Original Article

Using social media to communicate employer brand identity: The impact on corporate image and employer attractiveness

Received (in revised form): 3rd November 2015

Patrick Kissel

is a postdoctoral researcher at the University of Hohenheim, Germany, Institute of Marketing and Management. He received his doctoral degree in Business Administration from the University of Hohenheim. His research interests include brand management, customer experience management, customer behavior, social media and online communities.

Marion Büttgen

is Professor in Corporate Management at the University of Hohenheim, Germany, Institute of Marketing & Management. Before, she held a professorship in Services Management at the Stuttgart Media University, Germany. She received her Doctoral in Business Administration from the University of Cologne, Germany. She has published articles relevant to management and service marketing in leading International Journals such as the Journal of Service Research, Journal of Vocational Behavior, Business Research and Management Review. Her current research interests include customer participation, dysfunctional behaviour of customers and employees, customer and employee stress, leadership personality, and employer branding.

ABSTRACT Employer branding has become a top management priority as more and more companies realize that human resources are among the most valuable intangible assets they possess. The rise of social media gives employers a new communication channel for delivering job-related information, strengthening their image and entering into a dialog with potential candidates early in their employment choice processes. Drawing on branding theory, this study identifies substantial drivers of employer attractiveness in a social media context, such as information-seeking behavior, self-congruity with the employer and its employees, and corporate image. Tests of the model with both company-controlled and company-independent social media sites reveal only marginal differences, so information credibility does not appear to be an issue. The results further show that self-congruity and information gathered from social media have no direct effects on perceived employer attractiveness and application intentions but are fully mediated by a powerful corporate image.

Journal of Brand Management (2015) 22, 755-777. doi:10.1057/bm.2015.42

Keywords: employer branding; corporate branding; social media; online communities; employer attractiveness; brand strength

Correspondence: Patrick Kissel, Institute of Marketing and Management (570B), Universität Hohenheim, Schloss Osthof-Ost, Stuttgart 70593, Germany

The rise of social media has significantly changed the way people communicate:

Users not only retrieve information but also actively participate in content generation.

Social media span a wide range of platforms and services, such as blogs, discussion boards, chat rooms, forums, consumer product or service rating Websites and, perhaps most notably, social networking sites. Their increasing convenience and accessibility have made such social networks a highly frequented channel for accessing information during employment searches. In 2010, for example, 48 per cent of all US jobseekers conducted at least one social job-hunting activity on Facebook, the world's largest social network, and one in six members of the US workforce indicated that an online social network was one of the sources they used to find a job (Jobvite, 2011). LinkedIn, world's largest professional network on the Internet, is used by 94 per cent of the world's 500 fastest-growing companies for talent acquisition (Barnes et al, 2015).

Because social media and social networks offer vast possibilities for direct communication (for example, video, audio, posts, live chat, pictures, private messages), they also provide excellent tools for communicating the brand meaning of the employer. Employer branding aims to build a positive employer image and proffer a unique employer value proposition that features attributes that potential employees perceive as valuable and attractive (Ambler and Barrow, 1996; Backhaus and Tikoo, 2004). A strong employer brand enables the firm to develop an image as a good place to work (Edwards, 2010) and offers a differential advantage, relative to weaker brands with the same attributes, such that it should prompt enhanced decision behavior (Smith and Park, 1992; Keller, 1993; Erdem et al, 2002; DelVecchio and Smith, 2005). Similar to high involvement buying decisions, job choices involve significant uncertainty and risk (Gomez-Mejia et al, 2001). Accordingly, strong brands can reduce the uncertainty that jobseekers face, simplifying their decision making and mitigating risk (Roselius, 1973).

When communicating through social media, contact with the target group is personal, realistic and interactive, as well as cost efficient and wide ranging. It provides an opportunity for companies to communicate what they stand for easily and directly. However, communication in social media also has specific shortcomings, in that it is less controllable than classic media channels. Many companies have started using social networks, such as Facebook with its over 1 billion users, to approach and recruit potential candidates (Caers and Castelyns, 2011).

We focus on career-oriented social media sites in this study, thereby meaning Web and social media resources where the individual's career is in the center of interest. This includes all or parts of information on business networks and contacts, career paths, information on salaries, on work life, job opportunities and benefits. We further divide career-oriented social media sites into two subtypes. On company-controlled platforms, employers provide most content and stand in the middle of the interaction with thousands of potential applicants. In contrast, on company-independent platforms, users - and not the employer – provide most of the content and interaction, as is the case for the business network LinkedIn or Facebook's independent job-related groups (for example, groups run by universities or newspapers). These two social media types may have different effects on job search behavior and employer choice decisions, especially regarding the credibility of available information. Thus, we conduct tests of our model across both company-controlled and company-independent social media sites.

Through our studies, we offer several contributions to how strategic employer branding can be used in social media for growing attractiveness and attracting new employees. Previous recruitment marketing research has identified various factors that might influence jobseekers' attraction to organizations, including information



sourcing, fit perceptions and organizational image (Saks and Ashforth, 1997; Barber, 1998; Rynes and Cable, 2003; Chapman et al, 2005). However, the specific characteristics of social media, such as user's ability to discuss with other users or the company, or the company's possibility to show employees and their jobs as distinct, lively and interactive as in real life, have not been taken into account in these studies. These features and characteristics offer an previously unknown level of personalized user experience, and support users in shaping a specific image of an employer without the disadvantages of a real (off-line) contact or mass communication.

First, because social media offer unique possibilities to interact with jobseekers, especially through well-developed audio-visual tools, the communication of an employer brand personality is likely more effective than in conventional media channels. Previous studies have shown that instrumental and symbolic employer image dimensions affect potential applicants' attractiveness perceptions (Lievens and Highhouse, 2003; Van Hoye and Saks, 2011). However, no study has analyzed self-congruity effects (Sirgy, 1982) involving the match between the employer's brand personality and a jobseeker's self-image with regards to the particularities of social media.

Second, despite some general discussion of the effects of employee behavior on jobseekers' perceived brand personality (Aaker, 1997; Wentzel, 2009; Ostrom *et al*, 2010), no research is available for jobseekers experiencing employees through social media, instead of in person.

Third, because information in social media is not standing alone, but rather commented, rated and discussed by others, information might be interpreted differently than in real life. Members of a career site can be seen as a group or online community (Muniz and O'Guinn, 2001) unified in their common interest and can influence attitudes

and decisions of others (for example McMillan and Chavis, 1986).

Fourth, we also expand previous employer branding research by comparing the factors that affect attractiveness and application intentions in two social media settings: company-controlled and company-independent career sites, which we believe to have different levels of perceived credibility regarding the information they provide.

Fifth, previous employer branding, job search and recruiting studies, have been limited in their experimental designs (that is, Dineen *et al*, 2002; Allen *et al*, 2007). We address these research gaps by examining the determinants of corporate image, employer attractiveness and application intentions among 365 potential applicants in a real social media setting.

RESEARCH BACKGROUND AND HYPOTHESES DEVELOPMENT

Perceived availability of information in social media

Similar to product brands, a job represents a bundle of functional and symbolic benefits. Choosing an employer is a complex decision, with important and unpredictable consequences for workers' personal lives. In this sense, it is similar to an extensive consumer purchase decision, when the consumer faces high degrees of uncertainty and risk related to the decision (Arndt, 1967; Godes *et al*, 2005). Both decisions are characterized by intensive internal and external searches for information, high search costs and a long span before the final decision (Lamb *et al*, 2011).

Information sources might include media (for example, newspapers, Internet), other people (for example, friends, family) or personal experience (for example, career fairs, internships) (Peterson and Merino, 2003). As an essential element of social media, online communities and networks play a particularly important role in providing or

sharing information across Internet users (Dholakia *et al*, 2004; Ma and Agarwal, 2007) and thus among jobseekers.

Social networks can be characterized by real-time interaction and dialog, limited anonymity, short answer times, and can serve as useful public relation tools (Kent, 2010).

Social media have the potential to act as a relationship building tool because of the dialog function and sense of connection typical for this media (Kent, 2010). The more interactivity exists, the better the relationships between organizations and individuals is perceived by the user (Saffer et al, 2013). From this point of view, social media can be considered to be close to personal contact with an employee, but less formal as during a career fair or job interview. On the other side, the amount of other users provides jobseekers with an access to huge amounts of information, opinions and evaluations regarding employers, which in turn is quite different from personal contact.

'Which source provides potential job applicants with information is a key determinant of their initial attraction to an employer (Barber, 1998; Zottoli and Wanous, 2000; Rynes and Cable, 2003). Prior research suggest that companies stressing Employer Branding elements in job advertisements generate a higher perception of that companies attractiveness among jobseekers (Elving et al, 2012). Gatewood et al (1993) find that potential applicants possess different corporate and recruitment images of the same organizations, because job-related information addresses employment topics and are not necessarily correlated with economic, marketing or social facets of an overall corporate image.

Beyond the amount of information provided, information quality (for example, accuracy, up-to-datedness, credibility) constitutes an important determinant of cognitive processing (Gray and Meister, 2004; Dholakia *et al*, 2009). When information is under control of a large number of people as

for social media, it is perceived to be more credible and thus of better quality. As Rieh and Danielson (2007, p. 312) note, 'Out of a set of objects that appear to hold various information values, people tend to choose the items that appear to be most credible'. The sourcing of credible information in social media (for example, career sites) should lead job seekers to form attitudes and preferences regarding a specific employer by increasing, restructuring and changing the knowledge they possess. Accordingly, we predict the following:

Hypothesis 1: The more and better information is available to potential employer jobseekers out of social media sources, the higher their perceptions of employer attractiveness.

Before the rise of digital information networks such as the Internet or social media, differentiated information about employers was largely lacking. Failure to provide important information regarding the potential employer undermines the ability of employees to estimate their fit with the organization (Elving et al, 2012). Signaling theory (for example, Rynes, 1991) proposes that in case of absence of information, applicants interpret the information they have about an organization as signals of organizational characteristics (Turban, 2001). Today, with social media offering large amounts of information regarding the employer, applicants who evaluate a company as potential employer likely gather information about other aspects of the organization, too, such as financial data or strategic decisions. Thus, we propose that for jobseekers in social media, corporate image is now largely build on information gathered from social media:

Hypothesis 2: The more and better information is available to potential employer jobseekers out of social media sources, the better their perceptions of the corporate image of that employer.



Congruence of personality traits

For years, researchers have suggested that brands have personality characteristics (Aaker, 1997) and symbolic attributes (for example, prestigious, dynamic). That is, brand personality is an integral part of the brand identity, which the target group perceives as part of the brand image. Jobseekers also ascribe personality traits to an employer that are 'subjective, abstract and intangible attributes' of the organization (Lievens *et al*, 2007, p. 48).

Another line of consumer research notes that consumers purchase goods to express their identities (Aaker, 1996). According to Sirgy's (1982, 1986) congruence theory, increasing the congruence between consumers' self-concept and the personality they perceive in an object results in increasing affinity for that object (for example, product, brand, employer). Underlying self-concept motives include the need for self-esteem and self-consistency (Sirgy, 1982; Malhotra, 1988; Aaker, 1997). This matching process, or self-congruity, plays an important role in predicting purchase motivations and brand choice (for example, Sirgy, 1985; Sirgy and Samli, 1985; Malhotra, 1988).

In turn, researchers conceptualize and measure various traits that jobseekers attribute to organizations (for example, Cable and Turban, 2001; Collins and Stevens, 2002; Lievens and Highhouse, 2003; Slaughter *et al*, 2004). In the context of job choice behavior, an employer brand that exhibits personality traits that match a jobseeker's actual or ideal personality increases affinity toward the employer, because it satisfies underlying self-esteem and self-consistency needs. In contrast, a lack of self-congruence makes the employer less attractive (Turban *et al*, 2001).

In social media, especially on career sites in social networks, communication with other users and the potential employer tends to be personal and rather informal. Potential applicants may ask questions and hold discussions with the employer, exchange their personal experiences with that employer or post

comments. When the employer uses audiovisual means (that is, videos of specific jobs, business units or employees) to communicate job-related information, potential candidates can experience the company in a more manifold, lively and realistic way than in other communication channels. Moreover, the informal, user-specific, personal information exchange exerts an important impact on attitudes and decisions (Muniz and O'Guinn, 2001). Thus, by using social media as an information source, jobseekers can gather more detailed and realistic information, which allows them to form a more holistic image of the potential job and employer.

Jobseekers also might form a perception of the typical employee of a company, through personal contacts with employees or indirectly through storytelling or media reports. Frontline employees often serve as the 'living brand', representing the brand by how they behave and appear and offering an intensive brand experience (Bendapudi and Bendapudi, 2005; Walker et al, 2009). company-controlled social network career sites, employees similarly can interact directly and informally with potential applicants, answer questions or describe their daily job tasks. Jobseekers therefore obtain realistic impressions of current employees and may develop associations of a 'typical employee'. If these employees behave and present themselves consistently with the brand identity, their interaction with potential candidates also should transmit brand meaning. In addition, some employees provide personal profiles, which give jobseekers a rather broad range of impressions about their lives (and personalities). If these impressions of current employees are consistent (inconsistent) with existing impressions, they should exert a positive (negative) impact on brand attitudes (Aaker et al, 2004; Aggarwal, 2004) and job decisions:

Hypothesis 3: The higher the jobseeker's self-congruity with (a) the employer's brand personality and (b) a typical

employee's personality, the greater the attractiveness of that employer.

Because the employer is a company viewed from a specific perspective, an applicant who is attracted to a specific employer probably develops positive associations with the overall company. Therefore,

Hypothesis 4: The higher the jobseeker's self-congruity with (a) the employer brand personality and (b) a typical employee's personality, the better is his or her perception of the corporate image of that employer.

Corporate image

Applying ideas from marketing literature suggests ways how corporate images could influence organizational attractiveness (Ehrhart and Ziegert, 2005). Corporate image is the sum of the perceptions and knowledge associations that exist in consumer memory related to a company, including its functional and symbolic benefits (Keller, 1993). Various stakeholders (for example, jobseekers, employees, customers, shareholders) likely have different images of the company (Dukerich et al, 2002). Through their experiences with the company (for example, products, advertising, staff), people develop knowledge associations and form impressions over time that may result in positive attitudes toward the brand (Keller, 1993).

Social media has made considerably more information about companies and employers available for minimal search costs. Because the employer information provided in social networks typically contains company-related information, it likely affects both employer attractiveness perceptions and corporate image. Long before people start their search for a job, they may have already developed a general image of the organization.

When they start pursuing employment opportunities in social networks though,

these same people begin to form a new image by gathering information about the company as an employer. This newly formed image, or the employer brand image, provides the basis for their attractiveness evaluations, though their perceptions are still influenced by their general impressions of the corporate image (Gatewood *et al*, 1993; Lemmink *et al*, 2003). Thus we propose:

Hypothesis 5: In a social media context, corporate image impressions relate positively to employer attractiveness.

Employer attractiveness

As marketing literature reveals, people assign instrumental and symbolic meanings to brands (Keller, 1993, 1998). Recruitment research suggests that symbolic attributes are as important as instrumental job and organizational attributes when it comes to predicting perceived organizational attractiveness (for example, Lievens and Highhouse, 2003; Lievens, 2007). This assignment of meanings is common among jobseekers, who grant instrumental and symbolic meaning to employers (Lievens and Highhouse, 2003). In online communities, such as career sites, brands tend to be built and formed through the interaction of the brand owner and users (Muniz and O'Guinn, 2001).

The value of an employer brand is expressed by its ability to attract potential applicants, that is, the attractiveness of the employer for jobseekers. In turn, organizational attraction is a key antecedent of application intentions (for example, Turban and Greening, 1997; Collins and Stevens, 2002), and a jobseeker who turns to social networks is unlikely to apply for a job without having developed some attraction to the employer. Yet it remains unclear how attractiveness contributes to application intentions in social media:

Hypothesis 6: In social networks, higher levels of perceived attractiveness increase application intentions.



Online community research shows that Internet users assign lower credibility to information from company-controlled sources than to information from independent sources (Flanagin et al, 2014), mainly because the independent Website has no financial or other self-serving interest. For this study, we posit that because a company-controlled social media career site aims to depict its own image as positively as possible to attract more talented candidates, the information published on such a site is likely biased; any negative information about the employer would be suppressed. Thus, we hypothesize that information from company-controlled career sites may be considered less credible than information from company-independent social media platforms:

Hypothesis 7: In social networks, information from company-controlled career sites appear less credible than information from company-independent career sites.

In addition, the social media context may influence subsequent attractiveness perceptions and application intentions. Therefore, we propose:

Hypothesis 8: Compared with companycontrolled career sites, job-relevant information on company-independent social media platforms has a stronger impact on (a) corporate image, (b) attractiveness, and (c) application intentions.

We summarize these hypotheses in Figure 1.

METHODOLOGY

Sample

Our research focuses on how specific messages and information obtained from social media influence both the employer's attractiveness and the application intentions of jobseekers. Social networks offer opportunities to create new content and interactions,

along with effective communication (Ellison et al, 2007; Trusov et al, 2009). Facebook is the largest and most influential such network, with more than 960 million daily active users on average (Facebook, 2015). At the time of research, Facebook was the network where most companies had launched their own career site to connect and maintain contact with potential candidates. For Study 1, we selected the 30 largest German-language, company-controlled career sites on Facebook to survey (see Table B1 in Appendix B). They represent various sectors and had each attracted at least 1000 fans at the time of the study. All the career sites offered job-related information, including application help, detailed information about the employer's business, various job roles and occasionally details about individual employees and their jobs. The companies gave us permission to post a short invitation on their Facebook page with a link to the self-administered online questionnaire (see Table A1 in Appendix A). From this link, we received responses from of 265 German-speaking jobseekers. Of these, approximately 59 per cent were younger than 25 years, 26 per cent between 25 and 29 years, and 15 per cent were 30 years or older. The sample is slightly skewed toward male respondents (56 versus 44 per cent), and education levels and occupations of our sample respondents reveal a wide range: 23 per cent pupils and apprentices, 38 per cent students, 11 per cent young graduates and 28 per cent young professionals with work experience of at least 1 year. In contrast, prior research on online job searches relies on student samples as 'potential (for example, Lievens and applicants' Highhouse, 2003; Lievens, 2007). In reality, job searches become most important after graduation or some work experience.

For Study 2, we selected career sites in social media that were not controlled, operated or obviously influenced by employers. Several of these sites were on Facebook, some were third-party recruitment sites, but

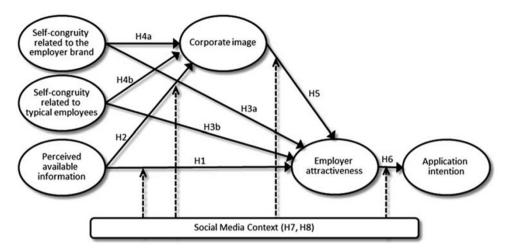


Figure I: Structural model.

in both cases, they had no apparent relationship with a specific employer (such as those operated by newspapers or universities). For example, we made use of the leading business network Xing, which is more popular in German-speaking countries than LinkedIn (Xing, 2015), and interviewed online members of four student or graduate platforms dealing with career and job issues (see Table B1 in Appendix B). The sample for Study 2 consists of 100 respondents and is similar to the first sample in terms of gender (52 per cent male, 48 per cent female) and age (52 per cent younger than 25 years, 36 per cent between 25 and 29 years, and 12 per cent were 30 years or older). Regarding education levels, this sample was very similar to the one in Study 1. As demographics on jobseekers are not available for Germany, we struggle to indicate how representative the sample is for the population. However, it matches our expectations regarding online jobseekers.

Measures

The measures were administered in German and, unless otherwise noted, based on multiitem, 5-point Likert-type scales. Except for 'perceived available information' and 'corporate image', we used reflective measurement scales for the items.

Perceived available information

For the measure of perceived available information, we reviewed prior literature and found that information processing in social media is typically characterized by the quantity of information gathered (Gray and Meister, 2004), the quality (Dholakia et al, 2009) and diversity (Kleijnen et al, 2009) of the information. Thus, we propose a three-dimensional structure with 24 items to assess the amount, quality and variety of information. Some items come from Flanagin and Metzger (2007), Dholakia et al (2009) and Van Birgelen et al (2008); others were developed for this study. With explorative and confirmatory factor analyses, we validated the three underlying factors. Our approach does not assume that the measures are all caused by a single underlying construct; rather, the factors should all contribute to the formative construct. In line with extant recommendations (Jarvis et al, 2003; MacKenzie et al, 2005; Diamantopoulos et al, 2008), we used a second-order factor



structure, in which the factor values served as indicators of the construct dimensions on the second level.

Self-congruity

To exclude any undesired implicit theories or illusory correlations (Podsakoff et al, 2003), we chose an indirect measure of congruency. On a 10-item semantic differential scale, we determined jobseekers' actual and ideal selfimage independently, as well as their perceptions of employer brand personality and the personality of a typical employee. Thus, we obtained four personality measurements per respondent. For self-congruity, we used absolute difference scores for each attribute and averaged them across personality attributes for each respondent (Sirgy, 1982; Sirgy et al, 1997). We conducted this calculation for all possible combinations, which produced four congruency scores for each respondent. Then, we used the congruity scores of the actual and ideal self-image related to the employer brand personality as reflective indicators of an employer (brand) self-congruity construct. The actual and ideal self-congruity scores related to a typical employee's personality produced the employee self-congruity construct.

We needed an identical scale to measure human and employer brand personality, but no existing scales supported this measurement. For example, Aaker's (1997) scale describes trait inferences ascribed to product brands and is not always appropriate for describing organizations (for example, 'good-looking'). Scales developed to describe organizations also do not apply entirely to humans (for example, corporate personality scale, Davies et al, 2004; organizational personality scale, Slaughter et al, 2004). Human personality scales such as the Big Five (Costa and McCrae, 1992) suffer a similar problem; they do not apply to brands. Therefore, we integrated items from the brand personality scale by Aaker (1997), the organizational personality scale by Lievens and Highhouse (2003) and some standard items from empirical social research that have been used for personality measurement (Friedrichs, 1990). The calculated score values range from 0 to 7, and a higher value indicates greater self-congruency with the employer brand or the typical employee.

Corporate image

Largely consistent with the reputation scale of Fombrun et al (2000), our corporate image scale comprises 18 items. However, we omitted a workplace environment dimension that is part of the employer attractiveness construct. We also adapted the wording of some items to fit the recruitment context. A confirmatory factor analysis supported our proposed four-factor structure: The emotional, strategic, product and sustainable image facets defined an overall corporate image. As for the information construct, we applied a mixed secondorder structure, in which the first-order factors are formative indicators having reflective indicators (Jarvis et al, 2003).

Employer attractiveness

We measured employer attractiveness with a 9-item scale that indicates the jobseeker's perception of the company's employer attractiveness. Following Keller's (1993) and Aaker's (1996) ideas of consumerbased brand equity, our scale is based on established practice models, modified to fit the recruiting and social media context. Our construct included trust, perceived quality, uniqueness, identification, sympathy and attachment. We adopted four trust items from Delgado-Ballester (2004) to measure trust in the employer brand. Identification with the brand referred to the quality of the relationship between the individual and the brand, a key element of brand strength (Keller, 2001). Perceived quality was the jobseeker's subjective evaluation of the company's quality as an employer. Because brand associations of strong brands should be unique (Aaker, 1996; Keller, 2001), we also included an item to measure uniqueness. As in established brand strength models (for example, Young & Rubicam's Brand Asset Evaluator), uniqueness described the ability to differentiate the firm from competitors (Backhaus and Tikoo, 2004). It is also closely associated with prestige, which has been identified as the major attribute for attracting high-talented graduates (Bonaiuto et al, 2013). Finally, sympathy represents the overall affective evaluation of a brand, and attachment is the closeness felt toward the brand, each measured with one item. The one-dimensional structure was confirmed through a confirmative factor analysis.

Application intentions

We operationalized application intentions with a 4-item scale adapted from Taylor and Bergmann (1987), Harris and Fink (1987) and Zeithaml *et al* (1996). We provide an overview of the measurement items in Table A1 in Appendix A.

Data analysis

We used SmartPLS Version 2.0 (Ringle et al, 2005) to obtain partial least square (PLS) estimates for both the measurement and structural parameters in our structural equation. We chose PLS because it offers an effective approach to formative specified indicators, namely, our perceived available information and corporate image constructs. Covariance-based structural equation modeling software cannot process formative constructs directly but instead requires special forms (Jöreskog and Goldberger, 1975). Moreover, PLS

requires fewer cases to attain consistent results (Chin and Newsted, 1999), which is important for our surveys with 265 and 100 respondents. Because the PLS path modeling procedure supports assessments of the psychometric properties of the measurement instruments (Fornell and Larcker, 1981; Chin, 1998; Tenenhaus et al, 2005), we tested the effects and statistical significance of the parameters in the structural model using a bootstrapping procedure with 300 resamples, as recommended by Chin (1998).

Construct validation

Reflective measurement models

To determine the quality of the reflective measures (Bagozzi and Yi, 1988), we began by analyzing convergent validity, for both models. According to the factor loadings of the measures on their respective constructs (Chin, 1998; Tenenhaus et al, 2005), all reflective loadings were significant at the 99 per cent level and thus exceeded the recommended minimum value of 0.707 (Chin, 1998). To assess the reliability of the measures, we calculated the composite reliability (CR) and average variance extracted (AVE) (Fornell and Larcker, 1981; Chin, 1998; Hulland, 1999). All estimated CR indices were greater than the recommended threshold of 0.7 (Chin, 1998; Hulland, 1999). The suggested threshold value of 0.5 for the AVE values also appeared exceeded by all constructs (Fornell and Larcker, 1981). Furthermore, the Cronbach's α values of all scales were acceptable and exceeded the recommended level of 0.7 (Nunnally, 1978). Satisfying Fornell and Larcker's (1981) discriminant validity criterion, the square root of the AVE exceeded the intercorrelations of each construct with other constructs in the model (Chin, 1998; Hulland, 1999). Finally, we

Table 1: Study 1: Intercorrelations, average variance explained, composite reliabilities and Cronbach's α

Intercorrelations						
Scale	а	Ь	С	d	е	f
a Available information						
b Employer self-congruity	0.39***					
c Employee self-congruity	0.38***	0.75***				
d Corporate image	0.62***	0.57***	0.54***			
e Employer attractiveness	0.53***	0.49***	0.49***	0.74***		
f Application intentions	0.39***	0.35***	0.41***	0.56***	0.76***	
Average variance extracted	n/a	0.88	0.91	n/a	0.70	0.87
Composite reliability	n/a	0.94	0.95	n/a	0.96	0.96
Cronbach's α	n/a	0.87	0.90	n/a	0.95	0.95
Q ² (redundancy)	n/a	n/a	n/a	n/a	0.39	0.50
Q ² (communality)	n/a	0.88	0.88	n/a	0.70	0.87

***P < 0.001, **P < 0.01, *P < 0.05.

Note: n/a = not applicable, because it uses a formative indicator specification.

assessed the discriminant validity of the construct items by examining the cross-loadings.

Formative measurement models

Because formative indicators need not be highly correlated, internal consistency is not an appropriate standard for evaluating their adequacy (Bagozzi, 1994). Therefore, we followed alternative procedures to evaluate these construct measures, using indicator weights, which provide information about the relative importance of each indicator in the creation of the construct (Chin, 1998). Weights below 0.1 are trivial (Seltin and Keeves, 1994). The associated t-value reveals the significance of each weight; it should be greater than 1.98 at P = 0.05 (assuming DF = 100). For our studies, these concerns were not at issue: All weights exceeded the 0.1 threshold and were significant at P = 0.05.

To detect potential multicollinearity, we relied on the variance inflation factor with a threshold of 10 (Hair *et al*, 1998). All computed variance inflation factors were well below this threshold. Finally, for our construct specification, we assessed construct validity in terms of discriminant validity. Although Bagozzi (1994) calls this step

unnecessary for formative constructs, because the indexes are linear sums of the measurement, other researchers have suggested testing whether the focal construct correlates less than perfectly with its related constructs (MacKenzie *et al*, 2005). Because the correlation of the formative constructs with other constructs did not exceed 0.738 (Study 1) or 0.720 (Study 2), we found support for discriminant validity. The outcomes of our validation for both reflective and formative models appear in Table 1 (Study 1) and Table 2 (Study 2).

Structural model

In addition to testing the measurement models, we evaluated the explanatory power of the structural model. We used the R^2 value of the endogenous latent variables as a measure of model fit (Chin, 1998; Tenenhaus *et al*, 2005), because it provides information about the amount of variance of an endogenous latent variable explained by the model. The squared multiple correlations (R^2) equaled 0.527 (Study 1) and 0.324 (Study 2) for the corporate image variable, 0.564 and 0.571 for the employer attractiveness variable and 0.579 and 0.555 for application intentions – that is, moderate

Table 2: Study 2: Intercorrelations, average variance explained, composite reliabilities and Cronbach's α

Intercorrelations						
Scale	а	Ь	С	d	e	f
a Available information						
b Employer self-congruity	0.20*					
c Employee self-congruity	0.21*	0.66***				
d Corporate image	0.46***	0.40***	0.37***			
e Employer attractiveness	0.42***	0.48***	0.43***	0.72***		
f Application intentions	0.22*	0.27**	0.26**	0.60***	0.75***	
Average variance extracted	n/a	0.81	0.82	n/a	0.59	0.81
Composite reliability	n/a	0.90	0.90	n/a	0.93	0.95
Cronbach's alpha	n/a	0.78	0.78	n/a	0.91	0.92
Q ² (redundancy)	n/a	n/a	n/a	n/a	0.33	0.45
Q ² (communality)	n/a	18.0	0.82	n/a	0.59	0.81

***P < 0.001, **P < 0.01, *P < 0.05.

Note: n/a = not applicable, because it uses a formative indicator specification.

explanatory power in all cases (Chin, 1998). With a blindfolding procedure, we performed a Stone–Geisser test (Q^2) to determine how well the original empirical data could be reconstructed using the estimated parameters. The results confirmed the model's predictive relevance (Fornell and Cha, 1994; Tenenhaus *et al*, 2005). Finally, we calculated a goodness-of-fit (GoF) index, as proposed by Tenenhaus *et al* (2005), and obtained values of 0.607 (Study 1) and 0.537 (Study 2), which indicates that our model performs well compared with given thresholds (Wetzels *et al*, 2009).

Common method variance

Because this study uses a cross-sectional survey design, bias because of common method variance is possible. To reduce the potential impact of common method bias, we first applied different measures, as recommended by Podsakoff *et al* (2003), included different scales lengths and formats, and placed similar constructs as far as possible from one another in the questionnaire. Next, we used Harman's one-factor test (Podsakoff and Organ, 1986) to determine if one dominant factor emerged in the overall factor analysis, which was not

the case. Eleven factors had eigenvalues greater than 1, and together they accounted for 68 per cent of the total variance, while the first factor accounted for 34 per cent of the total variance.

Hypothesis tests

Study 1

We estimated the results using PLS and bootstrapping procedures (see Table 3). The proposed constructs exhibit good explanatory power. Specifically, perceived available information in social networks positively and significantly influences corporate image (β = 0.458, P<0.001), in support of Hypothesis 2. Moreover, in support of Hypothesis 4a, corporate image depends significantly and positively on the congruence of the employer brand's personality with the respondent's own personality (β =0.261, P<0.001). However, employee-related self-congruity shows no significant link to corporate image (β =0.173, NS), so we must reject Hypothesis 4b.

Neither the link between perceived available information and employer attractiveness (β = 0.105, NS) nor the self-congruity relations to employer attractiveness (β = 0.036, NS; β = 0.104, NS) is significant,

Table 3: Study 1: Results

	Direct effects	Standardized B
Hypothesis I	Perceived available information→Employer attractiveness	0.11 ^{ns}
Hypothesis 2	Perceived available information→Corporate image	0.46***
Hypothesis 3a	Employer self-congruity→Employer attractiveness	0.04 ^{ns}
Hypothesis 3b	Employee self-congruity→Employer attractiveness	0.10 ^{ns}
Hypothesis 4a	Employer self-congruity→Corporate image	0.26***
Hypothesis 4b	Employee self-congruity→Corporate image	0.17 ^{ns}
Hypothesis 5	Corporate image→Employer attractiveness	0.60***
Hypothesis 6	Employer attractiveness—Application intentions	0.76***
	R^2	
	Corporate image	0.53
	Employer attractiveness	0.56
	Application intentions	0.58

ns: not significant; ***P < 0.001, **P < 0.01, *P < 0.05.

so we did not find support for Hypotheses 1, 3a or 3b. Corporate image contributes significantly to the formation of employer attractiveness (β =0.595, P<0.001), in support of Hypothesis 5. Finally, in support of Hypothesis 6, the level of perceived attractiveness of the employer has a strong positive effect on intentions to apply (β =0.761, P<0.001).

Although perceived available information and employer-related self-congruity did not influence employer attractiveness directly, their indirect impacts through corporate image (total effects = 0.273 and 0.155, respectively) are notable. Employee-related self-congruity had no significant effect on any of the other model constructs.

Study 2

Again, we estimated the results using PLS (see Table 4) and found comparable results, with one exception. That is, similar to our findings for Study 1, the results supported Hypothesis 2 (β =0.388, P<0.001), and the link between perceived available information and attractiveness we predicted in Hypothesis 1 remains insignificant (β =0.099. NS). Self-congruity with the brand personality also has a significant impact on corporate image, in further support of Hypothesis 4a

 $(\beta = 0.236, P < 0.001)$. Although Hypotheses 3b and 4b again show no significant results and confirm a negligible role of employee self-congruity effects in the companyindependent social media context ($\beta = 0.079$, NS; $\beta = 0.134$, NS), the link between selfcongruity based on the employer personality and attractiveness (Hypothesis 3a) reveals an interesting result, although the corresponding t-value for this hypothesis is slightly below the usual threshold, and significant at only P < 0.1. It clearly differs from Study 1 in terms its path coefficients (company-independent $\beta = 0.174$; company-controlled $\beta = 0.036$). Therefore, the effect in Hypothesis 3a appears slightly significant (P = 0.074). Finally, in support of Hypothesis 5, corporate image contributes significantly to attractiveness $(\beta = 0.576, P < 0.001)$, and attractiveness has positive effects on applying intentions $(\beta = 0.745, P < 0.001).$

The indirect effects of information sourcing and employer-related congruency on attractiveness, through corporate image, are notable but weaker than in Study 1, with total effects of 0.223 and 0.136, respectively.

Model comparison

To check Hypothesis 7, we considered the relevant credibility items for information

Table 4: Study 2: Results

	Direct effects	Standardized ß
Hypothesis I	Perceived available information→Employer attractiveness	0.10 ^{ns}
Hypothesis 2	Perceived available information→Corporate image	0.39***
Hypothesis 3a	Employer self-congruity→Employer attractiveness	0.17 [†]
Hypothesis 3b	Employee self-congruity→Employer attractiveness	0.08 ^{ns}
Hypothesis 4a	Employer self-congruity→Corporate image	0.27***
Hypothesis 4b	Employee self-congruity→Corporate image	0.13 ^{ns}
Hypothesis 5	Corporate image→Employer attractiveness	0.58***
Hypothesis 6	Employer attractiveness—Application intentions	0.75***
	R^2	
	Corporate image	0.32
	Employer attractiveness	0.57
	Application intentions	0.56

ns: not significant; ***P < 0.001, **P < 0.05; †P < 0.1.

from company-controlled career sites versus that from company-independent social media platforms to determine if there were any significant differences. Using a t-test, we compared the mean differences of four items directly related to information credibility and part of the broader perceived available information construct: 'The information on the website reflects reality/is correct/is believable' and 'I can rely on the information on this website'. Our results show that credibility significantly differs depending on the social media context (P < 0.01), yet in contrast with our expectations, the companycontrolled social media site was the more credible setting. All mean values for the four credibility items emerged as significantly higher in Study 1, which suggests that jobseekers perceive job-related information provided in a company-controlled social media context as more credible than information obtained from independent sources.

Moderating effects

To test Hypothesis 8, we compared Study 1's structural model against Study 2's model, to identify any differences in path effects based on the perceived available information. Even though the β coefficients in each group differed slightly, we found no significant

differences. The link between perceived available information and attractiveness remained insignificant in both cases, and the path coefficients of perceived available information and corporate image were both significant but only slightly different (0.458 and 0.388). Application intention did not link directly to perceived available information in our model, so we compared indirect effects, which revealed no significant differences between studies (0.207 and 0.166). Therefore, the social media context does not appear to have any significant impact on the relationship of job-relevant information with corporate image, attractiveness and application intentions, and we must reject Hypothesis 8. In addition, to control for other potential influences in our model, we tested age, gender and prior work experience with the employer; none of them had any significant impact.

DISCUSSION

Review of empirical findings

The findings of our two studies are relevant and noteworthy for both recruitment marketing and social media researchers in several ways. First, employer attractiveness largely depends on a holistic evaluation of a



company in terms of its corporate image; it is not a quick process determined by specific job-related information gathered in social media. Therefore, it appears that jobseekers combine information with their existing impressions and knowledge of the corporate brand, which in turn influences their corporate image. They do not build specific impressions of the company as an employer that influence its attractiveness directly. An employer brand is likely a part of the global company image, not a distinct brand with its own image.

Second, our findings show that congruency effects related to an employer brand help to explain corporate image perceptions; for company-controlled sites, they indirectly influence attractiveness and application intentions, and in companyindependent social networks, self-congruity related to the employer brand has a direct impact on attractiveness perceptions. This proves that self-congruity is important to employer branding in social media, though only with regard to the employer brand, not to a presented employee image. Furthermore, on the company-controlled platforms, both perceived available information and self-congruity with the employer brand had significant impacts on the company's corporate image but did not affect employer attractiveness directly. Social identity theory (Tajfel and Turner, 1979) might offer a useful explanation: On Facebook, membership with a public site appears on the user's personal information page and is visible to all of his or her personal contacts. Therefore, a user might become a member of a career page to demonstrate a social affiliation with a company and express personality insights, without really being interested in a job. In this case, information provided by the employer and self-congruity with the employer brand affect the user's image of the company for his or her self-identity building purposes but not perceived employer attractiveness.

A different explanation for the gap between self-congruency and attractiveness might stem from the theory of cognitive dissonance. Companies tend to offer detailed, actual information about themselves in company-controlled social media sites, which might help a potential candidate realize his or her poor fit with the company, in terms of personality or specific job requirements. In this case, cognitive dissonance may arise from the conflict between a desire to work for the employer and an awareness of poor hiring probability. In reaction to the resulting sense of discomfort, people engage in 'adaptive preference formation' (Elster, 1983, p. 123) and alter existing cognitions. Thus, jobseekers could have a positive perception of the company but also experience lowered perceptions of its attractiveness as an employer, to increase their cognitive consistency.

With regard to the effects of employeerelated self-congruency, we detected no significant impact on attractiveness or corporate image, in either study context. However, employee-related congruency effects are not without interest. Associations with employees instead may be part of the broader employer brand. That is, when a jobseeker is in contact with employees, his or her impressions of those employees' personalities become part of the employer's overall image, and the personality traits get associated with the employer brand rather than the employees. Similarly, prior work suggests 'personality traits come to be associated with a brand in a direct way by the people associated with the brand - such as ... the company's employees' (Aaker, 1997, p. 348). Because employer self-congruency effects already explain much of the variance in corporate image and attractiveness, selfcongruity related to employees' effects was not significant. Finally, without knowing whether jobseekers consider the employee a typical exemplar of the brand's workforce or as a relatively unique individual,

we cannot predict how brand personality impressions depend on the employee's behavior (Wentzel, 2009).

Third, in support of previous employer branding and recruiting research, our results show that perceived attractiveness is a major antecedent of application intentions; we specifically extend the finding to a social media context.

Fourth, we show that jobseekers perceive information to be more credible on company-controlled social media sites than on independent sites. This surprising result conflicts with prior online community research (Flanagin et al, 2014). In a social network such as Facebook, the information provided by companies on their career sites is subject to close social control, exerted by the many users. Wrong or incomplete statements tend to be quickly unmasked and criticized, resulting in serious (image) problems for that employer. If users recognize the power of such social control, they should perceive this information as credible and rely on it. Accordingly, employers should be eager to provide authentic and true content on their sites.

Fifth, the predicted moderating effect of the social media context on the relationship of perceived available information with corporate image perceptions, attractiveness and application intentions could not be confirmed, because the effects do not differ significantly between the two study contexts. Similar to our unexpected results regarding the credibility of information, we posit that because the information on company-independent social media sites is not more credible, it cannot affect outcomes such as image perceptions or attractiveness more strongly than it does on company-controlled social media sites.

Managerial implications

The issues addressed in this research offer several managerial implications.

First, for companies with employer branding and recruiting intentions, our findings suggest that social media is a useful tool for sharpening and improving corporate images and thus benefitting from increased attractiveness and application intentions. Both the content and its means of communication are crucial for the social media career site's success. By using symbolic brand meaning in social media, organizations can differentiate themselves better than it would be possible with instrumental attributes and build a strong brand personality (Aaker, 1997). Today, the use of instrumental information in communication to jobseekers is used about 4.5 times more often than symbolic attributes (Nolan et al, 2013). It is particularly important to define a distinct personality and behave consistently in social networks, which offer an excellent way to delineate what the employer stands for and reach a broad audience at a low cost. However, this does not mean the company should simply reveal as much information as possible about itself to foster its company image and attractiveness. Providing a sheer mass of information might rather confuse and disorientate jobseekers, as effects of information overload appear, than help them. For non-company-controlled sites, user-generated content should be researched in more detail to better understand how it can be influenced or managed.

Second, our findings highlight the dominant role of corporate image in attracting potential candidates. That is, a positive corporate image is necessary to improve employer attractiveness. Social media activities represent a tool to manage the whole corporate brand, not just the employer brand. Even if people have distinct images of the employer and corporate brands, the latter dominates, influencing various associations that form preferences for a specific employer. We suggest that the employer brand should be strongly consistent with the firm's corporate brand to maintain a nearly identical image across



relevant stakeholder groups. Because job seeking on career sites influences the corporate image, rather than a specific employer image (that is, employer attractiveness), it is possible that a dedicated career site would be just as effective as a general social media site that also includes product— and company-related information. More studies are necessary to confirm this prediction.

Third, though not significant in this study, the role of self-congruity with typical employees cannot be ignored. Perhaps jobseekers do not perceive employees as typical, because those presented in social media appear carefully chosen by the company to represent the employer as positively as possible. In this sense, they are not very credible.

Limitations and further research directions

Some features of this research constrain its generalizability. From a brand management perspective, researchers should identify more determinants of employer attractiveness. The explained variance of the employer attractiveness construct in both studies ($R^2 = 0.564$ and 0.571) indicates that other parameters should be investigated. Possible parameters include self-assessments of employability, fit with general job requirements (for example, geographical location, salary), word-ofmouth recommendations, or prior knowledge about the employer. Additional external effects like impact of other media, applicant's history with the employer and its products or brands could also be taken into account. As mentioned in the discussion section, aspects of information overload could be taken into account, in order to derive insights on the right amount of information for the social media channels.

Valuable results may also be derived from comparisons between companies of different business sectors and with different target groups (regarding the future employees), which was not possible because of the limited amount of cases. In order to obtain a maximum of cases, respondents in Study 2 were free to refer to the employer of their choice when answering, thus, the companies referred to in Studies 1 and 2 are not fully identical. Valuable insights could probably also be generated in a research setup where this model studied in social media is compared with an off-line study, in order to reveal differences resulting from the online/off-line context.

Moreover, our findings are limited to German-language sites, so extensions to other countries would be helpful. Despite the support of several companies and incentives for respondents, our sample size is limited and a larger sample would have allowed for further segmentation analyses. Further studies also could offer direct measures of self-congruity. We used an indirect approach to limit bias, but because 'people's preferences for particular organizations are based upon an implicit estimate of the congruence of their own personal characteristics' (Schneider et al, 1995, p. 749), a direct, global congruency measurement might produce higher effects.

Finally, further research should focus on the positive effects of the community aspect of career sites in social networks, as discussed in the brand community research (McAlexander et al, 2002; Stokburger-Sauer, 2010); we anticipate that outcomes identified in consumer contexts (for example, positive word of mouth, social pressure) also might apply to communities that form around an employer brand. Other details of the social media channel used could also be considered as parameters, such as interactivity modules, the use of video or audio and so on. Additional research could help employers understand these processes and adapt their employer branding strategy accordingly.



Conclusion

Our findings are relevant and noteworthy for marketing and social media researchers. Organizational research already has adopted the notion of brand marketing to describe how people perceive tangible and intangible benefits of a brand when making a decision (Lievens and Highhouse, 2003). We extend this approach by integrating the notion of employer brand strength, which reflects Keller's (1993) theorization. In so doing, we answer the call for more research at the intersection of human resources and branding theory (Keller and Lehmann, 2006; Edwards, 2010).

Our findings show that social media is an highly important channel to communicate brand meaning and attract talented candidates. The importance of social networks will continue to increase in both private and professional life. Companies should grab this opportunity to build and deepen an employer-candidate relationship and communicate their employer brand values in order to establish a powerful 'great place to work' image among potential candidates.

REFERENCES

- Aaker, D.A. (1996) Building Strong Brands. New York: Free Press.
- Aaker, J.L. (1997) Dimensions of brand personality. Journal of Marketing Research 34(3): 347–356.
- Aaker, J.L., Fournier, S. and Brasel, A.S. (2004) When good brands do bad. *Journal of Consumer Research* 31(1): 1–16.
- Aggarwal, P. (2004) The effects of brand relationship norms on consumer attitudes and behavior. *Journal of Consumer Research* 31(1): 87–101.
- Allen, D.G., Otondo, R.F. and Mahto, R.V. (2007) Web-based recruitment: Effects of information, organizational brand, and attitudes toward a web site on applicant attraction. *Journal of Applied Psychology* 92(6): 1696–1707.
- Ambler, T. and Barrow, S. (1996) The employer brand. *Journal of Brand Management* 4(3): 185–206.
- Arndt, J. (1967) Role of product-related conversations in the diffusion of a new product. *Journal of Marketing Research* 4(3): 291–295.
- Backhaus, K. and Tikoo, S. (2004) Conceptualizing and researching employer branding. *Career Development International* 9(5): 501–517.

- Bagozzi, R.P. (ed.) (1994) Structural equation models in marketing research: Basic principles. In: *Principles of Marketing Research*. Oxford: Blackwell, pp. 317–385.
- Bagozzi, R.P. and Yi, Y. (1988) On the evaluation of structural equation models. *Journal of the Academy of Marketing Science* 16(1): 74–94.
- Barber, A.E. (1998) Recruiting Employees: Individual and Organizational Perspectives. Thousand Oaks, CA: Sage.
- Barnes, N.G., Lescault, A.M. and Augusto, K.D. (2015) LinkedIn dominates, Twitter trends and Facebook falls: The 2014 Inc. 500 and Social Media, http://www.umassd.edu/cmr/socialmediaresearch/2015fortune 500andsocialmedia/, accessed 13 November 2015.
- Bendapudi, N. and Bendapudi, V. (2005) Creating the living brand. *Harvard Business Review* 83(5): 124–132.
- Bonaiuto, M., De Dominicis, S., Illia, L., Rodriguez-Canovas, B. and Lizzani, G. (2013) Managing employer brand attributes to attract potential future leaders. *Journal of Brand Management* 20(9): 779–792.
- Cable, D.M. and 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. doi:10.1016/S0742-7301(01)20002-4.
- Caers, R. and Castelyns, V. (2011) LinkedIn and Facebook in Belgium: The influences and biases of social network in recruitment and selection procedures. Social Science Computer Review 29(4): 437–448.
- Chapman, D.S., Uggerslev, K.L., Carroll, S.A., Piasentin, K.A. and Jones, D.A. (2005) Applicant attraction to organizations and job choice: A metaanalytic review of the correlates of recruiting outcomes. *Journal of Applied Psychology* 90(5): 928–944.
- Chin, W.W. (1998) The partial least squares approach for structural equation modelling. In: G.A. Marcoulides (ed.) Modern Methods for Business Research. Mahwah, N.J.: Lawrence Erlbaum Associates, pp. 295–336.
- Chin, W.W. and Newsted, P.R. (1999) Structural equation modeling analysis with small samples using partial least squares. In: R.H. Hoyle (ed.) *Statistical Strategies for Small Sample Research*. Thousand Oaks, CA: Sage, pp. 307–342.
- 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(6): 1121–1133.
- Costa, P.T. and McCrae, R.R. (1992) Revised NEO Personality Inventory (NEO-PI-R) and NEO Five Factor Inventory (NEO-FFI) Professional Manual. Odessa, FL: Psychological Assessment Resources.
- Davies, G.J., Chun, R., Da Silva, R.V. and Roper, S. (2004) A corporate character scale to assess employee and customer views of organisation reputation. Corporate Reputation Review 7(2): 125–146.
- Delgado-Ballester, E. (2004) Applicability of a brand trust scale across product categories. *European Journal of Marketing* 38(5/6): 573–592.



- DelVecchio, D. and Smith, D.C. (2005) Brandextension price premiums: The effects of perceived fit and extension product category risk. *Journal* of the Academy of Marketing Science 4(2): 184–196.
- Dholakia, U.M., Bagozzi, R.P. and Pearo, L.K. (2004) A social influence model of consumer participation in network- and small-group-based virtual communities. *International Journal of Research in Marketing* 21(3): 241–263.
- Dholakia, U.M., Blazevic, V., Wiertz, C. and Algesheimer, R. (2009) Communal service delivery: How customers benefit from participation in firmhosted virtual P3 communities. *Journal of Service Research* 12(2): 208–226.
- Diamantopoulos, A., Riefler, P. and Roth, K.P. (2008) Advancing formative measurement models. *Journal of Business Research* 61(12): 1203–1218.
- 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(4): 723–734.
- Dukerich, J.M., Golden, B.R. and Shortell, S.M. (2002) Beauty is in the eye of the beholder: The impact of organizational identification, identity, and image on the cooperative behaviors of physicians. *Administrative Science Quarterly* 47(3): 507–533.
- Edwards, M.R. (2010) An integrative review of employer branding and OB theory. *Personnel Review* 39(1): 5–23.
- Ellison, N.B., Steinfield, C. and Lampe, C. (2007) The benefits of Facebook "friends": Exploring the relationship between college students' use of online social networks and social capital. *Journal of Computer-Mediated Communication* 12(4): 3.
- Elster, J. (1983) Sour Grapes: Studies in the Subversion of Rationality. Cambridge: Cambridge University Press.
- Elving, W.J.L., Westhoff, J.J.C., Meusen, C. and Schoonderbeek, J.-W. (2012) The war for talent? The relevance of employer branding in job advertisements for becoming an employer of choice. *Journal* of Brand Management 20(5): 355–373.
- Ehrhart, K.H. and Ziegert, J.C. (2005) Why are individuals attracted to organizations? *Journal of Management* 31(6): 901–919.
- Erdem, T., Swait, J. and Louviere, J. (2002) The impact of brand credibility on consumer price sensitivities across multiple product categories. *International Journal of Research in Marketing* 19(1): 1–19.
- Facebook (2015) Facebook stats, http://newsroom.fb .com/company-info/, accessed 13 November 2015.
- Flanagin, A.J. and Metzger, M.J. (2007) The role of site features, user attributes, and information verification behaviors on the perceived credibility of webbased information. New Media Society 9(2): 319–342.
- Flanagin, A.J., Metzger, M.J., Pure, R., Markov, A. and Hartsell, E. (2014) Mitigating risk in ecommerce transactions: Perceptions of information credibility and the role of user-generated ratings in product quality and purchase intention. *Electronic Commerce* Research 14(1): 1–23.

- Fombrun, C.J., Gardberg, N.A. and Sever, J.M. (2000) The reputation quotient: A multi-stakeholder measurement of corporate reputation. *The Journal of Brand Management* 7(4): 241–255.
- Fornell, C. and Cha, J. (1994) Partial least squares. In: R.P. Bagozzi (ed.) Advanced Methods of Marketing Research. Oxford: Blackwell, pp. 52–78.
- Fornell, C. and Larcker, D.F. (1981) Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research* 28(1): 39–50.
- Friedrichs, J. (1990) Methoden empirischer Sozialforschung, 14th edn. Opladen, Germany: Westdeutscher Verlag.
- Gatewood, R.D., Gowan, M.A. and Lautenschlager, G.J. (1993) Corporate image, recruitment image and initial job choice decisions. Academy of Management Journal 36(2): 414–427.
- Godes, D. et al. (2005) The firm's management of social interactions. *Marketing Letters* 16(3/4): 415–428.
- Gomez-Mejia, L., Balkin, D.B. and Cardy, R.L. (2001) Managing Human Resources, 3rd edn. Upper Saddle River, NJ: Prentice Hall.
- Gray, P.H. and Meister, D.B. (2004) Knowledge sourcing effectiveness. Management Science 50(6): 821–834.
- Hair, J.F., Anderson, R.E., Tatham, R.L. and Black, W.C. (1998) Multivariate Data Analysis, 3rd edn. Upper Saddle River, N.J.: Prentice Hall.
- Harris, M.M. and Fink, L.S. (1987) A field study of applicant reactions to employment opportunities: Does the recruiter make a difference? *Personnel Psychology* 40(4): 765–784.
- Hulland, J. (1999) Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic Management Journal* 20: 195–204. doi:10.1002/(SICI)1097-0266(199902) 20:2 < 195::AID-SMJ13 > 3.3.CO;2-Z.
- Jarvis, C.B., MacKenzie, S.B. and Podsakoff, P.M. (2003) A critical review of construct indicators and measurement model misspecifications in marketing and consumer research. *Journal of Consumer Research* 30(2): 199–218.
- Jobvite Survey (2011) Jobsite social jobseeker survey 2011, http://recruiting.jobvite.com/resources/social-job-seeker-survey.php, accessed 1 March 2012.
- Jöreskog, K.G. and Goldberger, A.S. (1975) Estimation of a model with multiple indicators and multiple causes of a single latent variable. *Journal of the American Statistical Association* 10(351): 631–639.
- Keller, K.L. (1993) Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing* 57(1): 1–22.
- Keller, K.L. (1998) Strategic Brand Management: Building, Measuring, and Managing Brand Equity. Hemel Hempstead, UK: Prentice-Hall International.
- Keller, K.L. (2001) Building Customer-Based Brand Equity: A Blueprint for Creating Strong Brands. Marketing Science Institute. Working Paper no. 01-107, http://www.msi.org/.

- Keller, K.L. and Lehmann, D.R. (2006) Brands and branding: Research findings and future priorities. *Marketing Science* 25(6): 740–759.
- Kent, M.L. (2010) Directions in Social Media for Professionals and Scholars. In: *Handbook of Public Relations*, 2nd edn. Thousand Oaks, CA: Sage, pp. 643–656.
- Kleijnen, M., Lievens, A., De Ruyter, K. and Wetzels, M. (2009) Knowledge creation through mobile social networks and its impact on intentions to use innovative mobile services. *Journal of Service Research* 12(1): 15–35.
- Lamb, C.W., Hair, J.F. and McDaniel, C. (2011) Essentials of Marketing. Mason, OH: South Western Cengage Learning.
- Lemmink, J., Schuijf, A. and Streukens, S. (2003) The role of corporate image and company employment image in explaining application intentions. *Journal of Economic Psychology* 24(1): 1–15.
- Lievens, F. (2007) Employer branding in the Belgian army: The importance of instrumental and symbolic beliefs for potential applicants, actual applicants, and military employees. *Human Resource Management* 46(1): 51–69.
- Lievens, F. and Highhouse, S. (2003) The relation of instrumental and symbolic attributes to a company's attractiveness as an employer. *Personnel Psychology* 56(1): 75–102.
- Lievens, F., Van Hoye, G. and Anseel, F. (2007) Organizational identity and employer image: Towards a unifying framework. *British Journal* of *Management* 18(S1): 45–59.
- Ma, M. and Agarwal, R. (2007) Through a glass darkly: Information technology design, identity verification, and knowledge contribution in online communities. *Information Systems Research* 18(1): 42–67.
- MacKenzie, S.B., Podsakoff, P.M. and Jarvis, C. (2005) The problem of measurement model misspecification in behavioural and organizational research and some recommended solutions. *Journal of Applied Psychology* 90(4): 710–730.
- Malhotra, N.K. (1988) Self-concept and product choice: An integrated perspective. *Journal of Economic Psychology* 9(1): 1–28.
- McAlexander, J.H., Schouten, J.W. and Koenig, H.F. (2002) Building brand community. *Journal of Marketing* 66: 38–54. doi:10.1509/jmkg.66.1.38.18451.
- McMillan, D.W. and Chavis, D.M. (1986) Sense of community: A definition and theory. American Journal of Community Psychology 14(1): 6–23.
- Muniz, A. and O'Guinn, T.C. (2001) Brand community. *Journal of Consumer Research* 27(4): 412–432.
- Nolan, K.P., Gohlke, M., Gilmore, J. and Rosiello, R. (2013) Examining how corporations use online job ads to communicate employer brand image information. Corporate Reputation Review 16(4): 300–312.
- Nunnally, J.C. (1978) *Psychometric Theory*, 2nd edn. New York: McGraw-Hill.
- Ostrom, A.L. et al. (2010) Moving forward and making a difference: Research priorities for the science of service. *Journal of Service Research* 13(4): 4–36.

- Peterson, R.A. and Merino, M.C. (2003) Consumer information search behavior and the internet. *Psychology of Marketing* 20(2): 99–121.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.-Y. and Podsakoff, N.P. (2003) Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology* 88(5): 879–903.
- Podsakoff, P.M. and Organ, D.W. (1986) Self-reports in organizational research: Problems and prospects. *Journal of Management* 12(2): 531–544.
- Rieh, S.Y. and Danielson, D.R. (2007) Credibility: A multidisciplinary framework. In: B. Cronin (ed.) Annual Review of Information Science and Technology. Medford, NJ: Information Today, pp. 307–364.
- Ringle, C.M., Wende, S. and Will, A. (2005) SmartPLS 2.0 (beta), http://www.smartpls.de, accessed 1 March 2012.
- Roselius, T. (1973) Consumer rankings of risk reduction methods. In: H.H. Kassarjian and T.S. Robertson (eds.) *Perspectives in Consumer Behavior*. Glenview, IL: Scott, Foresman and Company, pp. 55–61.
- Rynes, S.L. (1991) Recruitment, job choice, and posthire consequence. In: M.D. Dunnette (ed.) Handbook of Industrial and Organizational Psychology, 2nd edn. Palo Alto, CA: Consulting Psychologists Press, pp. 399–444.
- Rynes, S.L. and 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: Industrial and Organizational Psychology. Vol. 12, Hoboken, NJ: John Wiley and Sons, pp. 55–76.
- Saffer, A.J., Sommerfeldt, E.J. and Taylor, M. (2013) The effects of organizational Twitter interactivity on organization – Public relationships. *Public Relations Review* 39(3): 213–215.
- Saks, A.M. and Ashforth, B.E. (1997) A longitudinal investigation of the relationships between job information sources, applicant perceptions of fit, and work outcomes. *Personnel Psychology* 50(2): 395–426.
- Schneider, B., Goldstein, H.W. and Smith, D.B. (1995) The ASA framework: An update. Personnel Psydhology 48(4): 747–773.
- Seltin, N. and Keeves, J.P. (1994) Path analysis with latent variables. In: T. Husen and T. Postlethwaite (eds.) The International Encyclopedia of Education, 2nd edn. Oxford: Pergamon, pp. 4352–4359.
- Sirgy, J.M. (1982) Self-concept in consumer behavior: A critical review. *Journal of Consumer Research* 9(3): 287–300.
- Sirgy, J.M. (1985) Using self-congruity and ideal congruity to predict purchase motivation. *Journal of Business Research* 15(3): 195–206.
- Sirgy, J.M. (1986) Self-Congruity: Toward a Theory of Personality and Cybernetics. New York: Praeger.
- Sirgy, J.M. et al. (1997) Assessing the predictive validity of two methods of measuring self-congruity. *Journal* of the Academy of Marketing Sciences 25(3): 229–241.
- Sirgy, J.M. and Samli, A.C. (1985) A path analytic model of store loyalty involving self-concept, store image,



- socio-economic status, and geographic loyalty. *Journal* of the Academy of Marketing Sciences 13(2): 265–291.
- Slaughter, J.E., Zickar, M.J., Highhouse, S. and Mohr, D.C. (2004) Personality trait inferences about organizations: Development of a measure and assessment of construct validity. *Journal of Applied Psychology* 89(1): 85–103.
- Smith, D.C. and Park, C.W. (1992) The effects of brand extensions on market share and advertising efficiency. *Journal of Marketing Research* 29(3): 296–313.
- Stokburger-Sauer, N. (2010) Brand community: Drivers and outcomes. Psychology and Marketing 27(4): 347–368
- Tajfel, H. and Turner, J.C. (1979) An integrative theory of social conflict. In: W.G. Austin and S. Worchel (eds.) The Social Psychology of Intergroup Relations, 2nd edn. Chicago, IL: Nelson Hall.
- Taylor, M.S. and Bergmann, T.J. (1987) Organizational recruitment activities and applicants' reactions at different stages of the recruitment process. *Personnel Psychology* 40(2): 261–285.
- Tenenhaus, M., Vinzi, V.E., Chatelin, Y.M. and Lauro, C. (2005) PLS path modeling. Computational Statistics and Data Analysis 48(1): 159–205.
- Trusov, M., Bucklin, R.E. and Pauwels, K.H. (2009) Effects of word-of-mouth versus traditional marketing: Findings from an internet social networking site. *Journal of Marketing* 73(5): 90–102.
- Turban, D.B. (2001) Organizational attractiveness as an employer on college campuses: An examination of the applicant population. *Journal of Vocational Behavior* 58(2): 293–312.
- Turban, D.B. and Greening, D.W. (1997) Corporate social performance and organizational attractiveness to prospective employees. *Academy of Management Journal* 40(3): 658–672.

- Turban, D.B., Lau, C.M., Ngo, H.-Y., Chow, I. and Si, S. (2001) Organization attractiveness of firms in the People's Republic of China: A person-organization fit perspective. *Journal of Applied Psychology* 86(2): 194–206. http://dx.doi.org/10.1037/0021-9010.86 .2.194.
- Van Birgelen, M., Wetzels, M. and Van Dolen, W. (2008) Effectiveness of corporate employment web sites – How content and form influence intentions to apply. *International Journal of Manpower* 29(8): 731–751.
- Van Hoye, G. and Saks, A.M. (2011) The instrumentalsymbolic framework: Organisational image and attractiveness of potential applicants and their companions at a job fair. *Applied Psychology: An International Review* 60(2): 311–335.
- Walker, H.J., Feild, H.S., Giles, W.F., Armenakis, A.A. and Bernerth, J.B. (2009) Displaying employee testimonials on recruitment web sites: Effects of communication media, employee race, and job seeker race on organizational attraction and information credibility. *Journal of Applied Psychology* 94(5): 1354–1364.
- Wentzel, D. (2009) The effect of employee behavior on brand personality impressions and brand attitudes. Journal of the Academy of Marketing Science 37(3): 359–374.
- Wetzels, M., Odekerken-Schröder, G. and Van Oppen, C. (2009) Using PLS path modeling for assessing hierarchical construct models: Guidelines and empirical illustration. MIS Quarterly 33(1): 177–195.
- Xing (2015) Xing corporate pages, https://corporate.xing .com/no_cache/english/unternehmen/xing-ag/, accessed 13 November 2015.
- Zeithaml, V.A., Berry, L.L. and Parasuraman, A. (1996) The behavioral consequences of service quality. *Journal of Marketing* 60(2): 31–46.
- Zottoli, M.A. and Wanous, J.P. (2000) Recruitment source research: Current status and future directions. *Human Resource Management Review* 10(4): 353–382.



APPENDIX A

Table A1: Scales

Perceived available information in social media

- I. I can find a lot of information about the employer on this Website, especially about \dots
- ... Salary
- ... Training opportunities
- ... Employees' responsibilities
- ... Security of employment
- ... Working atmosphere
- ... Work tasks
- ... Career opportunities
- ... Market success of employer
- ... Work-Life-Balance
- ... Career opportunities abroad
- ... Leadership
- 2. The information on the Website is believable.
- 3. The information on the Website is complete.
- 4. This Website provides me diverse information.
- 5. Participants contribute on many different topics and provide many answers.
- 6. On this Website, many different knowledge sources are available.
- 7. The information on the Website reflects reality.
- 8. The information on the Website is correct.
- 9. I can rely on the information on this Website.
- 10. The information on the Website is up-to-date.
- 11. The information on the Website is recent.
- 12. Visiting the Website provides me with relevant information.
- 13. The information provided applies to me.
- 14. The information provided is helpful to me.

Congruence of personality traits

- I. exciting ... boring
- 2. playful ... serious
- 3. generous ... thrifty
- 4. flexible ... inflexible
- 5. reliable ... unreliable
- 6. innovative ... traditional
- 7. professional ... unprofessional
- 8. modern ... classic
- 9. chaotic ... organized
- 10. liberal ... strict

Corporate image

- 1. I have a good feeling about this company.
- 2. I trust this company.
- 3. I admire this company.
- 4. I respect this company.
- 5. Offers high quality products and services.
- 6. Develops innovative products and services.
- 7. Has an excellent reputation due to its products and services.
- 8. Stands behind its products and services.
- 9. Offers products and services that are good value for money.
- 10. Has excellent leadership.
- 11. Has a clear vision for its future.

Table A1: continued

- 12. Recognizes and takes advantage of market opportunities.
- 13. Is financially stable.
- 14. Has a strong record of profitability.
- 15. Tends to outperform its competitors
- 16. Is an environmentally responsible company.
- 17. Maintains high standards in the way it treats people and nature.
- 18. Supports environmentally friendly projects.

Employer attractiveness

- I. This employer offers attractive jobs.
- 2. This employer differentiates itself positively from others.
- 3. This is an employer I can identify with very well.
- 4. I like this employer.
- 5. I feel attached to this employer.
- 6. This employer meets my expectations.
- 7. I feel confidence in this employer.
- 8. I believe this employer would make any effort to satisfy me as an employee.
- 9. I believe this employer cares much about fulfilling the needs of its employees.

Application intentions

- 1. I intend to apply for a position within this organization.
- 2. I consider this company as a potential future employer.
- 3. I would be very likely to accept a job offer of this company.
- 4. I would like to work for this company.

APPENDIX B

Table B1: Companies with German career sites on Facebook and independent social media platforms in our sample

Accenture	Ernst & Young
Allianz	E-Plus
Audi	Fraport
Bain & Company	Henkel
BASF	IBM
Bayer	Karstadt
BMW	L'Oréal
Commerzbank	Lufthansa
Daimler	MAN
_	

Datev Media-Saturn Group
Deutsche Bahn Otto Group
Deutsche Flugsicherung Rewe Group
Deutsche Telekom Siemens
Deutsche Post Stihl
xing.com wiwi-treff.de

xing.com wiwi-treff.de uni-protokolle.de unicum.de studis-online.de