



## Recruiting Generation Y for the Backbone of Economy: Organizational Attractiveness of Small, Family Owned, and Rural Firms

Johannes Caprano

*Technische Universität München*

### Abstract

Despite their outstanding economic importance, small, family owned, and rural firms find it hard to attract talent. Upon initial contact with recruiting organizations, job seekers use any of their observable characteristics, such as size, ownership, or location to infer attributes of the employment offering. Based on this assessment, they may feel attracted to an organization and develop intentions to pursue the employment opportunity. Following behavioral psychology, the consistency between organizational attractiveness and job pursuit intentions is affected by the amount of job seekers' direct experience with the firm type. For small, family owned, and rural firms, direct experience may be lower due to their relative anonymousness. The strength and direction of inferences made based on organizational characteristics as well as metacognitive assessments were tested using a vignette experiment. A sample of 200 Generation Y students and professionals rated fictitious firms based on their size, ownership, and location. The results show support of the indirect influence of these organizational characteristics on job pursuit intentions, mediated by employment attributes and organizational attractiveness. Family ownership led to positive evaluations while small size and rural location had a negative impact on job pursuit intentions. Another important contribution of this study is a validated two-stage implementation of firm location as a predictor of organizational attractiveness.

**Keywords:** Organizational attractiveness; family firm; SME; rural firm; hidden champion.

### 1. Introduction

Attracting a high-quality pool of applicants from which to select employees is crucial to a company's success (Ehrhart and Ziegert, 2005; Rynes and Barber, 1990). In this context, employer branding, defined as activities aimed at "internally and externally promoting a clear view of what makes a firm different and desirable as an employer" (Lievens, 2007, p. 51) has received substantial attention by researchers and practitioners alike (Theurer et al., 2016). It involves linking a "package of functional, economic and psychological benefits provided by employment, and identified with the employing company" (Ambler and Barrow, 1996) to the employer brand, i.e. "a name, term, sign, symbol, or design, or combination of them" (Kotler, 1991, p. 442).

An important precondition for creating an employer brand is awareness: Unless potential applicants do at least

recognize the recruiting organization, they do "not even have a template to collect and store information about" it (Cable and Turban, 2001, p. 124). For most large corporations this requirement may well be taken for granted, since they are highly visible in our everyday lives based on their size and resulting economic relevance, public listing, and geographic concentration in metropolitan regions, among others.

A large portion of economic activity around the world, however, is driven by companies that diverge from the stereotypical large corporation on one or several dimensions. This is illustrated by a glance at Germany's business landscape: Small and medium enterprises (SME) according to the European Commission's definition (workforce of less than 250) represented 99% of all active German companies as well as 61% of employment and 33% of sales (Söllner, 2014). In Germany, 86% of all active companies were owned and managed by families in 2016 and accounted for 46% and 42% of employment and sales respectively (Gottschalk et al., 2017). Lastly, based on information from Bundesamt (2017) and Bundesamt für Bauwesen und Raumordnung (2016), only 25% of active German companies were headquartered in ur-

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ban districts (cities of more than 100,000 inhabitants). It is therefore warranted to say that small, family owned, and rural firms are indeed the backbone of economy.

At the same time, they have less publicity and are often unknown to job seekers. When learning about a previously unknown firm, job seekers start creating an employer image defined as “the content of the beliefs held by a job seeker about an employer” (Cable and Turban, 2001, p. 125). This image is shaped by their very first impressions and information on it, which are processed as signals of what it is like to work there (Barber, 1998; Turban, 2001). A firm’s basic characteristics such as its size, ownership and location might therefore heavily influence potential applicants’ expectations of employment conditions, their attraction to the organization and intentions to further pursue employment.

Leaders of small, family owned, and rural firms are increasingly concerned about their ability to fill their personnel needs. For instance, a study by PwC (2016) found that recruiting and retaining top talent is regarded as one of the major challenges that family firms around the world expect to face in short and medium term. At the same time recruitment in small, family owned, and rural firms and specifically the role of inferences made on the basis of their basic characteristics has received little attention from researchers (Barber et al., 1999; Botero and Litchfield, 2013).

While some studies have explored the effect of family influence (eg. Block et al., 2016; Hauswald et al., 2016) and size (eg. Barber and Roehling, 1993; Turban and Greening, 1997) on organizational attractiveness individually, only very few studies have assessed these characteristics combined. A notable exception is recent work by Botero (2014) and Kahlert et al. (2017), who explored the inferences that job seekers make based on ownership and size, and ownership and organizational age respectively, with experimental research designs.

Important questions remain unanswered, however, such as the role that a firm’s location plays for job seekers’ attraction to organizations. Several studies have emphasized its relevance (eg. Carless and Imber, 2007; Collins and Han, 2004; Turban et al., 1995) and urban sociologists suggest that „talented people do not simply select a place to work based on the highest salary, [but] are typically concerned with a whole series of place-based characteristics“ (Florida, 2002, p. 6). Furthermore, I found a lack of conceptual clarity and insights into the mechanism through which location affects organizational attractiveness and intentions to pursue employment.

Considering the outstanding economic importance of small, family owned, and rural firms, their difficulties in attracting talent, and the need for more integrated studies of organizational characteristics effect on job seekers’ image of recruiting organizations, I arrive at my first research question:

Research question 1: How and through which inferences does information about organizational size, ownership, and location affect organiza-

tional attractiveness and intentions to pursue employment?

Companies are ultimately interested in recruiting outcomes such as an applicants’ willingness to accept a job offer (Collins and Stevens, 2002). Therefore, the conversion of potential applicants’ attraction toward an organization (attitude) into intentions to actually pursue employment with it (as a proxy of behavior) is crucial. Behavioral psychology suggests that this relation between attitudes and behavior is not only defined by the valence (i.e. favorability) of attitudes, but also by their structure.

One such structural property is attitude certainty, defined as “a subjective sense of conviction or validity about one’s attitude or opinion” (Gross et al., 1995, p. 215). As such, attitude certainty is a metacognitive assessment, i.e. a way of evaluating one’s own thoughts. The more convinced an individual is of an attitude, the more consistently they will behave according to it (Tormala and Rucker, 2018).

In the context of this study, it is conceivable that attitude certainty indeed plays a role for attitude-behavior consistency, for instance, if job seekers were systematically less certain of their attitudes toward small, family owned, and rural firms, because of their lower exposure to and experience with such organizations.

Given the well-established psychological research on the effects of metacognitive assessments and their very scarce applications to the recruitment context (see Walker et al., 2013 for a notable exception), I put forward my second research question:

Research question 2: Which metacognitive processes play a role in the formation of attitudes towards small, family owned and rural firms and how do these affect the relation between organizational attractiveness and intentions to pursue employment?

Both research questions were investigated through an experimental vignette-study in which respondents evaluated a set of fictitious firms defined by combinations of the factors size, ownership, and location. The sample included a total of 200 members of Generation Y, i.e. individuals born between 1980 and 2000 and was entirely comprised of students and young professionals. Each factor was manipulated on two levels and participants were asked to assess the organizations on three dimensions. First, its expected attributes as an employer, second, its overall attractiveness, and third their intentions to pursue employment. Furthermore, a number of personal-related data points were captured as control variables.

This study contributes to the organizational attractiveness literature in several ways: Most importantly, it answers to calls for a deeper investigation of the role of inferences in shaping job seeker perceptions (Ehrhart and Ziegert, 2005; Highhouse and Hoffman, 2001; Highhouse et al., 2007).

It contributes to family business research in that it takes an applicant centered approach instead of focusing on firms’ human resources management (HRM) practices and by using

an experimental design that is uncommon in family business research (Botero, 2014; Botero and Litchfield, 2013).

Another important theoretical contribution of this study is toward conceptual clarity regarding location. A two-step operationalization following the theoretical model introduced by Ehrhart and Ziegert (2005) was developed combining different research streams, and verified empirically. Furthermore, the application of the psychological concept of attitude certainty to the recruitment context may represent a useful combination of two related research streams.

For leaders and consultants of small, family-owned, and rural firms, this study contributes to a clear understanding of the reasons behind their difficulties in attracting talent. Given its highly relevant sample of Generation Y members, it provides valuable insights into how the generation currently entering the job-market perceives their firms and the concerns to which firms have to respond in order to improve their attractiveness.

## 2. Theoretical Background

The importance of gaining a deeper understanding of what makes organizations attractive employers and the effects of organizational attractiveness has been widely acknowledged in research (eg. Turban et al., 1993). At the same time, however, there has been a lack of generalizable theoretical work explaining the process through which individuals are attracted to organizations and how attraction translates into recruiting outcomes (Barber, 1998). Furthermore, there has been little use of unified terminology leading to the fact that “past recruitment research has been labeling similar concepts by different names, and has been labeling different concepts by the same name” (Cable and Turban, 2001, p. 118). In order to link the present study to established theory and to show its positioning in the ample field of recruiting research, the theoretical foundations of the model proposed and tested here are discussed in the following.

### 2.1. General positioning in the recruitment literature

From a temporal perspective, the recruiting process is commonly divided into three stages by researchers: generating applicants, maintaining applicant status, and influencing job choice decisions (Barber, 1998). In practice, the steps taken often include the employer identifying a position to be filled, then creating and advertising a vacancy announcement which is evaluated and possibly applied to by job searchers. Upon completion of a selection process, the firm extends job offers which are either accepted or declined by applicants (Phillips and Gully, 2015).

There are, however, deviations from this standard process: many recruiting organizations directly approach individuals who are currently employed or not looking for a job with unsolicited offers to interview (Lee et al., 2008). Similarly, job searchers approach firms with unsolicited applications (Gannon, 1971) and some organizations do not hire for

concrete positions to be filled but “pursue scarce talent constantly – not just when a vacancy occurs” (Phillips and Gully, 2015, p. 59).

My work focusses on the first phase, where organizations’ objective is to attract a sufficient number of qualified individuals, to spark their interest in the organization as an employer, and ultimately to get them to further pursue employment (Kahlert et al., 2017). It is, however, not limited to specific means by which potential employees are addressed or the which of two parties of establishes contact first.

There are two general streams of research concerned with the perceptions that potential applicants develop of recruiting organizations in the first stage of the recruiting process and their effect on recruiting outcomes, i.e. the progress to the subsequent steps of the recruiting process (Gardner et al., 2011): organizational attractiveness research and employer image research.

The first originated in industrial and organizational (I/O) psychology and more specifically the area of employee satisfaction and job characteristics (Aiman-Smith et al., 2001). Early work in this area assessed the influence of a variety of job and organizational characteristics as well as recruiting activities on organizational attractiveness and job choice (eg. Jurgensen, 1978; Schwab et al., 1987). These studies provided insights into the relative importance that potential applicants give to different characteristics in forming attitudes toward employing organizations. However, they did not account for firm-level differences between individual employers, the variety of recruitment practices or the mechanism through which organizational perceptions are processed and stored.

The second research stream has its origins in consumer psychology and more specifically brand equity (Aaker, 1997; Keller, 1993). The underlying assumption is that recruiting firms are competing for diverse talent with individual employment preferences and thus have to market their job opportunities to workers in the same way as products to consumers (Cable and Turban, 2001). In this context, a (product) brand, defined as the “name, term, sign, symbol, or design or a combination of them intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competitors” (Kotler, 1991, p. 442) becomes an employer brand.

In an influential contribution, Cable and Turban (2001) introduced the concept of employer knowledge encompassing 1) employer familiarity, 2) employer reputation, and 3) employer image as an antecedent of organizational attraction and ultimately job choice decisions. Gardner et al. (2011) coined the term employment brand, reasoning that the product that companies are ultimately trying to sell to applicants is work at their organization and not (only) the organization itself (as suggested by the term employer brand).

This study seeks to explore the perceptions, attitudes and intentions that applicants develop towards certain kinds of companies based on particular salient characteristics. Perceptions of the recruiting organization are measured through the expected levels of employment attributes. Employment

attributes describe aspects of a given employment opportunity and can be directly related to the work itself (also referred to as job attributes and) or indirectly related (influenced by the organization or coworkers) (Gardner et al., 2011). The aim is to show that potential applicants indeed infer a variety of employment attributes from scarce, factual information about a firm in absence of a concrete employer brand. Consequently, this study does not investigate individual employer brands but rather the starting point from which certain kinds of companies can develop such brands.

Even though this consideration certainly suggests a positioning within the field of organizational attractiveness literature, a clear delimitation appears neither possible nor favorable, since recruiting research could benefit from a convergence of the two research streams (Gardner et al., 2011). Therefore, I will be referring to concepts from both previously mentioned streams of research in the following discussion of the theoretical framework of this study to give reference to a wider variety of other studies and enable the embedding of the present study in both academic discussions.

Furthermore, I adapt the applicants' as opposed to the organization's perspective on the recruiting process. While the latter focuses on activities of companies such as human resources management (HRM) practices, recruiting materials, and recruiter behavior, the former is concerned with potential new hires' attitudes and behavior. Rynes et al. (1991) noted an emphasis on the firm's perspective in recruitment research. This can be explained by the high availability of data on corporate recruitment activities (Breugh and Starke, 2000) as well as the amount of practical implications that can be derived from such studies. Nonetheless, applicants' job choice decisions and hence success of recruiting ultimately depends on many factors outside firms' control such as (heterogeneous) individual reactions to organizational characteristics or activities (Cable and Judge, 1996). Therefore, a deeper understanding of the applicant perspective can be deemed crucial both from a theoretical as well as a practical standpoint (Ehrhart and Ziegert, 2005).

## 2.2. The relation between organizational characteristics and organizational attractiveness

Whether actively searching for a job or passively approached by a recruiter, potential applicants rely on information they have or receive about the recruiting organization in order to assess its eligibility as an employer to them (Barber, 1998). The attitude that potential applicants develop in this process is referred to as organizational attraction, defined as "expressed general positive affect toward an organization, toward viewing the organization as a desirable entity with which to initiate some relationship" (Aiman-Smith et al., 2001, p. 221).

Ehrhart and Ziegert (2005) referred to this activity as environment processing and described it as a two-staged process. They argue that "individuals process and organize information concerning what is known about the actual environment characteristics and thereby develop their own unique

perceptions of the environment, which in turn lead to attraction" (p. 903). There is a number of studies supporting this mediated relation between observable characteristics/behavior of an organization and attraction towards it (eg. Barber and Roehling, 1993; Botero, 2014; Goltz and Giannantonio, 1995; Turban et al., 1998).

### 2.2.1. Signaling theory

At the beginning of the recruiting process, potential applicants' knowledge of the hiring organization is often none or very limited (Barber, 1998). Therefore, they use all kinds of recruiting related and non-related information (Cable and Turban, 2001) such as organizational characteristics (Aiman-Smith et al., 2001; Lievens et al., 2001), recruiter behavior and properties (Turban et al., 1998) and recruitment practices (Turban et al., 1995) in order to assess its eligibility as employer. Since these inputs are rarely complete, thus creating uncertainty for potential applicants, they are assumed to be interpreted as "signals of what it would be like to work for the company" (Rynes et al., 1991, p. 20).

This view is rooted in signaling theory, which was first introduced by Spence (1973) in the context of job markets. He argued that job seekers use (secondary) education as a credible signal to employers regarding their own productivity thus reducing the information asymmetry between the two parties in job markets. Signaling theory is commonly applied to the recruitment context since it has the advantage of accommodating a variety of different predictors of organizational attraction (Celani and Singh, 2011; Lievens and Slaughter, 2016).

It does, however, provide little insight on the relative importance of individual variables (Ehrhart and Ziegert, 2005). Furthermore, Highhouse et al. (2007) lamented excessive and erroneous use of signaling theory in a recruiting context. With regard to these concerns, the present study used an experimental design that allows for the isolated observation of the (signaling) effect of individual characteristics as well as their relative impact on outcome variables.

The content and structure of the perceived environment, which potential applicants infer from characteristics of the actual environment has been subject to extensive academic debate. Early classifications coming from the field of job satisfaction were between intrinsic and extrinsic or motivator and hygiene job attributes (Giles and Feild, 1982; Kerr et al., 1974).

A more recent and common distinction adapted from marketing (eg. Gardner and Levy, 1955; Keller, 1993) is between instrumental attributes, which "describe the job/organization in terms of objective, concrete, and factual attributes that a job/an organization either has or does not have" and symbolic attributes, "in the form of imagery and trait inferences that applicants assign to organizations" (Lievens and Highhouse, 2003, p. 80). Examples of instrumental attributes include compensation, working hours or amount of required commuting (Lievens and Highhouse, 2003). Frameworks capturing symbolic attributes were proposed by Slaughter et al. (2004) ("Boy Scout, Innovative-

ness, Dominance, Thrift, Style”) or [Lievens et al. \(2005\)](#) (“Sincerity, Excitement, Cheerfulness, Competence, Prestige, Ruggedness”). Following these definitions, the constituting variables of both, actual and perceived environment in this study can be considered instrumental.

In this context, it should be noted that instrumental and symbolic attributes, cannot be mapped to actual and perceived environment as defined by [Ehrhart and Ziegert \(2005\)](#). For instance, an instrumental attribute such as compensation can be directly observed by applicants if information about pay and benefits were included in a job posting or available from a public source and hence formed part of the actual environment. If such information is not available, however, applicants might infer the same (instrumental) attribute from other salient instrumental attributes (such as firm size or industry). Thus, instrumental attributes can be both, source and result of inferences about organizations.

### 2.3. Expectancy theory

The relation between the perceived attributes of an employment opportunity and organizational attractiveness is commonly explained by expectancy theory ([Ehrhart and Ziegert, 2005](#)). Originally proposed by [Vroom \(1964\)](#) in the context of organizational behavior, it captures the mental process of choice among alternative behaviors. Under the theory, individuals select behaviors based on perceptions of their expectancy (behavior will lead to given performance), instrumentality (performance caused by behavior will lead to secondary outcome) and valence (preference for reaching a given secondary outcome).

In a recruitment context, the behavior upon which to decide is ultimately choice of one or another employment opportunity based on the perceived amount of valued attributes it offers ([Barber and Roehling, 1993](#)). [Wanous et al. \(1983\)](#) argued that expectancy theory may even be more suitable to explain organizational choice than in its original context of job motivation research since the decision to join an organization “is probably more under control of the individual than is one’s job performance” (p. 68). They defined the attractiveness of an organization toward an individual as the sum over the products of desirability (valence) and incidence (instrumentality) of outcomes involved in joining that organization.

### 2.4. The relation between organizational attractiveness and job pursuit intentions

Human resources practitioners as well as researchers have often interchanged the concepts of general attraction to an organization and intentions leading to actual job pursuit behavior ([Aiman-Smith et al., 2001](#)). This has been criticized on the basis of contradicting empirical results (eg. [Rynes and Lawler, 1983](#); [Rynes et al., 1983](#)) and the practical importance of differentiating the two, since “a decision not to apply for an opening is tantamount to a rejection decision” ([Collins and Stevens, 2002](#), p. 3). Therefore, a distinction of attitudes, behavior and predictors of behavior as well as consideration of relevant theory on their relation seems warranted in the recruitment context.

Theories linking attitudes (in this case attraction to an employing organization) and behavior (here job pursuit) are distinguished according to the circumstances and manner in which individuals decide on their behavior. In situations when the time or willingness for an elaborate decision process is limited, spontaneous processing takes place while more consequential behavioral decisions that are less time constrained lead to deliberate processing ([Fazio, 1990](#)).

The first is characterized by heavy reliance on immediate perceptions and knowledge structures activated in the moment of decision-making. A process for spontaneous processing was proposed by [Fazio \(1986\)](#) and further discussed in literature. It evolves around the idea that attitudes guide situational perception and hence behavior under the condition that the individual is able to activate attitudes toward the object from memory in the respective situation.

### 2.5. Theory of reasoned action

The most influential work on deliberate processing was proposed by [Fishbein and Ajzen \(1975\)](#) as theory of reasoned action (TRA) and later extended by [Ajzen \(1991\)](#) into the theory of planned behavior and the reasoned action approach ([Fishbein and Ajzen, 2011](#)). It characterizes human behavior as the result of a cognitive process where behavior is mainly driven by an individual’s intentions to engage in that behavior. Intentions in turn are driven by attitudes toward the specific behavior and the subjective norm, i.e. the perceived social approval of the behavior.

Actual job choice decisions as well as the experimental setting of the present study are best described as deliberate processing and hence TRA for several reasons: Firstly, there is no time pressure on the decision process that would limit an individual’s ability to carefully process benefits and costs of different courses of action. Furthermore, the forced inference of employment attributes leads to a structured evaluation of possible benefits and costs of pursuing employment with different kinds of organizations. And lastly, job choice decisions can be considered to be of high importance to most individuals, which implies a heightened motivation for deliberate processing.

The applicability of TRA to the recruitment context was confirmed by individual studies (eg. [Powell and Goulet, 1996](#); [Schreurs et al., 2005](#)) as well as a meta-review ([Chapman et al., 2005](#)). Therefore, this study adapts the TRA as applied to the recruitment context by [Highhouse et al. \(2003\)](#) in order to explain the relation between organizational attraction and intentions toward the company as a proxy of actual job pursuit behavior.

The central elements of TRA are intentions, determined by attitude and subjective norm and behavior as a consequence of intentions and map well onto concepts of the first stages of the recruiting process proposed by [Barber \(1998\)](#). The resulting assumption, that is regularly applied in recruitment research, is that organizational attraction leads to intentions toward the company which in turn predict job choice and thereby recruitment outcomes ([Chapman et al., 2005](#)).

Due to the difficulties involved in obtaining behavioral measures for job pursuit, most studies rely on indirect measures such as intentions of specific behavior toward the company (Schreurs et al., 2005).

Perceptions of attraction toward the employing organization are attitudes resulting from environment processing as described before. They include “affective and attitudinal thoughts about particular companies as potential places for employment” but have a passive nature, since they do not imply any action toward the employing organization (Highhouse et al., 2003, p. 989). Consequently, individuals can be attracted to multiple organizations simultaneously since holding such attitudes does not require effort on behalf of potential applicants (Barber, 1998).

The social norms component of TRA is best captured by concepts such as employer reputation or prestige included in many studies in the fields of organizational attractiveness and employer branding (eg. Gatewood et al., 1993). It is defined as “social consensus on the degree to which the company’s characteristics are regarded as either positive or negative” and hence normative as opposed to individual (Highhouse et al., 2003, p. 989). Importantly, it is potential applicants’ perception of a firm’s reputation that may influence their job pursuit intentions and later behavior and not the actual reputation that a firm has or communicates (Cable and Turban, 2001).

Lastly, intentions are “thoughts about a company that specifically imply further action” (Highhouse et al., 2003, p. 989). Compared to the attitude of organizational attraction, they involve a higher commitment toward an individual employing organization and can generally be regarded as a good approximation of subsequent behavior (Fishbein and Ajzen, 2011).

## 2.6. Moderators of the relation between organizational attractiveness and job pursuit intentions

Scholars from different disciplines as well as the original authors of TRA have recognized that the relation between attitudes and behavior may be subject to a number of moderating variables (Fishbein and Ajzen, 2011). In other words, the formation of intentions and hence behavior not only depends on the valence (positive or negative) and extremity (distance from neutrality) of attitudes held towards an object (in this case a potential employer) but also on the origin and structure of attitudes.

Attitude certainty is rooted in work by Festinger (1950), who proposed that people assess the validity of their attitudes through own observations of the subject. Whenever physical reality is not available as a base for evaluation, it is replaced by social reality such that “an opinion, a belief, an attitude is ‘correct’, ‘valid’ and ‘proper’ to the extent that it is anchored in a group of people with similar beliefs, opinions, and attitudes” (Festinger, 1950, p. 272). Festinger (1954) further suggested that evaluations of one’s opinions and abilities become unstable when they cannot be based upon physical or social reality.

In a current contribution on the antecedents of attitude certainty, Rucker et al. (2014, p. 122), proposed “that attitude certainty stems from a finite set of psychological appraisals that can be identified, measured, and manipulated”. These appraisals can be organized into the dimensions of experiential inputs, information completeness, information accuracy, information relevance, importance, and legitimacy (Tormala, 2016).

Experiential inputs are feelings that go along with the attitude itself such as the ease with which an attitude is retrieved (Alter and Oppenheimer, 2009), the number of times it is repeated (Petrocelli et al., 2007), or the emotional state in which an attitude is developed (Tiedens and Linton, 2001).

Information here refers to whatever is considered by an individual when developing an attitude toward an object. Completeness includes the sheer amount of information available as input for attitude development (Smith et al., 2008), perceptions of own thoughtfulness (Barden and Tormala, 2014), and amount of thinking performed about the attitude object (Wan et al., 2010). Appraisals of accuracy may be rooted in the feeling that an attitude is correct and therefore shared by others (Petrocelli et al., 2007), in the consistency of information underlying the attitude (Maheswaran and Chaiken, 1991), direct experience with the attitude object (Fazio and Zanna, 1978b), and receiving information from a credible source such as an expert (Clarkson et al., 2011). Lastly, relevance, importance, and legitimacy capture perceptions of having based an attitude upon legitimate information such as factual evidence as opposed to visual features of its presentation (Tormala et al., 2007).

The present study focuses on the role of information accuracy and more specifically direct experience as a predictor of attitude certainty. First proposed by Fazio and Zanna (1978b), it was shown in experiments that attitudes formed on the basis of direct behavioral experience with the attitude object are more predictive of future behavior and resistant to persuasive attacks (eg. Wu and Shaffer, 1987). Fazio and Zanna (1981, p. 166) also noted that the “distinction ... between direct and indirect experience represents a continuum”.

The consequences of attitude certainty fall into three broader categories: information processing, attitude strength, and attitudinal advocacy (Tormala and Rucker, 2018). Information processing is routed in the elaboration likelihood model by Petty and Cacioppo (1986) and can be summarized such that individuals’ willingness to process attitude-relevant information decreases with increased attitude certainty (Maheswaran and Chaiken, 1991). Attitude strength, can be defined as “the extent to which attitudes manifest the qualities of durability and impact” (Krosnick and Petty, 1995, p. 3), with durability representing their ability to endure persuasive attacks or time and impact referring to their ability to impact behavior and hence attitude-behavior consistency.

My study experimentally assesses the influence of attitude certainty on the impact dimension of attitude strength, or in other words the extent to which the certainty with which attitudes about a potential employer are held strengthens

the consistency between these attitudes and job pursuit intentions. Other consequences of attitude certainty may also have important implications in the recruiting context and are therefore also discussed at a later point.

### 3. Conceptual Framework

As laid out in the previous section, this study is concerned with the relation between employment attributes inferred from observable organizational characteristics and resulting perceptions of organizational attraction and ultimately job pursuit intentions. It builds upon signaling and expectancy theory, TRA and the concept of attitude certainty as a predictor of attitude-behavior consistency. In the following, I will summarize previous empirical findings on the variables included in my model.

#### 3.1. Definitions of company types and underlying organizational characteristics

Despite their outstanding economic relevance, there is a lack of clear typology for firms that diverge from the prototype of large, professionally managed and publically traded corporations on one or more dimensions. This is especially so in German-speaking countries, where a variety of (often multi-dimensional) labels are used interchangeably and ambiguously for such companies in everyday speech and research (Khadjavi, 2005). In other European and English-speaking countries, there is more conceptual clarity with size and ownership being the dominant dimensions (Becker et al., 2008). Nonetheless, concrete definitions and delimitations along these dimensions vary. In the following, common examples of company types are briefly discussed.

Small and medium enterprise (SME) is a term commonly used to distinguish firms below a certain threshold in terms of employment and/or financial indicators. There are numerous definitions of SME internationally (Ayyagari et al., 2007), which are not discussed in detail here. A comprehensive and legally binding definition for the European Union classifies a company as SME when (1) its total staff headcount is below 250, and its (2) annual turnover is equal or below € 50 m, or (3) balance sheet total is equal or below € 43 m (European Commission, 2003). Another common threshold for employment is a total staff headcount of less than 500, which is included in the North-American definition (NAICS, 2017), and others.

Family firm is a company type defined by ownership i.e. the group of natural or legal persons who control the company and are entitled to its economic benefits. It has received substantial interest from researchers and policy-makers alike (eg. Gómez-Mejía et al., 2007). Importantly, being a family firm under most definitions goes beyond economic ownership and control of the firm by a group of related individuals. An intention to pass on ownership and control within the family between generations as well as overlap of firm and family values are further criteria. This is illustrated by the dimensions of F-PEC scale, power, experience, and culture developed by

Astrachan et al. (2002), that is commonly used to identify family firms in research. A similar term that implies ownership and control on behalf of a natural person but is often associated with very small firms is owner-managed firm (eg. Sian and Roberts, 2009).

Mittelstand, best translated as mid-tier, is a common term in the German language area routed in the “sociological position of individuals in the middle of society” (Becker et al., 2008, p. 8). It is often used synonymously with SME (eg. Kraft et al., 2012; Muzyka et al., 1997) or family firm (IfM, 2018), yet considered in research to be multi-dimensional in nature. For a company to be considered mittelstand it has to be (1) economically and legally independent, and (2) owner-managed beside falling into the SME size category (Damken, 2007; Hausch, 2013). Becker et al. (2008) proposed a size limit well above common SME limits (3000 employees and/or annual revenues of less than € 600 m) for mittelstand companies.

Hidden champion, a term introduced and coined by Simon (1990), extends the mittelstand concept by a specific strategic orientation toward market leadership in niche segments. Notably not a German phenomenon, hidden champions “tend to be a world-wide market leader in a specific niche market but they have historically neither sought nor attracted publicity” (Simon, 1996, p. 1). Common definitions of hidden champions include firms that (1) generate at least 40% of their revenues in foreign markets, (2) have at least 30% market share in Europe or worldwide, (3) are owner managed, (4) have a performance-oriented management philosophy, and (5) are active in niche markets (Hausmann et al., 2009, p. 116).

One thing that becomes apparent when comparing these company types is that there is little consensus in definitions and substantial overlap between the individual groups. This is supported by business statistics from Germany, which state that the vast majority of all SMEs are also family firms (Gottschalk et al., 2017). Out of all Mittelstand companies “three quarters are family-owned” (Muzyka et al., 1997, p. 147) and “most of these [hidden champion] companies are family-owned” (Venohr and Meyer, 2007, p. 5). This correlation between size and ownership can partly be explained by the history of most firms: Usually started by individuals or small groups of founders and therefore considered owner-managed or family firms in their first years of existence, most ventures start out small. As they grow beyond a certain point, so do their capital requirements up to the point where the founders or their families cannot sustain the business anymore (Gottschalk et al., 2017).

Apart from usually falling under several of the overlapping definitions, there are further properties commonly shared by SMEs, family firms, mittelstand companies, and hidden champions. These properties are not part of any of the definitions but are nonetheless often associated with such firms. One is a focus on the manufacturing sector, often in very specialized segments and making intermediate products that are “invisible to consumers” (Simon, 1992, p. 115) but sought after by businesses around the world

(Kraft et al., 2012).

Another commonality of many of these firms is that they are often “located in a small town or village rather than in a big city” (Simon, 1992, p. 122). This may stem from their strong ties to the place of residence of the families owning and controlling them and often long-standing tradition in these locations. The importance and impact of geographic proximity to relevant stakeholders such as their owners is also supported by research on the impact of location on liquidity for public companies (Loughran and Schultz, 2005).

Due to the ambiguity in definitions and their use, I have chosen not to focus on one particular company type in this study but rather on the underlying dimensions of size, ownership and location as triggers for employment attribute inferences. While the first two are common distinguishing factors and part of most company type definitions, location is a concomitant circumstance that can be well operationalized as a dichotomous variable (urban-rural) and may be a relevant source of inferences for potential applicants.

### 3.2. Organizational characteristics as signals for employment attributes

As pointed out in the previous section, company size, ownership, and location are factors associated with common company typologies. In the first stage of the recruitment process, potential applicants heavily rely on general impressions of the recruiting organization (Barber, 1998). In this context, “[a]ny characteristic observable to a job-seeker could activate a schemata or category stereotype that also includes perceptions of organizational culture” (De Goede et al., 2011, p. 53).

Following Lievens et al. (2001, p. 34), I argue that organizational characteristics, that are (1) “visible and salient for applicants quite early in the decision process”, (2) “potentially act as signals of the organizational culture and values”, and (3) “differ across organizations” may affect potential applicants’ perceptions of employment attributes and thereby organizational attractiveness. In the following, the compliance of size, ownership and location with these criteria and their resulting role in forming initial applicant impressions is discussed.

Size is one of the organizational characteristics commonly included in studies of organizational attractiveness (Chapman et al., 2005). Information about an organization’s size is observable for applicants through corporate websites, recruiting materials, investor reports or in business press (Barber and Roehling, 1993).

In absence of more detailed information on a company, applicants may infer attributes such as level of bureaucracy, compensation level, organizational culture or values in a process of stereotypical categorization from its size (Lievens et al., 2001). Consequently, company size was the most frequent source of inferences about job security and second most important for organizational characteristics in a study by Barber and Roehling (1993).

They found that individuals with high self-esteem seemed to prefer small and medium organizations over large ones.

Inversely, low self-esteem implicated a preference for large organizations. Low need for achievement individuals were most attracted to medium sized firms while the opposite was true for high need for achievement participants.

The operationalization of size differs across studies: A common variable is number of employees. Turban and Keon (1993, p. 187) used three discrete levels: small (“several hundred employees”), medium (“between five and six thousand employees”) and large (“over 50,000 employees”) and tested moderation effects of personality traits on organizational attractiveness.

In a study on the fast-food industry, organization size was identified by participants as a distinguishing factor between different employers but did not show a significant correlation with organizational attractiveness (Highhouse et al., 1999). Collins and Han (2004) found that company size (turnover/number of employees) predicted organizational attractiveness (operationalized as applicant pool size). A recent meta-analytic review listed size as a significant ( $P < 0.05$ ) predictor of applicant attraction across four studies with a total of 1,217 participants (Uggerslev et al., 2012).

Ownership as an organizational characteristic is certainly not as salient as size or location. Nonetheless, organizations often choose to communicate family ownership actively in recruiting messages or passively on corporate websites or brochures (Zellweger et al., 2012). Furthermore, substantial shareholdings in private or listed companies have to be publicly announced in most countries (see for example German Wertpapierhandelsgesetz section 36.1) thus enabling potential applicants to identify family firms as such.

Ownership has been shown to be a predictor of organizational attraction and recruiting outcomes not only in the context of family firms. In a study of Chinese firms, Turban et al. (2001, p. 198) investigated the impact of being “a state-owned enterprise”, “a wholly-owned foreign enterprise”, or “an international joint venture” on organizational attraction and intentions of seeking a job interview and of accepting a job offer. They found that the type of ownership did indeed influence perceptions of working conditions and attractiveness, the latter under moderation of individual personality traits.

Previous studies on recruitment in family firms have often assumed the company perspective in investigating the role of human resources management (HRM) practices (eg. Carlson et al., 2006; De Kok, Uhlaner, & Thurik, 2006; King et al., 2001; Ward, 1997). A common theme is that “family firms are less likely to use professional HRM practices than their counterparts” as a direct consequence of their ownership type (De Kok et al., 2006, p. 23). Botero and Litchfield (2013) offer a comprehensive review of HRM practices in family firms.

In one of the first studies on potential applicants’ perceptions of family firms, Covin (1994) found that the participating students perceived family firms to be particularly concerned with employee wellbeing which resulted in increased organizational commitment. Furthermore, there was no significant difference in perceived competitiveness, but students believed that advancement opportunities were limited due to



nepotism. The study showed a significant influence of educational level with MBA students having more critical views on family firms as employers than undergraduate students. Predicted gender differences, however, could not be confirmed.

Ceja and Tàpies (2009) surveyed MBA students' perceptions of family firms as employers and found that they hold a generally negative image, especially regarding ownership-related problems, nepotism and innovation and internationalization effectiveness. The applicant perspective has also been adopted by a number of recent studies: Chrisman et al. (2014) theorized that family firms' ability to attract high quality external managers may be impaired by their inferior compensation offerings and opportunities for advancement.

In a person-organization fit study among German college students, Hauswald et al. (2016), found that attraction towards family firms was higher among individuals who valued conservation and self-transcendence while pronounced openness to change or self-enhancement reduced attraction.

Block et al. (2016) explored a variety of potential applicant characteristics in a multi-country study with a sample of over 12,000 individuals. They found that female gender and positive attitude toward entrepreneurship were positively correlated with preference for employment with family firms while amount of education received, residence in an urban area and entrepreneurial aspirations lead to reduced attraction. Their work does not allow conclusions about the mechanism linking personal characteristics to attraction toward family firms, however, due to its exploratory nature and omission of intermediate variables.

Building upon similar theory as the present study, Botero (2014); Botero et al. (2012) and Kahlert et al. (2017) investigated the effect of communicating family ownership together with organization size and organizational age respectively. Botero (2014) and Botero et al. (2012) found that only organization size had a significant effect on organizational attractiveness through perceptions about job security, advancement opportunities, compensation, and prestige. Kahlert et al. (2017) could not show any significant effects of either family ownership or organizational age on organizational attractiveness.

Location is commonly included in recruiting messages such as job postings and can be considered a significant factor evaluated by potential applicants (Barber and Roehling, 1993; Rynes and Lawler, 1983). Uggerslev et al. (2012) reported a total of 15 studies that included location as a predictor of applicant attraction. A closer look at the studies that were aggregated in their meta-analysis, however, unveils substantial heterogeneity in the concepts that were captured under the same or similar variables.

One conceptualization was included as an organizational characteristic in the present study and will be denominated location in the following: It refers to the physical location in which the recruiting organization or its respective subsidiary or branch seeking to attract talent is based. It was operationalized in past studies through concrete cities such as "Sacramento, CA" (Barber and Roehling, 1993, p. 849; Rynes et al., 1983), or regions such as "Midwest US" (Rynes

and Lawler, 1983, p. 622). In other research streams, location was implemented in terms of the kind of location as for example "Urban - company headquarters is in one of the ten largest metropolitan areas of the United States" vs. "Rural - headquarters is 100 miles or more from the center of any of the 49 U.S. metropolitan areas of 1 million or more" (Loughran and Schultz, 2005, p. 7).

A company's location may impact organizational attractiveness in different ways: first, it may be the source of inferences about characteristics of the company itself which in turn can be favorable or unfavorable. For instance, applicants might think that companies in rural areas are more traditional due to the kind of co-workers they might find in such locations. However, location did not appear to be among the most common sources for inferences about organizational characteristics in a study by Barber and Roehling (1993).

Other variables commonly subsumed under location therefore capture the implications that an organization's geographic location has for its (potential) employees lives outside of the narrower work context. Some of these are discussed in the following under quality of life. Only very few studies have captured the geographic and resulting dimensions of location individually (eg. Konrad et al., 2000; Slaughter and Greguras, 2009).

### 3.3. Employment attributes inferred from organizational characteristics

Potential applicants may draw a number of inferences about employment attributes from a firm's salient characteristics such as size, ownership, and location as discussed above. In the following I define the five employment attributes assessed here, four out of which are well established in the organizational attractiveness literature and the fifth, quality of life, is introduced in the present study.

Advancement opportunities are defined here as "the amount of potential for movement to higher levels", that a potential applicant perceives to have within an organization (Hausknecht et al., 2009, p. 271). Meta-reviews (Chapman et al., 2005; Uggerslev et al., 2012) as well as individual studies (eg. Cable and Turban, 2001; Lievens et al., 2007; Turban, 2001) emphasized its importance as a predictor of organizational attractiveness.

Compensation is the sum of all monetary and non-monetary items that an organization provides to its employees in exchange for their work (Williams and Dreher, 1992). Monetary compensation is usually referred to as pay, salary, or wage and usually linked to some unit of time or concrete units of work. Non-monetary compensation, called benefits (in kind), fringe benefits, perquisites, or perks are any other advantages that an organization provides to its members and may include items such as access to a firm car for private purposes. Even though there has traditionally been a focus on monetary compensation, I have employed a broader definition here, since benefits may indeed represent a large proportion of total compensation (García et al., 2010).

Prestige, “the degree to which organizations are perceived as being well regarded and reputable” (Highhouse et al., 2003, p. 989) has shown to be an important predictor of organizational attractiveness in previous studies (Barber, 1998; Cable and Turban, 2001; Gatewood et al., 1993). A firm’s actual prestige, “social consensus on the degree to which the company’s characteristics are regarded as either positive or negative” (Highhouse et al., 2003, p. 989) should be distinguished from perceived prestige, i.e. the extent to which an individual potential applicant perceives an organization to be prestigious. The present study studies the influence of the latter on organizational attractiveness and intentions toward the firm. Recruitment research has long overemphasized individual preferences of the potential applicant and given too little attention to the role of the social environment that influences them in their decisions (Van Hove and Saks, 2011).

Job Security is defined here as a perceived low likelihood of involuntary job loss, based on a definition of job insecurity proposed by Sverke et al. (2002). Further drawing from job insecurity research, job loss may not always be equivalent to total job loss but may also encompass the loss of individual job features such as compensation or hierarchical status (Greenhalgh and Rosenblatt, 1984). When forming perceptions of job security, individuals are likely to assess both, the probability of job loss at the organizational level and on the individual level. The former is likely to be impacted by the perceived financial stability in the overall organization and implied probability of downsizing or liquidation. The latter may be more related to a firm’s adherence to individual employees and structures that enable long-term careers. Overall, job security turned out to be an important predictor of organizational attractiveness and job pursuit intentions in previous studies (Highhouse et al., 2007; Lievens et al., 2007; Lievens et al., 2005; Turban, 2001).

### 3.3.1. Quality of life

The consequences of a firm’s geographic location for potential applicants depend on the question whether their place of residence is regarded as a given, or in other words the answer to the question „[d]o jobs follow people or do people follow jobs?“ (Storper and Scott, 2009, p. 147). Some studies have included this distinction by controlling for “whether or not relocation would have been required” (Becker et al., 2010, p. 229).

Assuming that applicants regard their living location as fixed (meaning they would not want or have to change their place of residence for joining a new organization), commuting is a potential implication. In this case, proximity of the workplace to their current home and hence required amount of commuting would likely have a major impact on attractiveness. Lievens and Highhouse (2003) (“this bank is close to where I live”) and Sommer et al. (2017) (“distance of work from home”), among others, interpreted location in this way and found a significant correlation with organizational attractiveness.

Research on employees’ willingness to accept opportunities that involve relocation has shown that individuals in the beginning of their careers are generally more inclined to relocate for jobs (Noe and Barber, 1993; Noe et al., 1988). The sample of this study is largely comprised of such individuals (students at the end of their studies or young professionals). When relocation is required, a possible implication of geographic location is what I call quality of life and included in this study as an employment attribute. Quality of life here refers to potential applicants’ evaluation of life in eligible places of residence within commuting distance from the organization.

Potential elements of quality of life can be drawn from the field of urban sociology: Glaeser et al. (2001) studied drivers of urbanization and argued that people are drawn into urban areas by more than mere economic factors and that cities “must attract workers on the basis of quality of life as well as on the basis of higher wages.” (p. 23). They coined the term of amenities suggesting that high population density in cities reduces the cost of consuming services leading to wider culinary, cultural and entertainment offerings. These in turn are assumed to make such places more attractive. Clark et al. (2002) went as far as calling cities “entertainment machines” (p. 494) emphasizing the importance of “urban ‘attractions’ such as parks, museums, art galleries, orchestras, signature buildings” (Storper and Scott, 2009, p. 152). For Florida (2003), the principal amenity luring what he calls the creative class into the urban space is social interaction enabled by tolerance and openness.

Accordingly, previous studies have assessed the impact of quality of life with items such as „[t]his organization would provide me with job opportunities in desirable locations“ (Collins, 2007, p. 38), “[a] location near family and friends” (Carless and Imber, 2007, p. 332) and “items tapping access to cultural and recreational activities” (Turban et al., 1995, p. 201) and found significant influence on organizational attractiveness.

## 4. Derivation of Hypotheses

Based on the theoretical background and conceptual framework outlined above, hypotheses are put forward covering (1) the influence of the organizational characteristics size, ownership, and location on perceived employment attributes, (2) the mediated influence of these organizational characteristics on organizational attractiveness and job pursuit intentions, and (3) the moderating role of direct experience and attitude certainty on the relation between organizational attractiveness and pursuit intentions.

### 4.1. Influence of organizational characteristics on perceived employment attributes

Size was shown to be negatively related to the probability of voluntary or involuntary turnover (Kalleberg and Mastekaasa, 1998). The reasons for this relation may be higher levels of unionization in large firms

(Villemez and Bridges, 1988) leading to more job protection, comparatively higher financial stability of larger firms (Hannan and Freeman, 1977) or higher overall job satisfaction in larger firms reducing voluntary separations. It is therefore likely that applicants perceive their chances of building long term careers to be higher in large organizations.

Size is furthermore inherently related to the number of positions and thereby vacancies in an organization. Consequently, large firms have bigger and more active firm internal labor markets, particularly in high-growth environments (Van Buren, 1992). Furthermore, firm size was found to be positively related to talent management practices, defined as “the proactive identification, development and strategic deployment of high performing and high-potential strategic employees on a global scale” (McDonnell et al., 2010, p. 151). Consequently, it can be assumed that potential applicants expect to find more advancement opportunities in large firms.

Large organizations do offer higher salaries and benefits to their employees (Kalleberg and Van Buren, 1996), potentially due to their wider financial resources and more formal HRM practices (Nguyen and Bryant, 2004). Accordingly, it was shown that potential applicants perceive small organizations to offer less of such extrinsic benefits (Greenhaus et al., 1978).

Lastly, large firms possess higher reputation capital than small firms (Hamori, 2003). Working in larger establishments is therefore related to higher perceptions of occupational prestige (Kalleberg and Van Buren, 1996). Considering the previous findings on the relation between organization size and employment attributes, it hypothesized that:

Hypothesis 1: Company size is related to perceptions of job security (H1a), compensation (H1b), advancement opportunities (H1c), and prestige (H1d) such that these attributes are perceived to be less pronounced in small companies.

#### 4.1.1. Ownership

In many family owned firms, employees “are hired not for mere jobs but lifelong careers” (Miller and Le Breton-Miller, 2003, p. 131). Furthermore, family ownership decreases the likelihood of downsizing as family firms are reluctant to fire employees in economic downturns (Block, 2010; Stavrou et al., 2007). It can therefore be assumed that potential applicants expect higher levels of job security in family owned firms.

On the downside, family firms (and particularly small ones) tend to put family first in personnel decisions and behave altruistically toward family members thus reducing advancement opportunities for non-family employees (Beehr et al., 1997; Chrisman et al., 2014). Therefore, potential applicants may fear to be at a disadvantage when competing for promotion opportunities with members of the owning family.

Additionally, family owned and managed firms were found to offer lower overall pay levels compared to professionally managed family firms and non-family firms (Basanini et al., 2013; Carrasco-Hernandez and Sánchez-Marín,

2007).

Family ownership is believed to have a positive impact on reputation across different cultures (Sageder et al., 2018). This may be due to the high identification of the owning family with its business and its resulting efforts to maintain a good reputation for it (Deephouse and Jaskiewicz, 2013). Building upon these findings, I put forward that:

Hypothesis 2: Ownership is related to perceptions of job security, compensation, advancement opportunities, and prestige such that family firms are perceived to offer more job security (H2a), less compensation (H2b), and less advancement opportunities (H2c), but more prestige (H2d) than non-family firms.

Highly educated knowledge workers such as the individuals surveyed for the present study, consider a variety of cultural and lifestyle amenities in their residential location choice beside traditional location factors such as housing prices (Florida, 2002). Cities seem to accommodate these needs best. This is due to their ability to sustain high levels of recreational and cultural offerings which depend on large audiences and hence high population density (Glaeser et al., 2000).

Furthermore, “the urban variables suggest that employees prefer to be moved to cities that are growing and dynamic rather than static or in decline.” (Carruthers and Pinder, 1983, p. 524). Consequently, I assume that individuals within the sample of this study have a preference toward living in urban locations and thus hypothesize that:

Hypothesis 3: Geographic location is related to perceptions of quality of life such that working for a company located in a rural location is perceived to imply a lower quality of life.

#### 4.2. Influence of perceived employment attributes on organizational attractiveness

Expectancy theory suggests that potential applicants evaluate employment attributes that they expect to find in an organization and are attracted to organizations that offer relevant and positively evaluated attributes (Barber and Roehling, 1993; Ehrhart and Ziegert, 2005).

As previously hypothesized, the organizational characteristics of size, ownership, and location are likely to trigger expectations of a number of positively valued employment attributes in potential applicants: Job security gives a sense of stability and reduces the perceived risk of job loss (Highhouse et al., 2007; Lievens et al., 2005). Compensation is a main driver of employees’ purchasing power and resulting lifestyle when working for a given organization (Cable and Judge, 1994; Lievens et al., 2007). Advancement opportunities define the extent of personal and professional growth that an individual is able to experience in an organization (Lievens et al., 2005). Prestige may be valued by potential applicants since working for a highly-regarded organization may foster approval of their social environment

(Highhouse et al., 2003). Lastly, quality of life is likely to impact organizational attractiveness since there is “strong evidence that the residential location choice of knowledge-workers is indeed guided by their culture-oriented leisure activity patterns” (Frenkel et al., 2013, p. 39).

Accordingly, meta-reviews have shown that job security, compensation, advancement opportunities, prestige, and location (here quality of life) are indeed among the most important predictors of organizational attractiveness (Chapman et al., 2005; Uggerslev et al., 2012). I thus put forward that:

Hypothesis 4: Size (H4a), ownership (H4b), and geographic location (H4c) are related to organizational attractiveness through perceived job security, compensation, advancement opportunities, prestige, and quality of life such that small, family-owned, and rural companies are perceived to be overall less attractive.

#### 4.3. Relation between organizational attractiveness and intentions toward the company

As proposed by the TRA, attitudes (here attraction toward a recruiting organization) may lead to intentions (to further pursue employment) which in turn predict subsequent behavior (progress within the recruitment process) (Fishbein and Ajzen, 1975). The applicability of TRA to the recruitment context has been shown in the literature and confirmed empirically (Highhouse et al., 2003).

I therefore assume that that the variation in organizational attractiveness induced by the organizational characteristics of size, ownership, and location and resulting perceptions of employment attributes should also reflect in potential applicants' intentions. It is therefore hypothesized that:

Hypothesis 5: Size (H5a), ownership (H5b), and geographic location (H5c) are related to job pursuit intentions through perceived job security, compensation, advancement opportunities, prestige, and quality of life, and resulting organizational attractiveness, such that the level of job pursuit intentions is lower for small, family-owned, and rural organizations.

Attitudes developed based on direct, personal experience with the attitude object are held with greater certainty than those resulting from indirect experience (Fazio and Zanna, 1978b; Tormala and Rucker, 2018). In the present study, the attitude in question is organizational attractiveness of different firm types. The more direct experience an individual has had with a given firm type in the past (for example through work experience at such a firm), the more confident they should be of their evaluation of employment there. I therefore put forward that:

Hypothesis 6: Exposure to/familiarity with a company type is related to certainty with which attitudes about such a company are held such that attitude certainty increases with direct experience.

Attitude-behavior consistency as one aspect of attitude strength is among the commonly cited consequences of attitude certainty (Clarkson et al., 2008; Luttrell et al., 2016). Here, I assume that the more certain applicants are of their evaluation of a firm type as a result of their direct experience such firms, the stronger and therefore hypothesize that:

Hypothesis 7: Attitude/behavior consistency increases with attitude certainty, such that the relation between organizational attractiveness and intentions towards the company is stronger for higher levels of attitude certainty.

## 5. Methodology

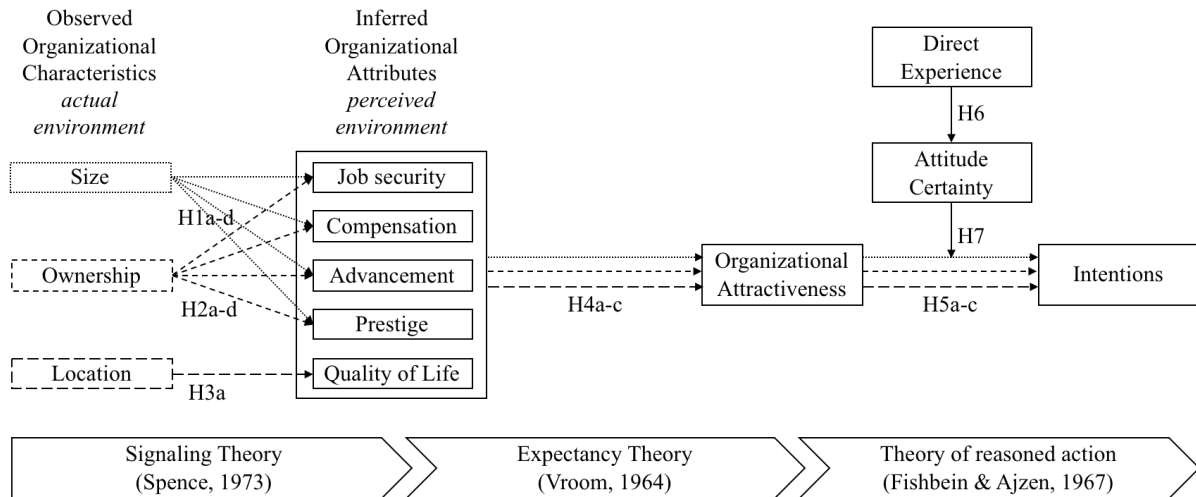
### 5.1. Research design

In order to test the model developed based on my literature review, an experimental empirical study was conducted. In designing it as a vignette study, I chose an infrequently used quantitative approach that combines experimental elements with classic survey methodology (Atzmüller and Steiner, 2010). In contrast to passive observation designs commonly used in management research, experimental designs allow for testing of causal relationships and thereby high internal validity (Aguinis and Bradley, 2014).

In experimental vignette studies, participants are provided with a context in which several short descriptions of persons, objects or individuals (called vignettes) are presented and described. Vignettes are defined by factors that are manipulated across different factor levels. In full factorial designs, the total number of vignettes is hence given by the product of factor levels for all factors. Similar to other methodologies such as conjoint experiments, experimental vignette studies are aimed at capturing the direction and strength of influence that the factors have on dependent variables and the underlying decision policies (Atzmüller and Steiner, 2010).

As context for the experiment, respondents were told that they had attended a job fair a few weeks back and now reflected upon some of the companies that they came across during the event. Job fairs are a commonly used recruiting technique (Beam, 2016) and can be considered a relatable situation for most participants. The vignette structure and dependent variables were introduced stating, that participants would be asked to assess the attractiveness of a number of potential employers only based on their size, ownership and location. On the following four pages, participants were shown one of the four company descriptions and a total of 27 items (see Appendix A for the full questionnaire). Both, the order of vignettes and individual items within were randomized in order to eliminate the possibility of order-effect bias.

Size was operationalized through two discrete levels of number of employees, which is a common measure of organizational size and has been shown to correlate with other measures such as sales (Agarwal, 1979). Respondents were



**Figure 1:** Theoretical model. This figure shows the and hypothesized relations between dependent and independent variables as well as the underlying theory.

told that the company they evaluated had either 500 (small) or 20,000 (large) employees. The low factor level was chosen at the upper end of common SME definitions with the aim of inducing perceptions of a smaller yet mature and professionally run company. It was assumed that most participants would find a firm with 500 employees to be above the size of start-ups or owner-run firms yet below the size of a large corporation. The high factor level of 20,000 employees was chosen considering that for even larger corporations, the framing assumption of coming across their booth at a job fair being unaware of their existence would become unrealistic due to the very limited amount and high publicity of such companies.

The factor ownership was implemented on two levels, “owned and managed by a family” and “owned by financial investors”. Following most common definitions of family firms (Astrachan et al., 2002), I combined ownership and some extent of family control over the company. Respondents should get the feeling that the owning family played an active role in the firm and shaped it according to its values. The contrasting factor level was chosen such that it became clear to participants that the owners pursued predominantly financial goals and the firm was run by employed managers.

The factor levels for geographic location are “located in an urban area (inside a major city)” and “located in a rural area (outside any major city)”. Previous studies have operationalized geographic location either by naming concrete locations (eg. Barber and Roehling, 1993) or through categories of locations such as urban/rural (eg. Loughran and Schultz, 2005). This study follows the latter approach in order to avoid potential bias caused by individual respondents’ liking or familiarity with concrete locations. Table 1 summarizes the three factors, their levels and allocation to vignettes.

These three factors with two levels led to a total vignette population of  $2^3 = 8$  vignettes. A full factorial design would therefore have meant a total of eight vignettes with nine con-

structs measured through three items each or  $8 * 9 * 3 = 216$  items in total per respondent. The resulting survey would have taken more than 30 minutes to complete which was considered too long, given that survey length was shown to be negatively related to answer rates and -quality (Deutskens et al., 2004). Therefore, a fractional factorial design with a fraction of  $\frac{1}{2}$  and (ABC) as the defining contrast was applied, reducing the vignette subpopulation to four. Fractional factorial designs are within-subjects designs, meaning that each respondent is presented the same (reduced) set of vignettes (Montgomery, 2012). The advantage is a reduction of the responses to be captured from each participant by the fractional factor ( $\frac{1}{2}$  in the present design). A possible disadvantage is the confounding of main and second and third level interaction effects. In the present study interaction effects between the vignette factors were not evaluated or interpreted, thus eliminating this downside of the fractional factorial design (see Limitations for details).

5.2. Participant recruitment and sample

The experiment was carried out through an online questionnaire, which was distributed through email, direct messages and postings in academic groups on social networks. Furthermore, the questionnaire was published on an online platform for research projects leading to an additional 60 complete participations. A total of 2242 accesses were registered during the time period of participation with a finishing rate of 9.32% thus yielding 209 filled questionnaires. Upon accessing the survey, participants were informed that their participation was voluntary, and responses were confidential and could not be traced back to individual participants. Participation was incentivized through the chance to participate in a raffle and a donation pledge for each completed questionnaire. The choice of distribution channels for the survey aimed at reaching a diverse audience with a predominantly academic background within the birth years of 1980 and

**Table 1:** Description of the levels of three organizational characteristics and resulting vignettes

Factor	Levels	Description	V1	V2	V3	V4
Size	Large	The company is large (about 20,000 employees)	x	x		
	Small	The company is small (about 500 employees)			x	x
Ownership	Non-Family	The company is owned by financial investors	x		x	
	Family	The company is owned and managed by a family		x		x
Location	Urban	The company is located in an urban area (inside a major city)		x	x	
	Rural	The company is located in a rural area (outside any major city)	x			x

2000 which is commonly referred to as Generation Y. This age range was chosen based on common definitions of Generation Y (eg. Cennamo and Gardner, 2008; Eisner, 2005), even though there is some debate on its correct delimitation (Luscombe et al., 2013).

Out of the initial 209 responses, 9 had to be excluded for falling out of the targeted age range (which was not implemented as an exclusion criterion), leading to a total of 200 valid responses. No incomplete responses were recorded since all fields were implemented as mandatory in the software used for implementing the online survey, Unipark QuestBack. The average birth year in the sample was  $A=1991.61$  ( $SD=3.11$ , range: 1980 to 1998) meaning that the average participant was between 26 and 27 years old at the time of participation. Gender was well balanced with 46% male ( $N=92$ ) and 54% female ( $N=108$ ) respondents. 75.5% of participants ( $N=151$ ) are German nationals with the remaining 24.5% ( $N=49$ ) split across 12 other nationalities among which Spanish ( $N=12$ ) was the largest group. Employment status was almost equally split between students/unemployed ( $N=104$ ) and employed/self-employed individuals ( $N=96$ ). The average work experience was  $A=3.40$  years ( $SD=2.87$ , range: 0 to 17).

### 5.3. Measures

All constructs were measured by assessing agreement with one statement per item on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Each construct was represented by three items adopted from literature. All items were positively coded and grouped in two blocks: the first assessed inferred employment attributes with statements such as “Such a company offers...” and the second captured the remaining variables with first-person statements such as “I find this a very attractive company”. The full questionnaire including introduction to the vignette experiment and all items is included in Appendix A.

Job security and advancement opportunities were measured with three out of the four items developed for each by Lievens et al. (2005) in their study of the Belgian military. One item was dropped from each construct based on an informal pre-study conducted with potential participants.

Compensation was measured using items from a study by Turban (2001) that had a similar target audience. Importantly, the items capture both, monetary and non-monetary aspects of compensation (also referred to as benefits).

Prestige was measured with three out of five items developed by Highhouse et al. (2003) based on previous work by Turban et al. (1998) and Highhouse et al. (1998).

Quality of life was measured with three self-constructed items capturing opportunities for social life proposed as an important location factor by Florida (2002) and operationalized in a similar way by Turban et al. (1998), cultural and leisure offering based on Glaeser et al. (2001) and the overall liking of a location similar to Bauer et al. (2001) (see the literature review on location for details).

Organizational attractiveness was assessed with three out of the five items developed by Bauer and Aiman-Smith (1996), and Aiman-Smith et al. (2001).

Direct experience was assessed using three self-developed items similar to those used by Trute and Loewen (1978). Overall, there were few studies directly measuring direct experience constructs since most studies about the influence of direct experience on attitude certainty manipulated the variable experimentally (eg. Wu and Shaffer, 1987).

Attitude certainty was measured with three out of the items used by Clarkson et al. (2008) based on previous work by Krosnick et al. (1993), Petty et al. (2002) and Bizer et al. (2006).

Job pursuit intentions were measured with two items adopted from Highhouse et al. (2003) and one item from Aiman-Smith et al. (2001).

#### 5.3.1. Control variables

A common critique of experimental designs is that high internal validity is achieved at the expense of external validity due to participant selection and the prevalence of student-dominated samples (Scandura and Williams, 2000). Several control variables was therefore included in the present study to be able to assess sample representativeness.

Age was included in the questionnaire both to identify the target group as well as to preclude the possibility of a correlation between age and any of the dependent variables.

Gender was in controlled for based on empirical results that suggest systematic differences in organizational and job preferences of men and women. For instance, women have seemed to place more importance on job characteristics such as pay or location than men according to previous studies (Chapman et al., 2005). See Konrad et al. (2000) for an extensive review of gender-specific differences in perceptions of organizational attractiveness.

**Table 2:** Descriptive statistics of participants in sample - frequencies and percentages

	Total N = 200	%
<b>Gender</b>		
Male	92	46.0
Female	108	54.0
<b>Year of birth</b>		
1980-1984	7	3.5
1985-1989	32	16.0
1990-1994	128	64.0
1995-1999	33	16.5
<b>Nationality</b>		
German	151	75.5
Other	49	24.5
<b>Highest education degree</b>		
Secondary school	25	12.5
Apprenticeship	1	0.5
Undergraduate	87	43.5
Graduate	82	41.0
Ph.D./Dr.	5	2.5
<b>Work experience years</b>		
0-2	96	48.0
2-5	74	37.0
5-10	23	11.5
>10	7	3.5
<b>Job search</b>		
Currently searching	85	42.5
Not searching	115	57.5
<b>Family firm background</b>		
Yes	68	34.0
No	132	66.0
<b>Rural origin town &lt; 100,000 inhabitants</b>		
Yes	103	51.5
No	97	48.5
<b>Rural residence town &lt; 100,000 inhabitants</b>		
Yes	36	18.0
No	164	82.0
<b>Relationship status</b>		
Single	98	49.0
In a relationship	90	45.0
Married/in a registered relationship	8	4.0
Married with children	4	2.0

Nationality was included as a control variable since previous studies indicate that there may be differences in perception of different kinds of organizations due to cultural orientation (eg. [Botero, 2014](#)).

Personal relationship status was controlled for since having a family and the stage in and were indeed shown to have an influence on residential preferences ([McAuley and Nutty, 1982](#)).

Family firm ownership was controlled for to account for the possibility that individuals whose families own businesses of their own might hold different and potentially more favorable opinions on such firms than others.

Furthermore, respondents were asked to indicate if they were originally from or currently resided in a town of less than 100,000 inhabitants to control for a possible influence of geographic location. The same threshold was used by

Moser et al. (2017) in a study conducted with German respondents.

#### 5.4. Analysis

##### 5.4.1. Dataset preprocessing

Gender was the only variable that was manually imputed in three cases due to ambiguous answers. Owing to the fractional factorial design, each respondent responded to the same four vignettes with a resulting total number of observations on the vignette level of 800. All vignette level variables were implemented fourfold, once for each vignette. Upon completion of the survey, the dataset was therefore disaggregated from respondent level to vignette level by adding dummy variables for size, ownership, and location representing the respective vignette configurations. Variables representing the 27 items per vignette were aggregated into one common variable per item. The resulting dataset used for further analysis therefore contained 3 dummy variables representing one vignette factor each, 27 scaled item variables (vignette level), 9 control variables and had a total of 800 entries, four for each respondent and one for each vignette.

##### 5.4.2. CFA

A confirmatory factor analysis (CFA) using structured equation modelling (SEM) was conducted in order to verify that the 3 items measured for each variable captured the respective constructs, i.e. the latent variables as intended. To this end, a base model with three items each loading on their respective construct, was simulated. Based on the results of the subsequent validity analysis, three further models were simulated in order to assess that their fit of the data was inferior to the intended model. Model fit was evaluated for all four models using measures and thresholds proposed by Hu and Bentler (1999) Common method bias (CMB) and more specifically the existence of a common latent factor (CLF) was recognized as a potential source of bias in my dataset (Podsakoff et al., 2003) but not explicitly tested for (see the section on limitations for details). All models were designed and simulated using IBM SPSS AMOS, a software for visual SEM. See Appendix B for illustrations of the respective models.

##### 5.4.3. Reliability and validity

Based on correlations and standardized regression weights obtained from the CFA, measures of reliability as well as convergent and discriminatory validity were computed and evaluated. Measures and thresholds were adopted from Hair et al. (2010).

##### 5.4.4. Hypothesis testing

Upon verifying that the measured items captured the intended constructs, mean scores were computed for each construct and used for subsequent hypothesis testing and additional analysis. Hypotheses predicting direct relations between vignette factors and dependent variables (H1, H2, H3) or between dependent variables (H6) were tested through

linear regression analysis using the ordinary least squares (OLS) method.

Hypotheses involving parallel (H4) or parallel-serial (H5) multiple mediation were tested using the multiple regression approach described by Hayes (2017). Hypothesis 7, which predicted a moderated relation, was tested using a hierarchical regression approach consisting of three linear regression models. Hypothesis testing was entirely carried out using IBM SPSS Version 24 in combination with the PROCESS macro (version 3.0) by Hayes (2017). In addition to the proposed hypotheses, three additional sets of relations were estimated using linear regression in IBM SPSS.

## 6. Results

### 6.1. CFA

My hypothesized measurement model consisted of 9 factors (advancement opportunities, job security, compensation, quality of life, organizational attractiveness, direct experience, attitude certainty, and job pursuit intentions) captured by three items each. A corresponding model was simulated and fit the data within the thresholds proposed by Hu and Bentler (1999).

Subsequent validity checks indicated a potential lack of discriminatory validity for attractiveness and intentions as well as job security and prestige. Therefore, three additional models, two combining one of the critical factor pairs each and one combining both pairs, were simulated. Both were significant at the  $p < 0.01$  level and fit the data sufficiently well but showed inferior model fit compared to the initial 9 factor model. Table 4 shows fit indicators for all simulated models.

Based on these results, I conclude that the 27 items included in my questionnaire captured the underlying 9 constructs as intended. No items were removed from their underlying constructs. Mean scores were then computed for each latent variable including all three items and used for subsequent hypothesis testing and additional analysis.

### 6.2. Reliability and validity

Initially, tau-equivalent reliability (i.e. Cronbach's alpha) and composite reliability (CR), of the measures used in my study were computed.

The results were above the commonly used thresholds (Hair et al., 2010, see Table 3) thus confirming their overall reliability. Subsequently average variance extracted (AVE) and maximum shared variance (MSV) were determined as basis for validity checks. While AVE was at or above the threshold of 0.5 for all constructs indicating sufficient convergent validity, a comparison of AVE and MSV and  $\sqrt{\text{AVE}}$  and inter-construct correlations pointed towards potential discriminant validity issues in my measurement model (Fornell and Larcker, 1981). Specifically, AVE was lower than MSV for organizational attractiveness and job pursuit intentions as well as job security and prestige. For the same two pairs of constructs, inter-construct correlation was larger





**Table 4:** CFA model fit

Note. All models were significant at the  $p < 0.01$  level.

No	Model	$\chi^2$	df	$\chi^2/df$	CFI	GF	AGFI	SRMR	RMSEA
1	9 factors	1,071.90	288	3.72	0.95	0.90	0.87	0.06	0.06
2	8 factors (attractiveness and intentions combined)	1,114.87	296	3.77	0.95	0.90	0.87	0.06	0.06
3	8 factors (prestige and job security combined)	1,294.81	296	4.37	0.94	0.89	0.85	0.07	0.07
4	7 factors (organizational attractiveness and intentions, prestige and job security combined)	1,336.23	303	4.41	0.93	0.88	0.85	0.07	0.07

than the square root of AVE. In order to verify that the respective six items still measured two distinct constructs as intended, three additional models combining each one and both of the construct pairs in question were simulated using the same methodology as the initial CFA. Since none of the three additional models resulted in a better fit to the data than the initial 9-factor model, sufficient discriminatory validity was assumed for the further analysis despite violation of the criteria. In the case of organizational attractiveness and job pursuit intentions the high correlation and resulting reduced discriminatory validity is furthermore warranted by theory (Fazio and Zanna, 1978a).

### 6.3. Hypothesis testing

Hypotheses 1, 2, and 3 predicted the relation between the three organizational characteristics size, ownership, and location, which were manipulated as vignette factors, and perceived levels of employment attributes (job security, advancement opportunities, compensation, prestige, and quality of life). All three hypotheses were tested by estimating an ordinary least square (OLS) regression model for each of the five employment attributes with size, ownership, and location as well as all control variables (gender, year of birth, nationality, work experience, job search status, personal status, family firm background, rural origin, rural residence) as independent variables. Two-tailed confidence intervals were estimated at the 95% and 99% percent level. All five resulting regression models were significant on the  $p < 0.01$  level.

Hypothesis 1 stated that small firm size is negatively related to perceptions of job security (H1a), advancement opportunities (H1b), compensation (H1c), and prestige (H1d). Supporting H1, job security ( $\beta = -0.27, p < 0.01$ ),  $R^2_{adj} = 0.24, F(12, 787) = 22.27, p < 0.01$ , advancement opportunities ( $\beta = -0.31, p < 0.01$ ),  $R^2_{adj} = 0.16, F(12, 787) = 13.39, p < 0.01$ , compensation ( $\beta = -0.42, p < 0.01$ ),  $R^2_{adj} = 0.20, F(12, 787) = 18.07, p < 0.01$ , and prestige ( $\beta = -0.24, p < 0.01$ ),  $R^2_{adj} = 0.19, F(12, 787) = 16.16, p < 0.01$ , were indeed negatively influenced by size. Hypotheses 1a, 1b, 1c, and 1d were thus supported at  $p < 0.01$  significance level. Although not predicted, size was also negatively related to quality of life ( $\beta = -0.05, p < 0.05$ ),  $R^2_{adj} = 0.59, F(12, 787) = 94.87, p < 0.01$ .

Hypothesis 2 covered the relationship between ownership and four of the employment attributes assessed for each vignette. It stated that family owned firms are perceived to offer more job security (H2a), less advancement opportunities (H2b), less compensation (H2c), and more prestige (H2d). The data showed strong support for H2a ( $\beta = 0.39, p < 0.01$ ),  $R^2_{adj} = 0.24, F(12, 787) = 22.27, p < 0.01$  and H2b ( $\beta = -0.15, p < 0.01$ ),  $R^2_{adj} = 0.16, F(12, 787) = 13.39, p < 0.01$ . Hypothesis 2c, however, had to be rejected since no significant influence of ownership on compensation was found ( $\beta = -0.02, p > 0.05$ ),  $R^2_{adj} = 0.20, F(12, 787) = 18.07, p < 0.01$ . The influence of (family) ownership on prestige was positive and highly significant as predicted ( $\beta = 0.30, p < 0.01$ ),  $R^2_{adj} = 0.19, F(12, 787) = 16.16, p < 0.01$ . Hypothesis 2d was therefore supported.

Hypothesis 3 predicted a negative effect of (rural) location on the perceived quality of life involved in working for a firm located there. Regression analysis indeed showed a strong negative relation between both variables ( $\beta = -0.77, p < 0.01$ ),  $R^2_{adj} = 0.59, F(12, 787) = 94.87, p < 0.01$  confirming H3. Even though no further hypotheses were proposed regarding location, it also had a significant influence on perceptions of job security ( $\beta = 0.08, p < 0.05$ ),  $R^2_{adj} = 0.24, F(12, 787) = 22.27, p < 0.01$  and highly significant influence on advancement opportunities ( $\beta = -0.17, p < 0.01$ ),  $R^2_{adj} = 0.16, F(12, 787) = 13.39, p < 0.01$ , compensation ( $\beta = -0.14, p < 0.01$ ),  $R^2_{adj} = 0.20, F(12, 787) = 18.07, p < 0.01$ , and prestige ( $\beta = -0.14, p < 0.01$ ),  $R^2_{adj} = 0.19, F(12, 787) = 16.16, p < 0.01$ .

It was predicted that size, ownership, and location influence organizational attractiveness through perceptions of job security, advancement opportunities, compensation, prestige, and quality of life. Hypothesis 4 stated that small size (H4a), family ownership (H4b), and rural location (H4c) each have an indirect and overall negative effect on organizational attractiveness. No predictions were made regarding the significance of individual indirect effects even though they were included in the mediation analysis and are reported in the following.

The hypothesized parallel multiple mediation effects were assessed using the regression approach implemented



in Model 4 of the PROCESS macro for SPSS by Hayes (2017) (see Appendix C for schematic diagrams of the models used). The effects were assumed to be present in my model whenever there was a significant overall indirect effect of the respective firm characteristic on organizational attractiveness. Three regression models were calculated with one of the organizational characteristics as independent variable (X), z-standardized values for the five inferred attributes as mediators (M), the remaining two characteristics and all control variables as covariates, and organizational attractiveness as dependent variable (Y). Two-tailed confidence intervals and standard errors were estimated using bootstrapping with 5000 samples each. Effects were assumed to be significant at the 95% or 99% level whenever zero was not included in the respective bootstrapped confidence intervals.

The total partially standardized indirect effect of (small) size on organizational attractiveness through all employment attributes was negative and highly significant ( $\beta = -0.39, p < 0.01$ ) while the remaining direct effect was not significant ( $\beta = 0.07, ns$ ). The influence of size on organizational attractiveness can thus be assumed to be fully mediated by inferred employment attributes as predicted by H4a. Out of the individual indirect effects, only the paths size  $\rightarrow$  advancement opportunities  $\rightarrow$  organizational attractiveness ( $\beta = -0.14, p < 0.01$ ), size  $\rightarrow$  prestige  $\rightarrow$  organizational attractiveness ( $\beta = -0.17, p < 0.01$ ), and size  $\rightarrow$  quality of life  $\rightarrow$  organizational attractiveness ( $\beta = -0.03, p < 0.05$ ) were significant. The insignificance of the indirect effects through job security and compensation despite their strong dependence on size was due to weak relations between these attributes and organizational attractiveness (see additional analyses for details).

Similar to size, family ownership was predicted by H4b to have an indirect overall negative effect on organizational attractiveness. The indirect effect of family ownership through all employment attributes was indeed highly significant but positive, contrary to my prediction ( $\beta = 0.19, p < 0.01$ ). Furthermore, the corresponding direct effect was also significant meaning that only (strong) partial mediation can be assumed. Out of the individual indirect effects, only the ones through advancement opportunities ( $\beta = -0.07, p < 0.01$ ) and prestige ( $\beta = 0.21, p < 0.01$ ) were highly significant, all others were insignificant. The strong positive effect of family ownership on perceptions of job security did not affect organizational attractiveness again due to the weak relation between the latter two variables. Hypothesis 4b was therefore rejected.

Location was the third firm characteristic assumed to influence perceived employment attributes. The resulting prediction for H4c was that rural location would affect organizational attractiveness negatively. The overall indirect effect was indeed highly significant and negative ( $\beta = -0.63, p < 0.01$ ) while the remaining direct effect was not significant ( $\beta = 0.02, ns$ ). Out of the individual indirect effects, however, not only the path location  $\rightarrow$  quality of life  $\rightarrow$  organizational attractiveness ( $\beta = -0.46, p < 0.01$ ) which could be expected following H3 but also location  $\rightarrow$  advancement op-

portunities  $\rightarrow$  organizational attractiveness ( $\beta = -0.07, p < 0.01$ ) and location  $\rightarrow$  prestige  $\rightarrow$  organizational attractiveness ( $\beta = -0.10, p < 0.01$ ) were highly significant. Overall, Hypothesis 3 was confirmed.

Theory indicated that there should be a strong relation between attitudes and intentions held by potential applicants toward organizations. Accordingly, Hypothesis 5 stated that size, ownership, and location's indirect effects through perceived employment attributes on organizational attractiveness should also affect potential applicants' intentions.

Hypotheses 5a-c consequently predicted indirect effects of organizational characteristics on intentions through parallel and serial multiple mediation of job security, advancement opportunities, compensation, prestige, and quality of life on the first stage and organizational attractiveness on the second stage.

Accordingly, I used PROCESS Model 80 (Hayes, 2017) with size, ownership, and location as independent variable (X), z-standardized values for the five inferred employment attributes and organizational attractiveness (the last being interpreted by the macro as second stage mediator) as mediators (M), the respective two remaining characteristics and all control variables as covariates, and intentions toward the company as dependent variable (Y) as inputs. Standard errors and 95% and 99% confidence intervals were again estimated using bootstrapping and the hypotheses accepted whenever the confidence interval for overall effects was entirely above or below zero. Indirect effects excluding organizational attractiveness (i.e. firm characteristic  $\rightarrow$  employment attribute  $\rightarrow$  intentions) were also estimated for all size, ownership, and location none of which were significant.

In summary, all mediated effects found for Hypothesis 4 could also be shown for Hypothesis 5 due to the strong relation between organizational attractiveness and intentions. Consequently, size was related to intentions fully mediated by advancement opportunities ( $\beta = -0.12, p < 0.01$ ), prestige ( $\beta = -0.14, p < 0.01$ ) and quality of life ( $\beta = -0.03, p < 0.05$ ) confirming H5a. Family ownership had an overall positive influence on job pursuit intentions through advancement opportunities ( $\beta = -0.05, p < 0.01$ ) and prestige ( $\beta = 0.17, p < 0.01$ ). Unlike for H4b, however, the remaining direct effect of ownership on intentions after subtraction of all indirect effects was no longer significant ( $\beta = -0.05, ns$ ). Despite the rejection of H5b due to the inverse direction of the measured effect, the relation between ownership and intentions can therefore be assumed to be fully mediated by employment attributes and organizational attractiveness. Lastly, (rural) location led to lower levels of intentions through perceived advancement opportunities ( $\beta = -0.06, p < 0.01$ ), prestige ( $\beta = -0.08, p < 0.01$ ), and quality of life ( $\beta = -0.38, p < 0.01$ ). H5c was therefore supported.

Hypothesis 6 stated that direct experience leads to increased levels of attitude certainty. It was tested with a linear regression model using attitude certainty as dependent and direct experience, all control variables and size, ownership, and location as independent variables. The model

showed a highly significant positive influence of direct experience on attitude certainty ( $\beta = 0.41, p < 0.01$ ),  $R^2_{adj} = 0.21, F(13, 786) = 16.80, p < 0.01$ . Hypothesis 6 was therefore supported.

The relation between organizational attractiveness and intentions was predicted to be moderated by attitude certainty (H7). In order to test this hypothesis, three linear regression models (OLS) with intentions as dependent variable were calculated using SPSS and PROCESS for model 3. The first model only included control variables and showed a low fit to the underlying data. In model 2, organizational attractiveness and attitude certainty were added as independent variables, leading to an increase of  $R^2$  from 0.02 to 0.76. In the third model, the interaction effect of organizational attractiveness was added. The interaction term was insignificant, and model fit even decreased compared to model 2. Consequently, a moderation effect could not be assumed to be present and Hypothesis 7 was rejected. See Table 6 for the results of the hierarchical regression analysis.

#### 6.4. Additional analyses

No hypotheses were formulated regarding the relation between employment attributes and organizational attractiveness. Nonetheless, an analysis of the influence and relative weight of job security, advancement opportunities, compensation, prestige, and quality of life allows for generalizable conclusions about the employment preferences of this study's target group. Therefore, an OLS regression model was simulated with organizational attractiveness as dependent and z-standardized values for all five employment attributes as well as all control variables as independent variables. Confidence intervals for regression coefficients were estimated at the 95% and 99% significance level.

The coefficients of the overall significant model ( $R^2_{adj} = 0.49, F(14, 785) = 55.06, p < 0.01$ ) showed that only four out of the five attributes had a significant positive influence on organizational attractiveness: job security ( $\beta = 0.08, p < 0.05$ ), advancement opportunities ( $\beta = 0.20, p < 0.01$ ), prestige ( $\beta = 0.37, p < 0.01$ ), and quality of life ( $\beta = 0.30, p < 0.01$ ).

Furthermore, I assessed the influence of organizational characteristics on direct experience and attitude certainty. Even though attitude certainty was not found to impact attitude-behavior consistency (here the relation between organizational attractiveness and intentions), the structure of attitudes held about certain firm types might still have relevant theoretical and practical implications.

To this end, linear regression models were estimated with direct experience and attitude certainty as dependent and size, ownership, and location plus all control variables as independent variables and confidence intervals at the 95% and 99% level. The only significant predictor of direct experience was rural location ( $\beta = -0.18, p < 0.05$ ),  $R^2_{adj} = 0.03, F(12, 787) = 3.28, p < 0.01$ . In the overall significant regression model for attitude certainty ( $R^2_{adj} = 0.04, F(12, 787) = 3.21, p < 0.01$ ), family ownership had

a highly significant positive ( $\beta = 0.17, p < 0.01$ ) and rural location a significant negative impact ( $\beta = -0.15, p < 0.05$ ).

## 7. Discussion

As discussed in the previous section, the organizational characteristics size, ownership, and location indeed influenced perceptions about employment attributes and resulting organizational attractiveness and job pursuit intentions significantly. While small size and rural location had negative effects on organizational attractiveness as expected, family ownership had an overall positive impact, contrary to my hypotheses and previous findings. Perceived levels of compensation and job security were clearly influenced by organizational characteristics; however, they did not have a strong impact on perceptions of organizational attractiveness and intentions thus rendering all mediated effects through compensation insignificant and reducing significance of mediated effects through job security.

While direct experience was indeed a significant predictor of attitude certainty, the assumed moderating role of attitude certainty could not be confirmed in the present study. Nonetheless, I found a significant negative relation between rural location and direct experience and highly significant relations between family ownership and attitude certainty (positive) and location (negative). All hypotheses and the empirical results obtained are summarized in Table 7.

### 7.1. Theoretical Implications

The present study contributes to the study of organizational attractiveness and the applicant perspective in the first stage of the recruiting process in several ways. From a theoretical perspective, the two-stage model of organizational attractiveness proposed by Ehrhart and Ziegert (2005) was supported. This was due to the fact that I found highly significant mediation effects between observed organizational characteristics and organizational attractiveness through inferred employment attributes. For two of the three organizational characteristics assessed in this study, mediation through perceptions of job security, advancement opportunities, compensation, prestige, and quality of life could even be assumed to be complete, since direct effects were insignificant. Confirming the findings of previous studies with similar methodology by Botero (2014) and Kahlert et al. (2017), my results therefore suggest that applicants do indeed infer employment attributes from observable organizational characteristics which in turn lead to perceptions of attraction toward an organization.

By integrating intentions toward the recruiting organization, however, my work goes beyond the theoretical contribution of the aforementioned two studies. Building upon the theory or reasoned behavior by Fishbein and Ajzen (1975) and previous applications in the recruitment context (Highhouse et al., 2003), it was proposed that potential applicants' intentions toward the recruiting organization depend on attitudes held toward the firm i.e. organizational attractiveness. My analysis indeed showed a strong relation between

**Table 6:** Hierarchical regression analysis of moderation effect

Note. Unstandardized coefficients (B) are reported.

	Model 1	Model 2	Model 3
Intercept	-18.12	-20.09	-20.65
Control Variables			
Gender	0.18*	0.03	0.03
Year of birth	0.01	0.01	0.01
Nationality	-0.02	-0.02	-0.02
Work experience	0.00	0.01	0.00
Job search status	0.03	-0.06	-0.05
Personal status	0.04	0.03	0.02
Family firm background	0.00	-0.01	-0.01
Rural origin	-0.01	0.01	0.01
Rural residence	0.21*	0.02	0.02
Independent Variables			
Organizational attractiveness		0.87**	0.91**
Attitude certainty		0.03	0.06
Moderator			
Organizational attractiveness x attitude certainty			-0.01
$R^2$	0.02	0.76	0.76
$\Delta R^2$		0.74	0.00
df 1	9	11	12
df 2	790	788	787
F	1.60	222.88	204.17

**Table 7:** Hypotheses and empirical resultsNotes. \* $p < 0.05$ . \*\* $p < 0.01$ .

(a) Effect was fully mediated by employment attributes.

(b) Effect was partially mediated by employment attributes.

(c) Effect direction was opposite to prediction.

No	Description	Result
H1a	Small firms are perceived to offer less job security	Confirmed **
H1b	Small firms are perceived to offer less compensation	Confirmed **
H1c	Small firms are perceived to offer less advancement opportunities	Confirmed **
H1d	Small firms are perceived to offer less prestige	Confirmed **
H2a	Family firms are perceived to offer more job security	Confirmed **
H2b	Family firms are perceived to offer less compensation	Rejected
H2c	Family firms are perceived to offer less advancement opportunities	Confirmed **
H2d	Family firms are perceived to offer more prestige	Confirmed **
H3	Rural firms are perceived to offer less quality of life	Confirmed **
H4a	Small firms are perceived to be overall less attractive	Confirmed ** (a)
H4b	Family firms are perceived to be overall less attractive	Rejected ** (b) (c)
H4c	Rural firms are perceived to be overall less attractive	Confirmed** (a)
H5a	Small firms cause less intentions to pursue employment	Confirmed** (a)
H5b	Family firms cause less intentions to pursue employment	Rejected ** (b)
H5c	Rural firms cause less intentions to pursue employment	Confirmed** (a)
H6	Direct experience leads to higher attitude certainty	Confirmed **
H7	Attitude certainty strengthens the relation between organizational attractiveness and intentions to pursue employment	Rejected

both variables and more importantly, fully mediated effects of all three organizational characteristics on intentions through employment attributes and organizational attractiveness. Direct effects or regression paths skipping one of these stages were not significant. In other words, the theoretical framework proposed here seems to offer a valid explanation of what lies between organizational characteristics observable to potential applicants and their intentions to further pursue a relationship with the organization. This theoretical extension is highly relevant, since the aim of organizations' activities on the first stage of the recruiting process ultimately is to get applicants to apply for employment (Barber, 1998), a behavior which is best approximated by corresponding intentions.

Regarding the role of firm size, this study was able to confirm previous findings indicating that potential applicants generally perceive small companies to offer less job security, advancement opportunities, compensation, and prestige (Botero, 2014) and are generally less attracted to such companies (Barber et al., 1999). Notably, only the effects through advancement opportunities and prestige had a highly significant influence on organizational attractiveness and intentions, indicating that job security and compensation are indeed assumed to be inferior in small companies but did not reduce potential applicants' attraction in our sample. These findings differ from results obtained by Botero (2014), who found highly significant effects of job security, compensation, and prestige on organizational attractiveness but only a moderate relation between advancement opportunities and organizational attractiveness. Possible explanations for these differences in results are the overall younger sample (M around 21 years compared to around 26 in this study), nationality (58% American, 42% Chinese vs. 75% German, 25% others) or different factor levels for size (50/500 vs. 500/20000).

The second firm characteristic assessed regarding its influence on perceived employment attributes and resulting attraction to the organization and intentions was ownership. Contrary to previous findings (Botero, 2014) and following my prediction, family ownership did have a significant influence on perceived job security, advancement opportunities, and prestige. Job security was assumed to be higher in family firms in line with empirical findings suggesting that such firms offer opportunities for long-term career building (Miller and Le Breton-Miller, 2003) and are reluctant to lay-off personnel in economic downturns (Block, 2010). Advancement opportunities were perceived to be negatively affected by family involvement, possibly due to commonly cited concerns about nepotism limiting non-family employees' career prospects (Chrisman et al., 2014). Interestingly, participants in the present study did not assume family firms to offer lower levels of compensation as was suggested by previous studies (eg. Carrasco-Hernandez and Sánchez-Marín, 2007).

Unlike hypothesized, the overall effect of family ownership on organizational attractiveness and intentions was positive. The strong positive influence of family ownership on prestige and in turn on organizational attractiveness over-

compensated the negative effect through advancement opportunities. This finding fits well with organizational identity theory, which suggests that family firms are particularly concerned with their reputation and prestige because "the strong mutual dependence between family and firm identities create incentives to ensure that the firm is seen in a favorable light by nonfamily stakeholders" (Zellweger et al., 2013, p. 3).

Location was the third firm characteristic whose influence on employment attributes, organizational attractiveness was assessed in this study. The first important contribution of my work regarding location was of theoretical nature. Previous studies had operationalized location in different and ambiguous ways thus reducing the generalizability of findings. Consequently, meta-studies aggregating these studies such as the ones by Chapman et al. (2005) or Uggerslev et al. (2012) provide little insight into whether or how location leads to organizational attractiveness. It was proposed here that similar to other organizational characteristics, geographic location does not affect perceptions of organizational attractiveness directly but rather through the assumed consequences arising from it for potential applicants. In other words, I suggested that observable characteristics of a firm's location such as being urban or rural lead to inferences about what it is like to live and work there which in turn affects organizational attractiveness. Fully mediated and highly significant effects of geographic location on organizational attractiveness and intentions supported this conceptualization.

While geographic location is a firm characteristic that is highly visible to potential applicants early in the recruiting process just like size or ownership, its consequences were assumed to be mainly outside the work environment. Some studies focused on the amount of commuting required given a firm's location (Lievens and Highhouse, 2003; Soulez and Guillot-Soulez, 2011) whereas others emphasized the implications that living in reasonable proximity to the firm has for employees' lifestyle.

Following the second aspect, I introduced quality of life as an employment attribute mainly related to the geographic location of an organization, which can be considered another important contribution of this study. The QOL construct, measured with items drawn from urbanism and previous recruitment literature showed high reliability and validity measures and was strongly predicted by the vignette factor geographic location as intended. Quality of life turned out to be the second strongest predictor of organizational attractiveness after prestige, clearly indicating that potential applicants do consider the overall impact that employment with an organization has on their lives.

An unpredicted yet noteworthy result regarding location is that rural location of firm did not only have a highly significant negative impact on quality of life but also led to lower perceived advancement opportunities and prestige (both effects being significant at the 99% level). Both effects had a highly significant influence on organizational attractiveness and intentions and in sum accounted for 27.56% of the total mediated effect of location on organizational attractive-

ness. A possible explanation for the impact of location on advancement opportunities could be that participants did not only consider possibilities for career development within the firm but also in other firms in their vicinity, assuming that rural locations offered smaller ecosystems of potential future employers. The effect on prestige might be rooted in the assumption that well-regarded firms concentrate in urban locations since firms in certain sectors “ascribe a great deal of emphasis to a well-known address, which supposedly adds to the credibility and esteem of an organization” (Fernie, 1977, p. 82).

Overall, the approach of separately manipulating the aforementioned three organizational characteristics allowed for estimation of their isolated effects as had been demonstrated by Botero (2014). With regard to the influence of individual employment attributes, this study confirms previous findings indicating that job security, advancement opportunities, and prestige predict organizational attractiveness (Cable and Turban, 2001; Lievens and Highhouse, 2003; Lievens et al., 2005). Contradicting previous contributions to the organizational attractiveness literature (Uggerslev et al., 2012), however, compensation had no significant influence on organizational attractiveness in our sample. This finding is particularly relevant, given the ongoing discussion literature on employment preferences of Generation Y, the population targeted in this study. While some studies emphasized the importance of compensation (eg. Qenani-Petrela et al., 2007), others found that “contrary to conventional stereotypes, economic benefits (including salary) appear to be less important in the end than symbolic ones” (Soulez and Guillot-Soulez, 2011, p. 52). A possible explanation for my finding was proposed by Boswell et al. (2003), who found that unlike other employment attributes, compensation was merely a factor leading to offer rejection, indicating that compensation might be regarded as a hygiene factor by potential applicants.

The predicted moderating role of attitude certainty in the relation between organizational attractiveness and intentions did not find support in my analyses. While direct experience did indeed lead to higher levels of attitude certainty, the interaction between organizational attractiveness and attitude certainty did not lead to higher attitude-behavior consistency. A possible explanation for the absence of such an effect lies in the operationalization of intentions. It included items such as “If such a company was at a job fair I would look for their booth”, whose related behaviors did not require a great deal of effort on behalf of potential applicants. Theory predicts that the amount of metacognitive reasoning depends on the cost and resulting importance of a decision (Petty and Brinol, 2014). Attitude certainty might therefore play a role in determining applicant behavior when the decision to pursue employment with an organization requires more effort such as participating in a lengthy assessment center.

An analysis of the relation between organizational characteristics, direct experience and attitude certainty unveiled significant and relevant effects. The negative relation between rural location and the level of direct experience that

participants indicated with respective firms is consistent with the fact that the vast majority resides in urban locations and is therefore likely to have gathered more work experience in urban firms. Attitude certainty, however, was positively related to family ownership and negatively related to urban location. These findings indicate that while potential applicants seem to be over proportionally certain of their opinions about family firms, rural location led to less confidently held attitudes. It can therefore be assumed that observable organizational characteristics do not only influence the valence but also metacognitive elements of potential applicants’ attitudes toward them. Given the strong empirical evidence for further consequences of attitude certainty beyond impact such as increased attitude durability and advocacy (Tormala and Rucker, 2018), it might indeed be a relevant factor for future recruitment research.

## 7.2. Practical implications

The overarching practical implication of the present study is that even in absence of a developed employer image, firms do not start out as clean slates in potential applicants’ minds. Whether actively communicated or individually acquired, information about salient characteristics such as size, ownership or location leads to multidimensional inferences which in turn affect attractiveness and intentions. Recruiting organizations should consider and address these initial perceptions throughout the recruitment process in order to maximize their ability to attract talent. Since possibilities to interact with potential applicants at early stages of the recruitment process are typically limited and costly, recruitment messages should focus on those employment attributes that actually lead to increased intentions.

Job seekers assume that small firms offer less job security, advancement opportunities, compensation, prestige, and even quality of life. Larger companies which might not be perceived as such, should therefore ensure that their size is visible to potential applicants at an early stage. Subsidiaries of larger groups of companies should emphasize their corporate affiliation thus signaling advancement opportunities in sister and parent companies. Consequently, small firms should refrain from openly communicating their size. Since potential applicants might still develop perceptions or acquire information about organization size, small firms could also address the individual prejudices toward them. A focus should be placed on those inferred employment attributes that negatively impacted organizational attractiveness, namely advancement opportunities, prestige, and quality of life. For instance, employee testimonials on their career progress or transparent promotion policies might defuse concerns regarding advancement opportunities. Measures such as participation in best employer surveys may serve as signals of prestige (Love and Singh, 2011). Perceptions of lower quality of life due to organization size only had a moderate influence on organizational attractiveness. Nonetheless, small firms in attractive places might benefit from emphasizing their location. Similarly, those offering



above-average compensation to their employees should address the assumed lower level of compensation, even though it had no significant influence on organizational attractiveness. Potential applicants' doubts regarding job security may be reduced by communicating solid financial performance and a commitment to long-term career opportunities.

My results suggest that family firms might benefit from actively communicating family ownership irrespective of their size or location. The positive effect of family ownership on attractiveness and intentions was due to higher prestige while advancement opportunities were perceived to be inferior. Prestige was not only positively affected by family ownership but also appeared to be the strongest individual predictor of organizational attractiveness and intentions. The concerns regarding advancement opportunities are potentially rooted in assumed nepotism (Ceja and Tàpies, 2009). Family firms with non-family management or restrictions regarding family member employment might hence benefit from openly communicating such policies. Furthermore, attitudes toward family firms were held with significantly more certainty in our sample, indicating that potential applicants are convinced of their positive views of such firms. This may translate into another benefit, since attitude certainty can be considered an antecedent of advocacy (Tormala and Rucker, 2018). It is therefore likely that current and future employees are prone to sharing their positive views of family firms, and that the latter may be well advised to encourage such behavior.

(Rural) location is a highly visible firm characteristic the source of attribute inferences that had by far the strongest (negative) influence on organizational attractiveness and intentions, mainly through perceived quality of life. The latter is the one factor about which firms have the most and the least control at the same time. On the one hand, the attractiveness of a place is determined by its broader economic situation, demographics, geographic features and the actions of political and administrative parties all of which are largely outside a firm's sphere of influence. Large firms may be able and willing to contribute to their communities as part of their corporate social responsibility efforts thus improving quality of life (Carroll, 1991). Nonetheless, it is unlikely that a firm could substantially change the living environment of their (future) employees. Therefore, when regarding its location as a given, there is little that a firm could do to change negative perceptions about the quality of life associated with it.

On the other hand, unlike on their size or ownership, firms can decide where to conduct their business. If an organization finds its ability to attract talent substantially impaired by its location, it may indeed be an option to create new jobs in a different place. There are recent examples of larger organizations moving their headquarters from rural to urban locations, citing recruitment as a major motivation (Paul, 2013). Furthermore, with emerging office concepts such as co-working spaces (Spinuzzi, 2012), firms may not even have to move their operations entirely or invest into own premises in a new location. Recent technological ad-

vances have led to new possibilities in mobile and distributed work (Yuan et al., 2010), enabling even smaller organizations to create employment where the talent is – or wants to go – in the future.

Another important practical implication of this study regarding location is that potential applicants seem to make inferences about what is like to work in a firm based on where it is located. Respondents in my sample expected moderately higher job security but significantly lower advancement opportunities, compensation, and prestige in rural companies. It is unclear how such presumptions come about. In any case, recruiting organizations should be aware of the inferences that potential applicants make about employment attributes based on location and address these in their recruiting communication.

Lastly, it should be noted that rural location led to significantly lower attitude certainty in our sample. This may have positive implications for rural firms, since low-certainty attitudes have shown to be more susceptible to persuasive attacks (Tormala and Rucker, 2018). In other words, theory suggests that even though potential applicants seem to have negative views of rural firms, they may indeed be convinced otherwise.

### 7.3. Limitations

Participants in my study were self-selected and were informed about its content prior to participation. It is therefore possible that the sample is biased towards particularly career-oriented individuals who might be more inclined to participate in research on employment preferences. As proposed by Höllig et al. (2018), future studies might consider choosing an experimental setting in which participants do not know the topic of research beforehand.

Just as Barber and Roehling noted regarding the design they used to study the role of attribute inferences, all four companies in the present research were fictitious. This choice was made to facilitate study of inferences; by using fictitious companies, we could unambiguously conclude that statements about unobserved attributes were the result of inferences rather than the result of prior knowledge of the companies. (Barber and Roehling, 1993, p. 855)

A potential limitation of this methodology, however, is that some inferences may only occur when exposing participants to real companies. The role that familiarity and reputation of individual organizations play for organizational attractiveness should therefore be assessed with alternative experimental designs.

Regarding the choice of employment attributes and associated items, I largely relied upon previous literature and did not perform a qualitative pre-study or exploratory factor analysis. This can be considered as a limitation of this study, given that potential applicants might in fact make inferences about additional or different employment attributes when evaluating the attractiveness of firms.

With regard to the analysis of the data obtained through my experiment, there are three methodological limitations

which should be addressed in future studies: Firstly, I did not test my data for common method bias (CMB) and more specifically the existence of a common latent factor (CLF). As suggested by Podsakoff et al. (2003), CMB is present when data is collected through only one source (such as the survey used in this study), which introduces a source of variance common to all responses captured.

Secondly, I did not distinguish vignette-level from respondent-level effects as recommended by Atzmüller and Steiner (2010) for vignette studies such as the present one. Due to the disaggregation of data from respondent-level to vignette-level, part of the variance between observations is linked to respondents, since construct variables were captured for each vignette while control variables were captured per respondent. A suitable approach for analysis of such data structures is multi-level analysis or hierarchical linear modelling (Raudenbush and Bryk, 2002). In my research design, the effect of this simplification is limited, however, since respondent-level variables were only used as control variables.

Lastly, only main effects of the three organizational characteristics were evaluated. Effects resulting from the manipulation of individual vignette factors were therefore confounded with effects stemming from two-way and three-way combinations of characteristics. Multivariate analysis of variance (MANOVA) can be used to distinguish main and interaction effects.

#### 7.4. Further Research

The results and limitations of the present study suggest a variety of avenues for further research. The two-stage conceptualization of location proposed here, proved to be useful in explaining the influence of a firm's geographic location on organizational attractiveness and intentions. Nonetheless, a number of questions remain and should be addressed in future studies: the distinction of urban and rural locations is rather general and most actual locations will likely be in between these two extremes. Rather than using discrete location categories, it would therefore be interesting to assess individual features of locations regarding their impact on inferred employment attributes and organizational attractiveness. The second commonly investigated implication of firm location for employees, amount of commuting, should be operationalized as another employment attribute inferred from geographic location and compared to quality of life and other attributes.

Importantly, the apparent inference of employment-related attributes based on geographic location deserves further examination. It is conceivable that for some organizational characteristics such as geographic location, an additional stage of inferences mediates the relation between characteristics and organizational attractiveness. For instance, potential applicants might draw conclusions about the kind of co-workers that they will find in a firm based on its location. These might then lead to inferences about employment attributes such as advancement opportunities which in turn affect organizational attractiveness. Future

research should also assess which additional employment attributes apart from the ones surveyed here are inferred from geographic location.

At the level of employment attributes, future research should assess the strength of employment images formed on the basis of inferences and compare it to images resulting from active communication regarding individual employment attributes. It would, for instance, be crucial to understand whether attitudes formed on the basis of stereotypical categorization are persistent to attack or if potential applicants can easily be convinced by firms that diverge from their category. Since though this study did not come to clear conclusions in this regard, further research should be conducted to gain an understanding of the role of metacognitive aspects in the first phase of the recruitment process.

Regarding the kind of attributes, the present study was limited to a set of instrumental attributes. Nonetheless, previous studies have shown that symbolic attributes account "for incremental variance over job and employment attributes in predicting an organization's perceived attractiveness as an employer" (Lievens and Highhouse, 2003, p. 75). Future studies should therefore evaluate if and how frameworks of symbolic attributes such as the ones proposed by Slaughter et al. (2004) or Lievens et al. (2005) are impacted by organizational characteristics.

Furthermore, future studies should scrutinize the apparent irrelevance of compensation as a predictor of organizational attractiveness. It should be assessed, whether Generation Y jobseekers indeed do not care about compensation or if they simply expect to be payed according to their expectations thus attributing little importance to compensation.

Another relevant avenue for further research would be the addition of more organizational characteristics to the framework proposed here. For instance, "[f]or organizations that do not have a clear image or reputation, [I] expect the branch of industry in which these organizations operate to be the category stereotype and therefore to influence jobseekers' perceptions" (De Goede et al., 2011, p. 53).

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