ATTRACTING JOB APPLICANTS TO ENTREPRENEURIAL FIRMS:

THE INFLUENCE OF ENTREPRENEURIAL SIGNALS AND ROLE CONGRUITIES

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Für all ihre Unterstützung und ihr Vertrauen in mich danke ich aus tiefstem Herzen

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ABSTRACT

Attracting job applicants is a challenging task for entrepreneurial firms. Research has only begun to study factors predicting entrepreneurial firm recruitment success. Still, a large knowledge gap exists on the topic of entrepreneurial firm recruitment. This cumulative dissertation seeks to address this void. It includes five research papers (chapters 3 to 7) that theoretically and empirically contribute to existing literature by analyzing job applicants' perceptions of entrepreneurial signals, and by exploring the influence of role (in)congruities which might indicate currently overlooked challenges and opportunities for recruiting entrepreneurs.

After a summary of the overall findings in chapter 1, the introduction section (chapter 2) provides a brief summary of the individual research papers as well as their main findings and contributions. The five research papers address following research questions: Does organizational attractiveness increase, via perceived authenticity, when entrepreneurs show entrepreneurial leadership? Is this effect particularly pertinent when entrepreneurs fit the demographic stereotype – being a young man? (research paper 1). Does signaling entrepreneurial orientation influence applicants' attraction to a small firm, and does CEO age moderate this relationship? (research paper 2). Does job candidates' perceptions of gender and occupational role incongruities (e.g., women leading start-ups) lead to differences in recruiting outcomes for start-ups using active recruitment strategies via social media? (research paper 3). What do potential employees think how a typical entrepreneurial leader behaves and looks like? (research paper 4). Does the intersection of social categories such as gender, ethnicity, and occupational roles influence human resource acquisition of new ventures? (research paper 5).

This dissertation provides new insights and perspectives related to entrepreneurial firm recruitment, and primarily contributes to research at the intersection of entrepreneurship, leadership, and recruitment.

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SUMMARY

"At a time of unparalleled technological development, it is the human resources that paradoxically spell success or failure for all firms, and especially entrepreneurial ones" (Katz, Aldrich, Welbourne, & Williams, 2000; p. 7).

Attracting job applicants is a challenging task for entrepreneurial firms as they usually face challenges such as limited financial resources or familiarity, known as the constraints stemming from liabilities of smallness and newness (Cardon & Stevens, 2004). Research has only begun to study factors of human resource acquisition in entrepreneurial firms, and job applicants' perspectives in this specific recruitment context (Tumasjan, Strobel, & Welpe, 2011; Moser, Tumasjan, & Welpe, 2017). Still, a large knowledge gap exists on the topic of small and new firm recruitment (Greer, Carr, & Hipp, 2016; Nyström, 2019). This cumulative dissertation seeks to theoretically and empirically contribute to literature by analyzing job applicants' perceptions of entrepreneurial signals, and by exploring the influence of role (in)congruities which might indicate currently overlooked challenges and opportunities for recruiting entrepreneurs.

In summary, this cumulative dissertation suggests that entrepreneurial firms might (un)intentionally send signals on both organizational-level (e.g., firms' entrepreneurial orientation) and individual-level (e.g., recruiters characteristics such as job role status, demographics, or entrepreneurs' leadership behavior), and thereby impact recruiting outcomes such as organizational attractiveness or applicants' job pursuit intentions. The overall findings suggest that signaling congruent information that fit the firm context and stereotype-based expectations of job applicants can enhance recruiting outcomes of entrepreneurial firms. These findings provide new insights and perspectives related to entrepreneurial firm recruitment, and primarily seek to contribute to research at the intersection of entrepreneurship, leadership, and recruitment.

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INTRODUCTION

"In entrepreneurial firms, the liabilities of both smallness and newness are likely to manifest themselves in how the firm addresses human resource issues [...] the distinct liabilities presented in size and age make the study of human resources in entrepreneurial firms different than the study of them in large and established firms" (Cardon & Stevens, 2004; p. 297-298).

The recruitment processes of entrepreneurial firms – which refer to small firms and new ventures in this cumulative dissertation – are unique such that empirical evidence from recruitment in large and established firms cannot be adopted to the entrepreneurial firm context without adaptation (Leung, Zhang, Wong, & Foo, 2006). When analyzing factors that influence human resource acquisition in entrepreneurial firms, it is important to take into account the specifics of the entrepreneurial firm context (Katz, Aldrich, Welbourne, & Williams, 2000). For example, due to the lack of financial resources an engagement in costly recruitment practices are scarce in entrepreneurial firms (Cardon & Stevens, 2004). As a result, entrepreneurs usually act as recruiters, tap their personal networks in the start-up phase and in the growth phase their business networks to attract human resources (Leung et al., 2006). However, entrepreneurs also need to reach potential job applicants without existing ties to them, in order to attract the human resources crucial for the growth of their organization (Rauch, Frese, & Utsch, 2005; Williamson, Cable, & Aldrich, 2002). The latter, however, is particularly tough for entrepreneurial firms, because they face particular challenges such as the lack of familiarity among potential job applicants (Tumasjan, Strobel, & Welpe, 2011).

The constraints stemming from the liabilities of smallness and newness lead to an information-gap between the recruiting entrepreneurial firm and the potential job applicant (Williamson, 2000). Applicants use information signaled by the entrepreneurial firm (organizational level) or the person who is recruiting (individual level) to make inferences about unobservable firm characteristics, such as the work climate (Celani & Singh, 2011). For

example, signaling a leadership behavior (e.g., entrepreneurial leadership style, Renko, Tarabishy, Carsrud, & Brännback, 2015) or an organizational strategic orientation (e.g., entrepreneurial orientation, Covin & Wales, 2019), which aims to empower innovative behavior among employees, might job applicants process as information about unobservable firm qualities, such as the work climate. Thus, important factors such as leadership and organizational strategies which significantly impact the work climate in entrepreneurial firms (Kang, Matusik, Kim, & Phillips, 2016), in turn, can influence recruiting outcomes (Moser, Tumasjan, & Welpe, 2017). However, factors predicting entrepreneurial firm recruitment success are still underexplored (Greer, Carr, & Hipp, 2016; Nyström, 2019). *This dissertation seeks to address this void by analyzing job applicants' perceptions of entrepreneurial signals sent by entrepreneurial firms at both the organizational and the individual level.*

Furthermore, this dissertation proposes that job applicants' perceptions of the recruiting person – who could be the entrepreneur him-/herself, an employed human resources professional, or a team member with specific expertise – play a central role in entrepreneurial firm recruitment. Particularly in entrepreneurial firms, employees and entrepreneurs work closely together (Jensen & Luthans, 2006). Thus, an entrepreneurial firm recruiter is likely to be perceived as more knowledgeable and trustworthy in signaling information about the job and the work climate, than a formal recruiter of a larger company (Larsen & Phillips, 2002). Particularly the early stages of the recruitment process (Uggerslev, Fassina, & Kraichy, 2012), job applicants put much attention on their perceptions of the recruiting person, which, in turn, influence recruiting outcomes (Wilhelmy, Kleinmann, König, Melchers, & Truxillo, 2016). However, it is likely that these perceptions are more influential in the entrepreneurial firm recruitment context, because the recruiting person might be perceived as a particular reliable information source (Theurer, Tumasjan, Welpe, & Lievens, 2018).

Perhaps more importantly, job applicants' perceptions of the recruiting person are prone to bias because these perceptions are connected to stereotype-based expectations (Koenig & Eagly, 2019), especially if the entrepreneurial firm recruiter is the entrepreneur him-/herself. For instance, behaviors of entrepreneurs are believed to overlap more with stereotypically male traits than stereotypically feminine traits (Gupta, Wieland, & Turban, 2019), leading to the "think entrepreneur, think male" phenomenon (Jennings & Brush, 2013); or beliefs that only Caucasian (men) have relevant abilities for higher ranked positions in an entrepreneurial firm, such as CEO roles, might form stereotype-based expectations (Jung, Vissa, & Pich, 2017). Expectations about what is "typical", in turn, can influence other entrepreneurial processes such as the acquisition of entrepreneurship-relevant resources (Tonoyan, Strohmeyer, & Jennings, 2019). For example, research indicates that women might be at a disadvantage when they send entrepreneurial signals to resource providers (Malmström, Voitkane, Johansson, & Wincent, 2020). Thus, a better understanding of how stereotype-based expectations of job applicants, who provide human resources, might influence recruiting outcomes of entrepreneurial firms is needed. *By pointing out the connection of role congruities with leadership, age, gender, and ethnicity stereotypes this dissertation seeks to explore currently overlooked challenges and opportunities for recruiting entrepreneurs.*

In sum, this cumulative dissertation proposes that entrepreneurial firms might (un)intentionally send signals on both organizational-level (e.g., firms' entrepreneurial orientation) and individual-level (e.g., recruiters characteristics such as job role status, demographics, or entrepreneurs' leadership behavior), and thereby impact recruiting outcomes such as organizational attractiveness or applicants' job pursuit intentions. The overall findings suggest that signaling congruent information that fit the firm context and stereotype-based expectations of job applicants can enhance recruiting outcomes. For example, recruiting outcomes might be enhanced if recruiting entrepreneurs show an entrepreneurial leadership

style and are young (men), which both fit the new venture context; or if their job status within the entrepreneurial firm matches their demographics (e.g., being a (male) Caucasian CEO).

The new perspectives and insights of this dissertation mainly address the still scant but needed knowledge on job applicant attraction to entrepreneurial firms (Moser et al., 2017; Nyström, 2019) and aims to provide a better understanding of how entrepreneurial signals and role (in)congruities influence entrepreneurial firm recruitment efforts by analyzing perceptions of job applicants. In doing so, this cumulative dissertation theoretically and empirically contributes to the entrepreneurial firm recruitment literature and beyond in several ways. The main contribution of this dissertation, however, lies in its aim to pave the ground for more research at the intersection of entrepreneurship, leadership, and recruitment. In line with this aim, this dissertation contains five research papers, that are included in Chapters 3 to 7. The following paragraphs provide a brief summary of the individual research papers and their main findings and contributions.

Research paper 1, 'How Entrepreneur's Leadership Behavior and Demographics Shape Applicant Attraction to New Ventures: The Role of Stereotypes' (co-authored by Dr. Syliva Hubner and Prof. Dr. Matthias Baum), examines in a vignette experiment with potential job applicants whether organizational attractiveness increases when entrepreneurs show an entrepreneurial leadership behavior, and if this effect is particularly pertinent when entrepreneurs fit the demographic stereotype – being a young man. Results demonstrate a positive effect of showing entrepreneurial leadership on organizational attractiveness via authenticity perceptions, which was stronger if the entrepreneur was young, while entrepreneur's gender did not moderate the relationship. The first research paper expands literature by introducing the importance of considering context congruity in research at the intersection of entrepreneurship and recruitment, and by emphasizing that an entrepreneurial

leadership style can be an attraction signal in new venture recruitment efforts, particularly for young entrepreneurs.

Research paper 2, *'Small Firm Entrepreneurial Orientation Signaling and Job Applicant Attraction'* (co-authored by Prof. Dr. Matthias Baum), investigates whether signaling entrepreneurial orientation (EO) influences applicant's attraction to a small firm, and whether small firms' CEO age moderates this relationship, because entrepreneurial behavior is typically seen as a young people's game. The hypotheses were tested in a conjoint experiment with potential job applicants. Results indicate support for the predicted main effects of EO subdimensions (firm's behavior towards innovativeness and proactiveness, and firm's attitude towards risk) on applicants' attraction. However, interaction effects with CEO age, which was manipulated with faces of men in different age groups, remained largely non-significant. The second research paper contributes to existing literature by offering a broader perspective on EO, as it suggests that EO is not only directly related to performance but might also contribute to organizational processes such as recruitment – a predecessor of small firm's performance.

Research paper 3, *'Facing the Start-Up Recruiter: Role Incongruities and Job Candidate Attraction'* (co-authored by Prof. Dr. Matthias Baum), analyzes whether job candidates' perceptions of gender and occupational role incongruities (e.g., women leading start-ups) lead to differences in recruiting outcomes for start-ups using active recruitment strategies via social media. The hypotheses were tested in a vignette experiment. Results indicate that a incongruity between the start-up recruiter's role, which was either the start-up CEO or an employed HR manager within the start-up, and recruiter's gender led to a decrease in job pursuit intentions for male job candidates, but not female job candidates. The third research paper contributes to current knowledge by offering new insights for recruiting entrepreneurs, because it suggests that gender role and occupational role incongruities lead to

different recruiting outcomes for woman- and man-leaded start-ups, when attracting male employees.

Research paper 4, *'The Entrepreneurial Leader Prototype from A Potential Employees' Perspective'* (co-authored by Dr. Syliva Hubner and Prof. Dr. Matthias Baum), explores in a qualitative interview study with potential start-up employees their mental image of a 'typical' entrepreneurial leader, and suggests a cognitive prototype which includes leadership behaviors and appearance that fit the entrepreneurial context. Based on the interview data, three different categories of the entrepreneurial leader prototype were identified (i.e., the 'hustler', the 'hipster', and the 'hacker'), while the overall 'typical' image is a young man with an entrepreneurial leadership style. The fourth research paper provides a more nuanced understanding of potential employees' expectations of their prospective leaders' behavior, as we show how these behaviors are linked to the entrepreneurial leadership style; and are connected to age and gender stereotypes. These insights are important for entrepreneurial leaders because meeting expectations might increase their legitimacy among potential employees.

Research paper 5, *'Stereotype Effects in Human Resource Acquisition of New Ventures: An Intersectional Approach'* (co-authored by Dr. Syliva Hubner, Prof. Dr. Maral Darouei and Prof. Dr. Matthias Baum), tests a conceptual model that addresses the lack of research at the intersection of social categories such as gender, ethnicity, and occupational roles (e.g., the Indian female startup leader), which has led to a simplistic and incomplete description of the effects of stereotyping in entrepreneurship. Findings of Study 1, a within-subject design, largely demonstrates the commonly expected gender and ethnicity stereotypes in certain job roles related to entrepreneurship (e.g., leader or tech-expert), while results of Study 2, a vignette experiment in a new venture recruitment context, suggests a communality-bonus for women, especially for Indian women, in the role of a new venture leader. The fifth research paper

exceeds knowledge in entrepreneurship research by demonstrating that ethnic stereotypes can overwrite gender stereotypes, and that the intersect of stereotypes can create power relations that depend on the context in which leadership is enacted.

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HOW ENTREPRENEUR'S LEADERSHIP BEHAVIOR AND DEMOGRAPHICS SHAPE APPLICANT ATTRACTION TO NEW VENTURES: THE ROLE OF STEREOTYPES

ABSTRACT

Given the challenges of new ventures to attract applicants, this paper focuses on the influence of applicants' perceptions of entrepreneurs for new venture recruitment. We take into account the particularities of the new venture context and investigate how entrepreneurs' stereotype congruity influences the attractiveness of their new venture as an employer. Based on role congruity theory, we propose that organizational attractiveness increases when entrepreneurs show entrepreneurial leadership because entrepreneurs who show entrepreneurial leadership are likely to fit applicants' expectations and therefore to be perceived authentic. Moreover, we propose this effect is particularly pertinent when entrepreneurs fit the demographic stereotype – being a young man. In our experiment (n=503), we found the positive effect of showing entrepreneurial leadership on organizational attractiveness via authenticity perceptions, and this effect was stronger if the entrepreneur was young – the entrepreneur's gender did not moderate the relationship. We discuss the implications of our study for research and practice in recruitment and entrepreneurship.

Research Paper 1 is co-authored by Dr. Sylvia Hubner and Prof. Dr. Matthias Baum

INTRODUCTION

Being perceived as an attractive employer is particularly important for growing new ventures (Moser, Tumasjan & Welpe, 2017; Newman, Mayson, Teicher, & Barrett, 2018a). They are dependent on human capital and simultaneously face comparative recruitment disadvantages, due to lower wages, job security and reputation (Tumasjan, Strobel, & Welpe, 2011). We argue that one central asset for attracting applicants to new ventures are behaviors and characteristics of entrepreneurs themselves. Entrepreneurs, particularly their leadership style, strongly influence the new ventures' organization, and its actions and philosophy (Bellou, 2011; Kang, Solomon, & Choi, 2015; Newman, Neesham, Manville, & Tse, 2018b). Entrepreneurs are usually involved in all human resources processes (Cardon & Stevens, 2004), they often act as recruiters themselves and are direct leaders of newly hired employees. Previous research showed recruiter behavior and characteristics, and applicants' perceptions of those, have a strong influence on applicant attraction (e.g., Chapman, Uggerslev, Carroll, Piasentin, & Jones, 2005). However, when and how entrepreneurs' behaviors and characteristics attract applicants to new ventures remains unclear so far.

Given the challenges of new ventures to attract applicants, this paper focuses on applicants' perceptions of the recruiting entrepreneur while taking into account the particularities of the new venture recruitment process. We suggest stereotype-congruency helps in acquiring human capital, which is of paramount importance for new ventures' success (Cardon, 2008; Rauch, Frese, & Utsch, 2005). Based on role congruity theory (Eagly & Karau, 2002), we assume that applicants are more likely to be attracted to a new venture when the entrepreneur fits prevailing expectations (Bellou, 2011). To test this assumption, we apply an experimental vignette between-subject design. This experiment investigates whether entrepreneur's fit with the stereotype, which comprises expected leadership behaviors and

demographics, shapes applicants' perceptions of entrepreneurs' authenticity and in turn the firms' organizational attractiveness.

Focusing on the effects of entrepreneurs' leadership behavior and its interplay with demographic stereotypes in the new venture recruitment process, we contribute to existing literature in two ways. First, we introduce the importance of considering context congruity in research at the intersection of entrepreneurship and recruitment (Greer, Carr, & Hipp, 2016; Gupta, Wieland, & Turban, 2019; Leung, 2003). Previous studies have analyzed influences of new venture specific job characteristics (Tumasjan et al., 2011), background information about entrepreneurs and employees (Backes-Gellner & Werner, 2007; Coad, Nielsen, & Timmermans, 2017), and their behaviors (Moser et al., 2017; Reis, Fernandes, & Nakata, 2018); but they didn't consider the context-specificity of applicants' perceptions of entrepreneurs' leadership behavior and characteristics in recruitment (Cardon & Stevens, 2004; Li, 2006; Zaech & Baldegger, 2017). We develop and test a model explaining how a leadership style that is congruent with the new venture context can benefit entrepreneurs in attracting applicants. By emphasizing that an entrepreneurial leadership style can be an attraction signal in new venture recruitment efforts, we advance the debate in human resource management (HRM) about determinants of employer attractiveness in general (Baum & Kabst, 2013) and in new ventures in specific (Moser et al., 2017).

In a parallel vein, our study contributes to the discourse on congruity-perceptions in recruitment. Previous research has focused on the firm-level, and investigated e.g. image-congruity (e.g. Baum, Schäfer, & Kabst, 2016), but left congruity on individual-level largely untouched. The individual level is important because recruiters' individual behaviors, such as their impression management, have been shown to determine recruitment success, for example via authenticity perceptions (Wilhelmy, Kleinmann, König, Melchers, & Truxillo, 2016). When entrepreneurs behave as expected, i.e. show an entrepreneurial leadership style (Renko,

Tarabishy, Carsrud, & Brännback, 2015), they are likely to be perceived more authentic because fitting expectations is likely to make them appear to act in congruence with their personal values and beliefs (Cha et al., 2019; Eagly, 2005). Authenticity of entrepreneurs can then serve as signal for credibility and a positive work climate (Baum & Kabst, 2013; Held & Bader, 2018; Wilhelmy et al., 2016), which is, due to high information asymmetry, especially important in new venture recruitment (Jensen & Luthans, 2006). By emphasizing the interplay between entrepreneurs' leadership and demographics, and by showing that perceived authenticity acts as a mediator in the attraction process, we provide an enhanced understanding of the influence of congruence in employee recruitment.

Second, our findings show under which conditions an entrepreneurial leadership style attracts applicants to new ventures. We propose showing an entrepreneurial leadership style is not equally beneficial for all entrepreneurs. Its impact is contingent on whether the characteristics of the entrepreneur fits applicants' demographic-based expectations. In line with research on how stereotypical beliefs of venture capitalists affect entrepreneurs' ability to acquire financial resources (e.g., Geiger, 2020; Malmström, Voitkane, Johansson, & Wincent, 2020), we argue that the fit of entrepreneurs with applicants' stereotype-based expectations, i.e. expecting a young men (Yang, Kher, & Newbert, 2020; Zhao, O'Connor, Wu, & Lumpkin, 2020), might affect entrepreneurs' ability to acquire human resources.

Due to the essential role of human resources in the new venture growth process, research at the intersection of literatures on entrepreneurship, recruitment, and stereotypes is relevant; but this intersection is still underexplored (Amberg & McGaughey, 2019; Gupta et al., 2019). We transfer role congruity theory to the new venture recruitment context and thereby advance the knowledge about recruitment in new ventures. We theorize and test in what way entrepreneurs' demographics qualify the effects of showing entrepreneurial leadership behavior during recruitment. In doing so, we theoretically and empirically contribute to the HRM

literature and beyond by providing an enhanced understanding of the role of stereotypes of entrepreneurial leaders for the attractiveness of new ventures as employers.

THEORETICAL BACKGROUND

Recruitment in New Ventures

The recruitment processes of new ventures are unique such that empirical evidence from recruitment in large firms, and also established small firms, cannot be adopted to the new venture context without adaptation (Leung, Zhang, Wong, & Foo, 2006; Nyström, 2019). When analyzing factors that influence new ventures' potential to attract applicants, it is necessary to take into account the particularities of the new venture context (Leung et al., 2006; Newman et al., 2018a). Research at the intersection of entrepreneurship and job decisions, however, has so far only focused on the decision to become an entrepreneur, and has largely ignored the decision of applicants of whether or not they want to become employed by a new venture (Nyström, 2019). Accordingly, our understanding of recruitment in new ventures, and particularly the applicant's perspective, remains limited (Moser et al., 2017; Tumasjan, Kunze, Bruch, & Welpe, 2020). This is problematic because the war for talents is particularly tough for new ventures. New ventures face particular challenges such as limited financial resources or high probabilities of exit, known as the constraints stemming from liabilities of newness and smallness (Choi & Shepherd, 2005; Williamson, 2000). Therefore, new ventures also face several disadvantages for attracting employees. For example, jobs in new ventures are usually characterized by high job uncertainty and high working hours, which might make working for a new venture a less attractive career option from an applicant's perspective. Nevertheless, Tumasjan et al. (2011) also identified advantages of working in new ventures, e.g. the communal team climate or early assignments of responsibilities, which can increase employer attractiveness.

As new ventures do not yet have a brand as an employer, there is particularly high information asymmetry (Tumasjan et al., 2011). Applicants, like other resource providers (Navis & Glynn, 2011), might form their evaluation of the new venture based on their perception of the entrepreneur (Backes-Gellner & Werner, 2007; Moser et al., 2017). Recruitment literature suggests that, in recruitment for larger established firms, applicants' perceptions about recruiters' behavior and characteristics are important factors influencing recruitment outcomes (e.g. Chapman et al., 2005; Lievens & Slaughter, 2016; Wilhelmy et al., 2016; Wilhelmy, Kleinmann, Melchers, & Lievens, 2019). In new venture recruitment, perceptions about entrepreneurs might be even more important because entrepreneurs usually take on the role of the recruiters as well as future leaders (in case of a hire) for their applicants. Entrepreneurs are likely to be perceived knowledgeable and trustworthy in signaling information about jobs in the new venture, more than any formal recruiters (Cable & Turban, 2001; Larsen & Phillips, 2002; Saks & Uggerslev, 2010; Theurer, Tumasjan, Welpe, & Lievens, 2018), who also are unlikely to be available in a new venture. Therefore, applicants' perceptions of the attractiveness of a new venture are likely to be mainly influenced by their perceptions of the entrepreneur, who is recruiting.

For new ventures, the organizational culture has been identified to be among the most important employer attributes (Tumasjan et al., 2011). Signals about the organizational culture are, in new ventures, also closely related to the person of the entrepreneur because entrepreneurs usually lead the new ventures' employees, and thereby form and influence the organizational culture in their firm (Cardon, 2008; Hubner & Baum, 2018; Zaech & Baldegger, 2017). Such information about the work climate can only be authentically signaled by current employees or entrepreneurs themselves (Berger & Kuckertz, 2017). In line with this argument, Backes-Gellner and Werner (2007) as well as Moser et al. (2017) highlight the importance of information about the entrepreneurs – in their studies entrepreneurs' education – as signals

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about how entrepreneurs are running their venture. Both argue that information about entrepreneurs can serve as credible signal to reduce the information-gap for applicants. Those two studies are, to the best of our knowledge, the only ones so far providing evidence for the common claim that information about entrepreneurs can affect applicants' attraction to new ventures.

We argue that signaling effects of entrepreneurs' leadership behavior play an important role for new venture recruitment. Although previous research has emphasized the importance of entrepreneurs' behavior, including their leadership behavior (Ensley, Hmieleski, & Pearce, 2006; Renko, 2017), its effects in recruitment have been neglected so far. How applicants form perceptions and evaluations of entrepreneurs, and their leadership behavior, and how those influence new venture recruitment, remains unclear.

In our study, we emphasize the importance of congruity. The information that applicants perceive is most likely to enhance organizational attractiveness if the information fits applicants' expectations; and their expectations will depend on the specific context. Baum et al. (2016), for example, demonstrate negative evaluations of organizational attractiveness if a recruitment advertisement is perceived as incongruent with the company image, i.e. if it does not fit applicants' expectations. Due to the importance of congruity of signals in the recruitment process (Baum et al., 2016; Brunner & Baum, 2020), and the specifics of the new venture context, we assume that the fit of entrepreneurs with the new venture environment plays a key role for attracting applicants to new ventures. In this research, we analyze in how far applicants' perceptions of entrepreneurs, and the attractiveness of their firms as employers, are influenced by entrepreneurs' fit with the stereotype of what an entrepreneurial leader does and looks like. To explain these effects, we draw on role congruity theory.

Role Congruity and Authenticity in New Venture Recruitment

Role congruity theory (Eagly & Karau, 2002) suggests that stereotypes about actual and ideal behavior of a social role occupant (e.g. an entrepreneur or leader) influence perceptions and evaluations of the role occupant. Individuals hold expectations about how people in specific social roles behave and should behave. For example, behaviors of leaders are believed to overlap with more attributes of men than women because expected behaviors of men and leaders are rather agentic (e.g., assertive, dominant) than communal (e.g., compassionate, helpful). Such beliefs become, over time, in the form of stereotypes, shared cultural expectations (Eagly, Nater, Miller, Kaufmann, & Sczesny, 2020). Stereotypes constitute consensual expectations about how occupants of a specific social role should behave, and which behaviors are thought to be required for success in this role. Thus, when the behaviors and characteristics of a person are congruent with the stereotype, the behaviors and characteristics of this person are usually congruent with expectations by observers (e.g. of applicants who observe the entrepreneur).

Congruence is usually perceived positively (Jensen & Luthans, 2006). Leaders, for example, are evaluated better when they behave consistently with expectations (Bellou, 2011; Johnson, Murphy, Zewdie, & Reichard, 2008), while incongruity between actual behavior and expectations lowers evaluations (Eagly & Karau, 2002). Also in recruitment settings, fit with expectation has been shown to have positive effects (Baum et al., 2016; Brunner & Baum, 2020). Specifically, in case of congruence with expectations, a person also is more likely to be perceived authentic because congruency with expectations increases perceptions that the person is acting in congruence with his or her true personal values and beliefs, and that the person it true to her or himself in most situations (Avolio, Gardner, Walumbwa, Luthans, & May, 2004; Cha et al., 2019; Eagly, 2005).

Being perceived as authentic by applicants is fundamental for entrepreneurs because authenticity helps them signal that the employer image that they create is realistic (Guthey & Jackson, 2005; Wilhelmy et al., 2016). Appearing authentic, and in turn realistic, also helps applicants to build trust during the recruitment process (Avolio et al., 2004; Ko & Liu, 2017). Trust is particularly important when applicants experience uncertainty (Baum & Kabst, 2013; Held & Bader, 2018; Wilhelmy et al., 2016), which is particularly likely in new venture recruitment, due to the high levels of information asymmetry (Tumasjan et al., 2011). Thus, authenticity helps to reduce the information-gap and build credibility perceptions. In turn, being perceived authentic helps in increasing organizational attractiveness (Chapman et al., 2005; Lievens & Slaughter, 2016; Reis, Braga, & Trullen, 2017).

In sum, we argue that entrepreneurs' congruence with the stereotype will positively influence applicants' perceptions of entrepreneurs' authenticity, and those authenticity perceptions will in turn contribute to the perceived attractiveness of the new ventures. In the following, we argue why the stereotype is likely to be related to specific leadership behaviors and demographics. We explain why we assume that congruence with the expected leadership behaviors, i.e. entrepreneurial leadership behaviors, and with the demographic-based stereotype, i.e. being a young man, increases perceptions of authenticity of entrepreneurs and attractiveness of their new ventures.

Fit with the New Venture Environment: Entrepreneurial Leadership

Applicants are likely to see the recruiting entrepreneur in the role of being their potential leader because entrepreneurs will typically be their leaders, in case they are hired (Cardon & Stevens, 2004). Therefore, applicants are likely to attend to entrepreneurs' leadership behaviors and evaluate whether those fit their expectations (Cha et al., 2019; Hopkins & Neil, 2015). Their expectations will depend on the organizational context (Held & Bader, 2018; Lievens &

Slaughter, 2016; Lord, Brown, Harvey, & Hall, 2001). For new ventures, the organizational context is characterized by operating in fast changing, innovative and uncertain environments, and the main focus is on exploiting entrepreneurial opportunities (Gupta et al., 2004). Applicants' perceptions of the entrepreneur will therefore depend on whether they think entrepreneurs' leadership behaviors fit such dynamic and uncertain entrepreneurial environments (Bellou, 2011; Li, 2006).

For new venture environments, 'entrepreneurial leadership' has been suggested to be a particularly appropriate leadership style (Ensley et al., 2006; Zaech & Baldegger, 2017). Entrepreneurial leadership is defined as influencing and directing the performance of group members towards the achievement of organizational goals that involve recognizing and exploiting entrepreneurial opportunities (Renko et al., 2015; Renko, 2017). We assume that applicants are likely to expect recruiting entrepreneurs to show leadership behaviors that fit such an 'entrepreneurial leadership' style (Dean & Ford, 2017; Newman et al., 2018b; Renko et al., 2015), which is specifically appropriate for the new venture context.

Due to the relation between stereotype congruence and authenticity perceptions, as explained above, entrepreneurs are likely to be perceived more authentic when they fit the expectation of showing entrepreneurial leadership behaviors (Schmader & Sedikides, 2018). Being perceived to be an authentic leader is important for entrepreneurs for several reasons. Authenticity fosters positive expectations among applicants and increases legitimacy (Wilhelmy et al., 2016). Authenticity also signals the likelihood of being accepted (Bellou, 2011; Nagy, Pollack, Rutherford, & Lohrke, 2012). Moreover, authentic leaders are attributed positive characteristics such as honesty, integrity, fairness, and ability, such that authenticity can help entrepreneurs to signal an attractive work climate that is characterized by trustful relationships (Li, 2006; Peus, Wesche, Streicher, Braun, & Frey, 2012; Theurer et al., 2018). Particularly in new ventures, the ability to build trust is important because employees and

entrepreneurs work closely together (Jensen & Luthans, 2006; Ko & Liu, 2017). We expect that applicants make inferences about organizational characteristics, such as a trustful work climate (Baum & Kabst, 2013; Held & Bader, 2018), based on their authenticity perceptions. As entrepreneurial leadership is likely to be perceived congruent, entrepreneurs showing an entrepreneurial leadership style are likely to be perceived authentic, and in turn their ventures as attractive employers.

Therefore, we argue that the organizational attractiveness of new ventures increases when entrepreneurs are perceived authentic, which is more likely when they show an entrepreneurial leadership style in the recruitment process.

H1: Entrepreneurial leadership style increases perceptions of organizational attractiveness via the perceived authenticity of the entrepreneur.

Insert Figure 1 about here.

Fit with the Demographic-Based Stereotype

Demographics are highly visible and distinctive personal characteristics. Demographics-based stereotypes therefore influence perceptions inherently (Snyder, Tanke, & Berscheid, 1977). Demographic based stereotypes are based on schemata or cognitive categories that people use to process information and to form perceptions about others quickly (Ng & Feldman, 2012). Both age and gender are apparent demographics that provide a breeding ground for stereotyping in entrepreneurship and entrepreneurial leadership.

Building on current research on stereotypes in entrepreneurship and leadership, and on role congruity theory (Eagly & Karau, 2002), we argue that perceptions of applicants are likely to be age and gender stereotyped, similar to perceptions of other resource providers (Balachandra, Briggs, Eddleston, & Brush, 2019; Yang et al., 2020). Previous research provides some indications that the stereotype of entrepreneurs could be related to their age and gender

(Johnson, Stevenson, & Letwin, 2018; Zhao et al., 2020). Entrepreneurial behavior is associated with youth (Azoulay, Jones, Kim, & Miranda, 2020) and entrepreneurial leadership is described as rather youthful (e.g. innovative, risk-taking; Renko, 2017). Additionally, both leadership and entrepreneurship are associated with masculinity (Eagly et al., 2020; Malmström et al., 2020) and are described agentic (e.g. determined, driven), which is related to the male stereotype (Gupta et al., 2019).

Entrepreneurship scholars have studied effects of demographic-based stereotypes of external resource providers, including venture capitalists, business angles, and crowdfunders. "Ageism" seems to influence the investment activity in entrepreneurship hubs, such as the Silicon Valley, indicating that venture capitalists discriminate older entrepreneurs (Azoulay et al., 2020). However, to date, no study investigated empirically how entrepreneurs' age affects perception of resource providers (Azoulay et al., 2020; Zhao et al., 2020). While only few studies focused on age stereotypes, there is a prominent stream of entrepreneurship scholars who centered their research around gender stereotypes (e.g., Gupta, & Fernandez, 2009; Gupta, Goktan, & Gunay, 2014; Jennings & Brush, 2013; Kanze, Huang, Conley, & Tory Higgins, 2018; Rocha & Praag, 2020; Yang et al., 2020). "Sexism" has been shown to affect financial resource acquisition (e.g., Geiger, 2020; Malmström et al., 2020) and entrepreneur-investor interactions (e.g., Alsos, & Ljunggren, 2017). In the following, we argue why both, entrepreneurs' age and gender, are likely to shape the effect of their entrepreneurial leadership on applicants' authenticity perceptions.

The influence of age. Even though the average (successful) entrepreneur is middle-aged (Azoulay et al., 2020; Lévesque & Minniti, 2011; Zhang & Acs, 2018), younger individuals are stereotyped as being 'ideal' for running a new venture. Younger entrepreneurs are expected to be more sensitive and adaptable towards newness than their older counterparts (Zhao et al., 2020). To be successful, entrepreneurs need the ability to successfully act in a fast

changing, innovative and uncertain environment (Nagy et al., 2012), and to be capable to catch up with the fast pace of technological innovation (Sung & Choi, 2019). These characteristics have been shown to be attributed to younger rather than to older individuals (Grima, 2011; Ng & Feldman, 2012; Posthuma & Campion, 2009). Additionally, older individuals are perceived as conservative and not open to integrate new ideas (Vignoli, Zaniboni, Chiesa, Alcover, Guglielmi, & Topa, 2019; Walter & Scheibe, 2013), which does not fit the expectations for the new venture context.

The stereotype of an entrepreneur might be also influenced by media presentations. The media is flooded by younger individuals, such as Marc Zuckerberg, who have created a world leading firm at their early twenties (Azoulay et al., 2020). Those salient examples are likely to influence public opinions about a correlation of entrepreneurship and youth. The Business Insider magazine, for instance, published results of a face analysis, that used 400 CEO portraits to create an 'average' face of a CEO in a specific industry (i.e., technology, business, retail, start-up, etc.), and then found that the 'average startup CEO face' looks about 15 years younger than the one for other industries (Baer, 2014). The same magazine also revealed that Silicon Valley entrepreneurs lie about their age and make themselves younger, which is interesting for two reasons. One, as they make themselves younger, they seem to assume that appearing younger makes their firm more attractive; i.e. they hold (or think others hold) the stereotype that successful entrepreneurs are young. Two, their lies contribute to the myth of the young entrepreneur (Akhtar, 2019). The salience and glorification of young entrepreneurs foster the stereotype that rather young than older individuals are predestined to lead a new venture – at least as a generalized and simplified perception that entrepreneurship is a young persons' game (Levesque & Minniti, 2006; Zhao et al., 2020). Therefore, we assume that applicants hold the stereotype that entrepreneurs are usually young.

As we expect that congruity with the stereotype increases perceptions of authenticity (see elaboration above), we expect that showing entrepreneurial leader behaviors should be perceived more authentic for younger than for rather old entrepreneurs. Younger entrepreneurial leaders are likely to be expected to have the core values and beliefs that underlie the entrepreneurial leadership style, e.g. valuing innovation and change and embracing fast technological developments. Therefore, we propose that the influence of showing an entrepreneurial leadership style on organizational attractiveness, via authenticity perceptions, is stronger if the entrepreneurs is young.

H2: Entrepreneur's age moderates the positive relationship between showing an entrepreneurial leadership style and organizational attractiveness, via perceived authenticity, such that the relationship is stronger if the entrepreneur is younger.

The influence of gender. Stereotypes concerning attributes of men and women prescribe the type of job that is considered appropriate for them (Gupta, Turban, Wasti, & Sikdar, 2009; Heilman, 2001). Entrepreneurs and entrepreneurship are associate with characteristics that overlap with masculine (aggressive, forceful, and independent) rather than feminine (kind, helpful, and concerned about others) stereotypes (Ahl, 2006; Jennings & Brush, 2013; Malmström et al., 2020). The assumption that entrepreneurship is a masculine domain causes legitimacy challenges for women (Foss, Henry, Ahl, & Mikalsen, 2019; Lim & Suh, 2019; Yang et al., 2020), e.g. in venture capital acquisition (Eddleston, Ladge, Mitteness, & Balachandra, 2016; Geiger, 2020). Malmström et al. (2017) showed empirically that in the venture capitalists' view the ideal entrepreneur usually is perceived to be a man not a woman, and as a result, women face more difficulties to access financial support for their new venture than men (Malmström, Johansson, & Wincent, 2017). Additionally, leadership has been shown to be associated with male rather than female attributes (Eagly & Carli, 2007; Braun, Peus, &

Frey, 2018). For this reason, applicants are likely to perceive incongruity between the characteristics of women and the requirements of entrepreneurship (Eddleston et al., 2016; Foss et al., 2019; Lim & Suh, 2019; Malmström et al., 2017; Yang et al., 2020) and leader roles (Eagly et al., 2020; Koenig, Eagly, Mitchell, & Ristikari, 2011; Sposato & Rumens, 2018).

With the stereotype of entrepreneurs and leaders being related to behaviors and characteristics that overlap with the masculine but not the feminine stereotype, entrepreneurial leadership is likely to be perceived more congruent with men's than women's behavior. Women are, due to the incongruity of both the entrepreneur and the leader stereotype with the female gender stereotype, likely to be assumed to better fit roles in which they would need to be kind and caring than roles which require assertive proactivity and risk-taking. Therefore, we hypothesize women showing entrepreneurial leadership are perceived less authentic than men, leading to lower organizational attractiveness.

H3: Entrepreneur's gender moderates the positive relationship between showing an entrepreneurial leadership style and organizational attractiveness, via perceived authenticity, such that the relationship is weaker if the entrepreneur is female.

METHOD

To investigate whether entrepreneur's fit with the entrepreneurial leader stereotype (comprising expected leadership behaviors and demographics) shapes applicants' perceptions of the firms' organizational attractiveness and if this relationship is mediated by perceived authenticity, we applied an experimental vignette between-subject design. This method allows for systematic sampling of stimuli, control over confounding, and derive causality (Aguinis & Bradley, 2014), and is therefore of increasing interest in entrepreneurship and new venture recruitment research (Moser et al., 2017; Stevenson, Josefy, McMullen, & Shepherd, 2020).

Procedure. Participants read through a scenario (vignette) which aimed for high realism and clarity and kept other factors, that we cannot control, constant where possible. First, participants were asked to assume that they recently had a job interview for a position in a new venture where the job tasks, payment and companies' culture fit with their expectations. Then, we presented the venture and varied the level of the entrepreneur's entrepreneurial leadership (strong vs. weak), entrepreneur's age (older = 55 vs. younger = 25) and entrepreneur's gender (female vs. male), resulting in 8 (2x2x2) conditions. Each participant was randomly assigned to one out of the eight conditions via a link to the online study. In a post-experiment questionnaire, we collected dependent variables, personal data and control variables.

Sample. Our final sample consists of 503 respondents who completed our questionnaire and succeeded the manipulation check for entrepreneur's age and gender (37 participants excluded). The online survey addressed students and employees via social media (e.g. Facebook) and university mailing lists. 64% of the respondents were female, and the mean age of all participants was 25.6 years (SD: 5.3 years, min: 16, max: 59). 56.1% stated to have a university degree. Participants were mainly students (68.4%) and employees (23.3%). 64.8% of the sample has been identified as job seekers (sought in the past year or will seek in the next year). There was no mean difference in judgments of organizational attractiveness (dependent variable) between the group job seeker (M = 4.63) and non-job seeker (M = 4.65; t(381.84) = 0.15, p = .88). This enhances the generalizability of our results and gives support for the eligibility of our sample. A t-test comparing early and late respondents, which were represented by the first and last quartiles (Berthon, Ewing, & Napoli, 2008), was non-significant for our dependent variable (organizational attractiveness) and mediator (perceived authenticity), indicating non-response bias is not a serious threat to our study (Armstrong, & Overton, 1977).

Manipulation. The vignettes manipulated the entrepreneur's entrepreneurial leadership style, age and gender. To create the manipulation of the entrepreneurial leadership style, we

built on the conceptualization of the ENTRELEAD scale (Renko et al., 2015) which focuses on leadership behaviors that are specific for the new venture context. In our vignettes, two employees first describe the entrepreneur's leadership behavior and then the conversation with the entrepreneur confirms the impression. Exemplary, the entrepreneur in our vignettes is described to either 'often challenge his/her employees' and 'often ask them to think and act in a more innovative way' (strong entrepreneurial leadership), or the conversation reveals that the entrepreneur 'rarely challenges his/her employees' and 'usually does not ask them to think and act in a more innovative way' (weak entrepreneurial leadership). See Appendix 1 for an example vignette. We decided to create a 'weak' entrepreneurial leadership condition instead of comparing strong entrepreneurial leadership with another leadership style to avoid potential cofounds, and we made it a 'weak' rather than 'no' entrepreneurial leadership condition to avoid the contrast sounds too negatively or unrealistic in a new venture setting.

We operationalized an entrepreneur as young at the age of 25 and as old at the age of 55, according to numbers of differences in actual entrepreneurial behavior. According to Kautonen and colleagues (2014), the probability of an individual becoming an entrepreneur increases in the early twenties. Mid-fifty is at the edge of the age-distribution of individuals engaging in entrepreneurial behavior (Zhang & Acs, 2018). We manipulated gender of the entrepreneur by repeatedly mentioning the male or female salutation 'Mr. or Mrs. Müller' or corresponding pronoun (he/she) in the descriptions. We used the last name 'Müller' because it represents a common name in Germany. The product of the hypothetical new venture in our vignettes (a "novel beverage that both men and women of younger and older age love to drink") was intended to be age and gender neutral.

To assure external validity, and that our entrepreneurial leadership manipulation ('weak vs. strong') is perceived realistic and fits the construct, we tested whether the created vignette scenarios are perceived as intended in a focus group pre-study with participants who are similar

to the targeted sample, as recommended by Aguinis & Bradley (2014). The focus group discussions provided additional support for the appropriateness of our study design and the manipulation because the perceptions of the scenarios appeared consistent with the constructs, and the general study was perceived realistic and reasonable. To check the manipulation of the entrepreneurial leadership in the main-study, we asked participants to judge the entrepreneur who was described in the vignette on the ENTRELEAD scale (Renko et al., 2015) on a 7-point Likert scale (1: strongly disagree and 7: strongly agree). A t-test indicated significant differences between the two levels (strong vs. weak) of entrepreneurial leadership. We checked the manipulation for entrepreneur's age and gender by asking participants after the experiment if the entrepreneur was 25 or 55 years old and if the entrepreneur was male or female.

Measures. All items were measured on a 7-point Likert scale (1 – strongly disagree to 7 – strongly agree). To measure organizational attractiveness (dependent variable), i.e. whether participants perceived the new venture as attractive employer, we used three items from the Highhouse, Lievens, & Sinar (2003) general attractiveness scale (sample item: "This company is attractive to me as a place for employment."). Two items were excluded from originally five-item scale because they did not fit in the recruitment setting of our study (Cronbachs' alpha .95). To measure the perceived authenticity (mediator) of the entrepreneur described in our vignettes, we used the four items authentic living scale from Wood, Linley, Maltby, Baliousis, & Joseph (2008) measuring perceptions of whether the entrepreneur is true to her- or himself and living in accordance with her or his values and beliefs (Wood et al., 2008). A sample item is "My leader will live in accordance with his/her values and beliefs" (Cronbachs' alpha .85). Control variables included participant's age and gender, consistent with previous research on applicants' attraction (e.g. Held & Bader, 2018; Moser et al., 2017). Additionally, we included the willingness to work in a startup ("generally, would you like to work in a startup?") and the

product attractiveness ("how attractive is this product in your perception") because these factors could affect their judgements of organizational attractiveness.

Robustness check. To check for potential endogeneity problems, we used the manipulated variables (entrepreneurial leadership style, and entrepreneur's age and gender) as instrumental variables in a two-stage least square procedure (2SLS) to get a consistent estimator for the mediator, perceived authenticity. Manipulation variables serve as perfect instruments in mediation models (Antonakis, Bendahan, Jacquart, & Lalive, 2010). As the regression coefficients for authenticity remain stable (coefficient estimated with the consistent estimate for authenticity = 0.530, $p < .001$ and coefficient estimated with the original values for authenticity = 0.514, $p < .001$), we conclude that endogeneity is not a serious threat for our results.

RESULTS

Table I presents the means, standard deviations, and correlations of the all variables and the experimental manipulation in our dataset. Multicollinearity does not seem to be an issue in our study as none of the correlations exceed critical values and variance inflation factors remain below common thresholds (Cohen, Cohen, West, & Aiken, 2013).

Insert Table I about here

To test our hypotheses, we used a regression-based path analysis using the PROCESS Model 9 macro for estimating interactions and conditional indirect effects in moderated mediation models with 10,000 bootstrap samples (Hayes, 2013; Hayes, 2018). Table II shows the results.

Insert Table II about here

In Hypothesis 1, we hypothesized that the effect of showing an entrepreneurial leadership style on perceptions of organizational attractiveness is mediated by the perceived authenticity of the entrepreneur. The indirect effect of showing entrepreneurial leadership style on the organizational attractiveness, via perceived authenticity, is significantly positive (ab = .204; CI [.122; .307]). Thus, we find support for Hypothesis 1. To analyze the relevance of the mediation effect, we calculated the mediation effect size PM (the ratio of the indirect to the total effect). Although this requires cautious interpretation, in certain conditions (sample size should be at least 500, the total effect should be larger than the indirect effect and of same sign) PM is seen as an appropriate effect size measure (Wen & Fan, 2015; Hayes, 2013). Our results (PM = .122) indicate that 12.2% of the effect of entrepreneurial leadership style on organizational attractiveness occurs indirectly via perceived authenticity influence.

Hypothesis 2 and 3 suggest that entrepreneur's age and gender moderate the effects. The index of moderated mediation in Table II indicates that entrepreneur's age but not entrepreneur's gender moderates the positive relationship between showing an entrepreneurial leadership style and organizational attractiveness via perceived authenticity. The moderating effect of age on the relationship between entrepreneurial leadership style and authenticity is significantly positive (a4b1 = .111; CI [.013; .241]). The conditional indirect effect (Hayes, 2018) is stronger for the young (a2yb1 = .293; CI [.179; .440]) compared to older entrepreneur (a2ob1 = .183; CI [.088; .311]). For the moderation effect of gender, the 95% bias-corrected bootstrap confidence interval includes zero (a5b1 = .048; CI [-.053, .158]. Thus, the results of our (conditional) indirect effects indicates support for Hypothesis 2 but rejects Hypothesis 3.

Post-hoc analysis. We tested a three-way interaction (entrepreneur's entrepreneurial leadership style*entrepreneur's age*entrepreneur's gender on perceived authenticity) because the effects of being young and male could add up to an even stronger effect. However, the three-way interaction was not statistically significant (coefficient = .041, p > .10, CI = [-.157 to .252]).

Additionally, we tested a three-way interaction by using participant's age as higher level moderator, because our sample consists of mainly young individuals, and demographic-based applicant-recruiter similarities might affect recruiting outcomes (Goldberg, 2003). However, the interaction remained non-significant (coefficient = -.368, p > .10, CI = [-.822; .086]). Finally, we tested conditional indirect effects by using participant's gender as higher level moderator, as it has been shown that the leadership style preference and organizational attractiveness might be contingent on applicant's gender (e.g., Bellou, 2011; Held & Bader, 2018). To do so, we conducted a three-way interaction analyzing the conditional effect of participant's gender on the relationship between entrepreneur's entrepreneurial leadership style and entrepreneur's age/ gender via perceived authenticity on organizational attractiveness. However, we could not find significant conditional indirect effects.

DISCUSSION

In this research, we investigated particularities of recruitment in new ventures. Recruitment is important for new ventures because they heavily rely on their human resources to prosper and grow (Greer et al., 2016; Messersmith, & Wales, 2013; Newman et al., 2018a; Nyström, 2019). Our study is among the first to focus on the influence of entrepreneurs' behavior and characteristics on applicant attraction in new ventures (for other examples see Backes-Gellner & Werner, 2007, and Moser et al., 2017). Drawing on recruitment, entrepreneurship, and stereotype literature, our study showed influences of the applicants' perspective in new venture recruitment. Specifically, we elucidate whether showing an entrepreneurial leadership style can serve as a pathway to organizational attractiveness and in how far demographic-based influences are boundary conditions for this effect. By advancing the knowledge of context specific influence factors for new ventures' ability to attract human resources, our research contributes to the literature in several ways.

First, by considering effects of context specific expectations about leadership and demographics, and their influence on authenticity perceptions, we advance the debates about determinants of organizational attractiveness in HRM and employer branding literature (Altmann & Süß, 2015; Berthon, Ewing, & Hah, 2005; Held & Bader, 2018; Baum & Kabst, 2013; Evertz, Kollitz, & Süß, 2019; Theurer et al., 2018; Tumasjan et al., 2020).

On the one hand, we emphasize the importance of stereotype congruency. Our study adds a new perspective because we focus on the individual-level congruity rather than firm-level image-congruity (e.g., Baum et al., 2016). In this attempt, our study also provides new insights into the role of authenticity perceptions in recruiting processes. Authenticity has been shown to be valued by applicants, equally or even more than other dimensions of organizational attractiveness (Reis et al., 2017). We shed light on authenticity perceptions' dependency on congruency with applicants' expectations, and authenticity perceptions' influence on employer attractiveness. Importantly, authenticity is an interesting mechanism to target, particularly for new ventures, because increasing authenticity perceptions appears as a particularly cost-efficient strategy (Wilhelmy et al., 2016).

On the other hand, we introduce findings from entrepreneurship research to the debates in HRM and employer attractiveness literature. Entrepreneurship research has emphasized that entrepreneurs' leadership behavior has an impact on how processes in new ventures, including recruitment processes, are created (Baron, 2003; Cardon, 2008; Hubner & Baum, 2018; Newman et al., 2018b; Reis et al., 2018; Zaech & Baldegger, 2017). Our study transfers this knowledge to the context of applicant attraction and indicates that showing entrepreneurial leadership behavior contributes to applicants' perceptions of organizational attractiveness (Li, 2006; Ko & Liu, 2017). In doing so, we highlight the particularities of the so far rather underexplored new venture context (Moser et al., 2017; Tumasjan et al., 2011). By conducting

an experiment, we also embrace a methodological approach that is highly recommended but still rare in the new venture recruitment context (Stevenson et al., 2020).

Second, we elucidate the influence of entrepreneurs' demographics as boundary conditions of the effect of entrepreneur's entrepreneurial leadership behavior on organizational attractiveness. We proposed that applicants' perceptions of the authenticity of an entrepreneur showing entrepreneurial leadership is dependent on entrepreneurs' demographics, i.e. their age and gender. In our data, the positive effect of the entrepreneurial leadership style was dependent on the entrepreneur's age but not on the entrepreneur's gender.

Regarding entrepreneurs' age, our study identified a recruitment advantage for younger compared to older entrepreneurs, when showing an entrepreneurial leadership style. In that regard, increasing applicants' authenticity perceptions by showing an entrepreneurial leadership style seems to be easier for younger than for older entrepreneurs. This finding adds to research on challenges of being a younger leader (Buengeler, Homan, & Voelpel, 2016) and support the argument that a specific organizational context, such as new venture recruitment, can influence the salience of a particular stereotype (e.g. Spisak, Grabo, Arvey, & van Vugt, 2014). Although both age and gender are apparent demographics that provide a breeding ground for stereotyping in entrepreneurship, entrepreneurship scholars so far centered their research around gender stereotypes (Gupta et al., 2019). The few studies investigating age stereotypes in entrepreneurship mainly focused on individuals' intentions and decisions to start an entrepreneurial career, which was found to be related to youth (e.g., Kautonen, Tornikoski, & Kibler, 2011; Lechner, Sortheix, Obschonka, & Salmela-Aro, 2018). However, ageism also has been suggested to influence perceptions of external resource providers, such as venture capitalists (Azoulay et al., 2020), which might lead to discrimination of older entrepreneurs when it comes to the acquisition of resources (Zhao et al., 2020). By showing that being young can be a disadvantage also in attracting human resources, our study underscores that

"entrepreneurs' age deserves scholarly attention in its own right rather than being simply treated as a 'control'" (Zhao et al, 2020; p. 17).

Regarding entrepreneurs' gender, one would expect that female gender stereotypes are less congruent with being an entrepreneur and with being a leader, based on existing literature on gender stereotypes (Gupta et al., 2019; Johnson et al., 2008). Our study, however, provides some ground to assume that these stereotypes might not feed forward into disadvantages in applicant attraction. Our data contrasts previous findings in entrepreneurship literature which showed that women are at a disadvantage when signaling that they are 'entrepreneurial' to venture capitalists (Malmström et al., 2020). One reason for the absence of the female disadvantage in the recruitment setting could be that, as suggested by shifting standards theory (Biernat, 2003), women who have proven they are successful (by already being successful entrepreneurs), are evaluated as positively as their male counterparts (Eagly & Karau, 2002). Moreover, women could be perceived particularly trustworthy and authentic leaders because women are stereotyped to act with communality which refers to building strong interpersonal relationships, enhancing collective interests, and contributing to followers' basic need satisfaction (Leroy, Anseel, Gardner, & Sels, 2015). This female stereotype could increase authenticity perceptions for women (Braun et al., 2018). This argument is in line with Harrison et al. (2015) who point out that a feminization of leadership might be reflected in an increased attention to authenticity (Harrison, Leitch, & McAdam, 2015; p. 669). Therefore, more research is needed to understand the influence of gender in entrepreneurship and how gender stereotypes are contextually embedded in institutional and social structures in entrepreneurial processes, which may limit or provide opportunities for women (Harrison, Leitch, & McAdam, 2020).

Third, from an international HRM perspective, our study contributes toward a better understanding of organizational attractiveness of German new ventures and how entrepreneurs can enhance their chances to attract applicants in Germany. Germany provides an interesting

empirical setting for our study, given the comparatively low rates of entrepreneurship activities combined with a large number of well-established, middle-sized (mostly family-owned) businesses (Bosma & Kelley, 2019). From the recruitment perspective, this is a challenging environment for growth-seeking entrepreneurs because they have to compete for talent with attractive 'hidden champions'. In such a competitive environment, entrepreneurs have a particular need to understand what they can do to succeed in the war for talent. Our study suggests showing entrepreneurial leadership as one promising pathway. Moreover, as we do find a devaluation of older entrepreneurs but do not find the expected devaluation of female entrepreneurs regarding employer attractiveness, our study can be used as piece of information when researchers seek to map age and gender equality between countries (Elam et al., 2019; Shahriar, 2018). Thus, one avenue for future research could be to create a more inclusive and global perspective, which we will discuss in more detail in our elaboration on implications for future research.

LIMITATIONS AND IMPLICATIONS FOR FUTURE RESEARCH

Our study has several limitations and provides numerous avenues for future research. Although our results suggest that an entrepreneurial leadership style predicts organizational attractiveness, it remains unclear whether this effect is specific to new ventures or if it also exists for established firms, for example when managerial entrepreneurship is aligned with business strategy and organizational culture (Amberg & McGaughey, 2019; Morris & Jones, 1993). Thus, we suggest that future research could analyze effects of entrepreneurial leadership for recruiting in larger and established organizations.

Moreover, even though we manipulated entrepreneurial leadership along the continuum of the ENTRELEAD scale (an established instrument for measuring entrepreneurial leadership style) and additionally tested the realism and construct validity of our vignette descriptions

(Aguinis & Bradley, 2014), we acknowledge that our vignettes depict only part of the new venture reality. Given the nascent stage of recruitment research in the context of new ventures, our goal was to initially show that a change in entrepreneurial leadership style has an effect at all (moderated by entrepreneurs' demographics). Future research might use our findings as a starting platform to compare effects of entrepreneurial leadership with other leadership behaviors, e.g. authentic, servant, or transformational leadership, which have also been suggested for new ventures (Jensen & Luthans, 2006; Newman et al., 2018b; Zaech & Baldegger, 2017) or with other characteristics of entrepreneurs.

Additionally, our sample consists at least in part of students (68.4%). Although the student population is suitable for analyzing prospective applicants, because they are usually currently or soon seeking for their first job upon graduation (Baum & Kabst, 2013), future research is needed to test whether our findings are transferrable to applicants who are already professionals. Importantly however, new ventures typically hire young individuals, and often recent graduates, such that we consider a sample, which includes both students and employees, to be suitable (Ouimet & Zarutskie, 2014; Nyström, 2019).

Relatedly, in our study, the positive effect of signaling an entrepreneurial leadership style shows stronger effects for younger than for older entrepreneurs. As the mean age of participants in our sample (m = 25.6) is similar to the age of the young entrepreneur in our experiment (in this condition the entrepreneur was described to be 25 years old), an age-based similarity-bias might have influenced our results because demographic similarities between applicant and recruiter can enhance recruiting outcomes (Goldberg, 2003). However, our post-hoc analysis indicates that participant age did not affect the results. Also, recent research indicates that the stereotype of entrepreneurs being young is universal such that a similar stereotype is held across age groups (Azoulay et al., 2020, Zhao et al., 2020). Still, we

encourage future research to evaluate in more detail if demographic-based 'similarity-attraction' impacts new venture recruitment.

Our findings could be shaped by the German context of our studies. Applicant's expectations about entrepreneurial leadership behavior, and age and gender of entrepreneurs, might be different in other countries (Gupta & Fernandez, 2009). For example, a recent study on entrepreneur stereotypes in the United States shows a strong association of entrepreneurship with gender (Gupta et al., 2019) such that the gender effect, which we proposed but didn't find, might become evident in a new venture recruitment study in the United States. Associations and connotations may vary globally, e.g. because levels of uncertainty avoidance and power distance vary (Bader, 2015; House, Hanges, Javidan, Dorfman, & Gupta, 2004). These cultural differences imply different attitudes towards entrepreneurship and leadership as well as women in workplaces (Elam et al., 2019; Bader, Schuster, & Dickmann, 2015; Bader, Stoermer, Bader, & Schuster, 2018). Moreover, applicants might expect different leadership styles from entrepreneurs across different countries (Li, 2006). For a global understanding of stereotypes of entrepreneurs, particularly in leadership and recruitment roles, future research that spans different cultures is needed.

In addition, it would be interesting to investigate international new venture teams, in which entrepreneurs and employees have different cultural backgrounds. As stereotypes can differ across countries (Gupta & Fernandez, 2009), future research is needed to uncover whether age and gender biases exist in an international new venture recruitment context where stereotypes of different cultures play together. Moreover, future research could analyze effects of stereotypes beyond age and gender, e.g. ethnicity stereotypes (Ghauri, Mansi, & Pandey 2019; Tüselmann, Allen, Barrett, & McDonald, 2008). Not only entrepreneurs' gender and age but also their ethnicity is inherently visible and can influence outsider perceptions. Everyone is part of multiple social groups simultaneously (e.g. being part of an ethnic group, being a

woman, a leader, an entrepreneur, etc.), such that several stereotypes intercept and affect the way one is perceived by others (Eagly et al., 2020). This intersection is a promising field for future research in entrepreneurship (Marlow & Martinez Dy, 2018), particularly from a diversity and international perspective on new ventures recruitment (Sung & Choi, 2019).

IMPLICATIONS FOR ENTREPRENEURS

Our research has several implications for recruiting entrepreneurs. New ventures face the challenge of attracting qualified employees and developing recruitment practices. During the recruitment process, they have to distinguish themselves from other firms (Williamson, 2000) and leverage their context-specific employer advantages (Moser et al., 2017). Our results reveal that showing an entrepreneurial leadership style can enhance new venture's attractiveness as an employer. New ventures need to be aware of their potential to attract qualified employees in order to prosper and grow, and how they can stay competitive in comparison with national and international larger companies (Ewerlin & Süß, 2016; Tumasjan et al., 2011).

Recruitment literature emphasizes the importance of strategic recruitment to maximize recruiting effectiveness (Phillips & Gully, 2015). Our findings have direct implications for recruiting strategies in new ventures. We can emphasize that authenticity is particular important in new venture recruitment because it is a signal for the organizational culture, which has been shown to be an important attribute for new venture attractiveness as an employer (Tumasjan et al., 2011). Moreover, our findings might be particularly valuable information for entrepreneurs because increasing authenticity perceptions appears as a particularly cost-efficient strategy (Wilhelmy et al., 2016). Signaling entrepreneurial leadership causes no additional costs, which is particularly important for new ventures which usually have very limited resources (Leung,

2003), such that entrepreneurial leadership can be considered an asset, if it can be signaled authentically.

We suggest that entrepreneurs should deliberately decide, prior to starting their recruiting activities, whether they want to indicate or hide their leadership or demographics, and who in their team should be responsible for recruiting new employees. For this decision, they should consider who is most likely to enhance their recruiting outcomes, how this person should appear and behave, and generally consider who is most likely to be perceived as an authentic entrepreneurial leader. In doing so, they should be aware that individual behaviors and characteristics of the person who recruits might be shaped by particular expectations of applicants. Entrepreneurs should be aware that stereotypes act as a boundary condition for enhanced authenticity perceptions.

Importantly, information about the organizational culture in a new venture can usually only be authentically signaled by entrepreneurs themselves or current employees. Entrepreneurs themselves and current employees are likely to be the only ones who can be perceived knowledgeable and trustworthy in signaling information about jobs in a new venture (Berger & Kuckertz, 2017; Theurer et al., 2018). Entrepreneurs should therefore also be aware that, from current employees, information about their leadership behavior might travel by word-of-mouth to potential job applicants (Evertz et al., 2019), and that way influence authenticity perceptions, and eventually the new ventures organizational attractiveness.

Our findings imply that some entrepreneurs can rely on and benefit from showing entrepreneurial leadership behaviors more than others. Our data indicates that young entrepreneurs can profit more than older entrepreneurs. Therefore, older entrepreneurs, who are less likely to benefit, could consider showing up with a particular youthful appearance (e.g. through suitable clothing) to be perceived younger. This might help them to be perceived as an authentic entrepreneurial leader and thus enhance their recruiting outcomes. Moreover,

entrepreneurs who are older and also entrepreneurs who feel uncomfortable with entrepreneurial leadership could consider focusing on other ways of attracting applicants. They could highlight other aspects than their leadership or demographics. Finally, our findings suggest that entrepreneurial teams should consider the team members' leadership and demographics when they decide who should be responsible for recruitment and how this person should appear.

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TABLE I

Means, Correlations, and Variance Inflation Factors (VIF)

	Mean	SD	VIF	1	2	3	4	5	6	7	8	9
1 Organizational Attractiveness (1=low, 7=high)	4.63	1.44	-	1								
2 Entrepreneurial Leadership Style (strong=1)	.52	.50	1.16	.607**	1							
3 Entrepreneur's Age (younger=25=1)	.54	.50	1.04	-.016	.018	1						
4 Entrepreneur's Gender (female=1)	.48	.50	1.01	.019	-.032	.029	1					
5 Perceived Authenticity (1=low, 7=high)	5.27	1.09	1.23	.438**	.353**	-.155**	.070	1				
6 Participant's Age	25.60	5.26	1.05	-.017	.025	-.070	.029	-.026	1			
7 Participant's Gender (female=1)	1.36	.48	1.04	.034	.000	-.044	-.007	.020	.172**	1		
8 Willingness to Work in a Startup (1=low, 5=high)	3.23	.96	1.07	.235**	.115*	.032	.005	.140**	-.045	.042	1	
9 Product Attractiveness (1=low, 5=high)	2.97	.82	1.09	.259**	.072	-.009	.011	.194**	-.084	-.079	.206**	1

Note: N=503; * p < .05, ** p <.01 (2-tailed)

TABLE II

Moderated Mediation Analysis

|			Perceived Authenticity (M)		Organizational Attractiveness (Y)	
			Coeff.	95% CI	Coeff.	95% CI
Entrepreneurial Leadership Style (X)	a_1	$\rightarrow$	.443** (.155)	.139, .474	$c \rightarrow$ 1.456*** (.103)	1.254, 1.659
Perceived Authenticity (M)					$b_1 \rightarrow$ .305*** (.048)	.210, .399
Entrepreneur's Age (W)	a_2	$\rightarrow$	-.544*** (.129)	-.797, -.291		
Entrepreneur's Gender (Z)	a_3	$\rightarrow$	.108 (.128)	-.142, .359		
X x W	a_4	$\rightarrow$	.364* (.178)	.013, .714		
X x Z	a_5	$\rightarrow$	.156 (.176)	-.190, .503		
Participant's Age	a_6	$\rightarrow$	-.008 (.009)	-.024, .010	$b_2 \rightarrow$ -.005 (.009)	-.029, .023
Participant's Gender	a_7	$\rightarrow$	.080 (.094)	-.102, .265	$b_3 \rightarrow$ .097 (.102)	-.073, .311
Willingness to Work in a Startup	a_8	$\rightarrow$	.076 (.049)	-.002, .172	$b_4 \rightarrow$ .184*** (.053)	.008, .288
Product Attractiveness	a_9	$\rightarrow$	.153** (.048)	.059, .248	$b_5 \rightarrow$ .100$^+$ (.053)	-.004, .204
Constant	i_M	$\rightarrow$	4.649*** (.300)	4.059, 5.239	$i_Y \rightarrow$ 1.487*** (.378)	.745, 2.229
			$R^2 = .197$		$R^2 = .471$	
			$F_{(9, 493)} = 13.143, p < .000$		$F_{(6, 496)} = 67.857, p < .000$	
Simple Mediation (Model Without Moderator)						
Indirect effect - mediation (M)	ab	$\rightarrow$	.204 (.046)	.122, .307		
Index of Partial Moderated Mediation						
Indirect effect - moderated mediation (W)	a_4b_1	$\rightarrow$	.111 (.057)	.013, .241		
Indirect effect - moderated mediation (Z)	a_5b_1	$\rightarrow$	.048 (.054)	-.053, .158		
Conditional Indirect Effect at Values of W^i						
Entrepreneur's Age (W) = younger (25)	$a_{2y}b_1$	$\rightarrow$	.293 (.065)	.179, .440		
Entrepreneur's Age (W) = older (55)	$a_{2o}b_1$	$\rightarrow$	.183 (.057)	.088, .311		

$^+p < .10$, $^*p < .05$, $^{**}p < .01$, $^{***}p < .001$

Note: Unstandardized OLS Regression Coefficients With Confidence Intervals (Standard Errors in Parentheses); W^i: at Given Value Entrepreneur's Gender = Female

FIGURE 1

Research Model
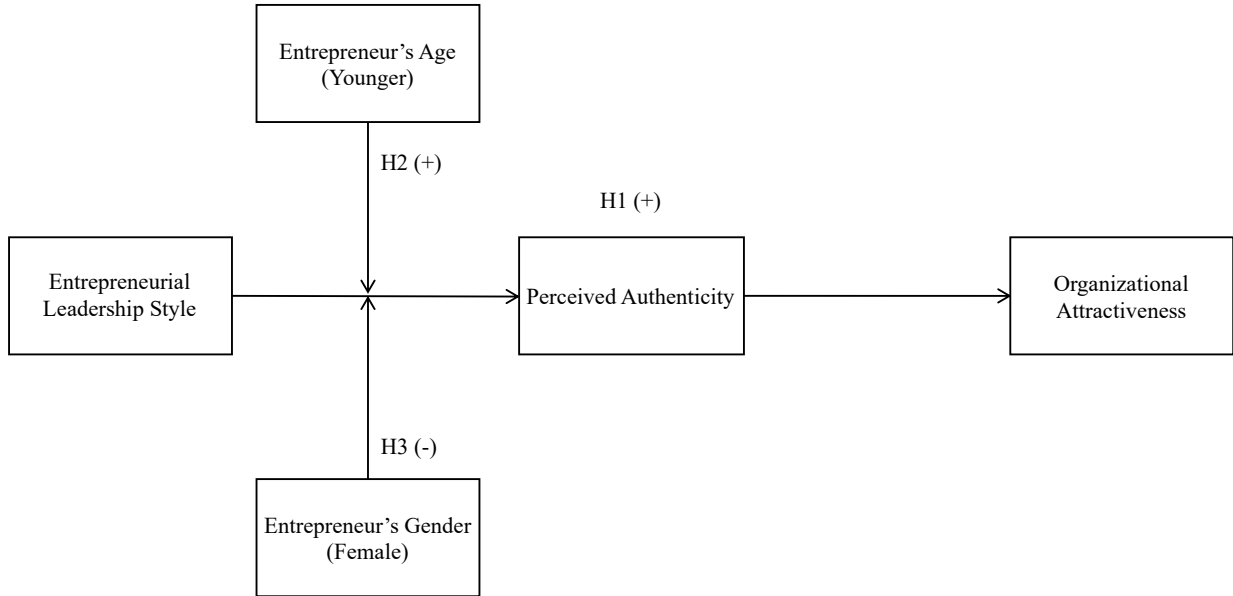
Note: Entrepreneur's Age: Younger = 1, Older = 0; Entrepreneur's Gender: Female = 1, Male = 0

APPENDIX 1

Example Situation Description 'Young Male Entrepreneur'

Imagine that you have recently been interviewed for a position in a start-up that was founded in 2014. Mr. Müller, the young founder (25 years old) of the start-up company has developed a new kind of drink, which is enjoyed by men and women as well as younger and older people. The sales figures have increased rapidly in the last year, so that the start-up with its current 20 employees can continue to grow. You are very interested in the position in this company. The tasks you are to take on in this company would challenge you, but fit perfectly with your skills. You have already agreed with Mr. Müller on a salary that makes the position very attractive for you. In addition, the corporate culture seems to fit you very well. The 25-year-old founder has now invited you to another meeting, in which you will have the opportunity to get to know the founder and the team better. You have been informed that two other employees and the founder himself will be present at this meeting. Mr. Müller has already signalled that he will make you a concrete offer and hopes that you will accept the job. You were very pleased about this invitation, because based on the current information you would like to work for the young Mr. Müller.

The second interview officially starts at 1 pm in the start-up's meeting room. The already mentioned young founder Mr. Müller, the employee Mr. Schmidt and the employee Mrs. Schneider will take part in the conversation. However, Mr. Müller is delayed due to a traffic jam he got into on the way back from a new customer. He will probably arrive in half an hour for the interview. In the meantime, you talk to the two employees.

Example Vignette 'Strong Entrepreneurial Leadership Style'

During the conversation it becomes clear that young Mr. Müller often comes up with drastic ideas for improvements to the product they offer, and also for improvements of current business processes, and often shows ideas for completely new products that could be sold. If problems arise, the young founder has creative solutions ready. The two employees report that Mr. Müller is prepared to take necessary business risks in the interest of the company. At work, the young Mr. Müller demonstrates his passion for the job every day anew. While carrying out the daily business, the employees realize that the founder has a vision for the future of the company. The two employees report that Mr. Müller often challenges his employees and often encourages them to think and act in a more innovative way. The young founder expects the employees to question current ways of working in the company.

A little less than half an hour later, young Mr. Müller has arrived and comes into the meeting room to officially start the second interview. This interview confirms the impression of the young founder, which was conveyed to you by the employees Mr. Schmidt and Mrs. Schneider.

Example Vignette 'Weak Entrepreneurial Leadership Style'

During the conversation, it becomes clear that the young Mr. Müller rarely brings in ideas for improvements to the product they offer and that he usually keeps current business processes as they are. There is no exception that he shows ideas for new products that could be sold. If problems arise, the young founder largely relys on already proven solutions. The two employees report that Mr. Müller basically wants to avoid emerging business risks for the company. At work, the young Mr. Müller rarely shows his passion for the job to the outside world. While carrying out the daily business, the employees realize that the founder has no concrete vision for the future of the company. The two employees report that Mr. Müller rarely challenges his employees and usually does not encourage them to think and act in a more innovative way. They are expected to follow his plan. The young founder therefore rarely expects the employees to question current ways of working in the company.

A little less than half an hour later, young Mr. Müller has arrived and comes into the meeting room to officially start the second interview. This interview confirms the impression of the young founder, which was conveyed to you by the employees Mr. Schmidt and Mrs. Schneider.

Note: this study was conducted in Germany. For the purpose of presenting an example of our vignette, we translated it into English.

SMALL FIRM ENTREPRENEURIAL ORIENTATION SIGNALING AND JOB APPLICANT ATTRACTION

ABSTRACT

Although attracting human resources is a challenging task and necessary for small firm survival, research on predictors of small firm recruitment success remains underexplored. This study examines whether signaling entrepreneurial orientation (EO) influences applicant's attraction to a small firm, and whether CEO age moderates this relationship. To test our hypotheses, we conducted a conjoint experiment, and analyzed data on 1,560 decisions made by 65 job applicants. While we find support for the main effects of EO subdimensions (firm's behavior towards innovativeness and proactiveness, and firm's attitude towards risk) on applicant's likelihood of long-term job commitment, the interaction effects of CEO age remain largely non-significant. Our study primarily contributes to the literature on the intersection of small firm recruitment and entrepreneurship.

INTRODUCTION

Recruitment is the foundation of organizational performance (Phillips & Gully, 2015) but particularly small firms face great challenges to recruit new talents (Greer, Carr, & Hipp, 2016; Heneman & Berkley, 1999; Hornsby, & Kuratko, 1990), which, in turn, might limit their ability to grow (Cardon & Stevens, 2004). However, growth-oriented small firms are driven by entrepreneurial behaviors as reflected by the dimensions of Entrepreneurial Orientation (EO) including innovativeness, proactiveness and risk-taking (Covin & Wales, 2019). EO is a firm's strategic posture that seeks to exploit opportunities for growth and is associated with small firm performance (Rauch, Wiklund, Lumpkin, & Frese, 2009). Thus, it is not surprising that an increasing attention has been paid to the effects of signaling EO to external stakeholders, such as venture capitalists (Wales, Cox, Lortie, & Sproul, 2019), which seems to be a successful strategy to acquire financial resources (Moss, Neubaum, & Meyskens, 2015). However, not only financial but also human resources are essential for small firms with an EO to achieve superior performance and to realize growth (Hayton, 2005). But how does EO affect the acquisition of human resources? As stated by Miller (2011), an "interesting question is which resources do EO give rise to: does innovation attract talented people who lead to more innovation?" (Miller, 2011, p. 884).

EO signals to external stakeholders, such as job applicants, small firm's potential to grow (Moss et al., 2015). It might also signal that an entrepreneurial mindset is highly pronounced among both CEO and employees (Messersmith & Wales, 2013), because an EO involves organizational practices that enhance employee empowerment, skills, and motivation (Rauch & Hatak, 2016). Thus, applicants might process EO as a signal about who the firm usually hires, what working culture and opportunities for human resources development they can expect (Brettel, Chomik, & Flatten, 2015). Prior research on small firm recruitment (e.g., Greer et al., 2016; Moser, Tumasjan, & Welpe, 2017; Zhao, 2013) suggest that an

entrepreneurially-oriented firm culture or offering a wide array of development possibilities are key success factors in the recruitment of new talent. Thus, we assume that signaling EO will influence job applicant's likelihood to work for a small firm, because EO signals underlying firm qualities such as a firm's growth-intention or an organizational culture that reinforces an entrepreneurial mindset.

A small firm's organizational strategy, such as EO, is assumed to be closely interwoven with CEO characteristics, such as age (Hambrick, 2007). CEO's age has been shown to have a negative effect on small firm's growth, because older CEOs are less focused on opportunities (Gielnik, Zacher, & Schmitt, 2017). Similarly, the entrepreneurship literature indicates that individual's age is correlated with entrepreneurial intentions (e.g., Kautonen, Tornikoski, & Kibler, 2011; Levesque & Minniti, 2006). In the same vein, age-related stereotype literature argues that behaving entrepreneurially (e.g., being innovative) in the work context is expected from younger than older individuals (Posthuma & Campion, 2009). Thus, leading an entrepreneurially-oriented business might not be perceived as a typical behavior of an older CEO, which, in turn, could limit their ability to access resources (Boulton, Shohfi, & Zhu, 2019). A small firms CEO is the "face" of the organization to job applicants, and age is an easily accessible facial cue that individuals automatically use to make inferences about leader abilities (Spisak, Grabo, Arvey, & van Vugt, 2014). Thus, there is reason to believe that CEO age might be a boundary condition for recruiting in small firms with a high entrepreneurial attitude.

Considering the importance of an EO for growing small firms (Rauch et al., 2009), we develop arguments based on the signaling theory (Spence, 1973, 2002) on how a small firm's EO signals credible information about the firm's underlying qualities to job applicants. However, we also argue based on the theory of age norms (Lawrence, 1988, 1996) that a CEO's age moderates the effect between EO and job applicant's likelihood of long-term job

commitment, because an entrepreneurial behavior on an individual level (e.g., innovative, proactive and risk-taking) is typically seen as a young people's game (Levesque & Minniti, 2006). We formalize these statements in five hypotheses, which are tested in a conjoint experiment on a sample of 1,560 job decisions nested within 65 job applicants. A conjoint experiment is a research method that is popular among entrepreneurship and recruitment scholars for studying decision makers' preferences (e.g., Hauswald, Hack, Kellermanns, & Patzelt, 2015; Moser et al., 2017; Zacharakis & Shepherd, 2018). Following recommendations by Aiman and colleagues (2002), we used realistic stimulus material in our conjoint experiment. More specifically, we manipulated CEO's age with pictures of male faces which is a frequently used method in leadership research (e.g., Elgar, 2016; Spisak et al., 2014) but remains largely unknown among entrepreneurship scholars.

The primary contribution of this study lies in its nuanced examination of the relationship between signaling EO and job applicant's likelihood to enter a long-term employment relationship with a small firm. Thus, this study offers a broader perspective on EO as we suggest that EO is not only directly related to performance (Rauch et al., 2009) but may also contribute to organizational processes (e.g. staffing) that are predecessors of small firm's performance (Cardon & Stevens, 2004). Moreover, the recruitment literature has largely used signaling theory to explain how job applicants infer unobservable characteristics of potential employers from observable firm characteristics, but the notion of sending credible signals, which are either costly to obtain or hard to fake, has gone unacknowledged (Bangerter, Roulin, & König, 2012). We address this scarcity as we develop and test theory that explains why EO is a credible signal in small firm recruitment context. Finally, we also contribute to the sparse and fragmented body of literature on the age-leadership linkage (Walter & Scheibe, 2013) and extend knowledge in this field by proposing that a CEO's age plays a central role for recruitment in small firms.

THEORY AND HYPOTHESES

Signals in Small Firm's Recruitment

Key elements of the signaling theory (Spence, 1973, 2002) are a signaler who produces a signal to influence a receiver's decision. While the signal must be observable and correlated with an unobservable but relevant characteristic of the signaler, the receiver interprets the signal as an indicator of unobservable characteristics (Connelly, Certo, Ireland, & Reutzel, 2011; Bangerter, Roulin, & König, 2012). The underlying mechanism of the signaling theory is concerned with the reduction of information asymmetry by sending credible signals.

In the recruitment process, job applicants do not have access to all information (creating information asymmetry) about organizational characteristics that could have an impact on their job decision (Baum, Schäfer, & Kabst, 2016; Williamson, Cable, & Aldrich, 2002). Prior research on recruitment indicates that applicants use observable characteristics signaled by recruiting firms to infer firm's unobservable characteristics, which, in turn, influences their attraction to a company (Chapman, Uggerslev, Carroll, Piasentin, & Jones, 2005). For example, job applications make inferences about working climate based on recruiter behaviour (e.g., friendliness; Lievens & Slaughter, 2016; Uggerslev, Fassina, & Kraichy, 2012;).

However, not all information communicated by recruiting firms are credible signals because credible signals must be honest and costly to obtain (Bergh, Connelly, Ketchen & Shannon, 2014). "Costly refers to the sender's expense associated with signaling desirable characteristics, such as quality, reliability, or genuineness" (Moss et al., 2015; p. 31). Thus, credible signals enable job applicants to distinguish between employers of high and low quality (Connelly et al., 2011). For example, signaling an employer award (e.g. Great Place to Work) is costly to obtain as firms have to pay application fees and fulfill strong criteria to be awarded. Consequently, not every firm can be awarded. Thus, employer awards can serve as a credible signal for job applicants that helps them distinguish between employers of higher and lower

quality, which, in turn, influences job applicant attraction to a company (Baum & Überschaer, 2018). Based on the above described key elements and mechanism of the signaling theory, we now theoretically develop arguments on how EO functions as a credible signal in small firm recruitment.

The influence of signaling EO on applicant's likelihood of long-term job commitment

"EO reflects the mindset and methods organizations use to search and pursue opportunities for growth" (Moss et al., 2015; p. 35). In other words, EO, which encompasses a firm level innovative, proactive, and risk-taking behavior (Covin & Wales, 2019), might signal organizational success (Su, Xie, & Li, 2011). But what exactly makes EO a credible signal?

EO is costly to obtain, because whether small firms can successfully translate EO into growth "may depend, in part, on their ability to leverage their human resources effectively" (Messersmith & Wales, 2013, p. 116). Thus, human resources play an essential role in the entrepreneurial process, because people drive the process forward (Kang, Matusik, Kim, & Phillips, 2016). Consequently, entrepreneurially-oriented small firms might invest even more in an organizational culture and structures that aim to reinforce employee motivation and empowerment (Brettel et al., 2015; Kroon, Van De Voorde, & Timmers, 2013; Rauch & Hatak, 2016). Building up this strength is costly and differentiates small firms from each other in terms of their culture and work performance (Patel & Conklin, 2012). Moreover, not meeting applicants' expectations, after they start working for the firm, can be particularly costly for small firms because applicant's job commitment and retention will be affected (Kickul, 2001). Thus, a small firm's EO transmit honest information to job applicants and is hard to imitate by firms with lower levels of EO.

For these reasons, we conclude that EO is a credible signal that small, growth-oriented firms can send to reduce information asymmetry among job applicants. However, we assume

different implications per subdimension. Thus, we separate the higher-order construct of EO into two subdimensions: (1) firm's behavior towards innovativeness and proactiveness, and (2) firm's attitude towards risk (e.g., as done in Anderson, Kreiser, Kuratko, Hornsby, & Eshima, 2015), to hypothesize the influence of EO.

The positive effects of small firm's behavior towards innovativeness and proactiveness. A firm's innovative and proactive behavior refers to the firm's tendency to create and introduce novel products or services and to take initiatives in the market (Covin & Slevin 1989). Behaving entrepreneurially through firm's innovative and proactive efforts is seen as a signal for small firm survival and growth (Moss et al., 2015). Moreover, an organizational innovative and proactive working climate empowers innovative behavior among employees (Kang et al., 2016). Thus, it influences small firm's ability to achieve high work performance (Patel & Conklin, 2012). It has been shown that an innovative image increases applicants' attraction to a firm (Lievens & Highhouse, 2003), particularly to small firms (Moser et al., 2017). Accordingly, we suggest that a small firm signaling an innovative and proactive behavior can positively influence applicant's likelihood to commit to a long-term employment relationship because it is correlated with underlying firm qualities such as a working climate that enhances innovation and opportunities for learning and development.

H1: There is a positive relationship between signaling a firm's high innovative and proactive behavior and applicant's likelihood to enter into a long-term employment relationship with a small firm.

The negative effects of small firm's risk attitude. A firm's risk-taking propensity reflects the extent to which it is capable of and comfortable with investing into costly projects in the face of uncertainty (Moss et al., 2015). Although a firm culture that fosters employee's innovative behavior needs a risk-taking working climate (Kang et al., 2016), it seems likely that

risk-taking might be also associated with a higher risk of failure (Rauch et al., 2009). In other words, job applicants might associate a firm's attitude to invest into risky projects with a higher possibility of failure, that could also be associated with a higher likelihood of job losses. As we assume that job applicants have a general tendency to avoid uncertainty (Alderfer, 1972; Hauswald et al., 2015), they might be less attracted to small firms with a high risk-taking propensity. Previous recruitment research also suggests that job security has an influence on applicants' attraction to an organization (Aiman-Smith, Bauer, & Cable, 2001; Baum & Kabst, 2013; Lievens & Highhouse, 2003). We, therefore, propose that a small firm signaling a high risk-taking attitude can negatively influence applicant's likelihood to commit to a long-term employment relationship as it is associated with an uncertain work environment.

H2: There is a negative relationship between signaling a firm's high risk-taking attitude and applicant's likelihood to enter into a long-term employment relationship with a small firm.

The joint effect of the EO subdimensions. While the direct effects of the EO subdimensions are important for understanding an applicant's attraction to a small firm, EO research also argues that the EO subdimensions are jointly necessary and form together a powerful higher-order dimension (Anderson et al., 2015). Kang et al. (2016), for example, shows how the different climates in an entrepreneurial firm culture, specifically an innovative, proactive, and risky climate, can coexist and jointly stimulate employees' innovative behaviors. Accordingly, we argue that job applicants will simultaneously consider the EO subdimensions, because it will signal a specific working climate. However, bearing applicant's general tendency to avoid uncertainty in mind (Hauswald et al., 2015), we suggest that combining the EO subdimensions to a higher-order construct (a high innovative, high proactive, and high risk-taking firm behavior), as suggested by the EO literature (Covin & Wales, 2019), will negatively

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influence applicant's likelihood to commit to a long-term employment relationship with a small firm.

H3: The positive effect of signaling a firm's high innovative and proactive behavior on applicant's likelihood to enter into a long-term employment relationship with a small firm becomes weaker for firms signaling high risk-taking attitude.

The Moderating Role of CEO Age

In entrepreneurially-oriented small firms, CEOs need the ability to successfully act in a fast changing, innovative and uncertain environment (Choi & Shepherd, 2004). However, in a work context, behaviors like high willingness to change or the capability to catch up with the fast pace of technological innovation, is rather expected from younger, and less from older individuals (Posthuma & Campion, 2009; Walter & Scheibe, 2013).

Age norms (Lawrence, 1988, 1996) refer to those social norms that determine, for example, whether running an entrepreneurially-oriented business is considered to be appropriate for an older individual (Kautonen et al., 2011). Age norms can predict how CEO's leadership ability is evaluated by others (Rudolph, Rauvola, & Zacher, 2018). Moreover, as chronological age is a highly visible facial cue, others automatically make inferences from facial age cues and link them to context specific leadership abilities (Antonakis & Eubanks, 2017; Elgar, 2016; Spisak, 2012; Spisak et al., 2014). The fit of age-related expectations and displayed leader behavior (e.g. running an entrepreneurially-oriented small firm) increases a leader's legitimacy and the likelihood that the leader is accepted by employees or external stakeholders (Lord et al., 2001; Nagy, Pollack, Rutherford, & Lohrke, 2012).

Drawing on this, we propose that applicants will expect rather a younger than older CEO running an entrepreneurially-oriented small firm. Thus, applicants will perceive these older CEOs as less legitimate. Because a small firm's CEO is the "face" of the organization to job

applicants and usually their future supervisor, they will consequently put attention on their perception of CEO legitimacy, which, in turn, will influence their likelihood to commit to a long-term employment relationship.

H4a: The positive effect of signaling a firm's high innovative and proactive behavior on applicant's likelihood to enter into a long-term employment relationship with a small firm becomes weaker for firms with an older CEO.

H4b: The negative effect of signaling a firm's high risk-taking attitude on applicant's likelihood to enter into a long-term employment relationship with a small firm becomes stronger for firms with an older CEO.

Insert Figure 1 about here.

Figure 1 illustrates our research model and hypotheses.

METHOD

Sample. Our sample consists of 1,560 assessments nested within 65 individuals. For conjoint experiments it is important that participants have experience with making decisions as those in the experiment (Aiman-Smith et al., 2002). In our conjoint experiment, participants were put in a hypothetical scenario where they assumed the role of a job applicant with different job offers to choose from. Therefore, we focused on individuals with work experience, as it means that they already made at least one job choice decision. Our online survey targeted undergraduates, graduates, and Alumni at two mid-sized German universities via university mailing lists. This sample particularly matches our research questions for two reasons. First, university graduates usually make job decisions upon graduation. Thus, similar samples have been used in a variety of empirical studies on applicant's attraction to organizations (e.g., Gatewood, Gowan, & Lautenschlager, 1993; Hauswald et al., 2015; Walker, Feild, Giles,

Bernerth, & Short, 2011). Second, current or former students have the intellectual capacity to understand complex instructions in experimental studies, which makes them ideal for initial theory tests and the establishment of general decision mechanisms (Lonati, Quiroga, Zehnder, & Antonakis, 2018). Participants in our sample indicated an average of 5.3 years of work experience (standard deviation: 8 years). Their average age was 28.3 (standard deviation: 9.2 years), and 66.2% of the study participants were female. In terms of highest level of education completed, 38% of the study participants had a high school degree and 62% had a university degree.

Experimental Design. We used a metric conjoint analysis (Louviere, 1988) to examine applicant's attraction to small firms. In conjoint experiments, participants are asked to make a series of real-time judgments based on profiles describing hypothetical decision situations. The profiles consist of a set of decision criteria described at different levels (e.g. high and low) and represent the independent variables. The decision makers' judgements are represented by the dependent variable. The advantage of this experimental approach is that it overcomes issues (e.g. retrospective reporting bias) associated with post-hoc techniques, such as surveys (Aiman-Smith et al., 2002). Thus, conjoint analysis is a commonly used and well accepted research method in research fields such as entrepreneurship (Zacharakis & Shepherd, 2018) or recruitment (e.g. Hauswald et al., 2015, Moser et al., 2017).

Procedure. We asked participants to make a series of assessments regarding their likelihood to enter a long-term employment relationship based on a set of small firms profiles that varied in the level of EO (high vs. low EO behavior = firm's innovativeness and proactiveness; high vs. low EO risk = firm's risk-taking attitude) and CEO age (younger vs. middle-aged vs. older). Because conjoint experiments are limited in how many decision criteria can be tested, placing the decision in context corrects for criteria that might be missing (Zacharakis & Shepherd, 2018,). Thus, we provided a common context by asking participants

to make several assumptions before starting the conjoint experiment (e.g. "you are currently looking for an long-term employer", "you have unconditional job offers from small firms that all have the same number of employees (30) and year of foundation (1980)", "assume that the current business environment in Germany is good and the unemployment rate is shrinking").

As each profile included three decision criteria (EO behavior, EO risk, and CEO age) that varied across different levels, we ended up with 12 (2x2x3) combinations. Participants were shown all 12 small firm profiles. Each profile included a male face, and a brief description of firm' organizational strategy (i.e., EO). To check the test-retest reliability, we fully replicated the profiles, resulting in 24 decision scenarios. Also, one practice profile was added to familiarize participants with the task (see Appendix A). Assessing 25 profiles has been shown to be manageable for study participants (Aiman-Smith et al., 2002). To control for ordering effects (Chrzan, 1994), participants were randomly assigned to one of the versions through a link to the online study. Finally, we used a post-experiment questionnaire to collect participants' data (e.g., age, gender, work experience).

Variables and Measures

Applicant's likelihood of long-term job commitment (dependent variable). We followed the conjoint study of Hauswald et al. (2015) and asked participants to indicate how likely they would commit to a long-term employment relationship with each small firm based on the profile description on a 7-point Likert scale (1: very unlikely and 7: very likely). This single item approach makes it manageable for participants to make a series of decisions in a short time.

Entrepreneurial Orientation (independent variable). Based on the items of the original EO measure (Covin & Slevin, 1989), we described our experimental manipulation for EO. We divided EO into two subdimensions (Anderson et al., 2015) and described (1) small firm's

behavior towards innovativeness and proactiveness (EO behavior) and (2) small firm's risk attitude (EO risk) each at two levels (high or low). EO behavior: The firm introduces many/ few new products and services on the market. It often/ seldom takes the initiative to take new chances in the market. EO risk: The company invests many/ few resources in strategies and projects with uncertain results.

CEO age (moderator). The age of the CEO was manipulated by showing neutral faces of male Caucasians in different age-groups (younger, middle-aged, older). We took a preselection of 24 faces from the FACE database (Ebner, Riediger, & Lindenberger, 2010) and asked in a separate pilot study twenty-four undergraduate business students to rate the age of each face and their facial attributes (e.g., leadership ability, competence, charisma, attractiveness, likeability, masculinity, trustworthiness). We then conducted a multidimensional scaling (MDS) to select most similar faces in each age-group (younger, middle-aged, older). From these results we identified four faces for each age-group that did not significantly differ from each other in terms of age. Finally, we had 12 different faces (4 faces for each age-group) to create our 12 profiles. Following other studies (Spisak, 2012; Spisak et al., 2014), we used different faces for each age group to minimize the idiosyncratic effect of any face and to increase the reliability of isolating the age cue. After the conjoint experiment we asked participants to estimate the age of each face to test if our age manipulation had worked in the main study. The results from a paired-sample t-test showed that the participants considered the younger faces to be significantly younger than the middle-aged faces, and the middle-aged faces significantly younger than the older faces (mean: 28.79 vs. mean: 48.53 vs. mean: 65.47 at $p < .001$).

Control variables. Following recent discussions on the usage of control variables (Bernerth & Aguinis, 2016), we focused on a few that may have an impact. We controlled for the effects related to job applicant's mindset (e.g., openness to change), demographics (age and

gender), and job search behavior (job seeker), because these variables might influence applicant's attraction (Hauswald et al., 2015; Moser et al., 2017). As entrepreneurial firms and their innovative and fast-paced working culture might not be equally attractive to all job applicants (Moser et al., 2017), we controlled for their openness to change (-1: contradicts my values, 7: of the most importance; Schwartz, 1992; our Cronbach's alpha: 0.80). We added participant's age (in years) as control variable, because rather younger than older individuals tend to work for entrepreneurial and fast-growing firms (Ouimet & Zarutskie, 2014), and the propensity to seek change within a new job might be lowered by age (Trusty, Allen, & Fabian, 2019). We include participant's gender (0=male, 1=female), because men might be more attracted to firms with a high-risk propensity than women are (Samek, 2019). We controlled for applicants search status, because job seekers (0=no, 1=yes) might be generally more open to job opportunities (Acikgoz, 2019).

RESULTS

Our study yielded 77 complete responses. However, 12 respondents (15.6 %) had poor test-retest reliability (test-retest correlation < .50), and were thus excluded from further analysis. For the 65 final respondents, the mean test-retest reliability (0.80) was acceptable. Thus, we used all 24 decisions per respondent, resulting in 1,560 data points (following other conjoint studies, e.g. Domurath & Patzelt, 2016; Hauswald et al., 2015). However, these data points are not independent of each other because they are nested within individuals. Thus, we applied hierarchical linear modeling (HLM), which is appropriate for nested data (Heck, Thomas, & Tabata, 2013).

Table 1 offers descriptive statistics and correlations of the Level 2 variables. Variance inflation factors (VIF) ranged from 1.01 to 1.08 and do not exceed generally accepted thresholds (Cohen, Cohen, West, & Aiken, 2013).

Insert Table 1 about here

Table 2 presents the results of the HLM analysis. We conducted our analysis following

recommendations by Aguinis et al. (2013) and other conjoint studies (e.g. Choi & Shepherd,

2004; Monsen, Patzelt, & Saxton, 2010). First, we conducted an unconditional model which

does not include any Level 1 or Level 2 predictors to have a base model to estimate the intraclass

correlation (ICC). The ICC (not reported) was 0.181 and means that 18.1% of the total variances

of the dependent variable is explained by differences across individuals, which is enough Level

2 variance to justify the use of HLM (Heck et al., 2013; Hayes, 2006). Next, as reported in

Table 2, we specified random coefficient models and computed pseudo R^2 with the

unconditional model as baseline (Snijders & Bosker, 1999).

Insert Table 2 about here

In Model 1, we entered our Level 2 control variables. As shown in Table 2, only the

control variable age (coefficient = -0.03; p = 0.007) significantly explain variance in the

dependent variable. In Model 2, the Level 1 variables (EO behavior, EO risk, and CEO age)

were entered, which were all significant. Specifically, applicant's likelihood to enter into a long-

term employment relationship with a small firm is higher if firms show high EO behavior

(coefficient = 1.52; p < .000), but the likelihood is lower if firms show high EO risk (coefficient

= -0.58; p = .001), which supports our Hypotheses 1 and 2. Additionally, there is a main effect

of CEO age on applicant's long-term job commitment, indicating that older CEOs have

generally better chances to attract applicants (coefficient = 0.21; p < .000). The effect size,

pseudo R^2, shows that on the decision level (Level 1) the main effect model explains 64.1% of

the variance in the dependent variable (refer to Table 2). To assess the effect size for each Level

1 variable separately, we additionally calculated the proportion of variance reduction based on the Level 1 variance components (Peugh, 2010). While EO behavior shows the largest effect (34.9%), followed by the effect of EO risk (22.1%), the effect of CEO age (1.3%) remains small.

Model 3 additionally entails the Level 1 interactions of EO behavior with EO risk, and CEO age with EO behavior, and EO risk, respectively. Table 2 reveals a significant interaction between EO behavior and EO risk (coefficient = -0.47; p = .009), and a marginally significant interaction between CEO age and EO risk (coefficient = 0.11; p = .083). However, there is no significant interaction between CEO age and EO behavior (coefficient = 0.02; p = .697). Figures 2–3 show the nature of the significant interactions. Figure 2 demonstrates that applicant's likelihood to enter into a long-term employment relationship with a small firm increases with higher EO behavior, and that this relationship is weaker (flatter line) when a firm's EO risk attitude is high than when it is low. Thus, Hypothesis 3 gains support. However, we reject Hypothesis 4a, as the interaction remains non-significant. As shown in Figure 3, applicant's attraction decreases with higher level of EO risk, but, contrary to our expectations, this negative relationship is weaker (flatter line) when the firm's CEO is older than when he is younger. Thus, Hypothesis 4b gains no support.

The effect size, pseudo R², for Model 3 in Table 2 shows that the inclusion of the Level 1 interactions leads to an increase of 0.8% in variance explained in the dependent variable as compared to the model without interactions. Although this incremental effect appears small, it is typical for interaction effects as they usually have small effect sizes (Domurath & Patzelt, 2016; Peugh, 2010).

Figure 2-3 about here

Post-hoc analysis. We controlled for the attribute order in our conjoint profiles and found a significant effect on our dependent variable, but not on the direction or significance of any other estimated parameter in our model. Thus, we conclude that ordering effects may occur unpredictably (Chrzan, 1994; Moser et al., 2017), but we do consider them to be of concern to our results. We also checked whether cross-level interactions with our control variables affect our results. We found that job applicant's demographics significantly moderate the effect of EO on our dependent variable, but it did not change the results of our hypothesized effects. However, job applicant's age moderates the effect of EO behavior (coefficient = -0.04; p = .001), indicating that the positive effect of signaling high EO behavior is stronger for younger job applicants (Appendix B, Figure 4). Job applicant's gender moderates the effect of EO risk (coefficient = -0.76; p = .039), indicating that the negative effect of signaling high EO risk is stronger for female job applicants (Appendix B, Figure 5).

Robustness check. In the first three columns in Table 2, we offer a stepwise representation of our HLM estimation using random coefficient models by including additional error terms on Level 2 to account for variance across individuals. Because the HLM method separates the error terms for the two levels of analysis, our estimated coefficients and error terms at the individual level (Level 2) should not impact the results at the decision level (Level 1) (Raudenbush & Bryk, 1992; Snijders & Bosker, 1999). In Model 4, we specified a fixed-effect model with no additional error terms on Level 2. Indeed, the estimated model coefficients, standard errors, and p-values in Models 3 and 4 of Table 2 are exactly the same for our Level 1 variables and interactions. Comparing the random coefficient model with the fixed-effect model therefore provides robustness of our results (Monsen et al., 2010). We performed a second robustness check and ran our full model with our dependent variable specified as ordinal (instead of continuous) variable (Monsen et al., 2010). As shown in Table 2 (Model 5), the pattern of our results does change except for the interaction of CEO age and

EO risk (the interaction between CEO age and EO risk is not significant in Model 5; coefficient = 0.21; p = .114).

DISCUSSION

Recruiting new talents is a highly important but challenging task for small firms (Cardon & Stevens, 2004; Heneman & Berkley, 1999). However, research on antecedence of small firm recruitment success is still scant (Greer et al., 2016; Moser et al., 2017). Based on the signaling theory (Spence, 1973, 2002) and the theory of age norms (Lawrence, 1988, 1996), we developed and tested a moderated model by introducing EO as a credible signal and CEO age as moderator to examine job applicants' attraction to a small firm. Our results make several contributions to the entrepreneurship, small firm recruitment, and age-related leadership literature.

First, we open a broader perspective on the role of EO, because results of our conjoint experiment show that job applicants take EO into account when assessing their willingness to pursue a job in a small firm. More specifically, our findings suggest that a firm's innovative and proactive behavior is an important decision criterium for job applicants and enhances small firm recruitment outcomes. In doing so, we add to existing research on the positive effects of signaling a firm's innovative image to job applicants (e.g., Lievens & Highhouse, 2003; Moser et al., 2017). Our post-hoc results show that particularly younger applicants are attracted by this signal. Compared to older applicants, they are more likely to associate high levels of small firm's innovativeness and proactiveness with opportunities for skills development (Ronda, Valor, & Abril, 2019), which, in turn, enhances their willingness to work for growth-oriented small firms (Ouimet & Zarutskie, 2014). However, although a firm's risk-taking attitude is seen (along with innovativeness and proactiveness) as a necessary requirement for firm growth (Covin & Wales, 2019) and employee's innovative behavior (Kang et al., 2016), it might also

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be detrimental to firm's recruitment success. Though, our post-hoc analysis reveals that a small firm's risk-taking behavior is less attractive for female than for male job applicants. Thus, in line with theoretical assumptions and other empirical findings (Acikgoz, 2019; Chapman et al., 2005; Trusty et al., 2019), our results indicate that demographic-based differences in the perception of signaled firm attributes might influence recruitment outcomes. With our findings, we contribute to the entrepreneurship literature as we show that high levels of EO might not only enhance small firms' ability to achieve superior firm performance (Wiklund & Shepherd, 2005), but also influences the success of other organizational practices such as recruitment. Thus, we provide support for Phillips and Gully's (2015) theoretical framework that describes how recruitment strategies are aligned with organizational strategies and add to the current discussion on how employee recruitment should relate to the fulfillment of organizational goals such as performance and execution of firm strategies (Acikgoz, 2019). Additionally, we extend growing research at the intersection of EO and human resource management (Hayton, 2005; Irwin et al., 2018; Messersmith & Wales, 2013; Schmelter, Mauer, Börsch, & Brettel, 2010).

Second, we used the signaling theory to develop arguments on how EO functions as a credible signal in small firm recruitment. We argued that EO is a credible and costly signal as it requires essential investment in organizational structures which then helps to build up a unique human capital asset. Thereby making them different from other small firms. Our results indicate that signaling EO influences applicant's attraction to small firms, and the effect sizes for the EO subdimensions (1. proactiveness and innovativeness, 2. risk-taking) suggest that EO is an important decision factor for job applicant's when assessing their long-term job commitment. Thus, we strengthen the signaling literature (Bergh et al., 2014; Connelly et al., 2011) and add to previous recruitment research which primarily focuses on one part of the signaling theory (e.g. how applicants use observable characteristics sent by recruiting firms to

infer unobservable firm characteristics) but remains mostly silent on the need of sending credible signals (Bangerter et al., 2012).

We also contribute to the growing entrepreneurship literature that pays attention to how signaling EO affects external stakeholder's willingness to support small firms with financial capital (e.g. Moss et al., 2015; Wales et al., 2019). Our results indicate that signaling EO also influences the likelihood of other external stakeholders, such as job applicants, to invest their (human) capital. However, our findings also demonstrate that signaling EO as a higher-order dimension (high levels of innovativeness, proactiveness, and risk-taking) has negative consequences, because signaling a high risk-attitude weakens the positive effect of signaling a high innovative and proactive firm behavior. Thus, we additionally advance work on EO by suggesting that certain dimension of EO can influence perceptions and decisions of job applicants differently and support the notion of investigating EO not only as a unidimensional construct (Anderson et al., 2015).

Third, our findings contribute to age-related leadership research. Contrary to our expectation, we did not find a significant interaction between signaling a small firm's innovative and proactive behavior and CEO age. This result indicates that signaling an appealing strategic posture which is associated with an attractive and stimulating work environment does not need additional justification by signaling a younger CEO, who is associated with the ability to successfully act in a fast changing and innovative environments (Spisak et al., 2014). Furthermore, we did find a marginally significant interaction between small firm's risk attitude and CEO age. Contrary to our expectations, this result implies that the negative effect of signaling a firm's high risk-taking attitude on applicants' attraction becomes weaker for firms with an older CEO. It seems that job applicants may follow the logic "think CEO, think old" (Lawrence, 1988) in cases of high uncertainty. Thus, age stereotypes about who is appropriate for a CEO position might lower the acceptance of younger CEOs and make

job applicants perceive them as less competent or reliable (Buengeler, Homan, & Voelpel, 2016).

LIMITATIONS

Our study has several limitations that provide avenues for future research. One limitation is that conjoint experiments face questions of external validity, because the hypothetical decision situations might not be perceived as real-world decision situations (Zacharakis & Shepherd, 2018). One could argue that job applicants could perceive EO as an unrealistic signal in recruitment. In reality, though, job applicants get information about a firm's strategies on the company website (Abeysekera, 2019) and firms communicate an EO in order to acquire resource (Moss et al., 2015). However, we encourage researchers to more deeply investigate the importance of EO for applicant's job choice decisions by conducting interviews. Another limitation of our study is the firm context. Signalers in our conjoint experiment are established small firm with a high versus low EO. We choose them over young firms because established compared to young firms already benefit from existing resource commitments, legitimacies, and organizational structures that makes it easier for them to implement entrepreneurial strategies (Su, Xie, & Li, 2011). Thus, for established small firms EO might be a particular credible signal as it communicates an honest information and not "blowing smoke" (Wales et al., 2019). However, this limits the generalizability of our results to other firm contexts, such as startups or even larger companies. Thus, other studies could evaluate if signaling an EO by young ventures or larger firms will have similar effects on job applicants. Finally, in our study we used male Caucasian faces for the manipulation of CEO age, because most people still visualize a man when thinking about leaders (Johnson, Murphy, Zewdie, & Reichard, 2008; Koenig, Eagly, Mitchell, & Ristikari, 2011; Offermann & Coats, 2018). Additionally, other's perception of leader's legitimacy is higher for leaders from the same

ethnicity (Burris, Ayman, Che, & Min, 2013). Despite the importance of these factors they were not in the scope of our study, as we were solely interested in the moderating effect of CEO's age. We used male Caucasian faces for our CEO displays as they might be perceived as highly stereotypical by job applicants in Germany (Fiske, 2017). Thus, our study may not generalize to other cultural contexts. We encourage future research to conduct similar studies in other countries while taking more diversity factors (e.g. gender, ethnicity) into account.

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TABLE 1

Means, Correlations, and Variance Inflation Factors (VIF)

Means, Correlations, and Variance Inflation Factors (VIF)	Mean	SD	VIF	1	2	3	4
1 Openness to change (-1=no, 7=high)	4.27	0.89	1.04	1.00			
2 Age (in years)	28.94	9.19	1.01	0.03	1.00		
3 Gender (female=1)	66%	-	1.04	0.02	0.01	1.00	
4 Job Seeker (yes=1)	40%	-	1.08	-0.17 **	0.08 **	0.19	1.00

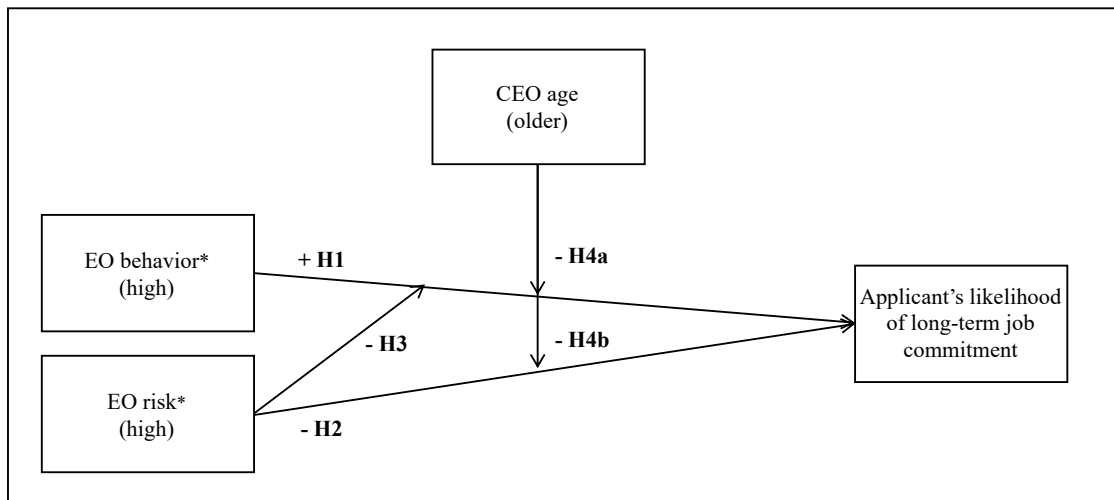Note: N=65; * p < .05, ** p <.01 (2-tailed)

TABLE 2

Results of the HLM Analyses for Applicant's Likelihood of Long-Term Job Commitment

H	Variables and Levels	Model 1 Base Model			Model 2 Main Effect Model			Model 3 Full Model			Model 4 Fixed-Effect (RC 1)			Model 5 Ordinal DV (RC 2)		
		Estimate	R.Std.E	Sig.	Estimate	R.Std.E	Sig.	Estimate	R.Std.E	Sig.	Estimate	R.Std.E	Sig.	Estimate	R.Std.E	Sig.
	Fixed effects															
	Intercept	3.72	0.09	0.000	3.72	0.09	0.000	3.72	0.09	0.000	3.72	0.09	0.000	1.56	0.23	0.000
	Level 2 (control variables)															
	Openness to change	-0.03	0.11	0.779	-0.03	0.11	0.779	-0.03	0.11	0.779	-0.03	0.11	0.779	-0.15	0.27	0.575
	Job applicant's age	**-0.03**	**0.01**	**0.006**	**-0.03**	**0.01**	**0.006**	**-0.03**	**0.01**	**0.006**	**-0.03**	**0.01**	**0.006**	**-0.08**	**0.03**	**0.005**
	Job applicant's gender (female)	-0.13	0.17	0.450	-0.13	0.17	0.450	-0.13	0.17	0.450	-0.13	0.17	0.450	-0.30	0.37	0.412
	Job seeker (yes)	0.01	0.19	0.953	0.01	0.19	0.953	0.01	0.19	0.953	0.01	0.19	0.953	0.06	0.44	0.891
	Level 1 (independent variables)															
+H1	EO behavior (high)				**1.52**	**0.12**	**0.000**	**1.52**	**0.12**	**0.000**	**1.52**	**0.12**	**0.000**	**3.35**	**0.30**	**0.000**
-H2	EO risk (high)				**-0.58**	**0.17**	**0.001**	**-0.58**	**0.17**	**0.001**	**-0.58**	**0.17**	**0.001**	**-1.21**	**0.39**	**0.002**
	CEO age				**0.21**	**0.05**	**0.000**	**0.21**	**0.05**	**0.000**	**0.21**	**0.05**	**0.000**	**0.41**	**0.10**	**0.000**
	Level 1 interactions															
-H3	EO behavior (high) * EO risk (high)							**-0.47**	**0.18**	**0.009**	**-0.47**	**0.18**	**0.009**	**-0.97**	**0.39**	**0.014**
-H4a	CEO age * EO behavior (high)							0.02	0.06	0.697	0.02	0.06	0.697	0.05	0.12	0.687
-H4b	CEO age * EO risk (high)							**0.11**	**0.06**	*0.083*	**0.11**	**0.06**	*0.083*	0.21	0.13	0.114
	Deviance statistic (-2 Log Likelihood)	5815.95			4654.41			4634.46			5243.24			75824.32		
	Pseudo R²	0.000			0.641			0.649			0.325					
	Change in Pseudo R²	0.000			0.641			0.008								

Note: Level 1 N=1,560; Level 2 N=65; H=Hypotheses; R.Std.E=Robust Standard Error; Sig.=Significance Level; Sig. < 0.05 in bold; Sig. < 0.10 in italic; Restricted Maximum Likelihood Estimation (REML); Models 4 and 5 represent our robustness checks; RC=Robustness Check; DV=Dependent Variable

FIGURE 1

Research Model

CEO age (older)

EO behavior* (high)

EO risk* (high)

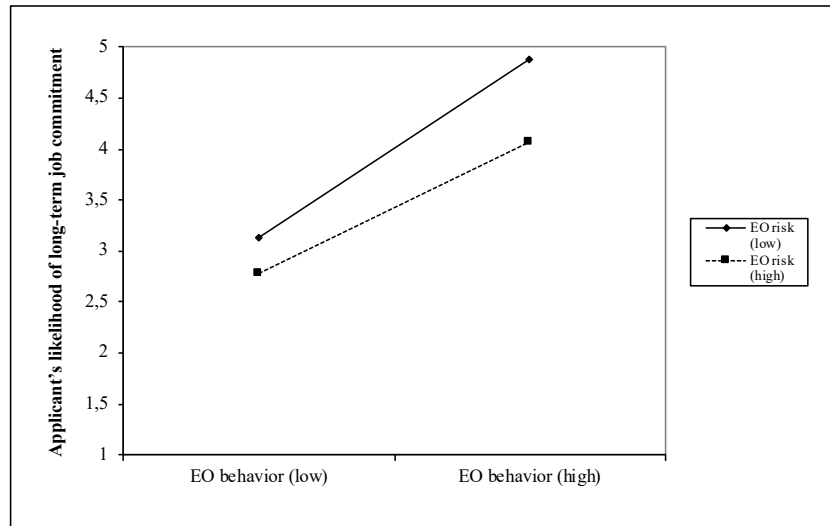**Applicant's likelihood of long-term job commitment**

+ H1

- H4a

- H3

- H4b

- H2

*EO behavior = small firm's behavior towards innovativeness and proactiveness; EO risk = small firm's risk attitude
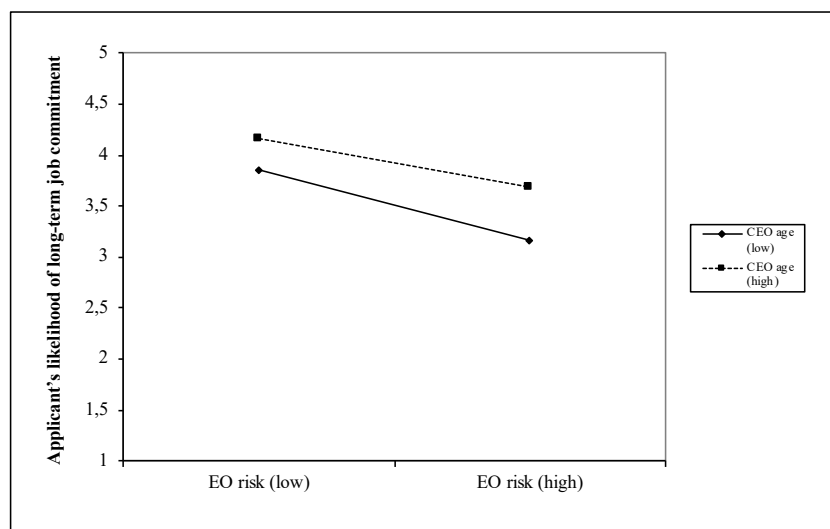
FIGURE 2

Two-Way Interaction of Small Firm's Behavior Towards Innovativeness and Proactiveness (EO Behavior) and Small Firm's Risk Attitude (EO Risk) on Applicant's Likelihood of Long-Term Job Commitment

FIGURE 3

Two-Way Interaction of CEO Age and Small Firm's Risk Attitude (EO Risk) on Applicant's Likelihood of Long-Term Job Commitment

APPENDIX A

Practice Conjoint Profile

Firm's CEO   Firm's Strategic Orientation

Behavior Towards Innovativeness and Proactiveness: <u>High</u>
The firm introduces **many** new products and services on the market. It **often** takes the initiative to take new chances in the market.

Risk Attitude: <u>High</u>
The company invests **many** resources in strategies and projects with uncertain results.

What is the likelihood that you would enter into a long-term employment relationship with the firm described?

APPENDIX B
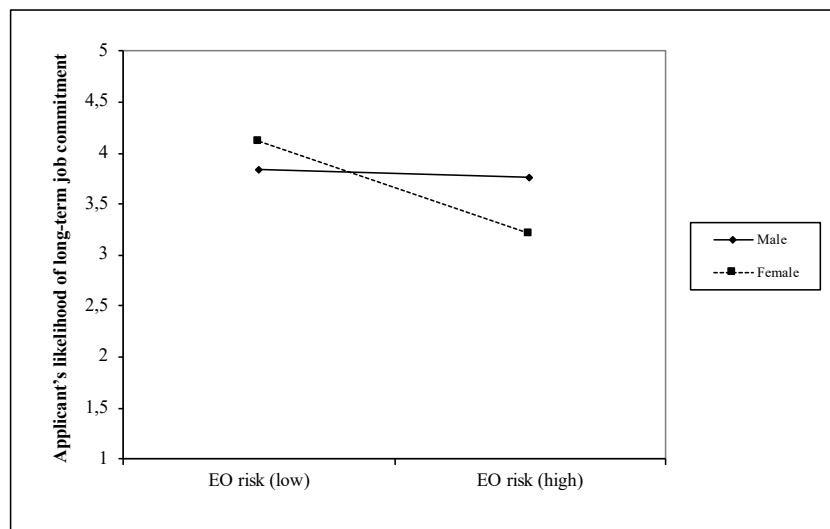
FIGURE 4

Two-Way Cross-Level Interaction of Job Applicant's Age and EO Behavior on Applicant's

Likelihood of Long-Term Job Commitment
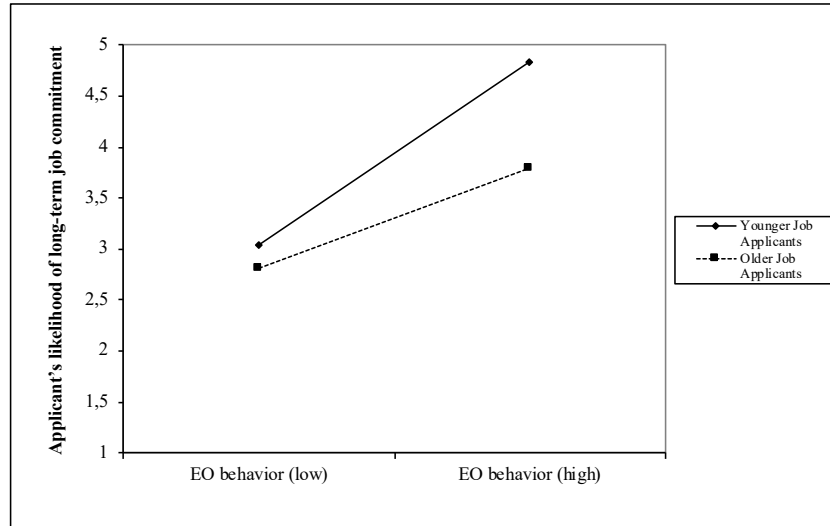
FIGURE 5

Two-Way Cross-Level Interaction of Job Applicant's Gender and EO Risk on Applicant's

Likelihood of Long-Term Job Commitment

FACING THE START-UP RECRUITER: ROLE INCONGRUITIES AND JOB CANDIDATE ATTRACTION

ABSTRACT

Gender stereotypes can reveal important insights on whether start-ups differ in their chances to attract new talent. Although great progress has been made to understand the relationship between gender stereotyping and entrepreneur's chances to attract financial resources, the effects of gender biases on entrepreneur's chances to attract human resources remains an unexplored topic. We use a between-subject vignette experiment (n = 263) to analyze whether job candidates' perceptions of gender and occupational role incongruities (e.g., women leading start-ups) lead to differences in recruiting outcomes for start-ups using active recruitment strategies via social media. Based on our findings, the answer is 'yes' for male and 'no' for female job candidate attraction.

Research Paper 3 is co-authored by Prof. Dr. Matthias Baum

INTRODUCTION

For entrepreneurs the recruitment of new talents is one of the most challenging tasks and critical for start-up survival (Moser, Tumasjan & Welpe, 2017). An easily accessible, and rather low-cost channel to find job candidates is active sourcing via social business networks such as LinkedIn (Alexander, Mader, & Mader, 2019; Roulin & Levashina, 2019). On these platforms, recruiters can make the first move to address potential job candidates and actively approach them with employment opportunities within their organization. In such recruiter-initiated processes, recruiters are the 'face' of an organization to job candidates and have a strong impact on recruiting outcomes (Chapman, Uggerslev, Carroll, Piasentin, & Jones, 2005; Phillips & Gully, 2015). Recruitment on social business networks therefore becomes more interpersonal and, by that, recruitment outcomes get more dependent on how the recruiter is being perceived by the job candidates.

Platforms like LinkedIn provide basic information about their members such as job position and salient demographic information such as a person's gender (Tifferet & Vilnai-Yavetz, 2018). Even though this information can be considered as superficial cues in the recruitment process, previous studies (e.g., Groza, Groza, & Barral, 2020; Johnson, Murphy, Zewdie, & Reichard, 2008; Malmström, Voitkane, Johansson, & Wincent, 2020; Rule, Bjornsdottir, Tskhay, & Ambady, 2016) and theory on role congruity (Eagly & Karau, 2002) suggests that these cues can influence how individuals are being perceived, particularly when the provided information has a (mis-) fit with existing stereotypes. In consequence, it is well possible that the interplay of basic features of the start-up recruiter, such as his/her status (the start-up CEO him-/herself or an employed HR manager within the start-up; Berry & Sanchez, 2019; Jung, Vissa, & Pich, 2017) as well as his/ her gender (Geiger, 2020; Nair, 2019), predict job pursuit intentions in social media recruitment – a channel with increasing importance especially in the start-up context (Banerji & Reimer, 2019).

Our study seeks to address the question whether start-up recruiters that match stereotyped occupational prototypes (e.g. a male CEO or a female HR manager) have a higher likelihood to attract potential job candidates. In addition, we seek to resolve the question if this prototypical effect is further contingent by job candidate's gender. So, we seek to contribute to understand the role of "who" recruits and "who" is being recruited in the context of start-up recruitment via social networks.

We use role congruity theory (Eagly & Karau, 2002) to argue how the congruity of start-up recruiter role (i.e., CEO or HR Manager) and gender stereotypes influences job candidates' job pursuit intentions. Previous research from that are suggests that the role of a start-up CEO is most likely expected to be occupied by a man (Rocha & Praag, 2020) given that entrepreneurs and leaders are rather associated with masculine characteristics (Eagly, Nater, Miller, Kaufmann, & Sczesny, 2020; Gupta, Wieland, & Turban, 2019; Jennings & Brush, 2013). HR manager roles, however, are most likely expected to be people oriented and focused on satisfying (prospective) employees' needs, which is associated with rather feminine characteristics (Cuddy, Fiske, & Glick, 2008; Heilman, 2001; Hentschel, Heilman, & Peus, 2019). Thus, the HR manager role might be seen as a female occupation. Consequently, we propose that start-up recruiter's match with stereotyped occupational prototypes will enhance start-up recruiting outcomes. However, we also propose that male job candidates will show a greater gender-role congruity bias than female job candidates (Gupta et al., 2019; Koch, D'Mello, & Sackett, 2015). We test these predictions in a randomized vignette experiment on a sample of 263 potential job candidates.

Our study primarily aims to contribute to the literature at the intersection of entrepreneurship, leadership and recruitment (Moser et al., 2017; Reid, Anglin, Baur, Short, & Buckley, 2018). Specifically, considering the different occupational roles that a start-up recruiter can have, and pointing out the intersection of job role and gender stereotypes indicates

currently overlooked challenges and opportunities for recruiting start-ups. Thus, we add to the still limited recruitment literature that focuses on start-ups (e.g., Leung, Zhang, Wong, & Foo, 2006; Moser et al., 2017; Nyström, 2019; Tumasjan, Strobel, & Welpe, 2011). Additionally, this study offers new insights for entrepreneurs, because it suggests that gender role and occupational role incongruities (e.g., women leading start-ups) lead to different recruiting outcomes for woman- and man-leaded start-ups. Growing literature focuses on the impact of external resource providers' gender biases on entrepreneurs' chances to acquire financial resources and provides important insights on how gender stereotyping affect investors decisions (e.g., Groza et al., 2020; Malmström et al., 2020; Yang, Kher, & Newbert, 2020). However, surprisingly little research has been done on analyzing perceptions and job decisions of human resource providers (Nyström, 2019), even though human resources, especially those of early hires, have a great impact on start-up succession (Cardon & Stevens, 2004; Coad, Nielsen, & Timmermans, 2017; Rauch, Frese, & Utsch, 2005). Thus, our study extends current knowledge about stereotyping effects in entrepreneurship by analyzing the effects of gender biases among human resource providers (i.e., job candidates). Finally, new trends in recruitment, such as active sourcing via LinkedIn, is a consequence of the current shift from an employer's job market to a candidate's job market (Acikgoz, 2019). However, the effect of recruitment activities using social media or the impact of being actively recruited on job candidates is still scarcely explored (Golovko, & Schumann, 2019; Phillips & Gully, 2015). Our study has several practical implications for recruiting start-ups.

THEORETICAL BACKGROUND

Recruitment in Start-ups, the use of Networks, and the Recruiter Role

The war for talents is particularly tough for start-ups (Tumasjan et al., 2011). They face particular challenges such as limited financial resources or lack of familiarity, known as the

constraints stemming from liabilities of newness and smallness (Choi & Shepherd, 2005; Williamson, 2000). Entrepreneurs usually tap their personal networks in the start-up phase and in the growth phase their business networks to attract human resources (Leung et al., 2006). However, when these networks are drained, entrepreneurs need to reach 'strangers' – individuals without existing ties to the entrepreneur – to find job candidates (Williamson, Cable, & Aldrich, 2002). A promising strategy for firm (and particularly new venture) recruiters to find job candidates is active sourcing via social business networks (Alexander et al., 2019; Roulin & Levashina, 2019). As recruitment on social networks becomes not only more important (Carpentier, Van Hoye, & Weng, 2019; Carpentier, Van Hoye, & Weijters, 2019; Nikolaou, 2014) but also more interpersonal, recruitment outcomes get more dependent on how the recruiter is being perceived by the potential job candidates.

Firm recruiters are the 'face' of an organization to job candidates (Phillips & Gully, 2015) and have a significant impact on recruiting outcomes (Chapman et al., 2005; Wilhelmy, Kleinmann, Melchers, & Lievens, 2019). Particularly at the early stages of the recruitment process, job candidates' perceptions of the recruiter is likely to influence their job decisions (Lievens & Slaughter, 2016; Uggerslev, Fassina, & Kraichy, 2012), because job candidates perceive them as reliable and trustworthy information sources (Theurer, Tumasjan, Welpe, & Lievens, 2018). Particularly in start-ups, employees and entrepreneurs work closely together (Jensen & Luthans, 2006). Thus, a start-up recruiter is likely to be perceived as more knowledgeable and trustworthy in signaling information about jobs and work climate (Berger & Kuckertz, 2017), than a formal recruiter of a larger company (Larsen & Phillips, 2002).

However, these perceptions are prone to bias and connected to stereotyped occupational prototypes (Braun, Peus, & Frey, 2018; Johnson et al., 2008; Offermann & Coats, 2018). Prior research has left the resulting consequences for job pursuit intentions of potential start-up job candidates rather untouched (Goldberg, 2003). This is why we develop and test a conceptual

grounding for better understanding if and how personal characteristics of start-up recruiters (and particularly their interplay) have an effect on evaluations of potential job candidates' job pursuit intentions.

Role Incongruities in Start-ups

The underlying mechanisms of the role congruity theory (Eagly & Karau, 2002) can help to explain the effects of stereotyping in start-up recruitment. Expectations and beliefs concerning the attributes of men (e.g., decisive and forceful) and women (e.g., helpful and concerned about others) recommend the type of job that is considered appropriate for them (Ahl, 2006; Heilman, 2001; Koenig, Eagly, Mitchell, & Ristikari, 2011). Previous work suggests that the characteristics expected for men fit more with the characteristics of entrepreneurs and leaders, which are agentic, than with characteristics expected for women, which are rather communal (Gupta et al., 2019; Yang et al., 2020). According to role congruity theory, this lack of fit results in a gender bias that leads to the conclusion that women do not have the required characteristics to fulfill neither a leader nor an entrepreneur role (Johnson et al., 2008). Moreover, role congruity theory suggests that violating expectations of observers lead to penalties for women occupying a typical male job role (Heilman, Wallen, Fuchs, & Tamkins, 2004). Consequently, these women are evaluated more negatively than their male counterparts (e.g., less effective; Heilman, Manzi, & Caleo, 2019; Johnson et al., 2008).

Stereotypes are "the cultural and symbolic trace of group members' typical social position" (Koenig, & Eagly, 2019; p. 228). In other words, occupational role and gender stereotypes are content of shared knowledge and expectations embedded in social structure (Eagly et al., 2020; Koenig, & Eagly, 2019). Founding and leading a new business is widely expected to be a "man's game" (Rocha & Praag, 2020), and the disproportional media presentation of men who lead successful start-ups (e.g., Marc Zuckerberg, Matthew Mullenweg, Steve Jobs or Elon Musk) might strengthen the shared expectation that a start-up

CEO is a male occupation. In the same vein, research from the last decades demonstrated in a magnitude of studies that the expected characteristics of an entrepreneur and a leader overlaps with characteristics of the male (or masculine) stereotype (for a review see: Eagly et al., 2020; Gupta et al., 2019; Hentschel et al., 2019; Jennings & Brush, 2013; Koch et al., 2015; Koenig et al., 2011). In sum, these findings lead to the general conclusion that the cognitive concept of leadership and entrepreneurship is gendered in favor of men (Johnson et al., 2008). Thus, we argue that job candidates' gender stereotypes might be a boundary condition for start-up recruitment efforts if the job role of the female recruiter is the start-up CEO.

Contrary, we expect that female start-up recruiters in the role of a HR Manager will be perceived as a good fit because the role of a HR Manger requires communal characteristics which overlaps with characteristics expected for women (e.g., people-oriented, aware of others feelings; Gupta et al., 2019; Hentschel et al., 2019). The typical job tasks of a HR Managers, which reflect communal behavior and characteristics of the occupant, might strengthen others' expectations that the HR Manager role typically occupied by a woman. For example, the task of a HR Manger requires a focus on "projects that support employee's development, productivity and happiness" (Donnelly, 2020). Particularly in start-ups, HR Mangers have a strong impact on the communal workplace culture in a start-up (Donnelly, 2020), which is one of the most important start-up employer attributes from a job candidate's perspective (Tumasjan et al., 2011). Because the job-related personal characteristics of a HR manager, particularly those employed within a start-up (Donnelly, 2020), are associated with rather feminine than masculine characteristics, the HR manager role might be seen as a female occupation.

Thus, start-up recruiting outcomes might be dependent on job candidates' gender-based expectations of who typically leads a start-up or who typically works as a HR manager in a start-up, because these expectations affect their perception of who is effective in his/ her job role (Heilman et al., 2019). As particularly at the early stages of the recruitment process job

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candidates' perception of the recruiter is likely to influence their likelihood to pursue a job opportunity (Chapman et al., 2005; Uggerslev et al., 2012), we hypothesize that a match with stereotyped occupational prototypes will enhance job pursuit intensions:

H1: Job pursuit intentions are higher if the start-up recruiter is a (a) female HR Manager (compared to a female CEO), and (b) male CEO (compared to a male HR Manager).

The Influence of Job Candidates Gender

However, recent research on leader prototypes (Offermann & Coats, 2018), and on gender stereotypes in leadership (Hentschel et al., 2019) and entrepreneurship (Gupta et al., 2019) indicate that observer's gender might play a role in the categorization of leaders and entrepreneurs based on gender stereotypes. More specifically, male observers might hold more traditional gender stereotypes than female observers (Koch et al., 2015). For example, Gupta et al. (2019) demonstrated that men and women differ "in their perception of overlap between the feminine stereotype and the entrepreneurial stereotype, but did not differ in their perceived overlap between the masculine stereotype and the entrepreneurial stereotype" (Gupta et al., 2019; p. 141). In a parallel vein, results from Hentschel et al. (2019) not only "clearly indicate that gender stereotypes persist. They also indicate that stereotypes about agency were more prevalent for male than for female raters" (Hentschel et al., 2019; p. 12).

Thus, there is reason to believe that job candidate's gender moderates the effect of start-up recruiter's (mis-) match with stereotyped occupational prototypes. As gender-based perceptions of leadership and entrepreneurship are likely to be different between men and women, we put forward the following hypothesis:

H2: The interaction effect of recruiter role and recruiter gender is contingent on job candidate's gender. Specifically, male job candidates will show a greater gender-role congruity

bias than female job candidates such that males' job pursuit intentions are highest if the start-up recruiter is a (a) female HR Manager or (b) male CEO.

Insert Figure 1 about here

Figure 1 presents our research model.

METHOD

Experimental Design. We used a randomized experimental vignette study with a between-subject design to examine our research questions. Vignettes studies use realistic scenarios, carefully constructed as short descriptions of a situation (vignettes) that are presented to participants in order to analyze their judgments about these scenarios. This method allows to analyze causal relationships by a systematic manipulation of independent variables (Aguinis & Bradley, 2014; Stevenson, Josefy, McMullen, & Shepherd, 2020).

Procedure. We designed a short vignette (see Appendix A for an example) that looks like a message from a representative (CEO or HR Manager) of a fictitious technology start-up (founded in 2015, in digital media industry, with currently 30 employees). We asked participants to assume that they have an account on a business networking platform (e.g., LinkedIn) where they have received this message. To enhance the realism of our fictitious recruiter message (vignette), and thus the external validity of our study, we presented the vignette in a pilot study to ten working adults (7 women, 3 men), between 25-37 years of age (mean 33), all with experience in being actively contacted by firms on business networking platforms. Participants confirmed that the fictious recruiter message (vignette) seems realistic and is similar to those they receive in reality on these platforms. An example vignette is included in Appendix A.

In the main study, participants were randomly assigned to one out of eight vignettes via a link to the online study. Hence, each participant has read one message (vignette) from a male

or female (gender) firm representative who is either the firm's CEO or HR manager (role) and shows a neutral or smiling facial expressions (control variable), resulting in a 2x2x2 experimental design. After reading the short vignette, participants were asked to evaluate their job pursuit intention based on the described scenario. In a post-experiment questionnaire, we collected an additional dependent variable (i.e., occupational prototype) and control variables. We also checked if participants in our main study perceived the presented vignettes as realistic by asking to indicate the scenario realism on a 7-point Likert scale (1 = definitely not realistic, 7 = definitely realistic). 85.2% perceived the scenario as above average realistic (> 3.5), which is a fairly high percentage and additionally enhances the external validity of our results.

Sample. Our sample consists of 263 participants who completed our study and succeeded the manipulation check for recruiter's role, gender, and facial expression (7 participants were excluded). The online survey addressed employees and students via social media (e.g., LinkedIn, Facebook) and university mailing lists. 62.7% of the respondents were female. Participants were on average 30.5 year of age (standard deviation: 9.2), with 6.9 years of work experience (standard deviation: 8.9). 61.6% stated to have a university degree. Participants were mainly employees (50.2%) and students (34.6%). 71.1% of the sample has been identified as job seekers (11.8% active and 59.3% passive). Our sample matches in particular our research questions for two reasons. First, active or passive (or even non-) job seekers are the target group of recruiters who actively source potential job candidates via social media (Acikgoz, 2019; Alexander et al., 2019) – likewise, we used social media to recruit an eligible sample. Second, students usually seek employment upon graduation, and are typically the target group of hiring start-ups (Nyström, 2019). Moreover, similar samples have been used in a number of empirical studies that focus their research questions on applicant's attraction to organizations (e.g. Brunner & Baum, 2020; Hauswald, Hack, Kellermanns, & Patzelt, 2016; Wei, Chang, Lin, & Liang, 2016). However, we could not find mean differences in job pursuit

intentions (dependent variable) between job seekers (M = 4.37) and non-job seekers (M = 4.25; t(261) = 0.53, p = .56), or between students (M = 4.55) and non-students (M = 4.23; t(261) = 1.44, p = .15). This enhances the generalizability of our results and gives support for the eligibility of our sample. A t-test comparing early and late respondents, which were represented by the first and last quartiles (Berthon, Ewing, & Napoli, 2008), was non-significant for our dependent variable (Mearly = 4.27 vs. Mlate = 4.27; t(131) = 0.03, p = .99), indicating non-response bias is not a serious threat to our study (Armstrong, & Overton, 1977).

Experimental Manipulations. In our study, we manipulated recruiter's role (HR Manager and CEO) by writing the start-up representative's job role status next to the profile picture as well as repeating it in the introduction section of the recruiter message. Recruiter's gender was manipulated by using images of one male and one female face with two different facial expressions of the same face (e.g. neutral, smiling). We have taken the faces from the FACES Lifespan Database (Ebner, Riediger, & Lindenberger, 2010). Form this validated database (Ebner et al., 2010; Ebner et al., 2018) we selected two similar faces in terms of perceived age (middle-aged), attractiveness, and accuracy of facial expressions (neutral and smiling). We decided to include the same face with different expressions because smiling, for example, is associated with warmth (linked to a female role) and a neutral expression might be associated with strength (linked to a leadership role). Thus, facial expression can have different effects on leadership and gender-role perceptions (Cuddy et al., 2008; Hess, Adams, & Kleck, 2005; Trichas & Schyns, 2012).

Measures. Our dependent variable was measured with one item on a 7-point Likert-Scale (1 = not at all, 7 = very). Job pursuit intention captures if job candidates become actively engaged in pursuing a job possibility within an organization (Aiman-Smith, Bauer, & Cable, 2001). Accordingly, we asked participants to indicate their likelihood to pursue scheduling a telephone interview with the company. This item was adopted from Aiman-Smith et al. (2001)

and adjusted to our study scenario. Our independent variables and moderators were all dichotomous. Specifically, we manipulated recruiter role (HR Manager = 0, CEO = 1), as well as recruiter gender (male = 0, female = 1) and measured participant gender (male = 0, female = 1).

We additionally considered following control variables in our analyses. As we used images of real faces for the manipulation of recruiter's gender, we added facial attractiveness (1 = not at all, 7 = very) and facial expression (neutral and smiling; as previously described in the manipulations section) as control variables, because both variables might influence others' perceptions based on occupational and gender stereotypes (Berggren, Jordahl, & Poutvaara, 2017; Oh, Buck, & Todorov, 2019; Wang, Mao, Li, & Liu, 2017). We also added control variables that might influence our dependent variable, job pursuit intention, as suggested by recent empirical and conceptual recruitment literature (e.g., Acikgoz, 2019; Moser et al., 2017; Trusty, Allen, & Fabian, 2019). We added participant's age (in years) as control variable, because rather younger than older individuals tend to work for growing start-ups (Nyström, 2019; Ouimet & Zarutskie, 2014). The propensity to seek a new job change might be higher among young professionals with no or little work experience (Moser et al., 2017; Trusty et al., 2019). Thus, we added the control variable career level unexperienced which refers to participants in our study with less than four years of work experience (no = 0, yes = 1; 1 refers to 49% of our sample). Also, perceived ease or desire to change the current job situation can influence job pursuit intentions (Acikgoz, 2019). Accordingly, we added two items as control variables: "I get a job offer very easily (compared to the average)" (job-change ability) and "A suitable job offer would considerably improve my current job situation" (job-change desirability). 7-point Likert-Scale (1 = definitely no, 7 = definitely yes).

RESULTS

In Table 1 the means, standard deviations, and correlations of the measured variables are reported, whereas Table 2 reports the results of our moderated regression analyses.

Insert Table 1-2 about here

Hypothesis 1 predicts that job pursuit intentions are higher if the start-up recruiter is a (a) female HR manager (compared to a female CEO) or (b) male CEO (compared to a male HR Manager). As shown in Model 1 (Table 2), we find a marginally significant two-way interaction effect between recruiter role and recruiter gender (coeff. = -.70, $p < 0.10$, CI [-1.530; 0.133]). This interaction adds to a marginally significant change in R^2 of 1%. Although this incremental effect appears small, it is typical for interaction effects as they usually have small effect sizes (Domurath & Patzelt, 2016; Peugh, 2010). Figure 2 show the nature of the interaction and indicates that job pursuit intentions are lowest if the start-up recruiter is a female CEO (m = 3.97) and highest if the start-up recruiter is a male CEO (m = 4.57). An additional analysis of conditional effects (simple slopes; Hayes, 2018) of the recruiter role (i.e., CEO vs. HR Manager) reveals a marginally significant and negative effect for female start-up recruiter in the role of the CEO compared to the HR Manager (effect = -.50, $p < 0.10$, CI [-1.092; 0.083]). For male start-up recruiters there is no significant difference between CEO and HR Manager (effect = -.19, $p > 0.10$, CI [-0.450; 0.793]). Thus, Hypothesis 1 gains partial support and is only accepted for the effect of the female start-up recruiter.

Hypothesis 2 predicts that the interaction effect of recruiter role and recruiter gender is contingent on job candidates' gender. Our results in Model 2 show a significant tree-way interaction between recruiter role, recruiter gender, and job candidate gender on job pursuit intentions (coeff. = 1.80, $p < 0.05$, CI [0.148; 3.460]), which adds to a significant change in R^2 of 1.5%. An additional test of conditional moderation effects (Hayes, 2018) reveals that the

interaction of recruiter role and recruiter gender is significant for male job candidates (F (1, 245) = 7.575, p < 0.01) but not for female job candidates (F (1, 245) = 0.020, p > 0.10). Interpreting these effects requires plotting. Figure 3 shows that for male job candidates job pursuit intentions are highest if the start-up recruiter is either a female HR manger (m = 4.85) or a male CEO (m = 4.67). An additional analysis of conditional effects (simple slopes; Hayes, 2018) for male job candidates indicates a significant and positive effect if the male start-up recruiter was a CEO (compared to HR Manager; effect = .95, p < 0.05, CI [0.178; 1.725]), and a marginally significant and negative effect if the female start-up recruiter was a CEO (compared to HR Manager; effect = -.89, p < 0.10, CI [-1.855; 0.079]). These results support our Hypothesis 2.

Finally, results (refer to Model 2) show that variance in our dependent variable, job pursuit intentions, is significantly explained by the control variables recruiter attractiveness (coeff. = 0.18, p < 0.05, CI [0.003; 0.353]), job-change ability (coeff= -0.15, p < 0.05, CI [-0.288; -0.007]), job-change desirability (coeff. = 0.20, p < 0.01, CI [0.071; 0.323]), and industry attractiveness (coeff. = 0.15, p < 0.05, CI [0.013; 0.278]).

Insert Figure 2-3 about here

Robustness check. We performed robustness checks to ensure our finding of the significant three-way interaction between recruiter role, recruiter gender, and job candidate gender on job pursuit intentions. First, we calculated our model without the non-significant control variables. Second, we calculated our model without any control variables. In both models the effects remained stable and the tree-way interaction significant (1. coeff. = 1.79, p < 0.05, CI [0.143; 3.445]; 2. coeff. = 1.79, p < 0.05, CI [0.048; 3.531]) and, thus, provides successful robustness checks.

Additional analyses. To enhance our understanding of the stereotyped occupational prototype in the context of our study, we asked participants to indicate to what extent the depicted person fits with their image of a CEO / HR Manager (occupational prototype). We measured occupational prototype by asking participants to indicate to what extent the depicted person fits with their image of a CEO (leader)/ HR Manager (non-leader) on a 7-point Likert-Scale (1 = not at all, 7 = very) (Lord, Foti, & De Vader, 1984). We found a significant two-way interaction effect between recruiter role and recruiter gender but no significant interaction effects with job candidate gender. Figure 4 (Appendix B) displays the nature of the two-way interaction which shows that CEO prototype perceptions where highest for the male recruiter and lowest for the female recruiter. This finding indicates that both male and female job candidates expect the role of a start-up CEO to be occupied by a man. The HR Manager prototype perceptions, however, indicate that this role might be rather expected to be occupied by a woman than man. These results confirm the existence of occupational stereotypes as derived in our theory development.

DISCUSSION

Our study analyzes whether gender and occupational role (in-)congruities lead to differences in recruiting outcomes for start-ups using recruitment activities via social business networks. More specifically, this article addressed the research questions, whether job candidates' intentions to pursue a job opportunity in a start-up is influenced by the start-up recruiters' (mis-) match with stereotyped occupational prototypes, and if this effect is contingent on job candidate's gender. To answer our research questions, we conducted a randomized vignette experiment with a sample of 263 potential job candidates in context of start-up recruitment via social networks.

Our findings suggest that the stereotyped occupational prototype (e.g. a male CEO or a female HR Manager) might influence male but not female job candidates' intentions to pursue a job opportunity in a start-up. Male job candidates in our study seemed to be more affected by role congruity biases than female job candidates. Our additional analysis of occupational prototype perceptions revealed a shared expectation among female and male job candidates in our study about who typically leads a start-up: a man. However, only male job candidates' job pursuit intentions seem to be affected by perceptions of an occupational prototype fit. More specifically, our data indicates that job pursuit intentions of male job candidates are highest if the start-up recruiter is either a male CEO or a female HR Manager. Based on these findings, the short answer to our research question, whether (mis-) match between occupational roles and gender stereotypes lead to differences in recruiting outcomes for start-ups, is 'yes' for male and 'no' for female job candidate attraction. We discuss the results of the present study and their implications for theory and practice below.

Theoretical implications. Our findings make several contributions to the entrepreneurship, leadership, and recruitment literature. Through the lens the gender role congruity theory (Eagly & Karau, 2002) our findings give new important insights and extend the scant literature on start-up recruitment (Leung et al., 2006; Moser et al., 2017; Nyström, 2019; Tumasjan et al., 2011). We point out that the intersection of start-up recruiter's occupational role with gender stereotypes can lead to a boundary condition for woman-led start-ups when attracting new talents. Our results suggest that consequences of gender biases in recruitment and selection not only refers to the employer's perspective (Rule et al., 2016) but also to the job candidate's perspective. In doing so, we contribute to a better understanding if and how the interplay of personal characteristics of start-up recruiters (i.e. their occupational role and gender) impact job candidates' perceptions and, thus, start-up recruiting efforts.

This is important because previous research shows that job candidates' perceptions of the firm recruiter characteristics can strongly influence their decision to pursue a job (e.g. Chapman et al., 2005; Wilhelmy et al., 2019). Particularly at the early stages of the recruitment process, job candidates rely even more on their perceptions of recruiters before making decisions. At this stage, the information-gap between job candidates and employers is usually large and job candidates use signals sent by recruiters to make inferences about unobservable job and firm characteristics (Uggerslev et al., 2012). Due to the liabilities of newness and smallness (Williamson et al., 2002), this information-gap is likely to be larger for start-up employers (Tumasjan et al., 2011), compared to established employers with well-known employer brands (Baum, Schäfer, & Kabst, 2016; Theurer et al., 2018; Tumasjan, Kunze, Bruch, & Welpe, 2020). Our study implies that start-up recruiters might (un) intentionally send individual-level signals, such as their occupational role and gender, and thereby influence job candidates' intentions to pursue a job opportunity, which are important new insights for recruitment research (Celani & Singh, 2011; Phillips & Gully, 2015; Wilhelmy, Kleinmann, König, Melchers, & Truxillo, 2016).

Furthermore, our study shows that if job candidates observe congruent signals by recruiters (e.g. a female HR Manager), this can enhance recruiting outcomes. Baum et al. (2016), for example, demonstrates that image-congruity between recruitment advertisement and company image can increase potential recruits' attraction to an organization. However, previous research on congruity-perceptions in recruitment has focused on firm-level signals but left the individual-level largely untouched (Brunner & Baum, 2020; Golovko & Schumann, 2019; Wei et al., 2016). As outlined above, the individual level is important because job candidates' impressions of recruiters have been shown to determine recruiting success (Wilhelmy et al., 2019). Our study indicates that job candidates' impressions of recruiters can be influenced by individual-level status cues such as job titles or demographics (Baron, 2003; Berry & Sanchez,

2019; Jung et al. 2017). More importantly, our study show that the stereotyped-based interplay of these cues might impact recruiting success, which makes our empirical findings not only vital for start-up recruitment research.

Additionally, we contribute to recent research on the impact of gender stereotyping in entrepreneurship and leadership. We show that male job candidates are more attracted by recruitment efforts of start-up recruiters if they are either a male CEO or a female HR manager, analogous to their mental image of who typically occupies these job roles. Thus, male job candidates in our study showed a greater gender-role congruity bias than female job candidates which is in line with recent research (e.g., Gupta et al., 2019; Hentschel et al., 2019; Koch et al., 2015). Moreover, even though attracting human resources is essential for entrepreneurs and vital for start-up succession (Moser et al., 2017), research on the effects of stereotypes in entrepreneurship largely focuses on financial resources acquisition and demonstrates that gender differences persist in terms of entrepreneurs' chances to attracted financial resources (Geiger, 2020; Groza et al., 2020; Alsos & Ljunggren, 2017; Eddleston, Ladge, Mitteness, & Balachandra, 2016; Micelotta, Washington, & Docekalova, 2018; Yang et al., 2020). Similarly, our study demonstrates that gender-biases of job candidates, particularly male job candidates, might influence start-up recruiting outcomes and, thus, entrepreneurs' chances attract human resources. In sum, our findings primarily contribute to research at the intersection of entrepreneurship, leadership and recruitment (Moser et al., 2017; Nair, 2019; Reid et al., 2018) by emphasizing the influence of stereotypes on the recruitment success of male- and female-led start-ups.

Practical implications. Our findings have also direct implications for recruiting start-ups. We analyzed recruiting outcomes in the context of start-up recruitment via social networks, that per se has an important practical implication because a growing number of entrepreneurs use social networks to reach potential investors, customers, or employees (Banerji & Reimer,

2019; Sahaym, Datta, & Brooks, 2019; Schjoedt, Fischer, Corbett, & Mumi, 2019). Our findings inform start-up teams on how to allocate their tasks to enhance recruiting success. Although social business networks such as LinkedIn can be a promising strategy to acquire resources (Banerji & Reimer, 2019), our study results suggest that start-ups should take underlying gender stereotypes of potential job candidates into account, as well as their gender-based differences in preferences of who should recruited them. Recruitment literature emphasizes the importance of strategic recruitment to maximize recruiting effectiveness (Greer, Carr, & Hipp, 2016; Phillips & Gully, 2015). Accordingly, we suggest that start-up team members (e.g. CEO or HR Manager) should decide prior starting recruitment activities, such as active sourcing via career platforms (e.g., LinkedIn), who should recruit who to enhance recruiting outcomes. Our data implies, for example, that recruiting outcomes might be higher when male CEOs or female HR Managers recruit male job candidates.

Moreover, a key component of social networking sites such as LinkedIn is the profile picture. We suggest that profile pictures of start-up recruiters might be a breeding ground for stereotyping because of visible gender cues which, in turn, might influence potential job candidates' decision to reply to recruiter message. The "emergence of social media fosters the prominent usage of human faces as a communicative tool" (Wang et al., 2017; p. 802) and perceivers automatically make inferences from facial cues and link them to personal characteristics of the depicted person (e.g., competence or warmth; Antonakis & Eubanks, 2017; Oh et al., 2019; Wang et al., 2017). Thus, when recruiting new talents via social media, start-up recruiters might strongly benefit from using appropriate pictures that make them appear particular competent and/ or warm in their specific occupational role (Sczesny & Kaufmann, 2018; Tifferet & Vilnai-Yavetz, 2018), particularly when the start-up recruiter does not match the stereotyped occupational prototype.

LIMITATIONS

We identified limitations that can serve as directions for further research. We used a vignette experiment to examine the influence of gender stereotypes on job candidate's intention to pursue a job opportunity. With this method, we could measure job candidates' intentions but not real behavior, at the costs of external validity. Although, intentions measured in such vignette experiments have the potential to predict real behaviors (Auspurg & Hinz, 2014), in a recruitment context it has been acknowledged that the correlation between job candidates' intentions and real behaviors is not perfect (Acikgoz, 2019). Replicating our study as a field experiment could be a useful approach to examine whether job candidates' intentions lead to real behavior.

Additionally, we realize that the focus on a specific firm context or industry limits the generalizability of our results. In particular, we designed a vignette that introduces study participants to a young, growing technology start-up searching for new employees. In our study, we asked participants to indicate how feminine or masculine they perceive the industry in which the described start-up operates. While 52% perceived the industry as neutral, 35% perceived it as somewhat masculine and 13% as feminine. It has been shown that gender stereotypes might be more prominent in gendered industries (Micelotta et al., 2018). As the described industry of our fictious start-up implies a marginal tendency to be gendered, the generalizability of our findings might be limited. However, an interesting question for future research is whether gender-based stereotypes influence recruiting efforts of man-led start-ups operating in a female industry (e.g., cosmetic or fashion industry).

Finally, not only gender but also their age and ethnicity are visible characteristics of a person and can influence others' perceptions and evaluations of that person (Fiske, 2017). Because every single person is part of multiple social groups simultaneously (e.g. being middle-aged, a woman, a Caucasian, a leader, an entrepreneur, etc.), several stereotypes intercept and

affect the way one is perceived by others (Eagly et al., 2020). This intersection is a particular promising field for future research in entrepreneurship (Gupta et al., 2019; Marlow & Martinez Dy, 2018), and for research focusing on diversity and international perspectives in recruitment (Baum, Sterzing, & Alaca, 2016).

CONCLUSION

Our study extends existing knowledge about how job candidates underlying gender stereotypes might affect start-up recruitment efforts when they use recruitment activities via social business networks. We report that a mismatch between the start-up recruiter's role, which can be either the start-up CEO or an employed HR manager within the start-up, and recruiter's gender can influence (male) job candidates' intentions to pursue a job opportunity in a start-up. Our findings imply that female start-up leaders face more difficulties to attract human resources compared to their male counterpart. Thus, gender biases of potential (human) resource providers, in our case job candidates, might create additional barriers for female entrepreneurs to attract (human) resources required for start-up growth. Given the importance of maximizing recruiting outcomes for start-ups, our study suggests that early recruitment efforts via active talent sourcing on career platforms such as LinkedIn can be a promising strategy if the influence of gender and occupational role congruities are taken into account.

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FIGURE 1

Research Model
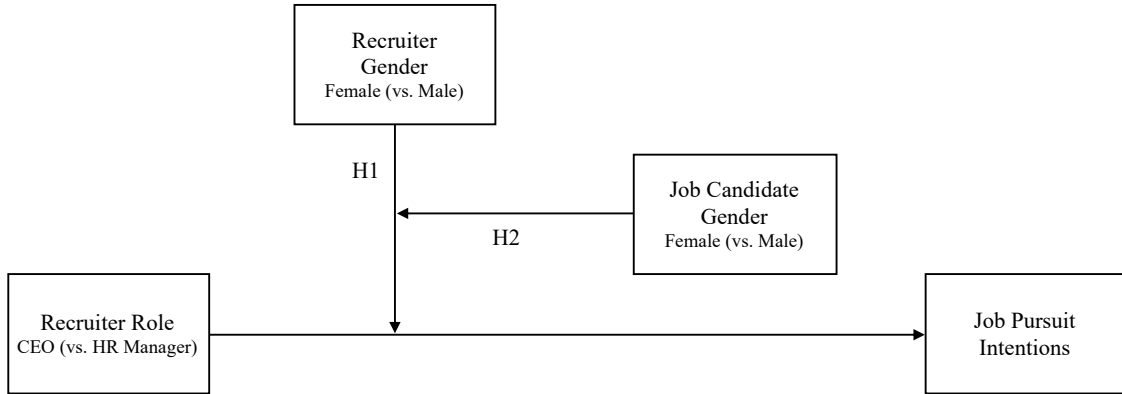
TABLE 1

Means and Correlations

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1 Job Pursuit Intention	4.34	1.73	1										
2 Recruiter Role (HR Manager = 0, CEO = 1)	0.50	0.50	-0.07	1									
3 Recruiter Gender (Male = 0, Female = 1)	0.49	0.50	-0.06	0.08	1								
4 Recruiter Facial Expression (Neutral = 0, Smiling = 1)	0.55	0.50	0.085	-0.11	0.067	1							
5 Recruiter Attractiveness	3.71	1.42	.167**	-0.08	.138*	.259**	1						
6 Job Candidate Gender (Male = 0, Female = 1)	0.63	0.48	0.033	-0.01	0.033	0.01	0.052	1					
7 Job Candidate Age	30.59	9.72	0.001	0.018	-0.1	-0.11	.188**	-0.04	1				
8 Career Level (Experienced = 0, Unexperienced = 1)	0.49	0.50	0.085	-0.07	0.102	0.021	0.058	-0.05	-.566**	1			
9 Job-Change Ability	3.79	1.55	-.138*	0.04	0.002	0.008	-0.02	-0.01	0.041	-.238**	1		
10 Job-Change Desirability	3.71	1.83	.249**	-0.04	-0	0.11	0.074	-0.07	-.194**	.195**	-0.06	1	
11 Industry Attractiveness	3.92	1.72	.147*	0.016	0.015	0.109	-0.01	-0.07	-0.063	-0.008	0.11	.155*	1

N = 263; * p < .05, ** p <.01 (2-tailed)

TABLE 2

Results of the Moderated Regression Analyses for Job Candidates' Job Pursuit Intentions

	Model 1				Model 2			
	Coeff.		RSE	95% CI	Coeff.		RSE	95% CI
Constant	2.59	**	0.78	1.059 4.129	2.18	**	0.80	0.603 3.751
Recruiter Role (CEO)	0.19		0.30	-0.405 0.793	0.95	*	0.39	0.178 1.725
Recruiter Gender (Female)	0.10		0.31	-0.520 0.714	0.77		0.50	-0.209 1.742
Job Candidate Gender (Female)	0.17		0.21	-0.252 0.581	0.81	*	0.40	0.020 1.592
H1 RR*RG	-0.70	+	0.42	-1.530 0.133	-1.84	**	0.63	-3.083 -0.596
RR*JCG					-1.24	*	0.58	-2.368 -0.103
RG*JCG					-1.06	+	0.64	-2.321 0.195
H2 RR*RG*JCG					1.80	*	0.84	0.148 3.460
Control Variables								
Facial Expression (Smiling)	0.03		0.22	-0.398 0.467	0.01		0.22	-0.423 0.451
Attractiveness	0.17	*	0.09	0.002 0.338	0.18	*	0.09	0.003 0.353
Age	0.01		0.02	-0.029 0.044	0.01		0.02	-0.026 0.044
Career Level (Unexperienced)	0.10		0.27	-0.426 0.625	0.09		0.27	-0.441 0.617
Job-Change Ability	-0.14	*	0.07	-0.281 -0.004	-0.15	*	0.07	-0.288 -0.007
Job-Change Desirability	0.19	**	0.06	0.069 0.320	0.20	**	0.06	0.071 0.323
Industry Attractiveness	0.14	*	0.07	0.012 0.274	0.15	*	0.07	0.013 0.278

<div align="center">

$R^2 = .138$

$F (11, 251) = 3.972 \ p < .001$

$R^2 = .156$

$F (14, 248) = 3.724 \ p < .001$

</div>

Test of Highest Order Interaction	Change in $R^2 = .010$	Change in $R^2 = .015$
	$F (1, 251) = 2.737 \ p < .100$	$F (1, 248) = 4.605 \ p < .050$

$^+p < .10$, $^*p < .05$, $^{**}p < .01$, $^{***}p < .001$

N = 263; Models Estimated with PROCESS 3.4; Coeff. = Unstandardized OLS Regression Coefficients; CI = 95% Confidence Intervals; RSE = Robust Standard Error; RR = Recruiter Role, RG = Recruiter Gender, JCG = Job Candidate Gender
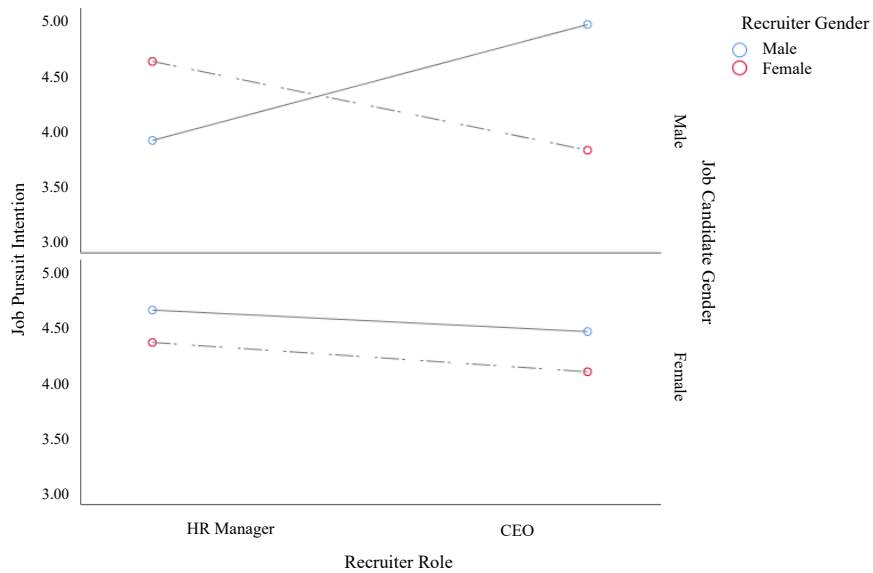
FIGURE 2

2-Way Interaction between Recruiter Role, Recruiter Gender on Job Pursuit Intention
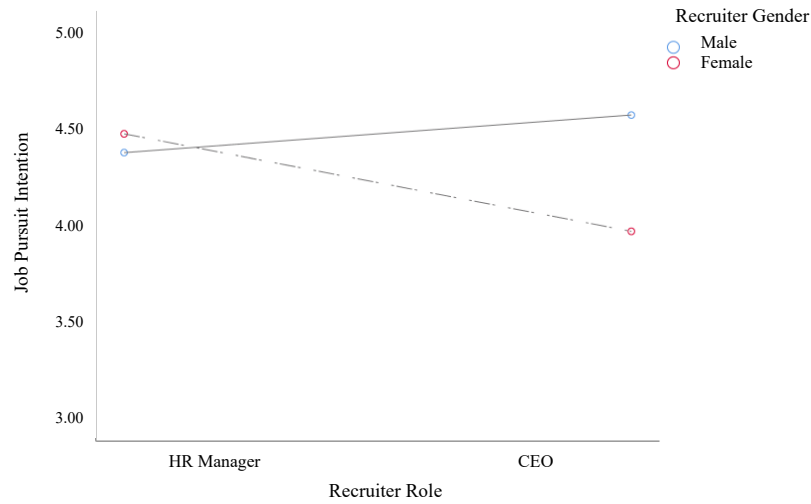
FIGURE 3

3-Way Interaction between Recruiter Role, Recruiter Gender, and Job Candidate Gender on

Job Pursuit Intention

APPENDIX A

Vignette Example for a Male Recruiter (CEO)

Please assume that you have an active account on a business networking platform (such as LinkedIn) and that you have given permission on this platform for companies to contact you with job offers.

After you logged in on the online platform today, you have found the following message in your inbox:

Andreas Müller

CEO

Hello *,

My name is Andrea Müller, CEO of the company 3D-ViS. We are a technology company founded in 2015 with currently 30 employees. We offer innovative software as well as consulting and design for 3D visualization of products. We create high-quality images and animations for our well-known customers from all industries - we help our customers to arrive in the age of interactive product marketing.

We are growing and looking for new employees in all areas. Your qualifications and industry experience is a perfect match for a currently open position in our company. Thus, I would very much like to tell you more about the position and what we can offer you. Are you interested in a telephone interview? I am looking forward to hearing from you.

Best regards
Andreas Müller

*Please note that, unfortunately, it is not possible to address you by name in this study. However, please feel personally addressed.

Based on this message, please indicate the likelihood that you will proceed as follows (on a scale from 1: not at all likely to 7: very likely): "I would schedule a telephone interview with this company"

Note: this study was conducted in Germany. For the purpose of presenting an example of our vignette, we translated it into English, and we blurred the targets' faces to meet the FACES Lifespan Databases' terms of use.

FIGURE 4

2-Way Interaction between Recruiter Role and Recruiter Gender on Occupational Prototype
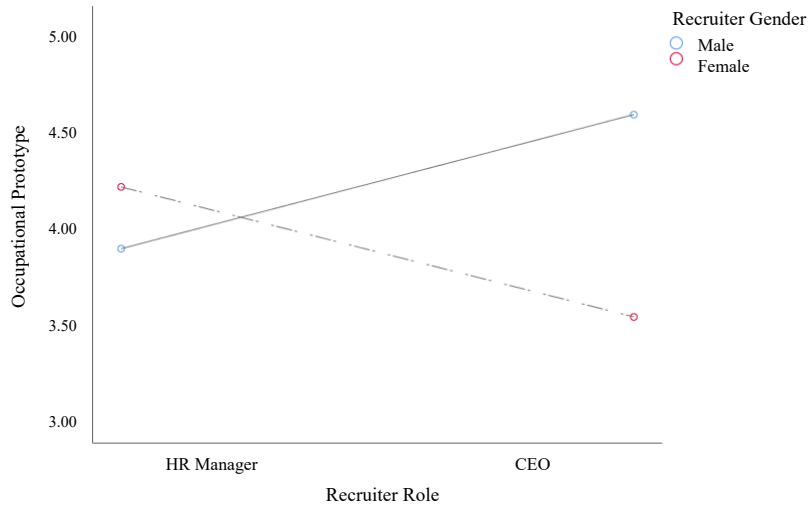
THE ENTREPRENEURIAL LEADER PROTOTYPE FROM A POTENTIAL EMPLOYEES' PERSPECTIVE

ABSTRACT

This paper explores what potential employees think how a typical entrepreneurial leader behaves and looks like. We conducted a qualitative interview study (n=21) to analyze and describe potential employees' image of typical entrepreneurial leaders' behaviors and appearance. Drawing on our findings and leadership categorization theory, we propose that potential employees' mental image of a typical entrepreneurial leader will include leadership behaviors and appearance that fit the entrepreneurial context. Our data suggests that potential employees' prototype contains expectations about leadership behaviors, more specifically an entrepreneurial leadership style. Moreover, expectations are strongly associated with connotations about age and gender. Our study offers important implications for future research.

INTRODUCTION

Expectations of others about entrepreneurs, and particularly their leadership style (Kang, Solomon, & Choi, 2015), are of paramount importance, because they influence how entrepreneurs will be evaluated by others (Malmström, Voitkane, Johansson, & Wincent, 2018). Others may hold a mental image of an 'entrepreneurial leader', the entrepreneurial leader prototype (Gupta & Fernandez, 2009). For example, others' migth expect entrepreneurs to show entrepreneurial leadership behaviors that aim at influencing and directing performance toward goals that involve recognizing and exploiting entrepreneurial opportunities because this leadership behavior fits the specifics of the startup context (Gupta, MacMillan, & Surie, 2004; Renko, Tarabishy, Carsrud, & Brännback, 2015). Moreover, the disproportionate media presentations of young men leading successful startups at their early twenties such as Mark Zuckerberg or early Steve Jobs may influence the perception of others that age and gender may be related to the successful entrepreneurs (Azoulay, Jones, Kim, & Miranda, 2020). Therefore, the mental image of an entrepreneurial leader might be influenced by both, others' implicit beliefs about context specific leadership behaviors and by demographic-based stereotypes. Our aim is to identify such implicit beliefs, i.e. entrepreneurial leader prototypes, from a potential employee perspective.

Previous research in the field of entrepreneurship, focusing on the 'entrepreneur prototype', provided very valuable contributions to a better understanding of what characteristics are expected of a 'typical' entrepreneur (Gupta & Fernandez, 2009; Yao, Farmer, & Kung-McIntyre, 2016), and how they are related to the attributes typically expected of men and women (Ahl, 2006; Gupta, Wieland, & Turban, 2019). Although this research showed that others expect typical entrepreneurs to show leadership qualities (Gupta & Fernandez, 2009; Yao, et al. 2016), it does not describe what leadership behavior others expect from entrepreneurs based on their implicit beliefs. These expectations can create a mental image of

an 'entrepreneurial leader prototype' that has been recognized but not detailed described so far (Offermann & Coats, 2018), even though this specific prototype might influence if entrepreneurial leaders gain legitimacy by others (Lord, Day, Zaccaro, Avolio, & Eagly, 2017). Knowledge about entrepreneurial leader prototypes is important because the fit of others' cognitive prototypes with observed leadership behaviors, and their association with age and gender, affect the evaluation of leaders (Buengeler, Homan, & Voelpel, 2016; Johnson, Murphy, Zewdie, & Reichard, 2008). Expectations about what is 'typical', in turn, can influnce other entrepeneurial processes such as the acquisition of entrepreneurship-relevant resources (Tonoyan, Strohmeyer, & Jennings, 2019). Thus, a better understanding on how the entrepreneurial leader prototype looks like is needed.

Moreover, while a large number of entrepreneurship studies that focused on others' perceptions of 'typical' entrepreneurs centered their research questions around the perceptions of financial resources providers (e.g. Eddleston, Ladge, Mitteness, & Balachandra, 2016; Geiger, 2020; Malmström, Voitkane, Johansson, & Wincent, 2020). This study focuses on the perceptions of potential employees because attracting human resources is at least as important as attracting financial resources for startups (Moser, Tumasjan, & Welpe, 2017; Tonoyan et al., 2019). For potential employees are entrepreneurs the organizational 'face' and also their future leaders in case of a hire (Coad, Nielsen, & Timmermans, 2017; Leung, Zhang, Wong, & Foo, 2006). Consequently, potential employees will put much attention on their perceptions of the recruiting entrepreneur. We examine potential employees' entrepreneurial leader prototypes to provide an enhanced understanding of influence factors on entrepreneurs' ability to attract human resources. In doing so, we contribute to existing literature and provide an in-depth understanding of what potential employees' mental image of a typical entrepreneurial leader looks like and how it is connected to leadership behaviors, age and gender. Thereby, we bridge entrepreneurship and leadership literature from an human resource perspective (Cogliser &

Brigham, 2004; Vecchio, 2003), contribute to the highly relevant but still scant research on startups recruitment (Nyström, 2019), and point out currently unacquainted challenges and opportunities for entrepreneurial leaders which has not been discussed in literature so far (Zhao, O'Connor, Wu, & Lumpkin, 2020).

To provide a comprehensive understanding of potential employees' mental images how a typical entrepreneurial leader behaves and looks like, we built on leadership categorization theory (Lord, Foti, & De Vader, 1984) and stereotyping literature (Gupta et al., 2019; Malmström et al., 2018; Zhao et al., 2020), and conducted a qualitative interview study (n = 21). We investigated expectations about leadership behaviors and appearance and identified three different categories of mental images of typical entrepreneurial leaders: the 'hustler', the 'hipster', and the 'hacker' – all expected to show entrepreneurial leadership behaviors and associated with gender and age.

THEORETICAL BACKGROUND

The Role of Entrepreneurial Leaders for Potential Employees

In startups, entrepreneurs usually not only recruit employees (Leung et al., 2006). In case of a hire, entrepreneurs are also their future leaders (Coad et al., 2017). Startups heavily rely on their employees to prosper and grow while attracting and holding them is a challenging task for entrepreneurs (Moser et al., 2017). Because entrepreneurs rely on perception of others (Choi & Shepherd, 2005), potential employees' perceptions and expectations of entrepreneurs and their leadership behavior might influence recruiting outcomes and, thus, startup success.

The scant startup recruitment literature focusing on potential employees' perceptions analyzed the influence of entrepreneurs' characteristics (e.g., their educational background) on their decisions to work for an entrepreneur (Backes-Gellner & Werner, 2007; Moser et al., 2017). For startup employees, however, entrepreneurs' leadership behaviors might become an

important factor in their decision to continue working for them (Cardon, 2008; Vecchio, 2003). This indicates, that for prospective employees the characteristics and leadership behaviors of entrepreneurs are important signals in startup recruitment. However, previous research did not consider the influence of potential employees' mental image entrepreneurial leaders which might influence their perceptions of entrepreneurs and, in consequence, recruiting outcomes. This study seeks to address this void by exploring potential employees' expectations of entrepreneurs which might uncover a stereotyped 'entrepreneurial leader prototype'.

The Entrepreneurial Leader Prototype

"The implicit and naïve conceptualizations people hold of leaders – their implicit leadership theories (ILTs) - represent the cognitive structures or schemas that specify what people expect from leaders in terms of leader traits or attributes" (Offermann & Coats, 2018; p. 513). ILTs is conceptually rooted in the leader categorization theory (Lord et al., 1984), which suggests that others form mental representations of leaders based on their perceptions. Drawing on leadership categorization theory, we expect that, during the prototype activation stage, the image of an entrepreneurial leader is associated with specific behaviors and appearance that fit the entrepreneurial context (Lord, Brown, Harvey, & Hall, 2001).

Others' mental representation of entrepreneurial leaders reflect their expectations about entrepreneurs' behaviors, particularly their leadership behaviors (Offermann & Coats, 2018). Others might expect leadership behaviors in entrepreneurs that fit the specifics of the startup context. Startups operate in fast changing, innovative and uncertain environments, and focus on exploiting entrepreneurial opportunities (Choi & Shepherd, 2005). The cognitive leader prototype that fits the specifics of the startup context could be linked to entrepreneurial leadership. Entrepreneurial leadership is defined as "influencing and directing the performance of group members toward the achievement of organizational goals that involve recognizing and

exploiting entrepreneurial opportunities" (Renko et al., 2015, p. 55). Thus, potential employees might hold a prototype of an entrepreneurial leader such that they expect entrepreneurs to show entrepreneurial leadership behavior (Cogliser & Brigham, 2004; Gupta et al., 2004). Whether the recruiting entrepreneur meets this expectation by showing an entrepreneurial leadership style (Renko, 2017) might influence potential employees' evaluations of entrepreneurial leaders (Lord et al., 2017). To better understand context specific leader evaluations, leadership research underlines the importance of identifying subcategories of leader prototypes such as entrepreneurial leaders (Offermann & Coats, 2018) but also indicates that leader prototypes might be stereotyped (Johnson et al., 2008).

Expectations Associated with Entrepreneurial Leader's Age and Gender

"Leader prototypes are useful heuristics for judgments about leaders in a complex world. Heuristics, however, can also negatively affect leaders who are not seen as prototypical." (Braun, Peus, & Frey, 2018; p. 130). Demographics like age and gender are highly visible and distinctive personal characteristics. As a result, stereotypes are inherently connected with age and gender (Fiske, Cuddy, Glick, & Xu, 2002). Demographic-based stereotypes can result in biases against leaders who do not fit the age and gender that is connected with the prototype (Buengeler et al., 2016; Johnson et al., 2008).

Since entrepreneurial leaders, and particularly their leadership behavior (Renko, 2017), are described to have rather youthful (e.g. innovative, risk-taking) and agentic (e.g. determined, driven, which are male stereotyped) attributes, others' mental image of entrepreneurial leaders might be affected by their expectations of how male and female or younger and older individuals should behave (Baron, Markman, & Hirsa, 2001; Eagly & Karau, 2002; Ng & Feldman, 2012; Posthuma & Campion, 2009). Previous research provides some indications that others' expectations of how entrepreneurial leaders should behave could be related to age and

gender such that men and younger individuals might be favored (Gupta et al., 2019; Zhao et al., 2020), which in consequence has implications for entrepreneurs' ability to acquire entrepreneurship-relevant resources (Tonoyan et al., 2019). Thus, as outlined earlier, knowledge about what exactly potential employees' mental image of a typical entrepreneurial leader looks like will provide a better understanding of which factors influence entrepreneurs' ability to attract employees.

METHOD

Qualitative design. We used qualitative interviews to explore potential employees' expectations about typical entrepreneurs and their leadership behaviors. A qualitative approach seemed appropriate because we aimed to understand potential employees' subjective understanding (Suddaby, 2006) on how an entrepreneurial leader typically behaves and looks like.

Sample. Following the typical case method (Miles & Huberman, 1994) our aim was to capture perceptions of individuals, who are generally interested in working for a startup. As startups typically hire young employees and graduates (Nyström, 2019; Ouimet & Zarutskie, 2014), we recruited participants at surroundings of three mid- to large-sized German universities. See Table 1 for the information on our sample characteristics including the mental image of an 'typical' entrepreneurial leader of each participant with link to entrepreneurs' age and gender.

Insert Table 1 about here.

Interview procedure. Our interview questions addressed (1) how entrepreneurs in startups typically behave, particularly towards their employees and (2) how they typically look like. For example, we asked interviewees to describe "how entrepreneurs typically behave

towards their employees" and asked further questions such as "what would this typical leadership behavior look like" to get a deeper understanding on what exactly they expect from a typical entrepreneur in the role of a leader. The interviews were conducted personally and recorded. They ranged from 5 to 19 minutes in length (average 10 minutes).

Analysis. Following guidelines for qualitative research (Miles & Huberman, 1994; Suddaby, 2006), we inductively analyzed all data by open coding (Suddaby, 2006). After an iterative process of inductive coding, we focused on and structured statements about entrepreneurs' (1) attributes, (2) leadership behavior, and (3) appearance. We discussed the impressions, interpretations, coding, and categorization among the authors until we reached agreement. We ended up with three categories of stereotypes of entrepreneurial leaders.

RESULTS

Our results indicate what the potential employees' mental images of typical entrepreneurial leaders look like. Based on our data, we identified three different categories: The 'hustler', the 'hipster', and the 'hacker'. Even though these categories differ in several aspects, there are similarities, particularly in leadership behaviors and demographic based appearance. In the following, we will first describe what differentiates each category and then elaborate on the similarities.

The category that we called the 'hustler' is most frequently described in our sample (by eleven out of 21 interviewees). 'Hustlers' were described as young, extroverted and confident risktakers, focused on entrepreneurial success, to have good communication skills, and to be able to persuade others to follow their ideas and visions. They are expected to be a serious boss and the one "who is in charge [...] and set the tone" (ID 14), because "otherwise it will not work at all. If you are the boss [...] you have to radiate that" (ID 21). In potential employees' perception this type of entrepreneurial leader shows goal-driven, convincing, and demanding

leadership behaviors. Potential employees expect they would, if they would work for the 'hustler', be enabled to participate actively, to work independently, and to be encouraged to bring in own ideas. They also fear this leader could demand to invest a lot of time and to see the startup as a matter of high priority also in their own lives. 'Hustlers' were generally described as extroverted and though.

ID 2: Basically, extroverted people. Yes, extroverted and definitely engaging [...] self-esteem and the idea you've started out of, you have to be so convinced that you probably want to push it on everyone else. Otherwise you might not dare this step if you do not show this behavior.

The next category, the 'hipster,' is an independent, innovative and mindful improver, very spontaneous and creative (described by nine out of 21 interviewees). Potential employees do not see 'hipsters' as typical boss but rather as entrepreneurial leaders who favor flat hierarchies, where all employees are treated equal and the working climate is more buddy-like. They also think 'hipsters' would expect from their employees to pitch own ideas, to show personal initiative, to learn from each other by a 'lively exchange of ideas and experience' (ID 10), and not to be too laid back because it is 'just' a startup (ID 18). The 'hipster' is a young person, who leads at the eye-level, and looks like a cool and casual dressed guy with sneakers and glasses.

ID 10: You are motivated to be part of the whole. Not an employee, but, it's a team and everyone is equally involved in the whole thing.

ID 18: With glasses and definitely with sneakers and not with dress shoes. I mean they are rather chic, but still with sneakers, because this reflects youth.

The 'hacker', by interviewees also called 'nerd', is our last category. In our sample, interviewees mentioned the 'nerd' when they tried to describe the entrepreneurial leaders' appearance. They said, "he looks either like a hipster or like a nerd" (ID 10). 'Hackers' are described as people with a strong domain expertise who get really excited when they understand

the technology behind an invention. These entrepreneurs are expected to manage a team in terms of setting plans but to lack motivating leader abilities. Such entrepreneurial leaders are expected to have higher expectations than leaders from established companies, particularly concerning the potential employees' domain specific knowledge, team fit, and work passion. The 'hacker' is not recognized as the main founder of a startup, more as the guy that stands behind the idea and is doing the 'actual' work. That might be the reason why there was only one interview completely fitting into the 'hacker' category. Nevertheless, several other interviews provided descriptions about this category. A 'hacker' is rather expected to be a "founder who originally had the idea but [...] work at eye-level [...] and visually looks as any other (employee)" (ID16).

ID 15: maybe there are people who just have a good idea and someone else behind them who says 'come, we'll do it. So, you're basically the head of the thing and I see that it works somehow'.

Despite these differences, all three categories, the 'hustler', the 'hipster', or the 'hacker', were recognized as leaders who fit the dynamism of entrepreneurial environments and are expected to show some kind of entrepreneurial leadership behavior. Entrepreneurial leadership behavior has been described by previous research (Gupta et al., 2004; Renko et al., 2015). Therefore, we decided to link our observations with the categories that been described as "entrepreneurial leadership style" in previous research (Renko et al., 2015).

Interviewees described entrepreneurial leaders, for example, as individuals who have "a clear vision [...] and ability to engage people and transmit ones' ideas and visions" (ID 5), are "brave, because they are not afraid to take risks" (ID 18), "burn extremely and also expect that the employees are really burning for it" (ID 11), expect from their employees "that they doubt decisions of their boss [...] and say 'yes, I have another idea here, maybe this is even better'" (ID 4). Table 2 shows in what way each of the categories of typical entrepreneurial leaders

seems to imply a particular leadership behavior and how each of these behaviors seems to fit aspects of the entrepreneurial leadership style (Renko et al., 2015).

Insert Table 2-4 about here.

Moreover, regardless which category interviewees had in mind (the 'hustler', the 'hipster', or the 'hacker'), we recognized consistent indications to age and gender. Entrepreneurial leaders were, at least in the first associations, described as young men.

ID 21: I would see rather a man. It's just a man at first glance, but I do not know why. Good question, that comes so subconsciously [...] late 20 early 30. Rather young, so "I still have a lot of plans and I can still make a great deal of it" because if you're older, that's not worth it anymore

ID 18: someone who has not directly this 'entrepreneur' look, maybe rather where you think "ok, cool". Also, young. I cannot somehow imagine a mid-fifties as a startup founder. Maybe as an investor.

ID 17: unfortunately, actually still more men [...] because there is also more confidence for men to do this (starting a business) [...] because they are also supported by society [...] women, even if they become self-employed, these heteronormative stories remain. "How to do it with a child and a job". And that is the balancing act that still has to be managed by a woman in the eyes of society.

Thus, the mental image of typical entrepreneurial leaders seems to be linked to age and gender. Entrepreneurial leaders were described as being between 20 and 35 years old, up to a maximum of "early forties" (ID 10). While ten (out of 21) interviewees concretely stated they associate this person with a young man, six interviewees revealed their male associations through male-connoted descriptions of the entrepreneurial leaders' attributes, behavior, and appearance. They verbalized male associations, for example by saying something like "what I think, first of all [...] it's definitely a business look, he wears a suit" (ID 14), or the entrepreneur "has a good appearance, well-groomed hair, shaved, maybe a shirt" (ID 10).

While five interviewees remained gender-neutral in their descriptions and stated it can be both, a man or a woman, 16 interviewees associate an entrepreneurial leader with a man. In several interviews however, it was mentioned that it could be a woman as well. For those women, the interviewees named additional restricting expectations. A woman has to be particularly tough or the particular industry in which her venture operates needs to fit the female stereotype (fashion or arts). Thus, the mental image of typical entrepreneurial leaders includes women who fulfill additional criteria.

ID 3: I think that is a guy who is sociable and good with everyone. Charismatically [...] My first thought would fall into the age category 25 to 35 [...] Well, I do not want to incorporate that stereotypically now, but I would see a man there. If it's a tough woman, too. But by default, I would rather see a man.

ID 15: I imagine him rather male. Although I have to say I have a few friends who I think would be typical female startup-founders. She should maybe be a doer, like a power woman.

ID 11: There are also female founders. Especially in the fashion industry and also for me, in my view [...] it's more open-hearted people. I have pretty much the same picture of both. Whereas men are more likely to found in technical domains and the ladies rather in art, fashion. At least that's how you see it more often.

DISCUSSION

Drawing on leadership categorization theory (Lord et al., 1984) and literature on stereotyping (Gupta et al., 2019; Malmström et al., 2018; Zhao et al., 2020), our qualitative interview study explored potential employees' mental images of typical entrepreneurial leaders and identified three different categories: The 'hustler', the 'hipster', and the 'hacker'. The 'hustlers' is described as the one who takes risks and sets the tone; the 'hipster' is seen as the innovative and creative improver; the 'hacker' is perceived to be the one with the tech-expertise. The 'hustler', the 'hipster', and the 'hacker' have been also discussed in practice-oriented management literature as entrepreneur prototypes (Ellwood, 2012; Hoffman, 2017). Our research goes beyond those ideas because we find, based on empirical data, that mental images

of entrepreneurial leaders incorporate specific entrepreneurial leadership behaviors, which have also been described in previous research (Renko et al., 2015), and are connected with demographics, because the 'typical' image is a young man with an entrepreneurial leadership style. Our findings provide a better understanding of mental images of potential employees, which is important because entrepreneurs need to attract human resources in order to grow their organizations. By pointing out the connection of mental images with leadership, age, and gender, our study indicates currently unacquainted challenges and opportunities for recruiting entrepreneurs. Thus, we paved the way for more research at the intersection of entrepreneurship, leadership, and recruitment. In doing so, we contribute to literature in several ways.

Previous entrepreneurship research showed that attributes such as being innovative and risk-taking are typically expected from entrepreneurs, even across countries (Gupta & Fernandez, 2009; Yao et al., 2016), and also repeatedly found that these attributes overlap with attributes typically expected of men (Ahl, 2006; Gupta et al., 2019). We go beyond this knowledge and extend theory on leadership prototypes by analyzing leadership behaviors which are characterized by behaviors that are typical for the startup context. Recently, Offermann & Coats (2018) showed that new leader attribute (i.e., creativity), which are typically associated with entrepreneurs' behaviors (e.g., innovativeness), became over the last two decades an integral part of ILTs. The authors explain that the "extensive media exposure to Jobs and other visionary leaders may be one context factor driving creativity into greater prominence when people think about leaders" (Offermann & Coats, 2018; p. 520). However, our interview study provides a more nuanced understanding of potential employees' expectations of entrepreneurial leaders' behaviors as we show how these behaviors are linked to the entrepreneurial leadership style (Renko et al., 2015). These insights are important for entrepreneurial leaders because fulfilling expectations might increase their legitimacy among potential employees (Spisak, Grabo, Arvey, & van Vugt, 2014).

Masculinity is shown to be a stable factor of ILTs and indicates that ""think leader, think male," still appears to persist in terms of naïve conceptions of leadership" (Offermann & Coats, 2018; p. 520), which is in line with our findings and the vast majority of entrepreneurship studies on gender stereotyping (e.g., Geiger, 2020; Gutpa et al., 2019; Malmström et al., 2020). However, our findings also indicate that potential employees not only expect entrepreneurial leaders to be male but also to be young. Age stereotypes has only recently attracted attention from entrepreneurship scholars (Azoulay et al., 2020; Zhao et al, 2020). Our findings support the notion that "entrepreneurs' age deserves scholarly attention in its own right rather than being simply treated as a 'control'" (Zhao et al, 2020; p. 17).

Context specific, demographic-based stereotyping plays an important role in prototype activation, as shown by leadership research (e.g., Buengeler et al., 2016; Johnson et al., 2008; Spisak et al., 2014). However, previous research on stereotyping analyzed perceptions of either financial resource providers (e.g., Malmström et al., 2020), followers (e.g., Spisak et al., 2014), or employees (e.g., Buengeler et al., 2016) but neglected perceptions of potential employees, which our study aimed to address. Our interview data offers insights on what potential employees might expect from their future entrepreneurial leaders. Meeting potential employees' expectations can be beneficial because it can enhance organizational attractiveness (Baum, Schäfer, & Kabst, 2016). We assume that the fit of entrepreneurs with the startup environment plays a key role for attracting employees to startups. However, more research is needed to analyze if there is a causal relationship between the match of entrepreneurial leader prototypes and organizational attractiveness. This can be a very promising research question as predictors of startup recruitment success and effects of potential employees' perceptions are still underexplored (Moser et al., 2017; Nyström, 2019).

Our study has limitations and provides indications what could be interesting avenues for future research. We conducted our interviews in Germany and our interviewees were all

Caucasians. However, entrepreneurial leader prototypes and demographic-based stereotypes about entrepreneurs can differ across countries and ethnic groups (Gupta & Fernandez, 2009; Shahriar, 2018). Thus, future research is needed to uncover whether implicit entrepreneurial leader prototypes interplay with stereotypes beyond age and gender, e.g. ethnicity stereotypes. Participants in our study did not directly mention ethnicity as part of their mental image of a typical entrepreneurial leader. However, it was expected that an entrepreneur looks 'like a Steve Jobs guy' (ID 4), indicating that the prototype is a white man, as shown by previous research (Jung, Vissa, & Pich, 2017; Knight, 2016). More importantly, the above quote also indicates a highly relevant but mostly neglected fact by researchers: every single person combines several demographics simultaneously, which can influence how a person is perceived by others based on stereotypical beliefs (Cole, 2009). Although it was not scope of our study to focus on the interplay of different demographic-based stereotypes for leadership prototype activations, we highly encourage future research to look through the lens of intersectionality (Crenshaw, 2017) when analyzing entrepreneurial leader prototypes.

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TABLE 1

Sample Characteristics and Interviewee's Stereotyped Prototype

ID	Gender	Age	Profession	Main Prototype*	Stereotype
1	male	25	Master Student	hustler	young man
2	male	24	Master Student	hustler	young man
3	male	20	Bachelor Student	hustler	young man
4	male	19	Bachelor Student	hipster	young man
5	female	23	Master Student	hustler	young man
6	female	27	Master Student	hustler	young
7	female	23	Bachelor Student	hustler	young
8	male	24	Bachelor Student	hustler	young (man)
9	male	25	Master Student	hipster	young
10	female	33	Freelancer	hipster	young man
11	male	23	Bachelor Student	hustler	young (man)
12	female	27	Bachelor Student	hustler	young
13	male	21	Bachelor Student	hipster	young (man)
14	male	24	Bachelor Student	hustler	young (man)
15	female	25	Master Student	hipster	young man
16	female	22	Master Student	hacker	young (man)
17	male	21	Bachelor Student	hipster	young man
18	female	19	Bachelor Student	hipster	young (man)
19	female	19	Bachelor Student	hipster	young
20	female	29	Master Student	hipster	young man
21	female	21	Freelancer	hustler	young man

Note 1: 52.4% are female, the average age is 23.5 years, 42.8% have a university degree, the average work experience is 3.3 years, 52.4% were jobseekers, 23.8% of the participants stated that they have experience working in new ventures. However, responses of interviewees with and without work experience in new ventures did not differ

Note 2: ID = Interviewee ID; *several interviewees provided also descriptions about other prototype categories besides their main prototype (frequency of main prototypes: 11 'hustlers', 9 'hipsters', and 1 'hacker'); 'man' in parenthesis means male connotated descriptions of the stereotype (gender was not exactly stated); descriptions for 'young' ranged from 20 until 35

TABLE 2

The 'Hustler' Prototype Category with link to Entrepreneurial Leadership Behavior

Entrepreneurial Leadership Behavior*	ID	Statement	Code
He/she often comes up with radical improvement ideas for the products and services we are selling	2	the idea you've started out of, you have to be so convinced that you probably want to push it on everyone else	convinced and persuasive
He/she often comes up with ideas of completely new products and services that we could sell	13	this ambition, and this vision in mind. They all have one goal in mind and they really want to achieve that.	ambitious visionary
He/she has often creative solutions to problems	4	you have to be creative and inventive. Also innovative, able to think about new things too	creativ inventor
He/she willing to take business risks	7	spontaneous and risk-taking [...] I think such a person is rather dominant, has leader abilities and is expressive. Also outgoing	risk-taking, dominant and expressive leader
He/she demonstrates every day passion for his/her work	14	that he not only tells of his idea, but also convinced me immediately so that I would like to get started right away. That's the way the guy has to be.	passionate entrepreneur
He/she has a vision of the future of our business	14	there must also be the will to stick on that (idea) and fight against adversity and always have your goal in mind	strong will and goal driven
He/she often challenges and pushes the employees to act in a more innovative way	1	they give more room for development. And, I think, it's more about finding ideas, which may also bring in new employees who have not been around for so long	idea supporter
He/she often wants the employees to challenge the current ways we do business	7	they expect self-initiative and creative thinking. Startup is not the business of one but when multiple people pull together	demanding leader
ID per Stereotype		1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 13, 14, 15, 17, 20, 21	

Note: *refers to the Entrepreneurial Leadership Style, ENTRELEAD scale (Renko et al., 2015); ID = Interviewee ID

TABLE 3

The 'Hipster' Prototype Category with link to Entrepreneurial Leadership Behavior

Entrepreneurial Leadership Behavior*	ID	Statement	Code
He/she often comes up with radical improvement ideas for the products and services we are selling	10	they bother what happens around them. They think outside of the box. In terms of 'what can I improve?'	mindful improver
He/she often comes up with ideas of completely new products and services that we could sell	18	they are creative, because you need the idea from somewhere. They are also innovative because you need to create something new or new ways doing something	creative innovator
He/she has often creative solutions to problems	15	I think there are startups, where really the one, who also has the idea is also the impeller and also a person, who tackles everything immediately	problem solver
He/she willing to take business risks	19	courageous, because they are not afraid to take risks, even to lose money	courageous risk taker
He/she demonstrates every day passion for his/her work	15	you have to be quite enthusiastic about the idea and you must be willing to sacrifice all your time - probably also free time - to do that well [...] For this you have to be the type who burn for an idea	passionate time investor
He/she has a vision of the future of our business	4	innovative, can also think of new ways in terms of leadership [...] the one who has the master plan, but actually just a colleague from the position. But he has the idea and knows where to go	innovative leader with masterplan
He/she often challenges and pushes the employees to act in a more innovative way	10	they expect a lot of initiative, a lot and lively exchange of ideas and experiences. And just always think one step further, not to persist at one point	challenger
He/she often wants the employees to challenge the current ways we do business	17	they have a more liberal attitude, in general, to suggestions and ways of working, new ideas	open-minded
ID per Stereotype		4, 9, 10, 12, 13, 15, 17, 18, 19, 20	

Note: *refers to the Entrepreneurial Leadership Style, ENTRELEAD scale (Renko et al., 2015); ID = Interviewee ID

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TABLE 4

The 'Hacker' Prototype Category with link to Entrepreneurial Leadership Behavior

Entrepreneurial Leadership Behavior*	ID	Statement	Code
He/she often comes up with radical improvement ideas for the products and services we are selling	16	inventive and passionate. Inventive in the sense of new ideas, because I also have to bring something new, otherwise my company actually makes little sense	passionate inventor
He/she often comes up with ideas of completely new products and services that we could sell	8	Nerds would rather be those who would stand behind the idea of the startup and have the product. And the people who really found it [...] maybe a man who simply wants to achieve something	not the main founder
He/she has often creative solutions to problems	15	maybe there are people who just have a good idea and someone else behind them who says 'come, we'll do it. So, you're basically the head of the thing and I see that it works somehow'	not the head but the hacker
He/she willing to take business risks	10	they are brave people who dare to take a risk	brave
He/she demonstrates every day passion for his/her work	16	most of them are very deep inside of their topics and that gives them a lot of fun. And they bring a lot of know-how, just because they are so interested	domain expert, enjoyment
He/she has a vision of the future of our business	5	it could be good to have ambitions and be creative and [...] to be realistic about what parts of the ambitions might be possible and what would not be possible	realistic entrepreneur
He/she often challenges and pushes the employees to act in a more innovative way	5	they make everyone understand the vision and to be engaged in the project	engaging
He/she often wants the employees to challenge the current ways we do business	16	they have high expectations, higher than in a normal company. Regarding working knowledge [...] and even beyond that	with high expectations
ID per Stereotype		5, 8, 10, 15, 16	

Note: *refers to the Entrepreneurial Leadership Style, ENTRELEAD scale (Renko et al., 2015); ID = Interviewee ID

STEREOTYPE EFFECTS IN HUMAN RESOURCE ACQUISITION OF NEW VENTURES: AN INTERSECTIONAL APPROACH

ABSTRACT

The lack of research at the intersection of social categories such as gender, ethnicity, and occupational roles within the field of entrepreneurship (e.g. the Indian female startup leader) has led to a simplistic and incomplete description of the effects of stereotyping in entrepreneurship. The current paper addresses this shortcoming by analyzing how similarly successful but demographically divers entrepreneurs are perceived by others in terms of job role fit (Study 1, a within-subject design) and how these stereotypical beliefs influence human resource acquisition of new ventures (Study 2, an experimental vignette study). Building on role congruity and intersectionality theories, our model provides a nuanced picture of how intersecting stereotypes shape human resource acquisition of new ventures. While the first study largely demonstrates the commonly expected gender and ethnicity stereotypes in certain job roles, we find in Study 2 a communality-bonus for women, especially for Indian women, in the role of a new venture leader. Our study suggests that women entrepreneurs can gain unexpected power which might help them to acquire the human resources they need and adds to existing literature by demonstrating that ethnic stereotypes can overwrite gender stereotypes and that the intersect of stereotypes can create power relations that depend on the context in which leadership is enacted.

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INTRODUCTION

The Fortune magazine ranks annually the most influential and standout entrepreneurs (e.g. 'Businessperson of the Year'; Fortune.com). For many years, those rankings have been headed by Caucasian men. In recent years, more and more women and more and more Indians, both still being demographic minorities in entrepreneurship, appear in these rankings. Although chances of minority groups to be successful seem to have increased, they face potential disadvantages, such as being perceived as less competent than Caucasians or experiencing barriers in entering entrepreneurship (Hekman, Johnson, Foo, & Yang, 2017; Knight, 2016). Demographics (e.g., being female and/or Indian) are salient characteristics that either fit or do not fit the "typical" picture of an entrepreneur, at least in the Western environment (Jung, Vissa, & Pich, 2017; Maitra, 2013). Demographics can be considered as superficial cues, but research demonstrates that demographic-based stereotypes impact entrepreneurial outcomes (e.g., Eddleston, Ladge, Mitteness, & Balachandra, 2016; Micelotta, Washington, & Docekalova, 2018; Yang, Kher, & Newbert, 2019). Based on the role congruity theory (Eagly & Karau, 2002), which posits that the evaluation of a person of a social group (e.g. women or Indians) in a certain role (e.g., being a leader, tech-expert, or entrepreneur) is influenced by what is perceived to be "typical" for that role and for that social group (Eagly, Nater, Miller, Kaufmann, & Sczesny, 2020), Yang et al. (2019), for instance, demonstrated that gender congruity enhances entrepreneurial outcomes such as being selected for accelerator programs, and that men still experience better outcomes from gender incongruity than women.

In recent years, entrepreneurship literature made very valuable and important contributions to research on a single social identity, such as gender (e.g., Jennings & Brush, 2013; Rocha & Praag, 2020), age (e.g., Zhao, O'Connor, Wu, & Lumpkin, 2020), or ethnicity (e.g., Ram, Jones, & Villares-Varela, 2017), and also demonstrated how stereotypes might influence important outcomes for entrepreneurs, such as their ability to acquire the resources

they need to grow their organization (Tonoyan, Strohmeyer, & Jennings, 2019). Entrepreneurship research, however, has applied a unidimensional perspective on stereotypes (Knight, 2016; Romero & Valdez, 2016) that neglects that people are always part of multiple social groups simultaneously (e.g., Indian, women, leader, entrepreneur, etc.). While much has been written about the impact of single stereotypes on entrepreneurial outcomes, it remains elusive how effects of intersecting stereotypes influence entrepreneurial processes and outcomes (Ahl & Marlow, 2019; Marlow & Martinez Dy, 2018). Drawing on intersectionality theory (Cho, Crenshaw, & McCall, 2013; Cole, 2009; Crenshaw, 1991), we aim to contribute to a better understanding of how several stereotypes play together in shaping perceptions, particularly in new ventures' human resources acquisition.

The new venture recruitment context serves as a particularly relevant and interesting ground for researching stereotypes. Human resources are essential for new ventures in order to achieve performance and growth (Hayton, 2005; Rauch, Frese, & Utsch, 2005; Tonoyan et al., 2019) making recruitment of new employees is an essential task for entrepreneurs (Coad, Nielsen, & Timmermans, 2017; Nyström, 2019). While stereotypes have been shown to influence recruitment outcomes (Rule, Bjornsdottir, Tskhay, & Ambady, 2016), less is known about how stereotype-based expectations of applicants might impact recruiting of new ventures, and research has only begun to study applicants' perspective in a new venture recruitment context (Moser, Tumasjan & Welpe, 2017; Tumasjan, Strobel, & Welpe, 2011; for a review see also Nyström, 2019). Our study aims to add to the literature by analyzing how applicants' perceptions of (in)congruities of the demographics (i.e. gender and ethnicity) and job role (i.e. leader role, tech vs. business expert) of entrepreneurs and their team members – who usually recruit in new ventures (Leung, Zhang, Wong, & Foo, 2006) – influence human resource acquisition of new venture.

Our research addresses recent calls for more research on the effects of intersecting stereotypes in leadership (Eagly et al., 2020; Heilman, Manzi, & Caleo, 2019), entrepreneurship (Ahl & Marlow, 2019; Marlow & Martinez Dy, 2018; Romero & Valdez, 2016), and recruitment (Rattan, Steele, & Ambady, 2019). Additionally, we introduce a new perspective on gender stereotypes in that we suggest that (dis)advantages for female entrepreneurs are dependent on intersections with other demographic cues, such as ethnicity, and also contextual factors, such as new venture recruitment. Specifically, we propose that perceptions of entrepreneurs are determined by demographics, the saliency of job roles (i.e., being introduced as leader, business expert, or tech expert) and the particular situation of an interaction (i.e., whether the entrepreneur wants to acquire financial capital or human resources). Understanding whether female entrepreneurs are confronted with particular (dis)advantages is important because recent research highlights that being a woman in entrepreneurship might not always provide limitations but also holds opportunities (Balachandra, Briggs, Eddleston, & Brush, 2019; Harrison, Leitch, & McAdam, 2020; Johnson, Stevenson, & Letwin, 2018). Finally, the new perspectives and insights of our study advance the still scant but needed knowledge on human resource acquisition in ventures (Leung et al., 2006; Moser et al., 2017; Tumasjan et al., 2011).

We test our hypotheses in two studies. Study 1 (n=185) explores which gender and ethnicity (pictures from successful entrepreneurs in the Fortune rankings) is perceived to fit with certain job roles (CEO, CTO, Office Assistant, IT Assistant). The second study (n=520) evaluates, in an experimental design, the combined causal effects of gender and ethnicity (manipulation with the same pictures as in Study 1) and job roles (leader role, tech vs. business expert) on potential applicants' perceptions of their chances to perform (e.g., to show their abilities) in a new venture recruiting context.

THEORETICAL BACKGROUND

In building our conceptual model, we draw on role congruity theory (Eagly & Karau, 2002) and intersectionality theory (Cho et al., 2013). Role congruity theory (Eagly & Karau, 2002) posits that when people observe members of a social group more often in certain roles than members of other groups, the behaviors enacted within these roles are believed to be linked to the traits perceived to be typical of the social group. For instance, behaviors of leaders are believed to overlap more with stereotypically male traits (e.g., assertive, dominant) than stereotypically feminine traits (e.g., communal, sympathetic), leading to the "think manager, think male" phenomenon (Eagly & Karau, 2002). That is, individuals' implicit beliefs about what it means to be a man and what it means to be a leader are aligned. Such beliefs define stereotypes and become, shared cultural expectations over time (Eagly et al., 2020).

Importantly, people can be part of multiple social groups simultaneously (e.g., a Caucasian female leader), such that several stereotypes overlap. However, most stereotype research in entrepreneurship has focused on a single social category and little attention has been dedicated to the intersection of categories (Ahl & Marlow, 2019), despite the obvious fact that every individual necessarily occupies multiple categories at a time, which also affects the way we think about others (Cole, 2009; Ghavami & Peplau, 2013). In other word, intersecting stereotypes can comprise unique elements (e.g. the Indian female entrepreneur) and cannot be understood by simply adding together the ingredients of each separate stereotype (e.g. Indians or women; Ghavami & Peplau, 2013). Consequently, a new "lens through which you can see where power comes and collides, where it interlocks and intersects" (Crenshaw, 2017) is needed in entrepreneurship research.

Intersectionality theory (Cho et al., 2013; Cole, 2009; Crenshaw, 1991) provides an inclusive perspective by acknowledging the unique stereotypical beliefs about certain subgroups (e.g., the Indian female entrepreneur). In fact, gender-by-ethnicity research

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demonstrates that culture stereotypes are conflated and rather reflect characteristics of the dominant social group. For example, while gender stereotypes are conflated with "whiteness", ethnicity stereotypes are conflated with "maleness", which means in other words, stereotypes of men and women (ethnicity unspecified) are most similar to those of White men and White women while stereotypes of an ethnic group (gender unspecified) reflect the characteristics of men rather than women in that ethnic group (Ghavami & Peplau, 2013).

Combining the theoretical perspectives of role congruity and intersectionality theory, we investigate stereotype-based perceptions in new ventures' recruitment. More specifically, we investigate differences in applicants' perceptions, based on the gender and ethnicity of the person who recruits as well as the role in which the recruiting person is positioned in. That is, whether it is a leader role and whether the role relates to tech- or business-expertise. First (Study 1), we analyze the perceived fit of certain social groups (based on gender and ethnicity) with specific job roles (leader role, tech vs. business). In our second study, we investigate in a new venture recruitment setting, which social group, in combination with which role, applicants prefer to meet in a job talk and when they think that they are able to perform in that job talk. Figure 1 illustrates our conceptual model.

Insert Figure 1 about here.

How Gender and Ethnicity Intersect with Job Role Stereotypes (Study 1)

Theory on role congruity (Eagly & Karau, 2002) suggests that the intersection of gender with occupational stereotypes can influence how individuals are perceived, particularly when the provided information has a (mis)fit with existing stereotypes. For instance, leadership, technology, and entrepreneurship are typically occupied by men (Gales & Hubner, 2020; Heilman et al., 2019; Jung et al., 2017; Ranga & Etzkowitz, 2010), and the stereotypes related to these occupational categories might therefore be biased in favor of men (Gupta, Wieland, &

Turban, 2019; Koenig & Eagly, 2019). In turn, the intersection of occupational categories with gender might lead to more positive evaluations for men but negatively affect the evaluations of women. Previous research on the intersection of gender with male-typed occupational roles repeatedly found gender biases (e.g., Johnson, Murphy, Zewdie, & Reichard, 2008; Koenig, Eagly, Mitchell, & Ristikari, 2011; Malmström, Voitkane, Johansson, & Wincent, 2020).

However, since expectations and thus evaluations might depend on the overlap of social categories such as gender and ethnicity (Eagly et al., 2020), it can be expected that not all observed women in male-typed job roles (e.g., Caucasian female leaders) will be evaluated more negatively than men (e.g., Indian male leaders). Yet, research on the intersection of gender-by-ethnicity with male-typed occupational roles remains scarce (Ahl & Marlow, 2019; Heilman et al., 2019). To explore where power comes and where it intersects in certain male-typed job roles related to entrepreneurship (i.e., leader and technology expert), we build on intersectionality theory (Cho et al., 2013; Cole, 2009; Crenshaw, 1991). We draw on the rational that gender stereotypes are conflated with stereotypes of the dominant ethnic group in certain occupational roles (Ghavami & Peplau, 2013), and posit that ethnicity stereotypes are more salient than gender stereotypes.

Following the theoretical perspectives of role congruity and intersectionality theory, we develop main effect (gender and ethnicity) as well as intersectionality effect (gender-by-ethnicity) hypotheses based on stereotypical belief that individuals have about gender and ethnicity in relation to job roles that require leadership abilities and tech-expertise.

The Leader Job Role Stereotype. Although examples of exceptional leaders such as Shantanu Narayen (Adobe), Indra Nooyi (Pepsi) or Sundar Pichai (Google), show that Indians have made remarkable gains in leadership, for ethnic minorities "a demographic status and power gap remains" (Hekman et al., 2017, p. 771). Until today, only a diminishing amount of globally successful companies are headed by ethnic minorities, such as Indians (Catalyst, Inc.,

2019). Caucasians are therefore more often observed in leader roles than Indians, at least in Western environments (Hekman et al., 2017; Sy et al., 2010). That way, a stereotype that only Caucasians (men) have relevant abilities for higher ranked positions, such as CEO roles, becomes salient and is reproduced (Jung et al., 2017). For example, Jung et al. (2017) demonstrated that co-founders' status cues such as gender and ethnicity predict how tasks are allocated within a founding team and who typically occupies higher ranked and more influential positions (i.e., white male). As a result, ethnic minorities are likely to be stereotyped as a social group that does not have attributes required for leadership roles (Fiske, Cuddy, Glick, & Xu, 2002; Hekman et al., 2017).

As elaborated earlier, believes about leadership abilities are also gender stereotyped. Men are expected to have relevant attributes for higher ranked positions, such as agentic attributes (Koenig et al., 2011). These expectations create biased perceptions and evaluations because a lack of fit between the attributes associated with job roles (e.g., agency associated with leadership) and the attributes associated with social groups (e.g. communality associated with women) results in the belief that a person (e.g., a woman) does not have the attributes to fulfill a certain job (e.g., leading a new venture) – without evaluating actual competence (Heilman et al., 2019).

Based on the perspectives of the role congruity and intersectionality theories we argue that congruity of leader role associations with ethnic and gender stereotypes can enhance the perception that certain social groups in particular fit leader roles. Accordingly, we expect that leadership might be biased in favor of Caucasians and in favor of men.

H1a: Caucasians are perceived to better fit leader roles than Indians.

H1b: Men are perceived to better fit leader roles than women.

However, from the intersectionality perspective we also argue that ethnicity stereotypes might overwrite gender stereotypes (Ghavami & Peplau, 2013). More specifically, being Caucasian is the salient characteristic in leadership, while within each ethnic group the salience of the dominant gender (i.e., men) will remain (Hekman et al., 2017). Consequently, while Caucasian men are perceived as the best fit for leader roles (Jung et al., 2017), Indian women are perceived as the worst fit because they do not belong to a dominant social group in leadership (i.e., Caucasian or man). However, we also propose, based on our expectation in leadership ethnicity stereotypes are more salient than gender stereotypes, that Caucasia women will benefit more from being a Caucasian than Indian men from being a man. Taken together, we hypothesize:

H1c: Caucasian men are perceived as the best fit for leader roles (compared to other gender-ethnicity combinations).

H1d: Indian women are perceived as the worst fit for leader roles (compared to other gender-ethnicity combinations).

H1e: Caucasian women are perceived to fit leader roles better than Indian men.

In the previous sections, we drew on both role congruity theory and intersectionality theory to argue that leadership might be biased in favor of certain ethnicities and gender (i.e., Caucasians and men, respectively). Moreover, we posit that leadership ethnicity stereotypes are more salient than gender stereotypes. In what comes next, we shed light on the biases and stereotypical beliefs that individuals have about gender and ethnicity in relation to job roles that require tech-expertise.

The Tech Job Role Stereotype. Although Indians are not stereotyped as leaders, they might be stereotyped to have advanced technology skills (Raghuram, 2011). Particular practices and policies in a country influence behaviors or skills in the society and which behaviors or

skills are valued in that society (Khandwalla, 2014). Such mechanisms can also influence stereotypes about people who are associated with that society (Gupta & Fernandez, 2009). That way, particular practices and policies in a country can influence stereotypes about individuals who are perceived to be associated with that country, for example due to their ethnicity.

For example, in the early 1990s a large number of companies started to outsource IT services to India, which reinforced Indians capability in IT (Agrawal, Goswami, & Chatterjee, 2010). Also, the Indian government facilitates skills for product development by emphasizing a high priority on state-of-the-art education in technology (Cappelli, Singh, Singh, & Useem, 2015; Khandwalla, 2014). Such practices and policies might also be a reason why Indians are believed to have a particular ability or "brilliance" for new product development; and technical and IT related skills (Agarwal & Brem, 2012; Hossain, 2017). Nowadays, India is widely recognized as a digital economy that possesses human capital with extraordinary technology skills (McKinsey, 2019). This might create a stereotype of the 'Indian technology expert'. This stereotype is likely to make others belief that Indians perfectly fit job roles related to technology (Khandwalla, 2014; Sy et al., 2010).

Believes about technological skills are also gender stereotyped (Chatterjee & Ramu, 2018; Gales & Hubner, 2020). "Male dominance in technology not only blocks women's access to the better and higher paid jobs, but also has broader consequences that go beyond workforce structure" (Ranga & Etzkowitz, 2010; p. 3). A significant barrier for women's acceptance in job roles requiring tech-expertise are negative stereotypes connotated with gender and technology skills (Chatterjee & Ramu, 2018). Heilman et al. (2019), for example, found that in male-typed domains (e.g. programming) women were more negatively evaluated than men. Specifically, the findings of their study demonstrate that when both women and men showed an equal improvement in performance women were evaluated as less competent than men, and when both showed an equal decline in performance the effect for women was more detrimental

than for men. These findings are consistent with the idea that technology stereotypes are gendered in favor of men (Gales & Hubner, 2020).

Drawing on the role congruity and intersectionality theories we argue that congruence of associations with job roles requiring tech-expertise with ethnic and gender stereotypes can enhance fit perceptions. Accordingly, we expect that job roles requiring tech-expertise might be biased in favor of Indians and in favor of men.

H2a: Indians are perceived to better fit roles requiring tech-expertise than Caucasians.

H2b: Men are perceived to better fit roles requiring tech-expertise than women.

Based on intersectionality theory we argue that being Indian is the salient characteristic in technology, while technology associations with the male stereotype still dominates within ethnic groups (Ghavami & Peplau, 2013). Therefore, we expect that Indian men are perceived as the best fit for job roles requiring tech-expertise. Consequently, we also expect that Caucasian women are perceived as the worst fit for these job roles because they do not belong to a dominant social group in technology (i.e., Indian or male). However, we expect that the 'Indian technology expert' stereotype will not always exceed the 'male technology expert' stereotype. Because Indian women are underrepresented in technology fields (Chatterjee & Ramu, 2018) and additionally an ethnic minority in Western societies (Maitra, 2013), we expect that for Indian women it is particularly tough to compete with Caucasian men, in terms of their acceptance in technology fields. Thus, we do not expect that Indian women will benefit more from being Indian than Caucasian men from being a man. However, we do expect that the former group will still benefit from being Indian, such that they are more likely to be perceived as tech-experts than Caucasian women. In sum, we suggest that:

H2c: Indian men are perceived as the best fit for roles requiring tech-expertise (compared to other gender-ethnicity combinations).

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H2d: Caucasian women are perceived as the worst fit for roles requiring tech-expertise (compared to other gender-ethnicity combinations).

H2e: Indian women are perceived to better fit roles requiring tech-expertise than Caucasian women.

To summarize, trough the lenses of the theories on role congruity and intersectionality we argue that job roles requiring leadership and technology skills might be biased in favor of certain ethnicities and gender (i.e., 'the Caucasian male leader' and 'the Indian male technology expert'). However, we also propose that ethnic stereotypes are more salient than gender stereotypes which can unfold unique stereotyping effects for certain subgroups such as the Caucasian female leader or the Indian female technology expert. In the next section, we analyze how the intersect of stereotypes might impact recruitment activities in a new venture context.

Stereotype Intersections in New Venture Recruitment Contexts (Study 2)

In recent years, entrepreneurship literature made significant contributions to research on a single social identity, such as gender (e.g., Gupta, Goktan, & Gunay, 2014; Jennings & Brush, 2013; Kanze, Huang, Conley, & Tory Higgins, 2018; Rocha & Praag, 2020), age (e.g., Azoulay, Jones, Kim, & Miranda, 2020; Zhao et al., 2020), or ethnicity (e.g., Ram & Jones, 2008; Ram et al., 2017). It has been also demonstrated how stereotypes might influence important outcomes for entrepreneurs, such as the acquisition of relevant resources to grow their organization (e.g., Eddleston et al., 2016; Yang et al., 2019; Tonoyan et al., 2019). Based on the role congruity theory (Eagly & Karau, 2002), Malmström et al. (2020), for example, show how gendered perceptions of venture capitalists can cause disadvantages for female entrepreneurs in the competition for funds. However, the competition for new talents is also a critical task for new ventures (Coad et al., 2017; Tumasjan et al., 2011), and applicant's stereotyped-based

perceptions could cause disadvantages for entrepreneurs whenever the stereotype of their social group does not fit their role.

Recruitment research has predominantly focused on recruiters' perceptions when analyzing the impact of stereotypes in recruitment and selection (Rattan et al., 2019; Zebrowitz, Tenebaum, Goldstein, 1991). However, stereotypes and biases in recruitment are not only limited to recruiters' perceptions but also extend to applicants' perceptions. In fact, previous research has shown that recruiters' demographics, expertise or job role might influence applicants' perceptions during the recruitment process (Goldberg, 2003, 2005; Rynes, Bretz, & Gerhart, 1991; Taylor & Bergmann, 1987). Goldberg (2003), for instance, showed that race is a more salient category than age and gender when predicting applicants' reactions to job interviews based on demographic similarities with the recruiter. In a similar vein, new venture recruitment research underlines that characteristics of recruiting entrepreneurs (e.g., their educational background) may be important signals for applicant attraction to new ventures (Backes-Gellner & Werner, 2007; Moser et al., 2017). However, the influence of stereotypes on applicants' perceptions of the recruiter remains elusive.

In new venture recruitment contexts, applicants' stereotypes might play a particular important role. Support for this argument may be found in entrepreneurship research, in which scholars have found that stereotypical beliefs of resource providers influence entrepreneurs' ability to accumulate financial resources (e.g. Alsos & Ljunggren, 2017; Kanze et al., 2018; Malmström et al., 2020; for a review see also Geiger, 2020). For entrepreneurs the acquisition of human capital is at least as important as the acquisition of financial capital (Rauch et al., 2005; Tonoyan et al., 2019). Thus, it can be assumed that stereotype-based perceptions of applicants, who are also resource providers, are not only important but also likely to influence resource acquisition.

In line with these arguments and building on previous research (Goldberg, 2003; Rocha & Praag, 2020; Romero & Valdez, 2016; Tonoyan et al., 2019) we propose that gender, age, ethnicity, and job role stereotypes play a crucial role in human resources acquisition, that is, new venture recruitment. More specifically, we suggest that applicants will try to infer, from their perceptions of the person who is recruiting, whether they will have good chances to perform in a job talk with them. Their perception of chances to perform might depend on whether they think that the person they will be talking to has relevant expertise, has power over the hiring decision, and whether this person is friendly, likable and trustworthy (Cable & Turban, 2001).

Perceptions of the person who is recruiting influence whether applicants perceive talking to that person as a chance to perform, i.e. as a good opportunity to show their skills and abilities (Bauer et al., 2001). Applicants are likely to believe that they can only convince a person about their own expertise when that person also has expertise. Moreover, they are likely to think that convincing a person is only helpful for them when that person has enough power over the final hiring decision. Therefore, applicants' perception of the expertise and power of the person who is recruiting are likely to influence their perceptions of their chances to perform.

One important cue to infer a person's power and competence is the person's job role (Berry & Sanchez, 2019; Jung et al., 2017). Power and competence can on the one hand be signaled by occupying a leader-role, on the other hand by a role that is associated with a particular expertise. For organizational processes, individuals with business expertise are usually perceived to be more influential than individuals with expertise in other fields. In new ventures, roles that require business expertise (e.g., CEO) are perceived as having a strong influence on internal organizational processes, and the tasks performed within these roles are necessary preconditions for the legitimacy and accountability of new ventures (Jung et al., 2017). Therefore, occupants of job roles that require business expertise can be expected to have

more power over strategic decisions, including hiring decisions. Hence, we expect that applicants will perceive greater chances to perform when they know they will be talking to someone in a leader role, and also when they know they are talking to someone in a business expertise role (compared to a tech expertise role):

H3a: Applicants see higher chances to perform when they talk to a person in a leader role compared to non-leader role.

H3b: Applicants see higher chances to perform when they talk to a person in a business-expertise role compared to tech-expertise role.

As outlined above, perceptions of a person's competence and power are not only influenced by signaling effects of certain job roles (Berry & Sanchez, 2019) but are also affected by stereotypical beliefs about the role occupant's gender and ethnicity (Hekman et al., 2017; Sy et al., 2010). Applicants' perceptions form in an interplay of perceptions of job roles and perceptions of other cues such as a person's gender and ethnicity (Goldberg, 2003). Demographics are important status cues (Jung et al., 2017) and signal competence, even if they are not reflecting real competencies or impact (Fiske, 2017; Fiske et al., 2002; Heilman et al., 2019).

To understand how perceptions of job roles and demographics play together in the new venture recruitment context, we consider different lines of arguments: On the one hand, *congruency* of associations with a person's demographics and roles usually evokes positive perceptions. Therefore, the person who is recruiting for the new venture is most likely to evoke positive perceptions in applicants when all attributes of the person who is recruiting are congruent. On the other hand, in the specific context of new venture recruitment, an ability to build trust and to connect with applicants is highly important (Tumasjan et al., 2011; Wilhelmy, Kleinmann, Melchers, & Lievens, 2019). Therefore, a person who can signal such *communal*

attributes, such as friendliness, likability or trustworthiness, is likely to evoke positive perceptions. In the following, we elaborate on the effects of both of those arguments.

Congruence of the demographic stereotype and the job role stereotype might enhance perceptions of competence and power of the person who is recruiting. Following this reasoning, we expect a positive effect of congruence for perceptions of chances to perform, such that applicants might perceive their chances to perform to be higher in a conversation with a person in an influential job role (i.e. leader role and business expertise role), and particularly high when the person fits the demographic stereotype of that role. Then, applicants perceive higher chances to perform when the person belongs to the dominant demographic groups, which implies, for persons in leader roles or business expertise roles, an advantage for Caucasians and men. We expect, due to the Caucasian stereotype for leader roles and business-expertise roles, an advantage for Caucasians and hypothesize that applicants perceive higher chances to perform when they talk to Caucasians in leader and business roles:

H4a: Applicants see higher chances to perform when they talk to a person in a leader role, particularly if the person is Caucasian (compared to Indian).

H4b: Applicants see higher chances to perform when they talk to a person in a business-expertise role, particularly if the person is Caucasian (compared to Indian).

Whether women face disadvantages due to their lower perceived congruence with leader and business roles, compared to men, is less clear. In the specific context of new venture recruitment, *communal attributes* such as friendliness, likability or trustworthiness – which are female-stereotyped characteristics – of the person who is recruiting might be at least as important as expertise and power perceptions (Chapman, Uggerslev, Carroll, Piasentin, & Jones, 2005). Perceptions of friendliness, likability or trustworthiness might be particularly important in new venture recruitment, because in new ventures employees and entrepreneurs

work closely together with trustful relationships (Jensen & Luthans, 2006). The working climate has been identified as one of the most valued employer characteristics of new ventures (Tumasjan et al., 2011). Therefore, applicants might pay particular attention to communal attributes of the person who is recruiting. Then, communal attributes are even more important than agentic attributes, in the context of new venture recruitment. This importance of signaling communal attributes – which are female-stereotyped characteristics (Hentschel, Heilman, & Peus, 2019) – suggest a 'communality-bonus' for women. Although applicants are likely to be most familiar with Caucasian men in business and leader roles – because women and other ethnicities are still underrepresented (Hekman et al., 2017; Rocha & Praag, 2020) – there might be an advantage for women in the recruitment context. We assume that, in this context, the importance of signalling communal attributes is higher than the importance of being perceived congruent. Because women are stereotyped communal, we hypothesize that applicants perceive higher chances to perform in a job talk when they talk with a female than a male leader or expert.

H5a: Applicants see higher chances to perform when they talk to a person in a leader role, particularly if this person is female (compared to male).

H5b: Applicants see higher chances to perform when they talk to a person in a business-expertise role, particularly if this person is female (compared to male).

For the specific context of new venture recruitment, gender might be a more dominant cue than ethnicity because applicants may pay particular attention to communal attributes. Drawing on the perspectives of the intersectionality theory and the rational that stereotypes of a dominant social category can overwrite stereotypes of other social categories (Cole, 2009; Ghavami & Peplau, 2013), we assume that gender stereotypes can here exceed ethnicity stereotypes. Thus, we expect that chances to perform are perceived higher in conversations with

female leaders and business experts, whether they are Caucasian or Indian, as compared to their male counterparts, because communal attributes are strongly associated with women (Hentschel et al., 2019).

Nevertheless, we expect that the communality-bonus is stronger for Indian than for Caucasian women. For successful and powerful women (e.g., women in leader roles), research demonstrates that women in general "were found to be characterized more negatively in interpersonal attributes than women typically are" (Heilman, Block, & Martell, 1995; p. 237). Women who fulfill powerful positions provoke "a mixture of positive and negative reactions – that is, an ambivalent reaction – storage of these reactions in memory could have a variety of effects" (Eagly & Karau, 2002; p. 576). In other words, displaying women in influential roles (e.g. CEO) could lead to ambivalence in applicants' perceptions. Even if these women are perceived as competent, which has positive connotations (Eagly et al., 2020; Fiske et al., 2002), they can also be seen as a symbol of the so-called 'Iron Lady', which is not only associated with agentic rather than communal attributes, but also has negative connotations (e.g. hostile, Eagly & Karau, 2002). However, we expect that this ambivalent effect applies rather to Caucasian women than to Indian women in influential job roles (i.e., leader role and business expertise role) because Caucasians compared to ethnic minorities are generally perceived as more dominant, thus more agentic, in influential positions such as leadership (Hekman et al., 2017; Jung et al, 2017). Moreover, when comparing Indian leaders with Caucasian leaders (i.e., American), it is suggested that Indian leaders were perceived as more "relationship oriented", "trusting", "emotion oriented," and had a "greater human touch" (Pellegrini, Scandura, & Jayaraman, 2010, p. 396). Because these interpersonal and communal attributes are highly valued by applicants (Wilhelmy et al., 2019), we hypothesize:

H6: The female advantage in the effect that applicants see higher chances to perform when they talk to a person in a (a) leader role and (b) business-expertise role is stronger for Indian women (compared to Caucasian women).

STUDY 1

Study 1 explores which gender and ethnicity (pictures from successful entrepreneurs in the Fortune rankings) is perceived to fit with certain job roles (CEO, CTO, Office Assistant, IT Assistant).

Stimuli and Design. For our stimuli that intend to manipulate ethnicity and gender, we selected publicly available headshots of sixteen CEOs from Fortune rankings (i.e., 'Businessperson of the Year', 'Most Powerful Women', and '40 under 40'; Fortune.com). We selected CEOs who were similar in success and background (leading a successful tech-related company and/ or with a university degree in technology) but differed in ethnicity, gender, and age[1]. Each CEO's photo was cropped around the head and standardized to the same size, as is common in studies that use photos of CEOs that are listed in Fortune rankings as stimuli material (e.g. Pillemer, Graham, & Burke, 2014; Rule & Ambady, 2009). With our stimuli material of 16 CEO faces (4 male Caucasian, 4 male Indian, 4 female Caucasian, and 4 female Indian), we created a 2 2 within-subject design which was used to manipulate our dependent variables, ethnicity (Caucasian, Indian) and gender (male, female).

Sample and Procedure. A total of 185 participants (50.3% women; MAge = 42.8 years, SD = 11.4; 12.4% with non-German background among which one person with East Asian background) were recruited via a professional online panel provider. On average, participants had 19.3 years of work experience, and 34.1% indicated that they used to be or currently are in

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[1] We selected CEOs from two age-groups (around 30 and around 50 years of age), because age stereotypes in entrepreneurship and leadership might affect participants' perceptions (Zhao et al., 2020; Walter & Scheibe, 2013). However, in this study we focus on the demographics gender and ethnicity but control for potential age-group effects, similar to other studies (e.g., Dietl, Rule, & Blickle, 2018).

a leadership position. We instructed the participants that they would view sixteen photos of individuals, without mentioning the identity or profession of those at any point[2].

Measures. To assess fit of individuals with varying demographics with particular job roles, we asked participants to intuitively assess how good each depicted person would fit each job role on a scale from 1 (not at all) to 7 (very) (Rule & Ambady, 2008; Rule & Tskhay, 2014). Consistent with previous research (e.g., Pillemer et al., 2014; Rule et al., 2016), we presented the faces and jobs in random order and all 16 faces were rated on the same job (e.g., CEO) before moving to the next job. Demographics were binary and measured with 0 and 1. That is, gender (male = 0, female = 1), ethnicity (Caucasian = 0, Indian = 1), and age (around 30 = 0, around 50 = 1).

Results Study 1

We analyzed the data using multilevel models to account for nesting within participants (Peugh, 2010). Following recommendations by Aguinis, Gottfredson, & Culpepper (2013), we grand-mean centered our binary predictor variables, gender and ethnicity, and then regressed the participants' perceptions of the targets' job role fit onto both main factors and their interaction. We specified random coefficient models and computed pseudo R^2 with the unconditional model as baseline (Snijders & Bosker, 1999). We included targets' age-group as control variable (around 30=0, around 50=1; see also footnote 1). Table 1 presents the results of our multilevel models, starting with the main effect model followed by the interaction effect model for each dependent variable (i.e. CEO fit, CTO fit, Office Assistant fit, IT Assistant fit) separately.

Hypotheses tests for leader-roles. Hypotheses H1a and H1b predict that Caucasians compared to Indians and men compared to women are perceived to better fit leader job roles. As shown in Table 1, job role fit perceptions are significantly lower for Indians compared to

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[2] Some participants occasionally recognized targets (<5% of all data); excluding these trials from the analyses did not change the results.

Caucasians in both leader roles, CEO (estimate = -0.71; p < .000) and CTO (estimate = -0.47; p < .000). However, job role fit perceptions are only significantly lower for women compared to men in the tech-related leader role, CTO (estimate = -0.55; p < .000). Based on these results hypotheses H1a gains full support and H1b gains support for the CTO role. Our gender-by-ethnicity hypotheses predict that Caucasian men are perceived to best fit leader roles (H1c), Indian women are perceived to worst fit these roles (H1d), and Caucasian women are perceived to better leader job roles fit than Indian men (H1e). The gender-by-ethnicity interaction effects remain non-significant for the leader job roles. Based on our results in Table 1, our gender-by-ethnicity hypotheses (H1c, H1d, H1e) do not gain support. However, we additionally conducted t-tests, as described later, to analyze mean differences between subgroups as hypothesized.

Hypotheses tests for tech-roles. Hypotheses H2a and H2b predict that Indians compared to Caucasians and men compared to women are perceived to better fit job roles requiring tech-expertise. As shown in Table 1, job role fit perceptions are significantly higher for Indians compared to Caucasians only in the non-leading tech-role, IT Assistant (estimate = 0.21; p < .000). However, job role fit perceptions are significantly lower for women compared to men in both tech-related job roles, CTO (estimate = -0.97; p < .000) and IT Assistant (estimate = 0.21; p < .000). Thus, H2a gains support for the non-leading tech-role (IT Assistant) and H2b gains full support. Our gender-by-ethnicity hypotheses predict that Indian men are perceived to best fit job roles requiring tech-expertise (H2c), Caucasian women are perceived to worst fit these roles (H2d), and Indian women are perceived to better fit job roles requiring tech-expertise than Caucasian women (H2e). The gender-by-ethnicity interaction effects remain non-significant for job roles requiring tech-expertise. Based on these results, our gender-by-ethnicity hypotheses (H2c, H2d, H2e) do not gain support. However, to analyze mean differences between subgroups, we additionally conducted t-tests, as described in the next section.

Figure 2 about here

Analysis of mean ratings. Figure 2 illustrates the marginal means of job role fit ratings for each demographic subgroup. Supporting H1a, H1b, H2a, and H2b, we find higher values for Caucasians than Indians (H1a) and for men than women (H1b) in leader roles. In tech-expert roles we find higher values for Indians than Caucasian (H2a), but only in a non-leader role (support for H1a), and higher values for men than women (H2b). Even though Table 1 does not reveal significant interaction effects to support our gender-by-ethnicity hypotheses, Figure 2 still shows relevant mean differences. To assess differences between specific subgroups, as hypothesized in our gender-by-ethnicity hypotheses, we conducted a series of follow-up t-tests. As predicted by H1c, Caucasian men are perceived to best fit leader roles. However, this applies only for Caucasian men CTO ratings (M = 3.49, SD = 1.16) because the mean for Caucasian men was significantly greater than the mean for the best fit follow-up, the Indian men (M = 3.04, SD = 1.20, t(1478) = 7.28, p < .000). H1d predicted that Indian women are perceived to worst fit leader roles. Even though Indian women were rated lowest in both leadership roles, we could not find significant mean difference for ratings of Indian women and the worst fit follow-ups per leader role (Indian men CEO and Caucasian women CTO). H1e predicted that Caucasian women are perceived to better fit leader roles than Indian men. This applies only for Caucasian women CEO ratings (M = 3.38, SD = 1.32) because the mean for Caucasian women was significantly greater than the mean for Indian men (M = 2.71, SD = 1.22, t(1478) = 10.13, p < .000), but not for CTO ratings.

As predicted by H2c, Indian men are perceived to best fit job roles requiring tech-expertise. However, this applies for Indian men IT Assistant ratings (M = 3.68, SD = 1.17) because the mean for Indian men was significantly greater than the mean for the best fit follow-up, the Caucasian men (M = 3.51, SD = 1.17, t(1478) = 2.75, p < .001). However, Indian men

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(M = 3.04, SD = 1.21) were perceived to better fit CTO roles than Caucasian women (M = 3.04, SD = 1.21). This mean difference is marginally significant (t(1478) = 1.35, p < .10) and indicates that Indian men might benefit from the 'Indian technology expert' stereotype in this particular leader role, because it might help them to overcome the dominant 'Caucasian leader' stereotype. H2d predicted that Caucasian women are perceived to worst fit in tech-related job roles. This applies only for Caucasian women IT Assistant ratings (M = 2.50, SD = 1.19) because the mean for Caucasian women was significantly lower than the mean for Indian women (M = 2.76, SD = 1.20, t(1478) = -4.18, p < .000), and that effect, however, was predicted by H2e.

Even if the analysis of mean ratings support some of our hypotheses, the gender-by-ethnicity interaction effects remained largely non-significant according to Table 1. Only for the non-leader job role, Office Assistant, a significant gender-by-ethnicity interaction effect was found (see Table 1), indicating that Indian women are perceived to best fit this particular job role.

Additional analyses. To examine whether the job roles (i.e., CEO, CTO, Office Assistant, IT Assistant) might be associated with gender stereotypes, we presented fourteen traits from an agency and communality scale (Gupta et al., 2019), and asked participants to indicate which personal traits (e.g., compassionate, sympathetic, assertive, dominant, etc.) they thought are characteristic of individuals in each job role (i.e., CEO, CTO, Office Assistant, IT Assistant), from 1 (not at all characteristic) to 5 (very characteristic). A paired-samples t-test showed that participants rated personal traits of leader job roles (i.e., CEO and CTO; MCEO agentic=4.35, SD=0.50 vs. MCEO communal=2.72, SD=0.58, and MCTO agentic=4.04, SD=0.52 vs. MCTO communal=2.94, SD=0.55), and non-leading tech-related job roles (i.e., IT Assistant; MIT agentic=3.40, SD=0.59 vs. MIT communal=3.26, SD=0.51) as significantly more agentic than communal (tCEO(2959) = 99.26, p < .000; tCTO(2959) = 70.80, p < .000;

tIT(2959) = 10.35, p < .000), while personal traits of non-leaders in business-related job roles (i.e., Office Assistant) were rated as significantly more communal than agentic (tOffice(2959) = -39.88, p < .000). Results indicate that others expect individuals occupying leader or tech-related job roles to have rather agentic than communal personal traits. Because the attributes expected for leader or tech-related job roles rather overlap with attributes associated with men than women (Eagly et al., 2020), these results help us to clarify whether the job roles in our study are gender stereotyped as derived in our theory development.

STUDY 2

Study 2 evaluates, in an experimental design, the combined causal effects of gender and ethnicity (manipulation with the same pictures as in study 1) and job roles (leader role, tech vs. business expert) on potential applicants' perceptions of their chances to perform in a new venture recruiting context.

Experimental Design. We used a randomized experimental vignette study to examine our research questions. Vignette studies use realistic scenarios, carefully constructed as short descriptions of a situation (vignettes) that are presented to participants in order to analyze their judgments about these scenarios. This method allows us to analyze causal relationships by a systematic manipulation of independent variables (Aguinis & Bradley, 2014; Stevenson, Josefy, McMullen, & Shepherd, 2020). To test effects at the intersection of gender-by-ethnicity with job roles (i.e. leader role, business- vs. tech-role), we used the same stimuli material as in Study 1. Our design combined a 2 2 2 within-subject design to manipulate gender (male, female), ethnicity (Caucasian, Indian), and expertise (business, tech), with leader role manipulation (non-leader, leader) as between subject condition. This way, we could use the

same faces for both leader role conditions. The faces we used also varied in age groups (younger, older)[3] but our model focuses on intersections of gender, ethnicity, and job roles.

Sample and Procedure. A total of 520 job seekers (27.5% active job seeker; 72.5% passive job seeker; 43.7% women; MAge = 38.4 years, SD = 11.5; 11.5% with non-German background among which four persons with South-East Asian background) were recruited via a professional online panel provider. On average, participants had 14.5 years of work experience, and 27.9% indicated that they used to be or currently are in a leadership position.

We asked the participants to read through a short vignette and put themselves into the described new venture recruitment scenario (see Appendix A). Then we presented, in each within condition, eight persons that we introduced as new venture representatives. They varied in terms of gender (male, female), ethnicity (Caucasian, Indian), and expertise (business, tech). The persons were presented separately and in a randomized order. Below each face the name of the fictious new venture and the representative was written. As representatives' names we chose typical Indian and German male and female names to make our ethnicity manipulation more explicit (see Appendix A). Each participant was randomly assigned to one out of the four between conditions (2 leader roles, 2 age groups) via a link to the online study.

Measures. We measured our dependent variable, chance to perform, with four items on a 7-point Likert-Scale (1 = not at all, 7 = very). We used the original scale from Bauer et al. (2001) and adopted it to our specific study context (item 1: 'In a conversation with this person I could really prove my abilities and skills'; item 2: 'In this talk I can demonstrate my job skills'; item 3: 'A conversation with this person gives applicants the opportunity to show what they can really do'; item 4: 'By talking to this person, I can show what I can do'; Cronbachs' alpha = .97). Our experimental manipulations were all binary and measured with 0 and 1. Specifically,

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[3] This helped us to reduce the presented face stimuli per participant and to prevent age-related contrasts that might affect participants' assessments (Dietl et al., 2018).

gender (male = 0, female = 1), ethnicity (Caucasian = 0, Indian = 1), and expertise (business = 0, tech = 1) as well as leader role (non-leader = 0, leader = 1).

Results Study 2

To account for nesting within each participant, we analyzed the data using multilevel models (Peugh, 2010). Following recommendations (Aguinis et al., 2013), we grand-mean centered our binary coded experimental manipulations, and then regressed the participants' chance to perform perceptions onto both main factors and their interaction; for the 'leader- vs. non-leader-role' and for the 'tech- vs. business-role' separately which allows us to investigate the effect sizes distinctly. We specified random coefficient models and computed pseudo R^2 with the unconditional model as baseline (Snijders & Bosker, 1999). We included targets' age-group as control variable (around 30=0, around 50=1; see also footnote 1).

Hypothesis H3 predicts that applicants see higher chances to perform when they talk to a person in a (a) leader role (compared to non-leader role) or (b) business-expertise role (compared to tech-expertise role). As shown in the main model of Table 2, applicants' chances to perform perceptions are significantly higher if the recruiting person is a leader compared to a non-leader (estimate = 0.35; $p < .01$), and if the person is a business-expert compared to a tech-expert (estimate = -0.09; $p < .001$), supporting H3. Moreover, we hypothesized that applicants perceive higher chances to perform when they talk to a person in a (a) leader role and (b) business-expertise role, particularly if the person is Caucasian (compared to Indian) (H4), or when the person is female (compared to male) (H5). Additionally, we expect that the female advantage (predicted in H5) is stronger for Indian women (compared to Caucasian women) (H6). The interaction models ('leader' and 'expert') in Table 2 reveal significant three-way interactions, for gender-by-ethnicity with leadership (estimate = 0.20; $p < .05$) and for gender-by-ethnicity with expertise (estimate = -0.21; $p < .05$). The effect size, pseudo R^2, in Table 2 shows that the inclusion of the interactions gender-by-ethnicity with (a) leadership leads

to an increase of 0.3%, and with (b) expertise leads to an increase of 1% in variance explained in the dependent variable as compared to the model without interactions. Although this incremental effect appears small, it is typical for interaction effects as they usually have small effect sizes (Domurath & Patzelt, 2016; Peugh, 2010).

Figure 3 about here

Figure 3 shows the nature of the significant interactions and demonstrates that applicants' chance to perform perceptions increase if the recruiting person is a (a) leader and (b) business-expert, particularly if the recruiting person is an Indian woman. Even though main effects in Table 2 reveal that, in a job talk, applicants generally prefer Caucasians over Indians (estimate = -0.07; $p < .10$), and women over men (estimate = 0.13; $p < .001$), Figure 3 shows that the negative main effect for Indians compared to Caucasians does not apply for Indian women in leader roles, but for Indian women in business-expertise roles. Moreover, simple slope analyses show that, the communality-bonus for women is only significant for Indian women in leader roles ($p < .001$) and business-expert roles ($p < .05$) but not for Caucasian women in these roles. In sum, our findings about the intersection of gender-by-ethnicity with (a) leader and (b) business-expertise job roles gives partial support for H4 (because chance to perform perceptions do not differ between Caucasian women leaders and Indian women leaders) and H5 (because only Indian women receive a communality-bonus), while H6 (stronger communality-bonus for Indian women) gains full support. Table 3 shows an overview of our hypotheses test for both studies.

Table 3 about here

Additional analyses. To examine how the recruiting person was perceived in terms of competence (leadership and technology), agency, and communion, we asked participants after

the experiment to evaluate each of the presented recruiting person. We asked them to intuitively indicate on a scale from 1 (not at all) to 7 (very) how leadership competent, technology competent, as well as assertive (agentic), and compassionate (communal) they thought the depicted recruiter would be. The recruiters were presented in random order and the attributes were presented in blocks; consistent with the approach taken in Study 1, all eight recruiters were rated on the same attribute before moving to the next attribute (Pillemer et al., 2014). We analyzed the data using multilevel models that accounts for nesting data (Peugh, 2010). As displayed in Figure 4 (Appendix B), significant gender-by-ethnicity interactions and simple slope analyses reveal that (a) Caucasians (compared to Indians) and Indian women (compared to Indian men) were perceived as more leadership competent, (b) women in general were perceived as less technology competent, (c) Caucasians (compared to Indians) and Indian women (compared to Indian men) were perceived as more agentic, and (d) Indians (compared to Caucasians) and Indian women (compared to Indian men) were perceived as more communal. Results indicate, as expected, that applicants are ethnicity biased in favor for Caucasians in terms of leadership competence (Jung et al., 2017), and gender biased in favor of men in terms of technology competence (Gales & Hubner, 2020). Moreover, Caucasians were perceived as more agentic, and Indians were perceived as more communal, confirming expected ethnicity stereotypes (Pellegrini et al., 2010). However, Indian women compared to Indian men were not only perceived as more communal, which was expected, but also as more leadership competent and agentic. These results help us to clarify whether and in what way the recruiting persons in our study were stereotyped based on demographics as derived in our theory development.

DISCUSSION

This study addresses the shortcoming concerning the lack of research at the intersection of social categories such as gender, ethnicity, and occupational roles (e.g., the Indian female

startup leader), which has led to a simplistic and incomplete description of the effects of stereotyping in entrepreneurship. In this study, we analyzed how similarly successful but demographically divers entrepreneurs, which we selected from Fortune rankings, are perceived by others without mentioning the identity or profession of these entrepreneurs at any point. In Study 1 we focused on perceptions of others who evaluated, based on pictures, the fit of the sixteen persons to job roles related to leadership, technology, and entrepreneurship. In Study 2 we used the same pictures of the individuals in Study 1 but this time in a new venture recruitment context. In course of the second study, we evaluated whether job applicants' perceptions, which are likely to be based on stereotypical beliefs, might influence human resource acquisition of new ventures.

Building on role congruity and intersectionality theories (Cho et al., 2013; Cole, 2009; Eagly & Karau, 2002), our results provide a nuanced picture of how intersecting stereotypes shape human resource acquisition of new ventures. Based on the primary contribution of our study, which lies in the examination of the impact of stereotypes through the lens of the intersectionality theory, we aim to answer recent calls for more research on the effects of intersecting stereotypes in leadership (Eagly et al., 2020; Heilman et al., 2019), entrepreneurship (Ahl & Marlow, 2019; Marlow & Martinez Dy, 2018; Romero & Valdez, 2016), and recruitment (Rattan et al., 2019). In the following, we will discuss in more detail the implications of our findings for research at the intersection of leadership, entrepreneurship, recruitment.

The interplay of gender and ethnicity with job role stereotypes. In sum, Study 1 implies that Caucasians were perceived to fit best a CEO role regardless of gender, that a CTO role is biased in favor of men, and that a non-leading tech-role (i.e., IT Assistant) was rather ascribed to Indians than to Caucasians. Result of our study indicate that Caucasian women, who are generally evaluated more negatively in male-typed job roles (Heilman et al., 2019), are

perceived as a comparable fit in leadership roles that require business-expertise (e.g., CEO) as Caucasian men, who are stereotyped as the archetype of such roles (Hekman et al., 2017; Jung et al., 2017). However, recent empirical findings also indicate that gender stereotypes can change and that now-a-days it is likely that men and women are perceived as similar competent (Eagly et al., 2020). The findings from our first study are in line with this proposition and, in particular for CEO roles.

Moreover, gender stereotypes might diminish negative evaluations of female leaders when observing Caucasian women in comparison to men of ethnic minorities, because ethnicity stereotypes are more salient than gender stereotypes when evaluating a person's fit to a leader role (Ghavami & Peplau, 2013). Also, not only in Western societies are Caucasians more often observed than ethnic minorities to lead successful companies (Hekman et al., 2017), which makes Caucasians in general being perceived as better qualified for leader roles (Jung et al., 2017). Since expectations, and thus evaluations, can change when more social categories overlap (Cole, 2009), our study shows that not all female leaders (i.e., Caucasian women) are likely to be disadvantaged compared to their male counterparts (i.e., Indian men).

However, findings of Study 1 also show that in leadership roles requiring technology expertise (i.e., CTO), Caucasian women cannot fully benefit from being Caucasian, because technology is strongly associated with 'maleness' (Gales & Hubner, 2020) and might be overwritten by ethnic stereotypes such as the 'Indian technology expert' stereotype (Chatterjee & Ramu, 2018). Accordingly, in our study Indian men were perceived to better fit leadership roles requiring tech-expertise than Caucasian women. This is interesting because it shows that the general stereotype-based perception that rather Caucasians than ethnic minorities possess attributes required for leadership positions highly depend on more contextual factors such as expertise within leadership roles (e.g. business vs. tech) (Hekman et al., 2017; Sy et al., 2010). Our results imply that Indian men can overcome disadvantages of being perceived as less leader

able due to their affiliation to an ethnic minority, but only in competition with Caucasian women in tech-related leadership roles. In consequence this also means that Caucasian women might still faces barriers to enter leadership positions that are particular male-dominated (e.g. technology; Gales & Hubner, 2020; Heilman et al., 2019), and that Caucasian women pursuing leadership might not always benefit from being in a dominant ethnic group (Ghavami & Peplau, 2013).

In sum, Study 1 implies that perceptions of leadership are dependent on the interplay of social categories (e.g. gender-by-ethnicity) and occupational expertise (e.g. technology or business) and cannot be fully understood when analyzing single categories (e.g. only gender or ethnicity) because every combination of social categories unfolds unique elements and consequences of stereotyping effects (Crenshaw, 1991). Thus, our study contributes to theory on role congruity, which does not answer all questions concerning the effects of demographic-based stereotyping, and emphasizes the importance to draw from other theories that shed light on role congruity theory from different perspective, such as the theory on intersectionality (Cho et al., 2013; Cole, 2009). In a parallel vein, results of Study 2 point out that when the context in which leadership is enacted changes (from general leadership to leadership in a context of new venture recruitment), new opportunities arise for women in entrepreneurship, especially for women from ethnic minorities.

The power of Indian female leaders in a new venture recruitment context. Study 2 suggests that if the recruiting person occupies a leader role (compared to a non-leader role) as well as business-expertise (compared to tech-expertise), and particularly if that person is Caucasian or an Indian woman, it increases applicants' perception that talking to this person can enhance their chances to perform in this job talk (Bauer et al., 2001). Study 2 also implies a 'communality-bonus' for women, especially for Indian women, in the role of a new venture leader.

Applicants might use the interplay of recruiters' job role with other social categories such as gender and ethnicity as symbolic attributes and, thus, as reliable signals of competence, expertise or trustworthiness (Cable & Turban, 2001; Lievens & Slaughter, 2016). These individual-level signals are important (Celani & Singh, 2011), because based on applicants' perceptions of the recruiting persons they might infer better chances to perform in a job talk (e.g. an opportunity to show their skills and abilities; Bauer et al., 2001) and to connect with that person, which is important for new venture recruitment (Tumasjan et al., 2011; Wilhelmy et al., 2019). Our study shows that signaling congruity (a match of job role and dominant demographic – i.e., the Caucasian leader) can promote positive perceptions among applicants, which is in line with research on the positive impact of congruity perceptions on applicant attraction (e.g., Baum, Schäfer, & Kabst, 2016; Brunner & Baum, 2020). Perhaps more importantly, we emphasize the significance of signaling communal attributes in new venture recruitment contexts, as done by previous research (Tumasjan et al., 2011). Because signaling communal attributes is easier for women, particularly for Indian women, than for men, or study implies that (Indian) female entrepreneurs can gain unexpected power which might help them to acquire the human resources they need (Rocha & Praag, 2020). These new perspectives and insights advance the still scant but needed knowledge on human resource acquisition in venture recruitment (Moser et al., 2017; Nyström, 2019), which is one important contribution of our study.

Moreover, by introducing these new perspectives on gender stereotypes, we suggest that in context of human resource acquisition in new ventures, advantages for female entrepreneurs compared to their male counterparts are highly dependent on intersections with other demographic cues, such as ethnicity (Sy et al., 2010). We show that being a woman in entrepreneurship also holds opportunities (Johnson et al., 2018). With our study we aim to contribute to a better understanding of the contingencies for female entrepreneurs who are

confronted with particular (dis)advantages. Recent research highlights that female entrepreneurs might not be always confronted with barriers (Balachandra et al., 2019; Harrison et al., 2020). For example, Johnson et al. (2018), demonstrates that in a crowdfunding context, informal funders judge, based on gender stereotypes, female entrepreneurs as more trustworthy which, in turn, increases funders' willingness to invest in early stage women-led ventures.

Our study adds to existing literature by demonstrating that the intersection of stereotypes unfolds unique elements and can create power relations that depend on the context in which leadership is enacted. For example, our additional analysis in Study 2 shows that Indian women (compared to Indian men) were not only perceived as more communal, which was expected, but also as more leadership competent and agentic. Thus, Indian women did not only benefit from a 'communality-bonus' in the context of this study, but might have also benefit from the effect that women who have proven they are successful (e.g. being an Indian female entrepreneur), are evaluated more positively, even more than their male counterparts (Biernat, 2003); which interestingly was not the case for Caucasian women. Importantly, the role congruity theory suggests that stereotypically masculine traits, such as agentic and forceful behaviors, are aligned with what it means to be a good leader (Koenig et al., 2011). Our finding challenges the assumption that stereotypically feminine traits, such as being communal, are less likely to be associated with what it means to be a good leader (Pillemer et al., 2014). Interestingly, we find this effect only for the ethnic group Indians. This, however, underlines even more the importance of taking different perspectives when analyzing the effects of role congruities in leadership and entrepreneurship (Ahl & Marlow, 2019; Eagly et al., 2020; Heilman et al., 2019), which can be achieved by a better integration of inclusive theories such as the intersectionality theory (Cho et al., 2013; Cole, 2009), as is done in this study.

Practical implications for recruitment in new ventures. The war for talents is particularly tough for new ventures (Tumasjan et al., 2011). They face challenges such as limited financial resources or lack of familiarity, known as the constraints stemming from liabilities of newness and smallness (Choi & Shepherd, 2005; Williamson, 2000). Entrepreneurial teams usually use in the start-up phase their personal networks and in the growth phase their business networks to attract human resources (Leung et al., 2006). However, new ventures also need to reach applicants without existing ties to the new venture team because their networks might be limited (Williamson, Cable, & Aldrich, 2002). Moreover, it is important to acknowledge that attracting human resources is not only one of the most challenging tasks for new ventures, it also has a great impact on new venture succession (Coad et al., 2017; Rauch et al., 2005). However, we argue that it is equally important to acknowledge that applicants' perceptions of the recruiter for the new ventures might be stereotyped. This, in turn, can influence entrepreneurs' success when attracting new talents to their organization.

Recruitment literature highlights the importance of strategic recruitment to maximize recruiting success (Phillips & Gully, 2015). Accordingly, we suggest that the new venture team should decide prior starting recruitment activities which team member (e.g. CEO, CTO or employees with different expertise background) should recruit new employees to be most successful. Our results confirm previous research that suggests that applicants' perceptions of the person who is recruiting are important (Chapman et al., 2005), because it influence whether applicants perceive talking to that person as a chance to perform (Bauer et al., 2001). Chance to perform perceptions are important, because applicants might use them not only as signal of competence of the recruiting person (individual-level) but also as signal of competence of the new venture (organizational-level). Applicants inferences of these signals, in turn, can influence their attraction to the recruiting organization (Celani & Singh, 2011; Wilhelmy et al., 2019).

Thus, new ventures need a better understanding of how the person who is recruiting is perceived by applicants.

Our data implies that applicants might prefer to be recruited by new venture leaders or team members with business-expertise, because they perceive talking to these persons as a good opportunity to show their skills and abilities. Also, not only Caucasian men but also Caucasian women and, in particular, Indian women in powerful job roles (e.g., new venture leader) might be able to promote recruiting success in new ventures because they are likely be perceived as both personable and powerful. While we acknowledge that women and ethnic minorities are still minorities in entrepreneurship, we argue that displaying these minorities might function as positive signals and role models that, in turn, can highly contribute to new ventures success in accumulating human resources (Rocha & Praag, 2020). To summarize, we suggest that new venture teams should take applicants stereotypes and the potential power of signalling minorities in entrepreneurship and leadership (e.g., women and women of ethnic minorities) into account when allocating tasks linked to human resource acquisition.

LIMITATIONS

We identified several limitations that can serve as directions for future research. We manipulated targets' demographics by publicly available pictures of successful entrepreneurs from Fortune rankings. We carefully selected eight Caucasian and eight Indian targets to manipulate ethnicity, with four male and four female targets per ethnicity group to manipulate gender. Because we used 'real' entrepreneurs, some participants (less than 5% of all trials) indicated to recognize the depicted person. Face recognition is a common concern in studies using leaders from Fortune rankings, but it usually does not change results when the overall percentage of recognitions remains small (Rule & Ambady, 2009). Similar to previous studies, our results did not change when excluding these trials from the analyses.

However, not only the possibilities of face recognition but also general perceptions of facial attributes might have influenced our results. For example, some faces might have been perceived as more agentic than others, independent of gender and ethnicity stereotypes. To analyze this assumption, we additionally asked participants in Study 1 to rate each face along facial attributes that are connotated to agency (i.e., confidence and dominance) and communion (i.e., trustworthiness and likeability), because these facial attributes can influence leadership perceptions (Dietl et al., 2018; Pillemer et al., 2014). Our additional analysis indicated that, as expected, Caucasian faces were perceived as more agentic (compared to Indian faces), while female faces were perceived as more communal (compared to male faces). However, we also found a significant interaction effect, indicating that Caucasian female faces were perceived as more agentic than Caucasian male faces. However, being perceived as more agentic, based on facial appearance, did not help Caucasian women to be perceived as a good fit for technology-related job roles which were strongly associated with agency, for example. This additional analysis strengthened our assumption that gender and ethnicity stereotypes dominate the influence of particular facial appearance. Still, because we 'only' used sixteen faces for our gender and ethnicity manipulation, we encourage future research to replicate our study with a larger set of faces for each gender and ethnicity group to minimize the effects of idiosyncrasy of single faces.

Moreover, the experimental design of our second study may lack realism. In Study 2, we used a vignette experiment to analyze applicants' perceptions of their chance to perform in a fictious new venture recruitment scenario (see Appendix A). Such design enabled us to investigate underlying mechanisms related to applicants' chance to perform perceptions that may not be easily examined in real-life scenarios because of confounding variables that cannot be controlled (Evans et al., 2015). However, since vignette experiments usually face issues of external validity (Aguinis & Bradley, 2014; Stevenson et al., 2020), we asked participants to

state how realistic they perceived the described scenarios, measured on a 7-point Likert scale (1 = definitely not realistic, 7 = definitely realistic). On average, 72.5% of the participants perceived the scenario as above average realistic (> 3.5), which is a considerably high percentage. Considering that applicants in our study are likely to expect Caucasians and not ethnic minorities in a recruitment context in Germany, this high percentage enhances the external validity of our results.

A final limitation relates to the generalizability of our findings as our research was conducted in Germany. Applicants' expectations of entrepreneurs based on stereotypical beliefs might be different in other countries (Gupta & Fernandez, 2009). Also, cultural differences imply different attitudes towards women in entrepreneurship, leadership, and technology (Chatterjee & Ramu, 2018; Shahriar, 2018). Thus, for a global understanding of the effects of stereotyping in entrepreneurship, particularly in new venture recruitment contexts, future research that crosses different cultures is needed.

CONCLUSION

Human resource acquisition is important for new ventures and previous research has shown that stereotypes of resource providers might influence entrepreneurs' abilities to accumulate resources. The current paper demonstrates in a new venture recruitment context that stereotypes can influence applicants' perceptions and, thus, human resource acquisition. Moreover, not only the interplay of single demographic stereotypes with job roles but rather the intersect of these stereotypes are highly important, because it might activate stereotypes that contain unique elements. Both leadership and entrepreneurship research still lack to consider intersectionality in their research when analyzing effects of stereotyping. Our study is among the first to provide new insights related to stereotype intersectionality, in the context of new venture recruitment.

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TABLES

Table 1: Unstandardized Parameter Estimates for Multi-Level Models Predicting Participants'

Ratings of Targets' Job Role Fit (Study 1)

Leader Roles	DV: Fit with CEO Role						DV: Fit with CTO Role					
Predictor	Main Model			Interaction Model			Main Model			Interaction Model		
	Estimate	RSE	Sig.	Estimate	RSE	Sig.	Estimate	RSE	Sig.	Estimate	RSE	Sig.
Intercept	3.02	0.04	***	3.02	0.04	***	2.99	0.04	***	2.99	0.04	***
Age (younger=0, older=1)	0.72	0.05	***	0.72	0.05	***	0.52	0.05	***	0.52	0.05	***
Gender (male=0, female=1)	-0.04	0.05		-0.04	0.05		-0.55	0.06	***	-0.55	0.06	***
Ethnicity (Caucasian=0, Indian=1)	-0.71	0.05	***	-0.71	0.05	***	-0.47	0.05	***	-0.47	0.05	***
Gender*Ethnicity				-0.11	0.08					-0.04	0.07	
Deviance statistic												
(-2 Log Likelihood)	9,182.86			9,184.29			8,987.25			8,990.33		
Pseudo R²	0.188			0.188			0.160			0.160		
Change in Pseudo R²				0.000						0.000		
Non-Leader Roles	DV: Fit with Office Assistant Role						DV: Fit with IT Assistant Role					
Predictor	Main Model			Interaction Model			Main Model			Interaction Model		
	Estimate	RSE	Sig.	Estimate	RSE	Sig.	Estimate	RSE	Sig.	Estimate	RSE	Sig.
Intercept	3.21	0.05	***	3.21	0.05	***	3.12	0.04	***	3.12	0.04	***
Age (younger=0, older=1)	-0.31	0.04	***	-0.31	0.04	***	-0.28	0.04	***	-0.28	0.04	***
Gender (male=0, female=1)	0.88	0.07	***	0.88	0.07	***	-0.97	0.07	***	-0.97	0.07	***
Ethnicity (Caucasian=0, Indian=1)	0.11	0.05	*	0.11	0.05	*	0.21	0.05	***	0.21	0.05	***
Gender*Ethnicity				0.39	0.08	***				0.09	0.07	
Deviance statistic												
(-2 Log Likelihood)	9,028.36			9,006.51			9,025.00			9,026.87		
Pseudo R²	0.175			0.182			0.202			0.202		
Change in Pseudo R²				0.007						0.000		

Note: N=2,960 ratings (level 1) nested within N=185 participants (level 2); DV=Dependent Variable; RSE=Robust Standard Error; Sig.=significance level: * $p < 0.05$, ** p < 0.01, *** p < 0.001; all models were specified with Random Intercepts and Restricted Maximum Likelihood Estimation (REML); we calculated the Pseudo R² as described in Snijders & Bosker (1999) with the Null Model (not reported) providing the base

Table 2: Unstandardized Parameter Estimates for Multi-Level Models Predicting Participants'

Chance to Perform Perceptions (Study 2)

Predictor	Main Model			Interaction Model Leader			Interaction Model Expert			Full Model		
	Estimate	RSE	Sig.	Estimate	RSE	Sig.	Estimate	RSE	Sig.	Estimate	RSE	Sig.
Intercept	4.74	0.05	***	4.74	0.05	***	4.74	0.05	***	4.74	0.05	***
Age (younger=0, older=1)	-0.01	0.11		-0.01	0.11		-0.01	0.11		-0.01	0.11	
Gender (male=0, female=1)	0.13	0.03	***	0.13	0.03	***	0.13	0.03	***	0.13	0.03	***
Ethnicity (Caucasian=0, Indian=1)	-0.07	0.04	+	-0.07	0.04	+	-0.07	0.04	+	-0.07	0.04	+
Leader (non-leader=1, leader=1)	0.35	0.10	**	0.35	0.11	**	0.35	0.10	**	0.35	0.11	**
Expertise (business=0, tech=1)	-0.09	0.03	***	-0.09	0.03	***	-0.09	0.03	***	-0.09	0.03	***
Gender*Ethnicity				0.08	0.05	+	0.08	0.05	+	0.08	0.05	+
Gender*Leader				-0.03	0.06					-0.03	0.06	
Ethnicity*Leader				-0.01	0.08					-0.01	0.08	
Gender*Ethnicity*Leader				0.20	0.09	*				0.20	0.09	*
Gender*Expertise							0.07	0.04	+	0.07	0.04	+
Ethnicity*Expertise							0.20	0.04	***	0.20	0.04	***
Gender*Ethnicity*Expertise							-0.21	0.08	*	-0.21	0.08	*
Deviance statistic												
(-2 Log Likelihood)	11,496.18			11,501.85			11,478.71			11,483.20		
Pseudo R²	0.282			0.285			0.292			0.294		
Change in Pseudo R²				0.003			0.010			0.012		

Note: N=4,160 ratings (level 1) nested within N=520 participants (level 2); RSE=Robust Standard Error;

Sig.=significance level: + p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001; all models were specified with Random Intercepts, Random Slopes, and Restricted Maximum Likelihood Estimation (REML); we calculated the Pseudo R² as described in Snijders & Bosker (1999) with the Null Model (not reported) providing the base

Table 3: Overview Hypotheses Tests (Study 1 and Study 2)

Hypotheses	Support
Study 1	
H1a: Caucasians are perceived to better fit leader roles than Indians.	yes
H1b: Men are perceived to better fit leader roles than women.	only for CTO
H1c: Caucasian men are perceived as the best fit for leader roles (compared to other gender-ethnicity combinations).	only for CTO*
H1d: Indian women are perceived as the worst fit for leader roles (compared to other gender-ethnicity combinations).	no
H1e: Caucasian women are perceived to fit leader roles better than Indian men.	only for CEO*
H2a: Indians are perceived to better fit roles requiring tech-expertise than Caucasians.	only for IT Assistant
H2b: Men are perceived to better fit roles requiring tech-expertise than women.	yes
H2c: Indian men are perceived as the best fit for roles requiring tech-expertise (compared to other gender-ethnicity combinations).	only for IT Assistant, and for CTO (compared to Cauasian women)*
H2d: Caucasian women are perceived as the worst fit for roles requiring tech-expertise (compared to other gender-ethnicity combinations).	only for IT Assistant*
H2e: Indian women are perceived to better fit roles requiring tech-expertise than Caucasian women.	only for IT Assistant*
Study 2	
H3: Applicants see higher chances to perform when they talk to a person in a (a) leader role (compared to non-leader role) or (b) business-expertise role (compared to tech-expertise role).	yes
H4: Applicants see higher chances to perform when they talk to a person in a (a) leader role and (b) business-expertise role, particularly if the person is Caucasian (compared to Indian).	yes, except for Caucasian women leader (compared to Indian women leader)
H5: Applicants see higher chances to perform when they talk to a person in a (a) leader role and (b) business-expertise role, particularly if this person is female (compared to male).	only for Indian women
H6: The female advantage in the effect that applicants see higher chances to perform when they talk to a person in a (a) leader role and (b) business-expertise role is stronger for Indian women (compared to Caucasian women).	yes

*supported by follow-up *t*-tests

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Figure 1: Conceptual Model
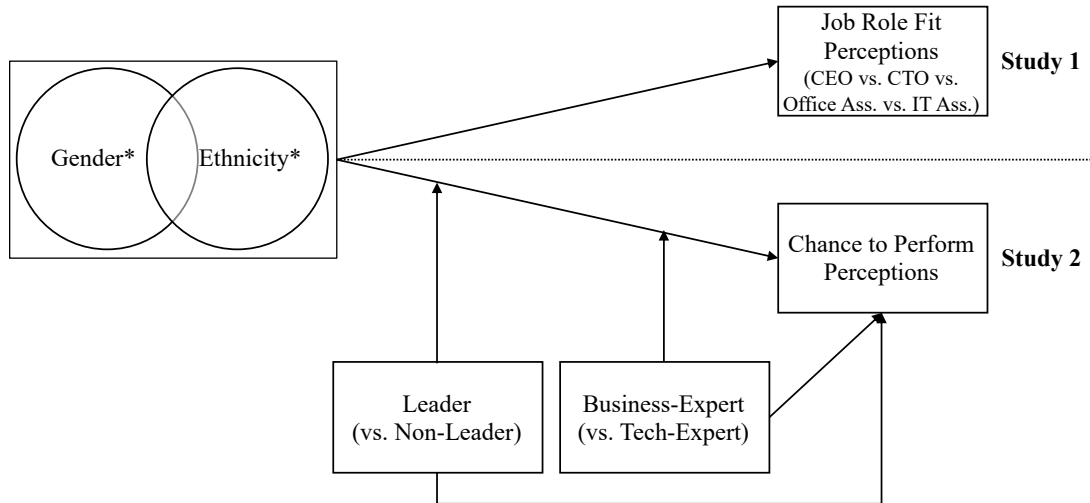
*The model proposes direct effects of 'gender' and 'ethnicity', and interaction effect 'gender-by-ethnicity'; Ass. = Assistant

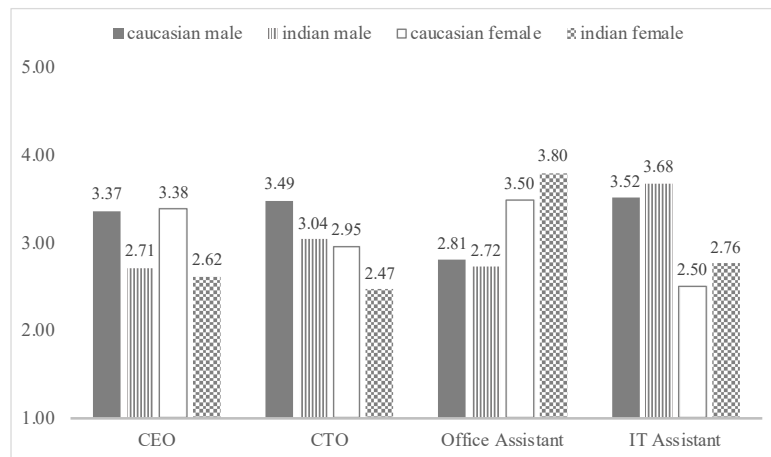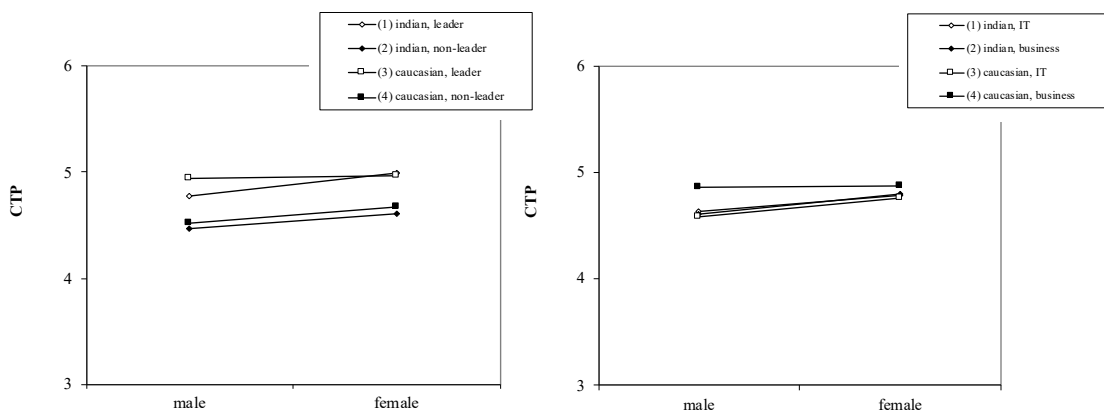Figure 2: Marginal Means of Job role Fit Ratings for Demographic Subgroups (Study 1)

Figure 3: 3-Way Interactions of Gender and Ethnicity with Job Roles (Leadership/ Business

vs. Tech-Expertise) on Job Seekers' Chance to Perform (CTP) Perception (Study 2)
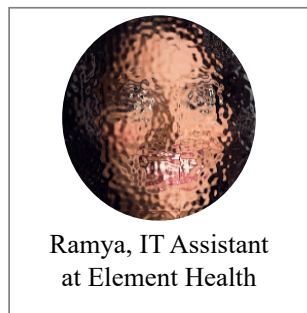
APPENDIX A

Vignette Example (Study 2)

Please read the following scenario carefully and put yourself in the situation:

A job fair will be held shortly, about which you found out on a career platform (e.g. LinkedIn). You have registered for participation in the job fair. You have agreed that companies may contact you.

Only technology start-ups from the healthcare industry will be represented at the fair. All start-ups were founded between 2015 and 2017 and have between 30 and 50 employees.
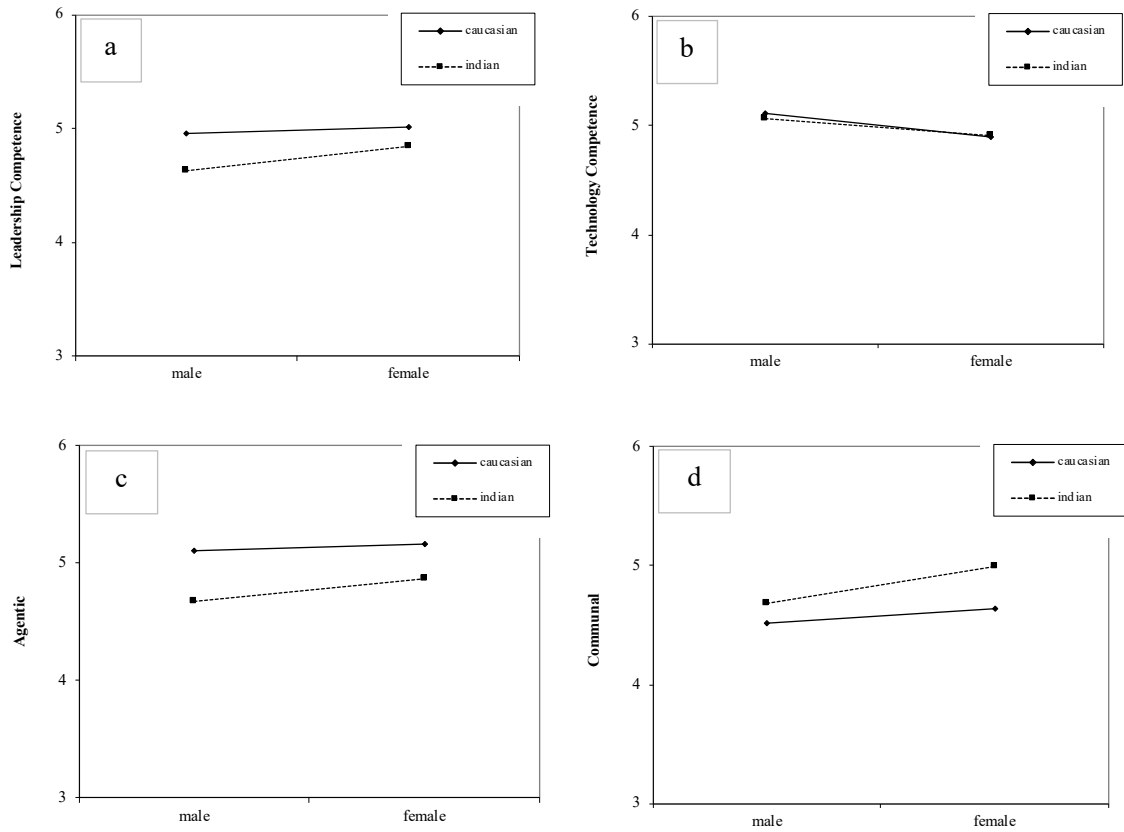
You have received 8 contact requests from people representing one of the companies you would like to meet at the job fair.

Example of one out of eight
contact persons:
(Indian female in non-leading tech-role)

Ramya, IT Assistant
at Element Health

Figure 4: 2-Way Interactions of Gender and Ethnicity on Applicants' Perceptions of

Recruiting Persons (Study 2)

CONCLUSION

Recruitment is particularly tough for entrepreneurial firms, which refer in this cumulative dissertation to small firms and new ventures, because they face particular challenges such as the lack of financial resources or familiarity among potential job applicants (Cardon & Stevens, 2004). Moreover, their recruitment processes are unique such that empirical evidence from recruitment in large firms cannot be simply adopted (Leung, Zhang, Wong, & Foo, 2006). Research has only begun to study factors of human resource acquisition in entrepreneurial firms, and job applicants' perspectives in this specific recruitment context (Tumasjan, Strobel, & Welpe, 2011; Moser, Tumasjan, & Welpe, 2017), while a large knowledge gap still exits (Greer, Carr, & Hipp, 2016; Nyström, 2019). This dissertation aimed to theoretically and empirically contribute to the literature by analyzing job applicants' perceptions of entrepreneurial signals, and by exploring the influence of role (in)congruities which indicate currently overlooked challenges and opportunities for recruiting entrepreneurs. The new perspectives and insights of this dissertation mainly aimed to address the still scant but needed knowledge on job applicant attraction to entrepreneurial firms, but also to contribute beyond this by paving the ground for more research at the intersection of entrepreneurship, leadership, and recruitment. In line with this aims, five research projects were conducted. The following paragraphs provide a brief summary of the main implications of the individual research projects.

Research paper 1, '*How Entrepreneur's Leadership Behavior and Demographics Shape Applicant Attraction to New Ventures: The Role of Stereotypes*', implies that some entrepreneurs can rely on and benefit from showing entrepreneurial leadership behaviors more than others. The data indicates a recruitment advantage for younger compared to older entrepreneurs when showing an entrepreneurial leadership style. Thus, ageism might lead to a bias towards older entrepreneurs when it comes to the acquisition of human resources, which underlines recent calls for more scholarly attention towards entrepreneur's age (Zhao,

O'Connor, Wu, & Lumpkin, 2020). Gender stereotypes, however, might not feed forward into disadvantages in applicant attraction. On the one hand, this result contrasts previous findings in entrepreneurship literature which show that women are at a disadvantage when they signal that they are 'entrepreneurial' (Malmström, Voitkane, Johansson, & Wincent, 2020). On the other hand, this finding emphasizes the need for a better understanding of how gender stereotypes are contextually embedded in institutional and social structures in entrepreneurial processes, which may also provide opportunities for women (Harrison, Leitch, & McAdam, 2020). Moreover, by emphasizing the importance of stereotype congruency, this study adds a new perspective because it focuses on the individual-level congruity rather than firm-level image-congruity (Baum, Schäfer, & Kabst, 2016), and provides new insights into the role of authenticity perceptions in recruiting processes (Wilhelmy, Kleinmann, Melchers, & Lievens, 2019). However, future research might use our findings as a starting platform to compare effects of entrepreneurial leadership with other leadership behaviors, e.g. transformational leadership, or with other characteristics of entrepreneurs.

Research paper 2, '*Small Firm Entrepreneurial Orientation Signaling and Job Applicant Attraction*', implies that signaling small firm's entrepreneurial orientation (EO) influences small firm recruitment outcome. Specifically, while signaling small firm's innovative and proactive behavior increases the attraction of job applicants, particularly of younger ones, signals of small firm's risk-taking behavior seems to be less attractive for female than for male job applicants. This paper adds to the theoretical discourse on how employee recruitment should relate to firm strategies (Acikgoz, 2019; Phillips & Gully, 2015) by empirically demonstrating how signaling small firms' strategic orientations influences recruiting success. This also implies that EO might not only directly affect small firm's performance (Rauch, Wiklund, Lumpkin, & Frese, 2009), but also contributes to organizational processes that are predecessors of small firm's performance such as human resource acquisition

(Cardon & Stevens, 2004). Moreover, although the hypothesized interaction effects with a small firm's CEO age remained non-significant, the data suggests a benefit for older CEOs compared to younger CEOs when attracting applicants in a small firm recruitment context. It seems that job applicants may follow the logic "think CEO, think old" (Lawrence, 1988) in this specific recruitment context, which, in turn, points out challenges for younger CEOs. However, future research could analyze whether the effect of CEO age leads to different results in other recruitment contexts, such as start-up recruitment, where CEOs might even benefit from being young, as this might fit better stereotype-based associations with the 'young' start-up firm context.

Research paper 3, 'Facing the Start-Up Recruiter: Role Incongruities and Job Candidate Attraction', implies that female start-up leaders might face more difficulties to attract human resources compared to their male counterpart. Specifically, data shows that perceptions of stereotyped occupational prototypes (e.g., a male CEO or a female HR Manager) influence male job candidates, such that their job pursuit intentions are highest if the start-up recruiter is either a male CEO or a female HR Manager. Although the data also show that a shared expectation among female and male job candidates exists about who typically leads a start-up (i.e., a man), only applicant attraction efforts toward male candidates seemed to be affected by role congruity biases. Given the importance of maximizing recruiting outcomes for start-ups (Moser et al., 2017), this study suggests that early recruitment efforts via active talent sourcing on career platforms such as LinkedIn can be a promising strategy if the influence of gender and occupational role congruities are taken into account, which has important implications for entrepreneurs' strategic recruitment decisions (Phillips & Gully, 2015). However, future research is needed examine whether job candidates' intentions lead to real behavior, which could be done by replicating this study in a field experiment.

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Research paper 4, '*The Entrepreneurial Leader Prototype from A Potential Employees'*
Perspective', implies that potential employees hold a mental image of an entrepreneurial leader
comprising three categories: The 'hustler', the 'hipster', and the 'hacker'. Although these
categories have been also discussed in practice-oriented management literature as entrepreneur
prototypes (Hoffman, 2017), this research goes beyond those ideas and suggests, based on
empirical data, that mental images of entrepreneurial leaders incorporate specific
entrepreneurial leadership behaviors, which have been described in previous research (Renko,
Tarabishy, Carsrud, & Brännback, 2015), and are connected with demographics. Specifically,
the 'typical' image of an entrepreneurial leader is a young man with an entrepreneurial
leadership style. This finding has several important implications for recruiting entrepreneurs,
because research shows that meeting potential employees' expectations by conveying
congruent images during the recruitment process can increase organizational attractiveness
(Baum et al., 2016). Although our qualitative study implies that the fit of entrepreneurs with
the startup environment might play a key role for attracting employees to startups, more
research is needed to analyze if there is a causal relationship between the match of
entrepreneurial leader prototypes and organizational attractiveness.

Research paper 5, '*Stereotype Effects in Human Resource Acquisition of New Ventures:*
An Intersectional Approach', implies that applicants might prefer to be recruited by new venture
leaders or team members with business-expertise, because they perceive talking to these
persons as a good opportunity to show their skills and abilities. Also, not only Caucasian men
but also Caucasian women and, in particular, Indian women in powerful job roles (e.g., new
venture leader) might be able to promote recruiting success in new ventures because they are
likely be perceived as both personable and powerful. This study demonstrates that not only the
interplay of single demographic stereotypes (i.e., gender and ethnicity) with job roles (i.e.,
leader, business vs. tech) but rather the intersection of these stereotypes is highly important

because it might activate stereotypes that contain unique elements. Both leadership and entrepreneurship research still lack to consider intersectionality in their research when analyzing effects of stereotyping (Ahl & Marlow, 2019; Heilman, Manzi, & Caleo, 2019). This study is among the first to provide new insights related to stereotype intersectionality, in the context of new venture recruitment. However, more research is needed to analyze if applicants' expectations of entrepreneurs based on stereotypical beliefs might be different across countries (Gupta & Fernandez, 2009), because cultural differences imply different attitudes towards women in entrepreneurship, leadership, and technology (Chatterjee & Ramu, 2018).

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