message was based on organizational and individual agreeableness. Our results might have been different if the recruitment message had been described in terms of other personality factors, values, or goals (Rentsch & McEwen, 2002). Finally, we investigated Belgian nurses' attraction to a position as a head nurse in a medium-sized regional hospital. It might be that this specific context affected some of the observed relationships. Therefore, future research should examine the generalizability of our findings in other populations, settings, and cultures.

Several practical implications follow from our study. Although recruitment websites increasingly feature employees testifying about their work experiences, there has been no research about the actual impact of web-based testimonials on organizational attraction. Our findings suggest an easy and inexpensive way in which the effectiveness of employee testimonials might be increased. It seems that potential applicants

are more attracted to the organization when the testimonial subtly focuses on the fit with the organization's current employees instead of with the organization as a whole. At a practical level, this implies that the credibility and impact of testimonials might be increased by having employees describe themselves instead of the organization. To this end, organizations need to gain a better understanding of the potential applicants they wish to attract. A prestudy such as the one conducted in the present study can provide organizations with crucial information for developing an effective targeted employee testimonial, which should emphasize similarities between the characteristics of desired potential applicants and current employees.

Our results further indicate that employment information provided through word-of-mouth might be more credible and attractive than information from an employee testimonial. Hence, it remains important to stimulate positive word-of-mouth about the organization and to avoid negative word-of-mouth. Even though word-of-mouth is a company-independent recruitment source, organizations can try to influence it indirectly through other recruitment activities such as image management, campus recruitment, building relationships with key influentials, and opinion leaders (e.g., career counselor, class president), employee referral programs (e.g., providing referral bonuses), or internships.

Acknowledgements

A previous version of this manuscript was presented at the 20th Annual Conference of the Society for Industrial and Organizational Psychology, Los Angeles, CA (April, 2005). We would like to thank Dan Turban for his valuable comments on a previous version of this paper.

References

- Allen, D.G., Van Scotter, J.R. and Otondo, R.F. (2004) Recruitment Communication Media: Impact on prehire outcomes. *Personnel Psychology*, 57, 143–171.
- Barber, A.E. (1998) *Recruiting Employees: Individual and organizational perspectives*. Thousand Oaks, CA: Sage Publications.
- Barber, A.E. and Roehling, M.V. (1993) Job Postings and the Decision to Interview: A verbal protocol analysis. *Journal of Applied Psychology*, 78, 845–856.

- Baron, R.M. and Kenny, D.A. (1986) The Moderator–Mediator Variable Distinction in Social Psychological Research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173–1182.
- Bone, P.F. (1995) Word-of-Mouth Effects on Short-Term and Long-Term Product Judgements. *Journal of Business Research*, 32, 213–223.
- Breaugh, J.A. and Starke, M. (2000) Research on Employee Recruitment: So many studies, so many remaining questions. *Journal of Management*, 26, 405–434.
- Byrne, D. (1971) *The Attraction Paradigm*. New York: Academic Press.
- Cable, D.M., Aiman-Smith, L., Mulvey, P.W. and 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. and Judge, T.A. (1994) Pay Preferences and Job Search Decisions: A person–organization fit perspective. *Personnel Psychology*, 47, 317–348.
- Cable, D.M. and 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. and Turban, D.B. (2001) Establishing the Dimensions, Sources and Value of Job Seekers' Employer Knowledge during Recruitment. In: Ferris, G.R. (ed.), *Research in Personnel and Human Resources Management*, Vol. 2. New York: Elsevier Science, pp. 115–163.
- Cialdini, R.B. (2001) *Influence: Science and practice*. Boston: Allyn & Bacon.
- Cober, R.T., Brown, D.J., Blumental, A.J., Doverspike, D. and Levy, P. (2000) The Quest for the Qualified Job Surfer: It's time the public sector catches the wave. *Public Personnel Management*, 29, 479–496.
- Cober, R.T., Brown, D.J., Levy, P.E., Cober, A.B. and Keeping, L.M. (2003) Organizational Web Sites: Web site content and style as determinants of organizational attraction. *International Journal of Selection and Assessment*, 11, 158–169.
- Collins, C.J. and 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.

- Crow, S.M. and Hartman, S.J. (2005) Nurse Attrition as a Process. *Health Care Manager*, 24, 276–283.
- Day, D.V. and Bedeian, A.G. (1995) Personality Similarity and Work-Related Outcomes among African-American Nursing Personnel: A test of the supplementary model of person–environment congruence. *Journal of Vocational Behavior*, 46, 55–70.
- Dellarocas, C. (2003) The Digitization of Word of Mouth: Promise and challenges of online feedback mechanisms. *Management Science*, 49, 1407–1424.
- Dineen, B.R., Ash, S.R. and Noe, R.A. (2002) A Web of Applicant Attraction: Person–organization fit in the context of web-based recruitment. *Journal of Applied Psychology*, 87, 723–734.
- Eisend, M. (2004) Is it Still Worth to be Credible? A Meta-Analysis of Temporal Patterns of Source Credibility Effects in Marketing. *Advances in Consumer Research*, 31, 352–357.
- Feick, L. and Higie, R.A. (1992) The Effects of Preference Heterogeneity and Source Characteristics on Ad Processing and Judgements about Endorsers. *Journal of Advertising*, 21, 2, 9–25.
- Fisher, C.D., Ilgen, D.R. and Hoyer, W.D. (1979) Source Credibility, Information Favorability, and Job Offer Acceptance. *Academy of Management Journal*, 22, 94–103.
- Frei, R.L. and McDaniel, M.A. (1998) Validity of Customer Service Measures in Personnel Selection: A review of criterion and construct evidence. *Human Performance*, 11, 1–27.
- Geisheker, P.C. Writing Job Advertisements That Attract Top Talent: Job descriptions. August 15, 2001. Retrieved May 26, 2005, from <http://www.vault.com>
- Goldberg, L.R. (1992) The Development of Markers for the Big-Five Factor Structure. *Psychological Assessment*, 4, 26–42.
- Herr, P.M., Kardes, F.R. and Kim, J. (1991) Effects of Word-of-Mouth and Product-Attribute Information on Persuasion: An accessibility-diagnostics perspective. *Journal of Consumer Research*, 17, 454–462.
- Highhouse, S. and Hoffman, J.R. (2001) Organizational Attraction and Job Choice. In: Cooper, C.L. and Robertson, I.T. (eds), *International Review of Industrial and Organizational Psychology*, Vol. 16. Chichester, UK: John Wiley, pp. 37–64.
- Highhouse, S., Hoffman, J.R., Greve, E.M. and Collins, A.E. (2002) Persuasive Impact of Organizational Value Statements in a Recruitment Context. *Journal of Applied Social Psychology*, 32, 1737–1755.
- Highhouse, S., Lievens, F. and Sinar, E.F. (2003) Measuring Attraction to Organizations. *Educational and Psychological Measurement*, 63, 986–1001.
- Judge, T.A. and Bretz, R.D. Jr. (1992) Effects of Work Values on Job Choice Decisions. *Journal of Applied Psychology*, 77, 261–271.
- Judge, T.A. and Cable, D.M. (1997) Applicant Personality, Organizational Culture and Organization Attraction. *Personnel Psychology*, 50, 359–394.

- Kelley, H.H. and Michela, J.L. (1980) Attribution Theory and Research. *Annual Review of Psychology*, 31, 457–501.
- Kotler, P. and Keller, K.L. (2005) *Marketing Management* (12th edn). Upper Saddle River, NJ: Prentice Hall.
- Kristof, A.L. (1996) Person–Organization Fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology*, 49, 1–49.
- Kristof-Brown, A.L., Zimmerman, R.D. and Johnson, E.C. (2005) Consequences of Individuals' Fit at Work: A metaanalysis of person–job, person–organization, person–group, and person–supervisor fit. *Personnel Psychology*, 58, 281–342.
- Laczniak, R.N., DeCarlo, T.E. and Motley, C.M. (1996) Retail Equity Perceptions and Consumers' Processing of Negative Word-of-Mouth Communication. *Journal of Marketing Theory and Practice*, 4, 4, 37–48.
- Lievens, F. and Harris, M.M. (2003) Research on Internet Recruiting and Testing: Current status and future directions. In: Cooper, C.L. and Robertson, I.T. (eds), *International Review of Industrial and Organizational Psychology*, Vol. 18. Chichester, UK: John Wiley, pp. 131–165.
- Mangold, W.G., Miller, F. and Brockway, G.R. (1999) Word-of-Mouth Communication in the Service Marketplace. *Journal of Services Marketing*, 13, 73–89.
- Mervielde, I. (1992) The B5BBS-25: A Flemish set of bipolar markers for the 'big-five' personality factors. *Psychologica Belgica*, 32, 195–210.
- Mittelstaedt, J.D., Riesz, P.C. and Burns, W.J. (2000) Why are Endorsements Effective? Sorting among Theories of Product and Endorser Effects. *Journal of Current Issues and Research in Advertising*, 22, 1, 55–65.
- Pornpitakpan, C. (2004) The Persuasiveness of Source Credibility: A critical review of five decades' evidence. *Journal of Applied Social Psychology*, 34, 243–281.
- Rentsch, J.R. and McEwen, A.H. (2002) Comparing Personality Characteristics, Values, and Goals as Antecedents of Organizational Attractiveness. *International Journal of Selection and Assessment*, 10, 225–234.
- Rynes, S.L. and Cable, D.M. (2003) Recruitment Research in the Twenty-First Century. In: Borman, W.C., Ilgen, D.R. and Klimoski, R.J. (eds), *Handbook of Psychology, Volume 12, Industrial and Organizational Psychology*. Hoboken, NJ: Wiley, pp. 55–76.
- Saks, A.M. (2005) The Impracticality of Recruitment Research. In: Evers, A., Anderson, N. and Voskuil, O. (eds), *Handbook of Personnel Selection*. Oxford, UK: Blackwell, pp. 419–439.
- Schneider, B. (1987) The People Make the Place. *Personnel Psychology*, 40, 437–453.
- Smith, R.E. and Vogt, C.A. (1995) The Effects of Integrating Advertising and Negative Word-of-Mouth Communications on Message Processing and Response. *Journal of Consumer Psychology*, 4, 133–151.
- Strauss, J.P., Barrick, M.R. and Connerley, M.L. (2001) An Investigation of Personality Similarity Effects (Relational and Perceived) on Peer and Supervisor Ratings and the Role of Familiarity and Liking. *Journal of Occupational and Organizational Psychology*, 74, 637–658.

- Taylor, M.S. and Collins, C.J. (2000) Organizational Recruitment: Enhancing the intersection of research and practice. In: Cooper, C.L. and Locke, E.A. (eds), *Industrial and Organizational Psychology: Linking theory with practice*. Oxford, UK: Blackwell, pp. 304–334.
- Till, B.D. (1998) Using Celebrity Endorsers Effectively: Lessons from associative learning. *Journal of Product and Brand Management*, 7, 400–409.
- Tong, J.P.C., Duffy, V.G., Cross, G.W., Tsung, F. and Yen, B.P.C. (2005) Evaluating the Industrial Ergonomics of Service Quality for Online Recruitment Websites. *International Journal of Industrial Ergonomics*, 35, 697–711.
- Tsui, A.S., Egan, T.D. and O'Reilly, C.A. III (1992) Being Different: Relational demography and organizational attachment. *Administrative Science Quarterly*, 37, 549–579.
- Turban, D.B. and Keon, T.L. (1993) Organizational Attractiveness: An interactionist perspective. *Journal of Applied Psychology*, 78, 184–193.
- Van Hove, G. and Lievens, F. (2005) Recruitment-Related Information Sources and Organizational Attractiveness: Can something be done about negative publicity? *International Journal of Selection and Assessment*, 13, 179–187.
- Van Hove, G. and Lievens, F. (2007) Social Influences on Organizational Attractiveness: Investigating if and when word-of-mouth matters. *Journal of Applied Social Psychology*, 37, 2024–2047.
- Van Oudenhoven, J.P., Prins, K.S., Bakker, W., Schipper, M. and Tromp, N. (2003) Organizational Culture in Terms of Personality: A big five-based questionnaire. *Gedrag & Organisatie*, 16, 355–369.
- Van Rooy, D.L., Alonso, A. and Fairchild, Z. (2003) In with the New, Out with the Old: Has the technological revolution eliminated the traditional job search process? *International Journal of Selection and Assessment*, 11, 170–174.
- Van Vianen, A.E.M. (2005) A review of Person–Environment Fit Research: Prospects for personnel selection. In: Evers, A., Anderson, N. and Voskuil, O. (eds), *Handbook of Personnel Selection*. Oxford, UK: Blackwell, pp. 419–439.
- Williamson, I.O., Lepak, D.P. and King, J. (2003) The Effect of Company Recruitment Web Site Orientation on Individuals' Perceptions of Organizational Attractiveness. *Journal of Vocational Behavior*, 63, 242–263.
- Zottoli, M.A. and Wanous, J.P. (2000) Recruitment Source Research: Current status and future directions. *Human Resource Management Review*, 10, 353–382.