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Attracted to the Hustle? An Impression Management Perspective on Entrepreneurial Hustle in New Venture Recruitment

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## Attracted to the Hustle? An Impression Management Perspective on Entrepreneurial Hustle in New Venture Recruitment

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ABSTRACT Research has shown that impression management helps entrepreneurs access critical resources, but insights into applying concrete impression management techniques in new venture recruitment remain scarce. This knowledge gap represents a challenge for new ventures facing disadvantages in recruitment. We propose self-presentations of entrepreneurial hustle as an effective impression management technique for entrepreneurs. Such self-presentations to applicants increase the perceived competence and thereby the attractiveness of entrepreneurs' new ventures. We introduce applicants' individual entrepreneurial orientation and entrepreneurs' gender as factors influencing the relationship between entrepreneurial hustle and perceived entrepreneurial competence. Employing an experimental vignette methodology across three samples – a main sample drawn from mTurk (N = 613) and two additional samples from Prolific (N = 130) and German management students (N = 188) – we find that perceived competence mediates the relationship between entrepreneurial hustle and perceived organizational attractiveness. While individual entrepreneurial orientation weakens the effect of entrepreneurial hustle self-presentations on perceived competence, we do not find an influence of entrepreneurs' gender. This research indicates mechanisms and contingencies regarding the effect of entrepreneurial hustle self-presentations. Our results advance not only research on entrepreneurial hustle but also theory on interviewer-level impression management and new venture recruitment.

**Keywords:** entrepreneurial behaviours, entrepreneurial hustle, individual entrepreneurial orientation, new venture recruitment, organizational attractiveness

#### INTRODUCTION

Research suggests that entrepreneurs use impression management (IM) techniques to improve access to critical resources (Nagy et al., 2012; Sanchez-Ruiz et al., 2021). Relating to 'behaviors people exhibit to create and maintain desired impressions'

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(Gardner and Martinko, 1988a, p. 42), IM techniques allow entrepreneurs to shape interactions with stakeholders and thus potentially increase the chances of new venture success. New venture recruitment is one context in which applying IM techniques might be particularly relevant. Entrepreneurs usually act as interviewers and representatives and unite several functions in their person, including the future supervisor for new hires (Coad et al., 2017; Leung et al., 2006; Rudic et al., 2021). The initial encounter between job applicants<sup>[1]</sup> and entrepreneurs is hence particularly decisive for eliciting a favourable image of the venture (Coad et al., 2017; Turban, 2001; Wilhelmy et al., 2016).

However, research on IM techniques interviewing entrepreneurs can use remains scarce (Wilhelmy et al., 2016). While extant studies infer that entrepreneurs' credentials (e.g., Moser et al., 2017; Nagy et al., 2012) or externally reported behaviours (Hubner et al., 2021) might positively influence recruiting outcomes, we know little about how entrepreneurs themselves shape impressions in interviews. We propose entrepreneurs' self-presentations displaying entrepreneurial hustle as an important IM technique. Entrepreneurial hustle can be defined as capturing urgent, unorthodox actions entrepreneurs take to navigate uncertainty and enrol stakeholders (Fisher et al., 2020b). Insights into the effects of entrepreneurial hustle on specific stakeholder groups are limited (Fisher et al., 2020b) and relevant outcomes in new venture recruiting are largely unexplored. Drawing on IM theory (Gardner and Martinko, 1988b), we argue that displays of entrepreneurial hustle in recruiting can inform an entrepreneur's self-presentation toward applicants. We examine hustle's influence on organizational attractiveness as perceived by applicants. Organizational attractiveness can be defined as 'individuals' affective and attitudinal thoughts about particular companies as potential places for employment' (Highhouse et al., 2003, p. 989) and hence presents a vital outcome in talent recruiting. We further consider how applicants perceive entrepreneurs' competence in this relationship. In entrepreneurial contexts, competence can be associated with entrepreneurs' 'capacity to identify and pursue opportunities, and to obtain and coordinate resources' (Erikson, 2002, p. 278). Examining this factor is relevant since prior studies identified entrepreneurs' trustworthiness and its ability-based components as a more immediate outcome of hustling presentations (Fisher et al., 2020b).

Moreover, IM theory points to contingencies that might influence how effectively techniques shape outcomes (Gardner and Martinko, 1988b). We analyse two contingency factors. First, on the applicant level, we focus on the contingent effect of individual entrepreneurial orientation (IEO), denoting the extent to which individuals 'proactively engage in the creation, introduction, and application of opportunities at work, marked by taking business-related risks' (de Jong et al., 2015, p. 982). Since applicants high in IEO and hustlers share patterns of entrepreneurial behaviour, IM theory might suggest a similarity effect, such that the effectiveness of entrepreneurial hustle self-presentations is stronger when applicants are high in IEO (Gardner and Martinko, 1988b). At the same time, applicants' proclivity toward entrepreneurial behaviour will shape how they perceive entrepreneurs' use of IM techniques. Since the perception of excessive use of such techniques can diminish their effectiveness (Jones and Pittman, 1982), entrepreneurial hustle self-presentations might also be less

effective when applicants' IEO is high. Second, on the entrepreneur level, we analyse the contingent effect of gender. Recent literature suggests that an entrepreneurial hustle image is associated with pronounced gender connotations (Rudic et al., 2021). Such connotations might diminish the effectiveness of IM techniques for women (Rudman, 1998), yet research also describes instances where women have advantages (Wood and Hoeffler, 2013).

We aim to answer two research questions: (1) How does entrepreneurial hustle affect applicants' perception of organizational attractiveness? (2) To what degree is this effect contingent upon characteristics of the applicant (e.g., IEO) and characteristics of the entrepreneur (e.g., gender)? We employ an experimental between-subjects audio vignette methodology, manipulating self-presentations of entrepreneurial hustle in job interviews with a fictitious entrepreneur (Fisher et al., 2020b). We test our predictions with three samples: An Amazon Mechanical Turk (mTurk) sample (N = 613), a Prolific sample (N = 130), and a German management student sample (N = 188). Our findings contribute threefold to entrepreneurship and IM theory. First, we advance research on entrepreneurial hustle by proposing that this concept can be seen as an IM technique – specifically, a form of self-promotion. By shifting the conceptual focus from what entrepreneurs do to how they communicate it, we make the hustle concept applicable to a broader range of contexts. Our finding that entrepreneurial hustle self-presentations positively affect organizational attractiveness also extends IM theory, advancing knowledge on techniques that are effective from the interviewer's rather than the applicant's perspective (Wilhelmy et al., 2016). Second, having specified the effect of entrepreneurial hustle as indirect-only, we enhance our understanding of the nomological net surrounding the entrepreneurial hustle concept (Fisher et al., 2020b). We introduce the concept to the context of new venture recruiting and corroborate the pivotal role the perceived competence of the entrepreneur plays in the new outcome of organizational attractiveness. Third, we provide evidence that high levels of applicants' IEO diminish the effectiveness of entrepreneurial hustle self-presentations. This insight not only advances theory by specifying conditions under which IM can be perceived as exaggerated – it also suggests limits to the largely positive effects of actor–audience similarity in IM research (Gardner and Martinko, 1988b).

#### **CONCEPTUAL BACKGROUND**

## Entrepreneurial Hustle as an Impression Management Technique

Modern IM theory originates in the work of Goffman (1959), who adopted a dramatur-gical approach to social interaction. According to this view, individuals are comparable to actors on stage, who perform in front of an audience to elicit a desired image or role (Bolino et al., 2008; Gardner and Martinko, 1988b; Schlenker, 1980; Wood and Hoeffler, 2013). As actors and audiences interact, they develop a 'definition of the situation' guiding their behaviours and thereby influencing the effectiveness of specific IM techniques (Gardner and Martinko, 1988b, p. 322). Previous research has described a broad range of techniques (e.g., Bolino et al., 2008) that can be roughly categorized as

either defensive (i.e., efforts to avoid unfavourable images) or assertive (i.e., efforts to produce favourable images) (Cole and Chandler, 2019; Tedeschi and Norman, 1985). Depending on how actors define the situation, they will choose the set of techniques they deem most conducive to achieving their goals. Specific expectations toward the actor or the general stage performance, in turn, influence the audience's definition of the situation (Gardner and Martinko, 1988b). Thus, the effectiveness of an IM technique hinges on whether audiences see it as congruent with their expectations (Gardner and Martinko, 1988b).

While literature points to the general usefulness of IM techniques in recruiting situations (Bolino et al., 2008; Wilhelmy et al., 2016), such techniques can be particularly valuable in entrepreneurial recruiting. New ventures may lack a brand image (Kraus et al., 2010), and public awareness of the organization is very limited – if at all present (Leung et al., 2006). Therefore, it is even more important for entrepreneurs to create a favourable impression of their venture (Tumasjan et al., 2011; Williamson et al., 2002). Entrepreneurs need to employ IM in recruiting as they often lack formal human resources knowledge and do not yet have sophisticated recruitment practices (Cardon and Stevens, 2004; Coad et al., 2017). With entrepreneurs adopting a pivotal role in the recruiting process and acting as recruiters, leaders, and representatives for the organization, their behaviour decisively influences applicants' perception of the venture (Coad et al., 2017; Leung et al., 2006; Rudic et al., 2021). Previous research suggests that the first contact between applicant and new venture is characterized by pragmatic interview techniques (Cardon and Stevens, 2004).

We posit that a self-presentation displaying entrepreneurial hustle can be regarded as a crucial IM technique available to an entrepreneur in new venture recruiting. Fisher et al. (2020b) developed the construct of entrepreneurial hustle to indicate how entrepreneurs can address 'immediate challenges and opportunities under conditions of uncertainty' (p. 1003). In detailing urgent, unorthodox, and creative entrepreneurial hustle behaviour, they specify an entrepreneurial method and offer a clarification of what entrepreneurial action looks like in practice (Fisher et al., 2020b; Sarasvathy and Venkataraman, 2011). The scope of this concept is not limited to new venture scenarios: Fisher et al. (2020a) study of entrepreneurial hustling in a university context suggests the concept is applicable even to established organizations. Studying the effects of self-presentations displaying entrepreneurial hustle in interview situations should thus offer valuable insights even beyond the new venture setting.

With its strong reliance on what entrepreneurs do, actors might draw on entrepreneurial hustle anticipating that related demonstrations are in line with their audiences' expectations of the new venture recruitment situation (Gardner and Martinko, 1988b). When used for self-presentation, entrepreneurial hustle serves as a form of self-promotion. Self-promotions are a subcategory of assertive IM techniques and aim at communicating 'abilities and accomplishments to attempt to appear competent' (Bolino et al., 2008, p. 1082). This conceptualization shifts attention from what entrepreneurs do (Fisher et al., 2020b) toward what entrepreneurs say or claim about their actions. Entrepreneurial hustle self-promotions comprise verbal cues and descriptions indicating that entrepreneurs act in line with the main dimensions of the original hustle concept, including, for instance, urgency and unorthodoxy. Research

shows that entrepreneurs' description of their engagement in corresponding actions induces perceptions of cognitive legitimacy, trustworthiness, and leadership effectiveness (Fisher et al., 2020b).

IM literature has established self-promotion as a technique that helps individuals create an impression of competence in audiences (Bolino et al., 2008). When audiences consider an actor's IM techniques congruent with their expectations, they will perceive the actor as more competent (Gardner and Martinko, 1988b). Based on this reasoning and on previous findings (Fisher et al., 2020b), we posit that perceived competence as an immediate outcome of displayed entrepreneurial hustle plays an essential role. We further propose that IM techniques in new venture recruiting ultimately aim at achieving organizational attractiveness, that is, applicants' affection and attitude toward the new venture 'as a potential place for employment' (Highhouse et al., 2003, p. 992). Organizational attractiveness also induces applicants to learn more about the new venture (Highhouse et al., 2003), which renders further interaction beyond the initial interview likely. Given the challenges new ventures face in recruiting, their ability to make their organization attractive in the eyes of job applicants is critical. Thus, the association between self-presentations of entrepreneurial hustle and the organizational attractiveness job applicants perceive merits further scholarly attention.

## **Contingencies of Self-Presentations of Entrepreneurial Hustle**

In their process model of IM, Gardner and Martinko (1988b) suggest that the effectiveness of IM techniques is contingent on both audience-based and actor-based factors. These factors influence how audiences define the situation, thereby limiting the range of transmitted images the actor can validly claim (Gardner and Martinko, 1988b). Accordingly, we consider two factors.

First, at the audience level, we analyse the impact of job applicants' IEO. Previous research conceptualizes IEO as a focus on entrepreneurial behaviour in corporate environments, including 'new product development, process and administrative improvements, or work role innovations' (de Jong et al., 2015, p. 982). De Jong et al. (2015) identify three dimensions that reflect individuals' entrepreneurially-mindedness and relate to entrepreneurial orientation on the organizational level<sup>[2]</sup>: innovativeness, proactivity, and risk-taking. Based on Shane (2003), de Jong et al. (2015, p. 983) define the innovativeness dimension as 'the initiation and intentional introduction (within a work role, group, or organization) of new and useful ideas, processes, products, or procedures.' Proactivity refers to a 'self-initiated and future-oriented action that aims to change and improve the situation or oneself' (Parker and Collins, 2010, p. 635). Risk-taking behaviour on the job carries a different meaning than on the organizational level. While financial risks in entrepreneurial processes will probably be covered by the employer, risk-taking behaviour on the job refers to social and psychological risks faced by employees (de Jong et al., 2015).

Despite some resemblance between the entrepreneurial hustle and the IEO constructs, they differ – particularly concerning hustle's two dimensions of urgency and unorthodoxy. These differences help explain how applicants high in IEO perceive the

competence of entrepreneurs. De Jong et al. (2015) emphasize the key role of creativity in the innovativeness dimension of IEO, and creativity is also reflected in hustle's dimension of unorthodoxy. As Fisher et al. (2020b) describe, unorthodoxy is closely associated with 'acting creatively or inventively' (p. 1010), among others. However, this is not necessarily the same as acting quickly or under time constraints, as defined in the urgency dimension of the hustle concept. While innovativeness might be born out of urgency, hustling emphasizes that such urgency is time-related. Thus, applicants high in IEO might be unfamiliar with a hustler's display of time-induced urgency. While the proactivity dimension of IEO includes self-initiated action (de Jong et al., 2015), such action is not necessarily unorthodox or need not occur under time constraints (Fisher et al., 2020b). Compared to IEO, the hustle concept specifies particularly challenging circumstances inducing the need to act, which might not be consistent with how applicants high in IEO perceive the unfolding of proactivity in entrepreneurship. Nevertheless, hustlers are similar to individuals high in IEO in that both seem to tend toward 'pioneering behavior [and] initiative taking' (de Jong et al., 2015, p. 983). The risk-taking dimension of IEO does not specify the degree of uncertainty involved. However, the consideration of risk implies that outcomes and their probability can be estimated, at least to a certain extent. The concept of hustle shifts the focus to even more challenging situations of uncertainty: With urgency and unorthodoxy warranted in decision-making, the risks taken by entrepreneurs are particularly unknown – be it due to time constraints or the level of novelty. Fisher et al. (2020b) explain that 'under conditions of less uncertainty (more oriented toward risk), hustle may be a less appropriate response, as those taking action will have the ability to be more rational in assessing alternatives and calculating probabilities prior to acting' (pp. 1032-33). Hence, applicants high in IEO who engage in risk-taking show different behaviours than hustlers, although both are able and willing to deal with uncertainty.

As outlined, entrepreneurs who hustle and applicants with high IEO share some patterns of entrepreneurial behaviour but differ in others. For our research context, we thus need to consider two views existing in the literature. On the one hand, scholars traditionally purport that similarity perceptions between two parties might positively influence individuals' evaluation (Byrne, 1971) – an effect that has been extended to the context of IM (Den Hartog et al., 2020; Gardner and Martinko, 1988b). This suggests that applicants high in IEO likely perceive entrepreneurs' hustle self-presentations differently than those low in IEO. On the other hand, self-promotions aim to create an impression of competence (Bolino et al., 2008). Studies point to the perils that emerge when audiences perceive the use of such techniques as excessive. In this regard, Jones and Pittman (1982) described a self-promoters' paradox, explaining that 'competence claims are more likely when competence is shaky than when it is high and securely so' (p. 243). When audiences perceive self-promotional techniques as exaggerated or overused, they discount related claims (Ashforth and Gibbs, 1990; Schlenker, 1980), expecting that truly 'competent people often downplay their successes' (Gardner and Avolio, 1998, p. 45). For our context, extant literature fails to indicate clearly the impact of applicants' level of IEO on the effectiveness of hustle self-presentations, which is why we examine it in our research model.

Second, at the actor level, previous IM research suggests that actors' features present relevant contingency factors and limit the set of images actors can validly claim (Gardner and

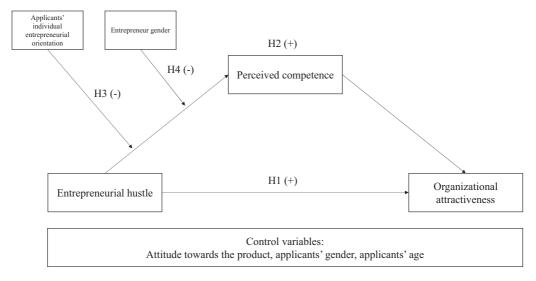


Figure 1. Overall research model of this study

Martinko, 1988b). Similar to the relationship between audience and actor, in our context, applicants have certain expectations toward entrepreneurs – and the question becomes key whether the applicant perceives the entrepreneur as congruent with stereotypes ascribed to entrepreneurs. One of the most prevalent stereotypical features of entrepreneurs is related to their gender (Gupta et al., 2009, 2019). A recent study by Rudic et al. (2021) also reveals that the image of an entrepreneurial hustler is strongly connoted with gender. IM research even indicates pronounced gender differences in the effect of IM techniques (Bolino et al., 2016; Rudman, 1998; Wood and Hoeffler, 2013). Following IM theory (Gardner and Martinko, 1988b), we argue that an entrepreneur's gender represents a contingency factor influencing the effectiveness of entrepreneurial hustle in eliciting applicants' perception of competence. Figure 1 displays our conceptual research model.

## HYPOTHESES DEVELOPMENT

## **Entrepreneurial Hustle and Organizational Attractiveness**

Drawing on IM theory (Gardner and Martinko, 1988b), we argue that entrepreneurial hustle is positively associated with organizational attractiveness. According to this theory, the effectiveness of the IM techniques employed by the actor (the entrepreneur) strongly depends on how the audience (the applicant) defines the situation (the interview) (Gardner and Martinko, 1988b). As the interview occurs in an entrepreneurial context, job applicants' expectations toward the situation, and in particular the entrepreneur, are likely to be based on stereotypical images of what entrepreneurs are and how they behave (Hubner et al., 2021). Rudic et al. (2021) have recently identified the hustler as the most frequent stereotype of entrepreneurs. Thus, entrepreneurs who exhibit a self-presentation of entrepreneurial hustle during the recruiting

interview evoke a sense of congruence in job applicants' perception. Put differently, the display of actions linked to urgency, creativity/unorthodoxy, intended usefulness, and addressing challenges and opportunities meets applicants' expectations of what entrepreneurs do and how they behave (Fisher et al., 2020b). Such congruence leads to job applicants' positive responses to the employed IM technique. Given the congruence between expectations and displayed behaviour, applicants are more likely to perceive the hustler as competent. Specifically, they assume that the hustler probably has accomplished his/her entrepreneurial goals (cf. Lee and Huang, 2018). In turn, such perception of competence increases applicants' willingness to work with the entrepreneur. Previous research on new venture recruiting indeed suggests that applicants' evaluation of the entrepreneur can help shape their perception of organizational attractiveness (Hubner et al., 2021; Moser et al., 2017). In new ventures, the entrepreneur will likely later be the leader of the recruits (Cardon and Stevens, 2004; Hubner et al., 2021) and shape their future benefits and well-being (Strese et al., 2018). Hence, how desirable an entrepreneur is as a potential employer determines how attractive the venture is for applicants as a future workplace (Highhouse et al., 2003; Moser et al., 2017).

Thus, when applicants experience the entrepreneurs' self-presentation as hustlers during the job interview, they sense congruence; this, in turn, increases organizational attractiveness. In contrast, if entrepreneurs display lower levels of entrepreneurial hustle, they might not fully meet job applicants' expectations, which results in a lower willingness to work with such entrepreneurs and, eventually, for the new venture. Consequently, we hypothesize that job applicants will perceive a higher organizational attractiveness of new ventures if entrepreneurs use entrepreneurial hustle as an IM technique in their recruiting encounter:

H1: Entrepreneurial hustle is positively associated with organizational attractiveness as perceived by job applicants.

# **Entrepreneurial Hustle, Perceived Competence, and Organizational Attractiveness**

To specify the underlying mechanism further, we argue that the competence of the entrepreneur as perceived by job applicants mediates the relationship between entrepreneurial hustle and organizational attractiveness. Using entrepreneurial hustle as an IM technique, entrepreneurs transmit cues on entrepreneurial competence: The entrepreneurial hustle themes of urgency, creativity/unorthodoxy, intended usefulness, and addressing challenges and opportunities (Fisher et al., 2020b) invoke the perception that in the context of the new venture, the entrepreneur acts according to the demands of accomplishing entrepreneurial goals. With such context-appropriate actions, applicants perceive that the entrepreneur holds the knowledge and understanding required for developing the new venture, which increases the applicants' perceived competence of the entrepreneur. Hence, the sense of congruence that arises in the perception of job applicants when entrepreneurs display entrepreneurial hustle (cf. Gardner and Martinko, 1988b) first enhances the competence of the entrepreneur job applicants observe.

New venture recruiting occurs in a setting of high uncertainty (Hubner et al., 2021), and perceived competence has the potential to reduce this uncertainty. We argue: The entrepreneur's competence that applicants perceive provides them with a quality indicator, which ultimately translates into how they perceive the new venture's attractiveness. Research exploring organizations' social media pages supports the general relationship between competence perceptions and organizational attractiveness (Carpentier et al., 2019). Instead of holistic information, job applicants use the limited information available based on the perceived competence of the entrepreneur to form an impression about the entire organization. Therefore, we expect that organizational attractiveness as perceived by job applicants follows a mechanism of perceived competence. We hypothesize:

*H2:* The relationship between entrepreneurial hustle and perceived organizational attractiveness is mediated by perceived competence of the entrepreneur.

# The Moderating Role of Applicants' Individual Entrepreneurial Orientation

We propose that high levels of applicants' IEO weaken the effect entrepreneurial hustle has on applicants' perceived competence of the entrepreneur. Specifically, we argue that the negative effects related to the self-promoters' paradox (Jones and Pittman, 1982) are more pronounced when applicants exhibit high IEO. Traditional IM theory suggests that a perceived similarity between actors and audiences can strengthen the effectiveness of self-promotional techniques (Gardner and Martinko, 1988b; Gurevitch, 1984). Since entrepreneurial hustlers and applicants high in IEO partially overlap in their behavioural patterns, one might argue that the effect of hustle self-presentations on perceived competence of the entrepreneur is stronger when applicants are high in IEO. However, a higher IEO also provides applicants with a clear reference point for evaluating the entrepreneur's self-presentation. Previous research infers that individuals rely on their own views to create reference points when assessing the behaviour of others, and that it is difficult for them to take alternative perspectives (Buchanan, 2020). This finding indicates that applicants' own entrepreneurial behaviour forms the basis for their reference points. Applicants high in IEO will thus use their own perspective of what entrepreneurs do as a reference point to evaluate entrepreneurs' self-presentation. In contrast, applicants low in IEO might lack a clear reference point. The reference point is critical regarding the self-promoters' paradox (Jones and Pittman, 1982), according to which applicants will discount the effect of self-promotional techniques if they perceive them as exaggerated or overused. We argue that the perception of whether entrepreneurs use self-promotion in excess depends on applicants' reference points, that is, on the level of self-promotion they consider acceptable. As such, applicants' reference points limit the set of images entrepreneurs can validly claim through their IM efforts (Gardner and Martinko, 1988b).

Entrepreneurial hustle is conceptualized as a means to navigate highly challenging circumstances in an unorthodox way (Fisher et al., 2020b); such circumstances are marked by exceptional degrees of uncertainty and an urgency to act quickly. Such facets go

beyond what job applicants perceive to be typical activities of entrepreneurs because their reference points – what they expect from the entrepreneur – are based on IEO. Applicants with high levels of IEO are thus more likely to turn sceptical and consider the hustle self-presentation exaggerated. They find incongruence between their expectations of and experience in the interview since they compare their own IEO-related actions with those the hustler displays. As a result, the entrepreneurs' self-presentation is less effective (Gardner and Martinko, 1988b), and the competence level they transmit is perceived as lower (Jones and Pittman, 1982).

In summary, we propose that applicants with high levels of IEO are more susceptible to the effects of the self-promoters' paradox than applicants with low IEO. Therefore, entrepreneurial hustle self-presentations should be associated with a lower level of perceived competence when applicants' IEO is high. We hypothesize accordingly:

*H3*: The relationship between entrepreneurial hustle and perceived competence of the entrepreneur is contingent on the applicants' individual entrepreneurial orientation (IEO) such that higher individual entrepreneurial orientation weakens the link between entrepreneurial hustle and perceived competence of the entrepreneur.

## The Moderating Role of Entrepreneurs' Gender

In line with IM theory (Bolino et al., 2016; Gardner and Martinko, 1988b), we expect that the effectiveness of entrepreneurial hustle self-presentations is higher if the entrepreneur is of male gender. In the entrepreneurial context, entrepreneur stereotypes might have a pronounced gender connotation, with entrepreneurs – and hustlers in particular – mainly being associated with masculine attributes (Gupta et al., 2009; Rudic et al., 2021). Given their stereotypical expectations toward the hustler, job applicants should perceive greater congruence in the interview situation when a male entrepreneur displays the self-presentation of entrepreneurial hustle. More closely meeting the expectations of the job applicants, the effectiveness of entrepreneurial hustle as an IM tool toward the perceived competence of the entrepreneur should hence be higher for male than for female entrepreneurs. More generally, related research indicates that women even may face backlash from 'violating normative gender expectations' in organizational settings (He and Kang, 2021, p. 1120). This view is consistent with previous findings that '[w]omen who use IM tactics to demonstrate important workplace traits such as task orientation, confidence, or assertiveness are not as positively evaluated as men who behave similarly' (Wood and Hoeffler, 2013, p. 1256). Importantly, we also acknowledge research that has found IM tools to increase the perception of women's competence (Rudman, 1998). However, in line with the theory (Gardner and Martinko, 1988b), we expect that this effect is lower for women than for their male counterparts. We hypothesize:

*H4:* The relationship between entrepreneurial hustle and perceived competence of the entrepreneur is contingent on the entrepreneur's gender such that a male gender strengthens the link between entrepreneurial hustle and perceived competence of the entrepreneur.

#### **METHOD**

To test our hypotheses, we employ a between-subject vignette experiment across three samples, namely a main dataset of 613 mTurk participants and two additional, smaller datasets with 130 Prolific participants and 188 student participants.

## **Participants**

First, for our main dataset, we sampled participants from mTurk in January and February 2021, reaching a total number of 613 respondents after exclusions for failed attention checks and other criteria explained below (Aguinis et al., 2021). mTurk is an Amazon-based platform for crowd workers applying for human intelligence tasks. The quality of mTurk respondents to survey data has often been testified in social science and management research (Aguinis et al., 2021; Buhrmester et al., 2016; Goodman et al., 2013), and several entrepreneurship studies have leveraged data obtained from mTurk (Jessri et al., 2020; Qin et al., 2020).

Despite advantages, precautions must be taken when sampling from mTurk to minimize threats to data quality from participant carelessness, social desirability bias, absence of neutrality, self-selection bias, or high attrition rates (Aguinis et al., 2021; Hydock, 2018; Ipeirotis et al., 2010). Therefore, we implemented the following filtering mechanisms. We sought to generate high data quality by only accepting mTurkers with more than 500 human intelligence tasks completed and an approval rate above 97 per cent (Lovett et al., 2018). We selected United States residents only to ensure English language fluency (Aguinis et al., 2021). To ascertain that respondents had a minimum experience with contexts of new ventures and recruiting, we screened for their familiarity with new ventures via a filter question. We also checked their prior work experience and excluded mTurkers reporting less than the monthly minimum wage of USD 1118 (Eurostat, 2021). Additionally, we collected demographic data and avoided hints to the purpose of manipulation of our experimental material. We ruled out common method and social desirability biases using the comprehensive marker technique by Williams et al. (2010) and Hays et al. (1989). We did encounter high attrition: 1350 participants started surveys, only 1063 of which were completed, equaling an approximate attrition rate of 21 per cent. Considering that attrition rates reported for mTurk samples often range between 31.9 per cent and 51 per cent (Aguinis et al., 2021), the rate of our study is rather low. Nevertheless, we ensured sufficient resources to counteract this and obtain a sufficiently large sample. [3] In line with Aguinis et al. (2021), we included two attention checks to address participant carelessness: (1) 'Please select the middle option' (only respondents indicating a value of 4 on our 7-point Likert scale were further considered), and (2) 'While watching TV, have you ever suffered a fatal heart attack?' (only respondents indicating 'Strongly disagree' were further considered) (Ramsey et al., 2016; Thomas and Clifford, 2017). Approximately 19.5 per cent of answers were eliminated because of failed attention checks. While this value is slightly higher than that of comparable failure rates of about 15 per cent (Aguinis et al., 2021), it ensures high quality of the remaining observations. Moreover, we conducted analyses for minimum response time, deleting observations with unrealistic response times. With these filters, we excluded a total of

450 participants and arrived at our final sample of N = 613. The mean age of respondents is 43 years; 52 per cent are female. To test for the efficacy of our manipulation, we had participants rate their level of agreement with the realism of the material and the clarity of instructions. Both scores show acceptable realism (M = 6.50, SD = 0.88) and clarity (M = 6.73, SD = 0.59). Since our research questions address the judgement of job applicants regarding potential employers, using an mTurk sample matches our research goal. Previous research suggests that in comparison to the general population, mTurk workers 'tend to report lower personal incomes and are more likely to be unemployed or underemployed' (Casey et al., 2017, p. 2). Thus, we assume mTurk provides respondents suitable to our job applicant context.

Second, we gathered additional data from Prolific to ensure that factors specific to data collection in mTurk do not bias our results. The Prolific platform is highly suitable for research purposes and has been used in various disciplines, including economics and psychology (Palan and Schitter, 2018). We drew on the same survey as in our main dataset and collected 130 responses. The mean age of respondents is 39 years; 40 per cent are female. At 4.35 per cent, the attrition rate was considerably lower than in the mTurk sample. The proportion of respondents failing at least one of the two attention checks was also lower at 7.75 per cent. Third, we collected an additional sample including 188 German management students. The mean age of participants is 25 years; 44 per cent are female. Management students are a particularly suitable sample to examine our research questions as they represent the typical job applicants for early-stage ventures. For both additional samples, we used filtering mechanisms in line with those applied to the mTurk sample.

## **Procedure and Experimental Design**

We employ a vignette experiment (Aguinis and Bradley, 2014), followed by several survey items using the survey platform Qualtrics. We randomized participants' exposure to the vignette to guarantee high internal validity (Atzmüller and Steiner, 2010; Gürtler et al., 2019). We developed a  $2 \times 2$  factorial experiment design with four versions of a vignette about fictional entrepreneurs and manipulated the degree of entrepreneurial hustle (Fisher et al., 2020b) as well as the entrepreneurs' gender to retain unexplained variance with respect to this. We kept all other framing conditions equal across manipulations: Both entrepreneurs are at university when founding a venture which develops and markets a mental health app. After six months, the app has been downloaded from app stores 50,000 times, and the entrepreneurs are in conversation with prospective investors to fund the business. Similar to Fisher et al. (2020b), we sought to choose a context which resonates well with the population of interest. This population included a broad range of potential job applicants. We deliberately selected the mental health space to set a realistic context for the venture, as this means a business-to-consumer sales channel, which makes it easier for participants to judge without prior knowledge or experience; mental health has also been one of the fastest growing industries recently (Gaussen and White Star Capital, 2018). In addition, mental health has become particularly salient with the rise of COVID-19 (Marroquín et al., 2020) and, hence, can be considered highly relatable to our population of interest.

We took various measures to ensure mundane and psychological realism of our experiment (Berkowitz and Donnerstein, 1982). We fostered mundane realism by confronting respondents with a situation that job applicants regularly encounter during their search phase — a job interview. Evaluating an interviewer's competence and organization's attractiveness based on their perceptions is a task job applicants do naturally during or after an interview. We implemented two main measures to ensure psychological realism. First, as outlined, we embedded the interview situation in an area that is not only expanding but has also gained salience during the pandemic — the mental health sector. This setting should allow respondents to relate deeply to the entrepreneur's business (cf. Berg and Yu, 2021). Second, to provide respondents with a 'vivid and engrossing' interview experience (Colquitt, 2008, p. 618), we chose to have the entrepreneurs' self-presentations read aloud by voice actors.

Manipulating entrepreneurial hustle and entrepreneurs' gender. The 'hustle' condition manipulated entrepreneurial hustle behaviour in all five domains in which hustle manifests: hustle for opportunity, resources, learning, legitimacy, and connections (Fisher et al., 2020b). For each of the five domains, we developed a 'hustle' and a 'no hustle' text segment. [4] These text segments vary in the levels of the dimensions Fisher et al. (2020b) have defined as constitutive of the construct (i.e., urgency, creativity/unorthodoxy, intended usefulness, address challenge/opportunity). Hustle for learning, for instance, is shown by the entrepreneur reporting that he/she wants to learn by experiencing mental health offerings himself/herself: 'However, I personally had no experience with treatment. So, I figured it was crucial to try it first myself. I enrolled as a patient into a program the university offered to give psychology graduates practice.' The 'no hustle' condition, in contrast, uses filler elements instead of 'hustle' behaviour like the entrepreneur talking about that he/she gained knowledge about the mental health space by consulting 'related books from a local library.' As stated by the entrepreneur, this allowed him/her to recombine 'parts of existing meditation programs and mix[...] them.' Importantly, this description does not correspond to the type of action 'entrepreneurs take to navigate uncertain entrepreneurial contexts' (Fisher et al., 2020b, p. 1002). The entrepreneurs' gender was manipulated using voice recordings by professional voice actors recruited within the authors' extended networks. We had three male and three female voice actors read and record the vignettes. Afterwards in the pretests, we chose the recordings of one male and one female voice actor that had the least variance in predefined measures to mitigate any unexplained variance. The male voice was then associated with a male gender of the entrepreneur, while the female voice was associated with a female entrepreneur.

Pretests of experimental materials. We examined the manipulations in two separate pretests with 17 and 19 participants who were not part of the final sample to increase ecological validity, realism, and consistency. With this, we closely followed the guidelines for experimental research in management and entrepreneurship (Stevenson et al., 2020; Stevenson and Josefy, 2019). In the first iteration, we asked 17 domain experts (i.e., active entrepreneurs and entrepreneurship scholars) for feedback to increase experimental realisms (Wood et al., 2017). Specifically, we randomized exposure to 'hustle' and 'no

hustle' conditions and let all participants rank the elements of urgency, creativity, unorthodoxy, intended usefulness, and addressing challenges and opportunities (Fisher et al., 2020b) on a 7-point Likert scale (1 = Strongly disagree; 7 = Strongly agree). Additionally, we asked several open-ended feedback questions. After this initial pretest, as shown in Table I, the discrepancy between the two manipulations of entrepreneurial hustle was not sufficient, and the mean values for all dimensions of the 'hustle' (5.25) vs. the 'no hustle' vignette (4.57) were still comparable, although the t-test result at t = 0.03 would allow to judge differently. After adaptations, we repeated the pretest with 19 participants from comparable backgrounds, all unfamiliar with the novel entrepreneurial hustle construct (Fisher et al., 2020b). The mean of all 'hustle' dimensions received much higher scores, while the 'no hustle' condition ranked lower than in the first pretest, widening the difference between 'hustle' and 'no hustle' conditions. In the 'hustle' vignette, the overall mean value increased to 5.79; it decreased to 2.98 in the 'no hustle' vignette. Paired with a t-value of 0.00, the latter definition of the vignettes was rated successful and used in the final experiments. We also tested the six voice actors' similarity in the four attributes of likeability, attractiveness, self-confidence, and age to identify the most similar pair and mitigate these attributes' influence on our research model (Kuppuswamy and Younkin, 2020). We asked all pretest participants to rate these four attributes on a 7-point Likert scale (1 = Strongly disagree; 7 = Strongly agree). We then conducted pairwise t-tests to identify one male/female pair of voice actors with statistically most similar scores in their perceived likeability (mean = 4.62), attractiveness (mean = 4.05), self-confidence (4.38), and age (26.30 years). This procedure follows common guidelines to rule out alternative explanations for dependent variables in gender research in management (e.g., Kuppuswamy and Younkin, 2020). Table I presents all pretest statistics.

#### **Measures**

Besides the manipulated variables (entrepreneurial hustle, entrepreneurs' gender), we measured the remaining variables as follows.

The *dependent variable* organizational attractiveness is measured by the scale of Highhouse et al. (2003, p. 989), with 5 items examining respondents' 'affective and attitudinal thoughts' about the entrepreneurs' venture as a potential place for employment on a 7-point Likert scale. This instrument was purposefully developed to measure attractiveness rather than an intention to act, which would require higher resource commitments of the applicant (Highhouse et al., 2003). This is suitable for answering our research questions since it is in line with measuring perceptions as are the other variables in our model. A sample item is: 'For me, this company would be a good place to work.'

We measure the *mediator variable* perceived competence using the scale developed by Fiske et al. (2002) in social psychology but also applied by management and entrepreneurship scholars (e.g., Lee and Huang, 2018). A sample item is: 'Please indicate to which extent you would describe the entrepreneur as proficient.' All items were measured on a 7-point Likert scale. We measure the first *moderator* applicants' IEO by using the second-order construct refined by de Jong et al. (2015), which they originally labelled entrepreneurial behaviour. It comprises three separate factors: innovative behaviour, developed by Scott and

Table I. Summary statistics vignette pretests

			Pretest I			
			. 161631 1	Hustle		
	Opportunity (	Resources	Learning	Legitimacy	Connections	Means of rows
Urgency	5.21	5.00	4.71	4.93	5.00	4.97
Creativity	5.29	5.50	4.86	4.86	5.43	5.19
Intended usefulness	5.71	5.29	5.21	5.50	5.50	5.44
Addressing challenges or opportunities	5.50	5.57	5.00	5.43	5.50	5.40
Means of columns	5.43	5.34	4.95	5.18	5.36	5.25
			U	No Hustle		
	Opportunity	Resources	Learning	Legitimacy	Connections	Means of rows
Urgency	4.62	4.77	3.86	4.46	4.62	4.46
Creativity	3.62	3.69	3.86	4.85	4.08	4.02
Intended usefulness	4.85	4.92	4.71	5.54	5.08	5.02
Addressing challenges or opportunities	4.77	4.69	4.29	5.23	5.00	4.80
Means of columns	4.46	4.52	4.18	5.02	4.69	4.57
T-test	0.03	0.11	0.01	0.26	0.06	0.03
		Pr	retest II			
				Hustle		
	Opportunity	Resources	Learning	Legitimacy	Connections	Means of rows
Urgency	6.18	6.00	5.71	6.35	5.82	6.01
Creativity	6.18	6.18	5.47	5.41	5.65	5.78
Intended usefulness	5.94	6.18	5.24	5.53	5.88	5.75
Addressing challenges or opportunities	6.29	5.82	4.59	5.29	6.00	5.60
Means of columns	6.15	6.04	5.25	5.65	5.84	5.79
			o	No Hustle		
	Opportunity	Resources	Learning	Legitimacy	Connections	Means of row
Urgency	3.18	2.59	3.39	3.17	2.24	2.91
Creativity	2.76	2.24	2.33	3.39	2.53	2.65
Intended usefulness	3.65	2.71	3.39	3.78	2.71	3.25
Addressing challenges or opportunities	3.29	2.76	3.56	3.50	2.53	3.13
Means of columns	3.22	2.57	3.17	3.46	2.50	2.98
T-test	0.00	0.00	0.02	0.01	0.00	0.00

Bruce (1994); proactive behaviour, developed by Parker and Collins (2010); and risk-taking behaviour (Zhao et al., 2005). To the latter two factors, we added one and two items, respectively. A sample item for innovative behaviour is: 'Please indicate how often you engage in this behavior as an employee: I generate creative ideas.' A sample item for proactive behaviour is: 'I identify long-term opportunities and threats for the company.' A sample item for risk-taking behaviour is: 'When large interests are at stake, I go for the big win even when things could go seriously wrong.' We measured the items on a 7-point Likert scale.

We measure *control variables* on the respondent level to control for unexplained variance in organizational attractiveness and follow existent research (e.g., Chapman et al., 2005). We measure respondent age and respondent gender, since these respondent demographics have previously been found to influence job choice decisions (Held and Bader, 2018; Judge and Bretz, 1994). Further, we include the latent construct hedonistic and utilitarian attitude toward the product (Voss et al., 2003) because the attitude of job applicants toward the product affects inferred traits, which are known to influence perceived organizational attractiveness (e.g., Hubner et al., 2021; Lievens and Highhouse, 2003). We measure the items on a 7-point Likert scale.

To address common method bias, we adhere to Podsakoff et al. (2003) for procedural as well as analytical remedies. First, we use seemingly unrelated survey questions in between independent and dependent variables. Second, we include a 5-item marker variable, the 'attitude toward the color blue,' in our survey. This construct was developed by Miller and Chiodo (2008) and is particularly applicable to our research context as it measures respondents' attitude, as do our other measures. Cronbach's alpha for this marker variable is 0.898. Moreover, we include a 5-item social desirability variable (Hays et al., 1989) and test for social desirability bias. Cronbach's alpha for this variable is 0.841. Given the nature of our data collection process and the investigated relationships, it was not feasible to employ alternative measures to control for common method bias. First, implementing a 'temporal separation' between the measurement of the independent and dependent variables was inappropriate in our case since this approach might cause increases in attrition rates (Podsakoff et al., 2003, p. 887). As online studies within mTurk are usually subject to high attrition rates (Aguinis et al., 2021), temporal separation might have negatively affected the quality of our data. Second, we are interested in evaluating the associations between entrepreneurial hustle and applicant-based, partly perceptual factors (e.g., perceived competence, organizational attractiveness, IEO); therefore, a separate measurement of such factors by different raters would not have been conducive.

#### RESULTS

## **Hypotheses Testing**

In Tables II–IV, we outline descriptive statistics and Pearson correlation coefficients for all variables across our three samples. For all latent constructs, the diagonals show the square-root of the average variances extracted to comply with the Fornell and Larcker (1981) criterion. To test our measures for reliability and validity, we examined Cronbach's alpha, composite reliability, and average variance extracted. All

Table II. mTurk sample: Descriptive statistics, correlations, and Fornell and Larcker (1981) criterion

Construct	Mean	SD	1	2	3	4	5	6	7
Main constructs									
1. Entrepreneurial hustle (1 = hustle, 0 = no hustle)	0.49	0.50							
2. Organizational attractiveness	4.59	1.71	0.068	0.941					
3. Perceived competence	5.74	1.18	0.268**	0.575**	0.943				
4. Applicants' individual entrepreneurial orientation	4.42	1.21	(0.003)	0.470**	0.191**	0.748			
5. Entrepreneur gender (1 = female)	54%	0.50	(0.044)	0.059	(0.021)	(0.017)			
Controls									
6. Attitude toward product	4.80	1.30	0.046	0.737**	0.538**	0.451**	0.042	0.843	
7. Respondent gender (1 = female)	52%	0.50	0.002	0.028	(0.065)	0.176**	0.048	(0.006)	
8. Respondent age (in years)	43.35	1.73	(0.038)	(0.172)**	(0.091)*	(0.116)**	(0.046)	(0.187)**	(0.143)**

Note: N = 613. The square root of the AVE (average variance extracted; Fornell and Larcker, 1981) is shown in the diagonal. Values in brackets indicate negative values. \*p < 0.05; \*\*p < 0.01.

latent measures are adequately reliable and valid as shown in Table V (DeVellis, 2016; Hair, 2010). During confirmatory factor analyses, we achieve adequate model fits for our main mTurk dataset (CFI = 0.959; TLI = 0.949; RMSEA = 0.063; SRMR = 0.048), and our additional datasets from Prolific (CFI = 0.970; TLI = 0.962; RMSEA = 0.053; SRMR = 0.054) and the students (CFI = 0.966; TLI = 0.958; RMSEA = 0.044; SRMR = 0.053).

We examine common method bias as our research design relies on a single source of primary data and the dependent, moderating, and control variables are latent constructs. We use the Comprehensive Marker Variable Technique to determine the threat of common method bias because the technique follows a latent variable-based test procedure that allows researchers to conduct model comparisons, thereby offering advantages over correlation-based approaches (Williams et al., 2010). The test procedure helps determine whether method variance based on a marker variable is present, corresponding method effects show equality (cf. Lindell and Whitney, 2001), and method effects bias substantive

Table III. Prolific sample: Descriptive statistics, correlations, and Fornell and Larcker (1981) criterion

Construct	Mean	SD	1	2	3	4	5	6	7
Main constructs									
1. Entrepreneurial hustle (1 = hustle, 0 = no hustle)	0.47	0.50							
2. Organizational attractiveness	4.35	1.72	0.079	0.944					
3. Perceived competence	5.61	1.24	0.219*	0.545**	0.936				
4. Applicants' individual entrepreneurial orientation	4.21	1.29	(0.156)	0.222*	0.059	0.767			
5. Entrepreneur gender (1 = female)	48%	0.50	0.006	0.108	0.195*	0.008			
Controls									
6. Attitude toward product	4.66	1.24	(0.100)	0.545**	0.351**	0.312**	0.104	0.814	
7. Respondent gender (1 = female)	40%	0.49	(0.057)	0.074	0.041	(0.103)	0.057	0.185*	
8. Respondent age (in years)	39	1.87	0.064	0.060	0.018	0.001	0.008	(0.031)	0.187*

Note: N = 130. The square root of the AVE (average variance extracted; Fornell and Larcker, 1981) is shown in the diagonal. Values in brackets indicate negative values. p < 0.05; \*\*p < 0.01.

results (Williams et al., 2010). The technique requires pairwise comparisons between our baseline models and models with constrained factor loadings (Method-C). This comparison helps determine whether common method variance is present. If so, we proceeded to test restricted models (Model-R) against unrestricted models (Model-U) to ascertain whether the presence of common method variance skews the relationships between the substantive variables (all based on Williams et al., 2010). In addition to the previously introduced marker variable, we used a variable measuring social desirability. Results across the three samples show that common method variance and social desirability bias are either not present or do not bias the relationships between our substantive variables. Table VI exemplarily illustrates the results of the marker variable test for our main dataset.

We proceed to test our hypotheses by conducting OLS regressions and bootstrapping following Preacher and Hayes (2008). For each sample, we test seven models in a hierarchical regression, the first four on the mediator variable perceived competence and the latter three on the dependent variable organizational attractiveness. In Model 1,

Table IV. Student sample: Descriptive statistics, correlations, and Fornell and Larcker (1981) criterion

Construct	Mean	SD	1	2	3	4	5	6	7
Main constructs									
1. Entrepreneurial hustle (1 = hustle, 0 = no hustle)	0.52	0.50							
2. Organizational attractiveness	3.59	1.47	0.158*	0.884					
3. Perceived competence	4.58	1.25	0.323**	0.450**	0.878				
4. Applicants' individual entrepreneurial orientation	4.82	0.96	0.135	0.147*	0.301**	0.672			
5. Entrepreneur gender (1 = female)	50.8%	0.50	0.005	(0.031)	0.120	(0.011)			
Controls									
6. Attitude toward product	4.47	1.07	0.058	0.446**	0.221**	0.151*	(0.086)	0.744	
7. Respondent gender (1 = female)	44%	0.50	(0.091)	0.067	(0.068)	(0.101)	(0.020)	0.199**	
8. Respondent age (in years)	25.01	0.99	(0.009)	(0.132)	(0.161)*	0.078	0.016	(0.085)	(880.0)

Note: N = 188. The square root of the AVE (average variance extracted; Fornell and Larcker, 1981) is shown in the diagonal. Values in brackets indicate negative values. p < 0.05; \*\*p < 0.05.

Table V. Validity and reliability criteria of all latent constructs in model (for all samples)

		Cr	onbach's a	lpha	Con	nposite reli	ability	Average	e variance (AVE)	extracted
Construct	Number of items	mTurk	Prolific	Student	m Turk	Prolific	Student	m Turk	Prolific	Student
Organizational attractiveness	5	0.966	0.969	0.927	0.975	0.976	0.947	0.884	0.891	0.781
Perceived competence	3	0.936	0.929	0.851	0.959	0.955	0.910	0.888	0.877	0.771
Applicants' individual entrepreneurial orientation	10	0.909	0.919	0.859	0.926	0.933	0.890	0.559	0.588	0.452
Attitude toward product	10	0.952	0.941	0.907	0.961	0.952	0.925	0.710	0.663	0.554

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Model	$\chi^2$	df	CFI
1. CFA model	1220.797	411	0.959
2. Baseline	1225.221	422	0.960
3. Method-C model	1224.996	421	0.960
χ²-Model Comparison Tests	$\Delta \chi^2$	$\Delta \mathrm{df}$	$\chi^2$ -critical value: 0.05
1. Baseline vs. Method-C model	0.225	1	3.841

Table VI. mTurk sample: CFA Marker Variable Technique based on Williams et al. (2010)

we regress the controls; in Model 2, we introduce entrepreneurial hustle. In Model 3, we introduce the moderators (i.e., applicants' IEO, entrepreneurs' gender); in Model 4, the interaction terms. In Model 5, we regress the controls including the moderators on organizational attractiveness. In Model 6, we add entrepreneurial hustle; in Model 7, we regress entrepreneurial hustle and control variables as well as the mediators and interaction terms on organizational attractiveness.

H1 predicted a positive link between entrepreneurial hustle and organizational attractiveness. In the mTurk sample, we detect a tendency to significance (b = 0.152; p = 0.096; Model 6 in Table VII) and thus consider H1 as not supported. This finding is corroborated in the Prolific sample (b = 0.490; p = 0.054; Table VIII) and the student sample (b = 0.352; p = 0.073; Table IX). However, we find support for H2, which predicted a mediation among entrepreneurial hustle, perceived competence, and perceived organizational attractiveness. In the mTurk sample, the bootstrapped indirect effect for the mediation is significant (b = 0.225; CI = [0.154; 0.318]; Table X). The direct path between entrepreneurial hustle and organizational attractiveness is not significant after the introduction of the mediator in Model 7 (Table VII), which indicates an indirect-only mediation (Zhao et al., 2010) whereby the entire effect is channelled through perceived competence. This effect is further illustrated by the strong links between entrepreneurial hustle and perceived competence we detect in Models 2 and 3. The mediating effect proposed in H2 is also supported in the Prolific sample (b = 0.339; CI = [0.138; 0.669]; Table X). Since the association between hustle and organizational attractiveness in Model 7 of Table VIII is not significant, we confirm an indirect-only mediation. Likewise, the results of the mediation analysis are confirmed in the student sample (b = 0.290; CI = [0.134; 0.516]; Table X). As the direct effect of entrepreneurial hustle on organizational attractiveness is insignificant in Model 7 of Table IX (b = 0.075; p = 0.777), we can support the indirect-only mediation detected in the main dataset.

We also find support for H3, which predicted a moderating effect of applicant IEO on the link between entrepreneurial hustle and perceived competence. For the mTurk sample, the corresponding interaction term is negative and statistically significant (b=-0.192; p=0.009; Model 4 in Table VII). We conduct further tests to clarify this effect (Aiken et al., 1991; Dawson, 2014). Figure 2 illustrates the slopes at low and high values of IEO. We adhere to common recommendations and show values that are one

Table VII. mTurk sample: Hierarchical regression models

					Perceived	Perceived competence					Or	Organiz ational attractiveness	l attractive	ness	
		Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
Variables	Hs.	ß	SE	В	SE	ß	SE	ß	SE	В	SE	В	SE	В	SE
Independent variable															
Entrepreneurial hustle (EH)	HI			0.582**	0.076	0.576**	0.077	0.536**	0.116			$0.152^{\dagger}$	0.091	0.046	0.132
Mediator															
Perceived competence	H2													0.463**	0.062
Moderators and interactions															
Applicants' individual entrepreneurial orientation (IEO)						(0.055)	0.035	0.035	0.062	0.303**	0.061	0.306**	0.061	0.338**	0.082
Entrepreneur gender (EG)						(0.084)	0.078	(0.127)	0.117	0.1111	0.091	0.118	0.092	0.261*	0.126
$EH \times IEO$	H3							(0.192)**	0.073					(0.024)	960.0
$EH \times EG$	H4							0.077	0.155					(0.223)	0.174
Control variables															
Attitude toward product		0.635**		0.049 0.624**	0.045	0.045 0.650**	0.053	0.650**	0.053	1.122**	0.052	0.052 1.117**	0.052	0.862**	090.0
Respondent gender		$(0.148)^{\dagger}$	0.081	$(0.147)^{\dagger}$	0.078	(0.124)	0.080	(0.129)	0.080	(0.016)	960.0	(0.017)	960.0	0.033	0.091
Respondent age		(0.002)	0.023	0.002	0.022	0.002	0.022	0.000	0.022	(0.026)	0.028	(0.024)	0.026	(0.023)	0.026
Constant		5.840**	0.145	5.520**	0.149	5.562**	0.152	5.594**	0.166	4.674**	0.181	4.587**	0.190	4.586**	0.193
$\mathbb{R}^2$		0.292	92	0.353	33	0.356	0	0.363	~	0.573	33	0.575	5	0.623	33
Adjusted $\mathbb{R}^2$		0.289	68	0.349	6	0.349	6	0.354	_	0.569	6	0.571	_	0.617	7
Change in adj. $\mathbb{R}^2$				0.061**	**	0.003	3	0.007*	*			$0.002^{\dagger}$	2‡	0.048**	* * *
F		58.22	22	65.51	_	44.51	_	34.48	~	205.45	45	170.56	99	138.44	44

Net: N = 613. Unstandardized regression coefficients and robust standard errors are shown. Values in brackets indicate negative values.  $^{\uparrow}$   $^{\downarrow}$   $^{$ 

Table VIII. Prolific sample: Hierarchical regression models

					Fercewed	Fercewed competence					Ó	Organizational attractiveness	ıl attractive	ness	
		Model I	I	Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
Variables	Hs.	В	SE	В	SE	В	SE	ß	SE	ß	SE	В	SE	В	SE
Independent variable															
stle (EH)	H			0.643**	0.193	0.628**	0.196	0.634*	0.272			$0.490^{\dagger}$	0.251	0.258	0.329
Mediator															
Perceived competence	H2													0.689**	0.139
Moderators and interactions															
Applicants' individual entrepreneurial orientation (IEO)						(0.040)	0.107	0.160	0.153	0.071	0.136	0.107	0.141	0.036	0.180
Entrepreneur gender (EG)						0.405*	0.201	0.435	0.319	0.210	0.266	0.206	0.264	0.084	0.334
$EH \times IEO$	H3							(0.436)*	0.203					0.204	0.257
$EH \times EG$	H4							(0.043)	0.386					(0.228)	0.459
Control variables															
Attitude toward product		0.439**	* 0.093	0.466**	0.000	0.458**	0.100	0.454**	0.102	0.911**	0.128	0.919**	0.125	0.666**	0.131
Respondent gender		(0.081)	0.228	(0.046)	0.218	(0.077)	0.211	(0.100)	0.215	(0.143)	0.253	(0.104)	0.0252	(0.043)	0.229
Respondent age		0.026	0.057	0.015	0.055	0.017	0.053	0.017	0.053	0.084	0.071	0.074	0.072	0.067	0.069
Constant		5.514**	* 0.300	5.248**	0.319	5.063**	0.343	5.031**	0.372	3.888**	0.419	3.688**	0.442	3.940**	0.438
$\mathbb{R}^2$		0.1	0.123	0.190	0	0.218	80	0.248	φ	0.308	8(	0.328	89	0.452	52
Adjusted $\mathbb{R}^2$		0.1	0.102	0.164	4	0.179	6,	0.198	8	0.280	30	0.295	95	0.410	01
Change in adj. $\mathbb{R}^2$				**420.0	**/	0.028	85	0.030	0.			$0.020^{\dagger}$	±0‡	0.13	0.123**
<u>[</u>		000	02	10.02	ç	1		00 9		16 90	0 4	16 16	9	10 70	20

Note: N = 130. Unstandardized regression coefficients and robust standard errors are shown. Values in brackets indicate negative values.  $^{\uparrow}$   $^{\downarrow}$   $^{\downarrow$ 

Table IX. Student sample: Hierarchical regression models

Model I  Variables  Independent variable Entrepreneurial hustle (EH) H1  Mediator Perceived competence H2  Moderators and interactions Applicants' individual	SE SE	Model 2		Model 3									
: (EH)	SE					Model 4		Model 5		Model 6		Model 7	
: (EH)		ß	SE	В	SE	В	SE	В	SE	В	SE	В	SE
: (EH)													
57		0.749**	0.171	0.665**	0.165	0.548*	0.256			$0.352^{\dagger}$	0.195	0.075	0.265
sz													
Moderators and interactions Applicants' individual												0.551**	0.108
Applicants' individual													
entrepreneurial orientation (IEO)				0.312**	0.092	0.456**	0.121	0.136	0.100	0.114	0.101	(0.074)	0.129
Entrepreneur gender (EG)				0.352*	0.159	0.250	0.242	0.030	0.193	0.025	0.192	(0.119)	0.252
$EH \times IEO$ H3						(0.335)*	0.165					0.112	0.186
$EH \times EG$ H4						0.228	0.322					(0.035)	0.359
Control variables													
Attitude toward product 0.287***	680.0 ***	0.259**	0.085	0.216**	0.082	0.223**	0.082	0.620**	0.104	0.612**	0.103	0.513**	0.104
Respondent gender $(0.320)^{\dagger}$	) <sup>†</sup> 0.177	(0.239)	0.171	(0.164)	0.166	(0.202)	0.160	(0.049)	0.202	(0.017)	0.202	0.068	0.195
Respondent age (0.195)*	)* 0.094	(0.189)*	0.087	(0.220)*	0.088	(0.221)*	0.086	$(0.158)^{\dagger}$	0.094	$(0153)^{\dagger}$	0.091	(0.054)	0.079
Constant 5.441**	** 0.359	4.993**	0.348	4.942**	0.337	5.039**	0.327	4.192**	0.371	3.979**	0.379	3.800**	0.371
$\mathbb{R}^2$ 0.084	084	0.173		0.251		0.270		0.215	2	0.229	6	0.334	
Adjusted $\mathbb{R}^2$ 0.069	690	0.155		0.226		0.238		0.194	4	0.204	4	0.300	
Change in adj. $\mathbb{R}^2$		0.089**	*	0.078**	*	$0.020^{\dagger}$	+			$0.014^{\dagger}$	4	0.104**	*
F 6.34	34	10.31		11.22		10.40		9.60		8.45		11.66	

Note: N = 188. Unstandardized regression coefficients and robust standard errors are shown. Values in brackets indicate negative values.  $^{\dagger}$   $^{\dagger$ 

			Organiza	utional attractive	eness	
Model	Н.	Sample	Boot coefficient	Boot SE	LL 95% CI	UL 95% CI
Entrepreneurial	H2	mTurk	0.225	0.041	0.154	0.318
hustle via		Prolific	0.339	0.130	0.138	0.669
perceived competence		Student	0.290	0.095	0.134	0.516

Table X. Bootstrap indirect effects and confidence intervals (for all samples)

Note: Bias-corrected and accelerated confidence intervals are reported based on 5000 bootstrap re-samples. CI = confidence interval; LL = lower limit; UL = upper limit.

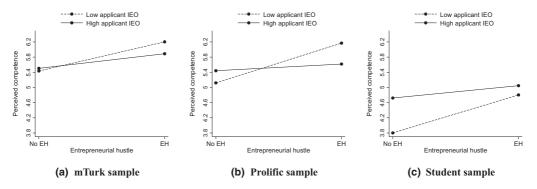


Figure 2. All samples: Effect of the interaction between entrepreneurial hustle and applicants' individual entrepreneurial orientation (IEO) on perceived competence

standard deviation below and above the mean (Dawson, 2014). For both low and high levels of IEO, the relationship between entrepreneurial hustle and perceived competence is significant (low: b = 0.769, p = 0.000; high: b = 0.385, p = 0.000). However, as hypothesized, Figure 2a shows that the relationship between entrepreneurial hustle and perceived competence is weakened (i.e., less positive) for higher levels of IEO. A slope difference test shows that the difference between the two coefficients is significant (p = 0.009). Further, we test whether the conditional effect of IEO also extends to the indirect effects previously detected. As indicated in Table XI, there are significant indirect effects of entrepreneurial hustle on organizational attractiveness via perceived competence for both low (b = 0.300; CI = [0.200; 0.426]) and high (b = 0.150; CI = [0.076; 0.245]) levels of IEO. We further bootstrapped the difference between these two coefficients (see Hayes and Rockwood, 2020) and find that this difference is significant at a 95 per cent confidence interval (b = -0.150; CI = [-0.280; -0.040]). This finding suggests a moderated mediation. The negative and significant moderation effect is also supported in our additional samples, that is, the Prolific sample (b = -0.436; p = 0.034) and the student sample (b = -0.335; p = 0.044). Figures 2b,c present the corresponding slopes at low and high values of IEO.

Finally, we do not find support for H4, which predicted a moderating effect of entrepreneurs' gender on the relationship between entrepreneurial hustle and perceived competence. Specifically, the interaction terms between entrepreneurial hustle and

				Organizational	attractiveness	
Model	Applicants' IEO	Н.	Boot coefficient	Boot SE	LL 95% CI	UL 95% CI
Entrepreneurial	Low	Н3	0.300	0.058	0.200	0.426
hustle via	High		0.150	0.045	0.076	0.254
perceived competence	Difference		-0.150	0.061	-0.280	-0.040

Table XI. mTurk sample: Conditional indirect results and confidence intervals

Note: Bias-corrected and accelerated confidence intervals are reported based on 5000 bootstrap re-samples. CI = confidence interval; LL = lower limit; UL = upper limit.

entrepreneurs' gender are not significant across the three samples (see Model 4 in Tables VII–IX). [5]

## **Robustness Check and Post-hoc Analysis**

To test the robustness of our results, we re-calculated the models of our main sample without control variables. The results lend support to H1, now with a p-value below the common threshold of 0.05 (b=0.249; p=0.040), and to H2 (bootstrapped indirect effect b=0.480; CI=[0.343; 0.637]). In addition, we find support for H3 (b=-0.178; p=0.044). This moderation also extends to the indirect effect (low IEO: b=0.616, CI=[0.406; 0.841]; high IEO: b=0.346, CI=[0.171; 0.534]; difference between coefficients: b=-0.271, CI=[-0.544; -0.010]). As in the main analyses, H4 is not supported.

To better understand potential reasons underlying the lack of evidence for a moderating effect of entrepreneurs' gender across all samples, we implemented an additional test. We asked respondents within the Prolific sample at the end of the survey to list words they associated with the entrepreneur they listened to earlier. Across the total sample, we obtained 687 words (including duplicates), with each respondent providing on average 3.47 words. We then counted the number of words with clear gender connotations (e.g., female, male). Only once, one of these words (i.e., woman) was mentioned. These findings do not necessarily contradict previous insights into the existence of gender connotations of the hustler image (cf. Rudic et al., 2021). They rather indicate that among all observed factors, entrepreneurs' gender had low salience in respondents' overall perception of entrepreneurs' self-presentation.

#### **DISCUSSION AND IMPLICATIONS**

### **Implications for Theory**

This study makes several theoretical contributions. First, conceptualizing entrepreneurial hustle as an IM technique in the form of verbal self-promotion and showing its positive relationship with organizational attractiveness has important implications for research on entrepreneurial hustle, IM theory, and new venture recruiting. While

previous research has emphasized that hustle primarily denotes entrepreneurial action (Fisher et al., 2020a; Fisher et al., 2020b), we expand the construct's conceptual scope toward verbalized descriptions of such actions. Showing that entrepreneurial hustle can lead to positive outcomes even when entrepreneurs only describe related actions demonstrates the effectiveness of the construct in the entrepreneurial realm. Thus, this type of self-promotion might also be relevant in other entrepreneur-stakeholder interactions where entrepreneurs seek to acquire resources, such as funding. Future research might, for instance, explore the effectiveness of entrepreneurial hustle selfpromotions in interactions with (potential) investors. Establishing the effectiveness of entrepreneurial hustle as self-promotion also helps advance IM theory, which to date has mainly focused on tools for interview situations on the interviewee side (Wilhelmy et al., 2016). While earlier research has started to explore more general interviewer IM techniques (Wilhelmy et al., 2016), our study concretizes specific descriptions by which interviewers can make an impression on applicants. We thus extend knowledge on the toolbox of IM techniques available to interviewers. Since entrepreneurial hustle seems most applicable in new venture recruiting, further analyses should examine description-based techniques that apply in other contexts. As for new venture recruiting literature (e.g., Hubner et al., 2021), we advance research by showing how interviewers themselves might use IM techniques to improve the outcomes of interview situations. While previous studies have emphasized factors such as credentials (e.g., Moser et al., 2017; Nagy et al., 2012) and externally reported behaviours (Hubner et al., 2021) as beneficial to the entrepreneur, we complement these insights and provide entrepreneurs with an IM tool that is more directly under their control. Based on our results, researchers might further analyse how entrepreneurs can actively configure their presentations during interview situations.

Second, we specify an indirect-only mediation through which entrepreneurial hustle affects organizational attractiveness by boosting the perceived competence of the entrepreneur. While this finding endorses the pivotal role of perceived competence as an intermediate outcome of entrepreneurial hustle (Fisher et al., 2020b), it also shows that hustle's effect, mediated through competence, might lead to concrete contextspecific outcomes, such as organizational attractiveness. At the venture level, previous research has pointed to indirect effects of entrepreneurial hustle on outcomes such as cognitive legitimacy (Fisher et al., 2020b), relating to whether ventures 'are understandable [...] rather than considering when they are desirable' (Shepherd and Zacharakis, 2003, p. 151). However, in recruiting, eliciting a sense of desirability in the applicant is highly relevant. Having identified organizational attractiveness as an outcome of the indirect effect of hustle through competence thus considerably advances the nomological net surrounding the hustle construct. This insight might inspire researchers to discover other concrete factors relating to the outcomes of the hustle construct. As for IM theory, our study provides hints about the causal path through which interviewer IM techniques unfold their beneficial effects. This knowledge has considerable implications for the further identification of such techniques (Wilhelmy et al., 2016): If competence is a key connecting element between using IM techniques and positive interview outcomes, then future research could focus on constructs known to elicit competence perceptions. Likewise, studies of effective new

venture recruiting can gear future research endeavours toward mechanisms that increase the perceived competence of the interviewing entrepreneur.

Third, we contribute to research by identifying a detrimental effect of applicants' IEO on the relationship between entrepreneurial hustle and perceived competence. While previous work on entrepreneurial hustle has focused on outcome relationships and relevant mechanisms (Fisher et al., 2020b), our research points to an essential contingency factor and further specifies the applicability of entrepreneurial hustle self-presentations in distinct circumstances. Given the detrimental effect of applicant IEO, future studies might further explore how the effectiveness of hustle self-promotion is sensitive to context factors. Our findings also hold implications for IM theory. Specifically, they suggest that the self-promoters' paradox (Jones and Pittman, 1982), theorized as the mechanisms underlying the detrimental effect of applicants' IEO, does not equally apply in all contexts. Whereas previous research on the topic indicates strategies to overcome or avoid this paradox (Ammeter et al., 2002; Gardner and Avolio, 1998; Holoien and Fiske, 2013), our findings show that this effect is more likely to occur with some audience types than with others - at least, in the new venture recruitment context. In addition, our findings indicate that the potential benefits to users of IM are limited when actors and audiences share some behavioural patterns. Thus, this study challenges IM research that purports only positive effects of actor-audience similarity on the effectiveness of related techniques. Specifically, our finding calls for further investigations of similarity effects in situations where individuals hold reference points of behaviour. As for research on interviewer IM (Wilhelmy et al., 2016), the identified contingency implies that the interviewer's selection of deployable IM techniques should consider the type of interviewee. Since interview situations are often short, avoiding techniques that promise little effect is imperative for interviewers. This aspect is also relevant for research on new venture recruiting. Previous research, for instance, has analysed entrepreneur-based factors as influencing IM tools in recruiting situations (Hubner et al., 2021). We extend these findings as we show that not only factors at the entrepreneur level but also at the applicant level influence the effectiveness of related tools. This calls for an applicant-dependent configuration of interviewing approaches in new venture recruiting. Guided by our results, future research might examine the interplay between factors on both sides as they shape entrepreneurs' success in interview situations.

Despite theoretical predictions (Gardner and Martinko, 1988b), we do not find evidence for gender-based differences in the effectiveness of the entrepreneurial hustle self-presentation. This non-finding is consistent across samples, indicating that neither national background (mTurk/Prolific samples: U.S.; student sample: Germany) nor age (mTurk/Prolific samples: mean ages 43/39 years; student sample: mean age 25 years) are likely to have influenced this result. Our post-hoc analysis suggests that entrepreneurs' gender was not among the primary associations respondents had when recalling the entrepreneurs' self-presentations. However, it is important to consider this finding in the context of our specific research model. Gender-related bias continues to disadvantage female entrepreneurs, especially regarding access to capital (Kanze et al., 2018; Liao et al., 2023). Such insights regarding funding success, however, do not seem to fully apply to our research context for two reasons. First, we primarily analyse the effect of gender in conjunction with hustle self-presentations on competence

perceptions. Gender stereotypes might have changed over time, leading to higher levels of perceived competence equality among genders (Diekman and Eagly, 2000; Eagly et al., 2020; Koenig and Eagly, 2014). Indeed, empirical results in two of our samples suggest that female entrepreneurs might be considered more competent than their male counterparts (indicated by the positive direct effects of entrepreneurs' gender on perceived competence; Model 3 in Tables VIII and IX). However, this effect vanishes as we extend our models, indicating that our data cannot firmly establish this relationship. Second, we focus on the effect of gender on the relationship between hustle and organizational attractiveness. Attractiveness perceptions in recruiting contexts are different from funding decisions – not only because applicants and investors have different decision-making criteria. Eventually, expressing attraction toward an organization as a potential employer is related to much less financial risk than investing capital into a new venture. Thus, the lack of statistical significance for the moderating effect of gender does not imply a decrease in gender bias altogether. However, our findings indicate that scholars should reconsider how they can account for the dynamics of competence perceptions in future gender-related research.

## **Implications for Entrepreneurs**

Our study yields several valuable implications for entrepreneurs. First, we derive recommendations for an effective self-presentation to portray competence, and, ultimately, organizational attractiveness. Even though applicants may not be familiar with the venture, displaying entrepreneurial hustle behaviours helps bridge uncertainty and conveys a positive impression to applicants. For instance, applicants will perceive organizational attractiveness more favourably if entrepreneurs emphasize more creative and out-ofthe-box steps they took when founding the venture. Presenting oneself as an entrepreneurial hustler works, and within the confines of our research, we do not find evidence that entrepreneurs' gender influences this effect. However, our findings also suggest that entrepreneurs should be more cautious when job applicants are high in IEO. In this case, a more subtle presentation of the entrepreneur, or even alternative means, such as nonverbal self-promotion, might be warranted. Information about an applicant's IEO can be collected before the interview. In addition to screening the application for relevant hints, entrepreneurs might conduct further research on social media or consult previous employers. Insights into applicants' IEO can also be gained during the interview. Before engaging in self-presentations with pronounced entrepreneurial hustle behaviour, entrepreneurs should have applicants recount their prior entrepreneurial activities.

## **Limitations and Conclusion**

Our study is subject to limitations that offer avenues for future research. First, we acknowledge that our research setting depicts a limited width of the spectrum describing entrepreneurial hustle in the IM context. Since Fisher et al. (2020a) demonstrate the usefulness of entrepreneurial hustle in a university context, future research might ascertain whether related self-presentations are also effective for recruitment in more established organizations. Second, our sampling intends to reflect the reality of the recruiting pool for new ventures, with the mTurk and Prolific samples containing older experienced professionals and the

third sample containing younger university students. Future research could elaborate more on the differences between these types of applicants. Our three samples draw on U.S. and German nationalities; potential cultural differences might thus offer further research opportunities as several dimensions vary among cultures (e.g., regarding stereotype expectations). Third, although we speculated about why we do not find a moderation effect of entrepreneurs' gender, further empirical research is needed to understand the impact of gender stereotypes in new venture recruiting. For instance, future research might ascertain whether gender biases manifest when actual recruiting success, in terms of hiring, is considered. Also, while we do not find evidence for respondents' gender influencing competence perceptions of male/female entrepreneurs, this effect needs to be further examined by future research. For instance, Snellman and Solal (2023) find that gender homophily might influence the success of female entrepreneurs and can entail advantages (apart from the backlashes reported in their study). We believe that complementary qualitative research will help explore gender-related effects more thoroughly in the given context.

Concluding, our study advances knowledge not only of entrepreneurial hustle but also of IM techniques in new venture recruiting. Across three samples, we consistently find a positive relationship between entrepreneurial hustle self-presentations and applicants' perception of organizational attractiveness. We specify this relationship as an indirect-only mediation, emphasizing the intermediary role of the perceived competence of entrepreneurs. However, our study also shows that the effectiveness of such self-presentations is lower when applicants exhibit high IEO, pointing to a critical contingency effect. In sum, this knowledge will prove to be of benefit to entrepreneurs seeking to secure talents for their new venture. Even beyond, we hope that related findings can offer valuable insights for interviewers in recruitment situations.

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#### **NOTES**

- [1] In this study, the term applicants refers to potential employees only; potential co-founders are not included.
- [2] de Jong et al. (2015) originally label the construct as "entrepreneurial behaviour." In line with later research (Covin et al., 2020; Kollmann et al., 2017; Wang et al., 2021) and to specify the construct for our study context, we adopt the label of individual entrepreneurial orientation (IEO).
- [3] In the additional sample collected via Prolific, the attrition rate was considerably lower (4.35%), and the results of our analyses were consistent with those obtained in the mTurk sample.
- [4] The text was derived based on experimental materials the authors of Fisher et al. (2020b) kindly provided.
- [5] We also estimated the interaction effect of hustle and entrepreneurs' gender in a model without simultaneously including the interaction effect of hustle and IEO. Across all three samples, we find that H4 is not supported.

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