#### **ORIGINAL ARTICLE**



## PERSONNEL PSYCHOLOGY WILEY

# Entrepreneur weirdness as a double-edged sword: Effects on product creativity and investor attraction

Jun-Yeob Kim<sup>1</sup> Emily Grijalva<sup>2</sup> Daniel A. Newman<sup>3</sup> Yong Li<sup>4</sup>

#### Correspondence

Jun-Yeob Kim, Department of Psychology, University of Illinois at Urbana-Champaign, 603 E. Daniel Street, Champaign, IL, 61820 USA.

Email:junyeob3@illinois.edu

#### **Abstract**

Many iconic entrepreneurs have been celebrated for being unapologetically weird. Using pitches collected from the TV show Shark Tank, we seek to unpack the link between entrepreneur weirdness and investor interest (i.e., number of bidders) in the context of securing investor funding. Integrating Wood and colleagues' (2007) theory of non-normativity with Amabile's (1983, 1996) componential theory of creativity, we propose that weirdness, as a form of non-normativity, yields both positive and negative outcomes for entrepreneurs through two distinct pathways. Specifically, the weirdness advantage operates through entrepreneur creativity, whereas the weirdness liability operates through lower entrepreneur competence. Our empirical analyses of non-normativity suggest that entrepreneur weirdness indeed is a doubleedged sword. Further, we propose that entrepreneur warmth (being friendly and good natured) moderates both weirdness effects, by strengthening the positive effect on entrepreneur creativity and dampening the negative effect on entrepreneur competence. Implications of the advantages and disadvantages of entrepreneur weirdness are discussed.

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2023 The Authors. *Personnel Psychology* published by Wiley Periodicals LLC

<sup>&</sup>lt;sup>1</sup>Department of Psychology, University of Illinois at Urbana-Champaign, Champaign, Illinois, USA

<sup>&</sup>lt;sup>2</sup>School of Management, University at Buffalo, Buffalo, New York, USA

<sup>&</sup>lt;sup>3</sup>School of Labor & Employment Relations and Department of Psychology, University of Illinois at Urbana-Champaign, Champaign, Illinois, USA

<sup>&</sup>lt;sup>4</sup>Lee Business School, University of Nevada, Las Vegas, Nevada, USA

### KEYWORDS entrepreneurship, weirdness, creativity

#### 1 | INTRODUCTION

"We can't be afraid of being weird."

Andrew Mason, Founder and CEO of Groupon.com

"Stay weird, stay different."

Graham Moore, Author and Director

"Whatever you do, be different. ... If you're different, you will stand out."

Anita Roddick, Founder of The Body Shop

Entrepreneurs are often considered "a quirky bunch" (Scudamore, 2017). Stories abound of the strange tendencies associated with characters such as Steve Jobs, Elon Musk, and Warren Buffett (Matousek, 2019; Taylor, 2015; Terry, 2017). In fact, these and other well-known individuals may make it seem as though being an oddball is a prerequisite for entrepreneurial success (Brogan, 2014). To illustrate, Steve Jobs, the former CEO of Apple, is known for his unusual behaviors such as soaking his feet in company toilets, taking an annual salary of \$1, and eating only specific foods (e.g., carrots and apples) while maintaining a strict dieting regimen (Isaacson, 2011; Tibken, 2011). At the same time, he is also considered one of the most creative leaders in the business world (The Citizen, 2021). Another successful entrepreneur, Tony Hsieh (former CEO of Zappos—an online retailer on the Fortune 100 Best Companies to Work For), was known for asking job applicants on a 1 to 10 scale how weird they were, in order to better identify individuals who would fit with Zappos' creative culture (Kero, 2019).

Consistent with Zappos' hiring strategy, we suggest that weirdness can be beneficial to entrepreneur creativity—with weirdness being defined as an individual difference characterized by failing to adhere to widely accepted social norms regarding one's appearance, speech, or behavior such that one is considered odd, strange, or abnormal (Wood et al., 2007). Weirdness is potentially beneficial because conforming to norms leaves little room to think in new ways or change existing approaches to solving problems, which are key components of creativity (Nemeth & Staw, 1989; Sutton, 2002). Further, it is widely acknowledged that "Creativity is an indispensable component in the entire entrepreneurship process" (Zhou, 2008, p. 2; see also Gilad, 1984; Ward, 2004). Thus, there appears to be a persistent notion that weirdness is a valuable attribute for entrepreneurs to possess—likely due to its positive influence on creativity (i.e., the degree to which entrepreneurs' ideas, products, and services would be considered both novel and useful; Amabile, 1988).

Despite seemingly common lay beliefs that weird individuals are more creative, there is surprisingly little work on this topic, particularly in the management and entrepreneurship domains. Research on weirdness currently resides primarily in personality psychology under the umbrella of normality evaluations, which are a sub-type of evaluative personality judgment (Benet-Martínez & Waller, 2002; Wood et al., 2007). Although we are unaware of research specifically relating non-normativity to creativity, implicit theories of creativity have long associated it with adjectives such as "nonconformist," "unconventional," and "unorthodox" (e.g., Newell et al, 1979; Sternberg, 1985). Indeed, numerous scholars have suggested that creativity is achieved by deviating from normative criteria (Amabile, 1996; Eisenman, 1990; see also Adarves-Yorno et al., 2007).

At the same time, however, being weird has potential downsides for entrepreneurs. Bucking social norms and thinking far outside the box can lead to new ideas, but these ideas must at some point be thoroughly researched

and carefully implemented. Consistent with this observation, the componential theory of creativity (Amabile, 1983, 1996), which attempts to capture creativity's main drivers, emphasizes that creative performance requires not only non-conformity and other creativity-relevant skills and attributes, but also competence in the domain in which one is attempting to enact creativity (such as knowledge about the topic and technical skill). Related to being less traditional and more willing to bend the rules, weird individuals tend to be less conscientious (Wood et al., 2007), and thus may be less likely to accrue task-based skills (Barrick & Mount, 1991). As a consequence, deficits in organization, reliability, and efficiency may be relatively common roadblocks that hinder the development of capabilities necessary to fuel creative performance for weird entrepreneurs. For example, in addition to his many successes, Steve Jobs was often criticized for lacking technical knowledge that some speculate might have contributed to launching numerous product failures such as NeXT computer, Apple Lisa, Macintosh TV, the Apple III, the Power Mac G4 Cube (Owens, 2022; Sims, 2013). In sum, the willingness to eschew social norms may enhance the creative thinking element of Amabile's model (1983, 1996), but it also has potential downsides through its deleterious effects on domain-relevant competence.

Despite these theoretical and anecdotal connections between weirdness and entrepreneurs' eventual outcomes, what we are currently missing is a systematic analysis of weirdness that leverages the theory of non-normativity to consider the potentially opposing forces governing its influence on creative processes. The purpose of the current paper is to develop theory to explain entrepreneur weirdness effects on investors' decisions to support a venture—specifying that weirdness can be simultaneously beneficial and detrimental through its effects on product creativity. By taking a micro perspective to examine how, when, and why non-normativity influences entrepreneurial outcomes, we offer several contributions to the entrepreneurship literature. First, we integrate insights from Wood et al.'s theory of non-normativity (Wood et al., 2007) with Amabile's componential theory of creativity (Amabile, 1983, 1996) to introduce the construct of weirdness to the entrepreneurship literature. This allows the first rigorous investigation of how weirdness affects valued entrepreneurial outcomes including product creativity and investors' funding decisions. In doing so, we advance entrepreneurship theory by furthering our understanding of what it takes to be a successful entrepreneur.

Second, we investigate whether weirdness operates through two specific, countervailing mechanisms—higher entrepreneur creativity and lower entrepreneur competence. Our examination of weirdness is informative because it challenges existing beliefs about the value of weirdness for entrepreneurs. As demonstrated by the quotes included at the beginning of this paper—people outside academia have tended to endorse weirdness for entrepreneurs, although with little reliance on objective data to back up these rosy pronouncements. In contrast, scholars have primarily focused on the downsides of being weird, particularly with regard to interpersonal functioning (e.g., Kim et al., 2020; Wood et al., 2007). There seems to be a relative overemphasis from each camp on the advantages (or disadvantages) of being weird with less attention directed toward considering the merits of the alternative viewpoint. Our paper takes a more balanced perspective, simultaneously specifying both benefits and drawbacks of weirdness for entrepreneurs.

Third, we provide insight into who gets the most out of being weird, and we do so by examining how the proposed entrepreneur weirdness effects are influenced by the fundamental interpersonal trait of warmth (being friendly and good natured; Wiggins, 1979, 1991). Specifically, entrepreneur warmth is proposed to condition the effects of entrepreneur weirdness, such that weirdness becomes both more beneficial for entrepreneur creativity, and less of a liability for entrepreneur competence, when the entrepreneur also possesses interpersonal warmth. We summarize our overall theoretical model in Figure 1, which specifies the dual pathways (entrepreneur creativity and competence) through which entrepreneur weirdness takes its effects on product creativity and investor funding decisions.

To test our predictions, we use pitches from the TV show *Shark Tank*. Pitch contexts such as these are highly relevant to entrepreneurs (Balachandra et al., 2019; Smith & Viceisza, 2018). Similar to venture capital and angel investments, *Shark Tank* investments can help relieve financial constraints for start-ups, bring them mentoring and networking opportunities, and serve as a certification of quality (Pollack et al., 2012; Sanchez-Ruiz et al., 2021; Smith & Viceisza, 2018). There are many high-profile pitch competitions with large cash prizes, particularly for new start-ups, that can help make or break a company's future (e.g., Martucci, 2022). Assessing how entrepreneurs' weirdness affects

FIGURE 1 Theorized model of entrepreneur weirdness, product creativity, and investment outcomes. Hypothesized path from entrepreneur weirdness to entrepreneur competence is a negative path. H = Hypothesis. H1b and H2b represent indirect effects. Serial indirect effect results are shown in Table 4. H3a, H3b, H4, and H5 represent warmth moderation effects.

performance in this domain offers a concrete opportunity to more thoroughly examine the micro-psychological processes that facilitate the emergence and success of entrepreneurs, which have tended to receive less attention than the predominant macro perspectives originating from fields such as economics and strategy. Overall, we introduce non-normativity as a relatively untapped area of personality psychology that is relevant to engaging in creativity and entrepreneurship, and we hope our theorizing will serve as an impetus for further investigation into the effects of weirdness in the workplace.

#### 2 | What does it mean to be weird? The theory of non-normativity

Currently, there is a cultural push for the belief that "weird is wonderful." If you type "being weird" into an online search engine (e.g., Google), it auto-populates phrases such as "being weird is a good thing," "being weird is cool," and "being weird in a good way." But what does it mean to be weird? Expanding upon prior work (e.g., Offer & Sabshin, 1966, 1991; Shoben, 1957; Vaillant, 2003), Wood et al. (2007) investigated this question in their seminal examination of non-normativity. They identified non-normativity as a separate dimension of evaluative personality judgment, using a lexical approach similar to how the Big Five was developed (i.e., identifying words in the English language commonly used to describe people, then assessing how these words cluster together in meaningful ways [Goldberg, 1990; Saucier & Goldberg, 1996]). In particular, Wood et al. analyzed 92 adjectives that are highly relevant to evaluative judgment (from Saucier, 1997), including adjectives related to being normal or average (both synonyms—e.g., average, normal, and ordinary; and antonyms—e.g., abnormal, exceptional, and extraordinary). Two dimensions of non-normativity emerged—weirdness and exceptionality (Wood et al., 2007).<sup>2</sup> The weirdness factor includes adjectives such as weird, odd, strange, and abnormal; whereas the exceptionality factor includes adjectives such as exceptional, remarkable, unique, and extraordinary. Benet-Martínez and Waller (2002) similarly identified two non-normativity dimensions (which they labeled peculiarity/unconventionality and distinction) when factor analyzing evaluative personality adjectives.

Normality evaluations are considered to capture "an ideal standard of adaptive social or mental functioning" (Wood et al., 2007, p. 837). The desire to "get along" with others is a strong environmental press, identified as one of the most basic and powerful human motivational drives (Hogan & Shelton, 1998; see also the need to belong; Baumeister & Leary, 1995). The importance of fitting in with social groups helps explain why normative social pressure exerts such a powerful influence on people throughout their lives (e.g., Asch, 1948; Deutsch & Gerard, 1955; Roberts et al., 2005). Being weird means that someone has failed to conform to these social norms, either through choice or a lack of ability to conform. Wood et al. (2007) demonstrated that individuals who perceive themselves as weird (e.g., being odd, strange, abnormal) reported having trouble fitting in with their peers and expressed lower satisfaction with life as well as a desire to change their personalities. In contrast, exceptionality (e.g., being remarkable, unique, extraordinary) captures the evaluation that one is non-normative because the individual is *above* average. The person in question exceeds

others' expectations for acceptable behavior. Thus, exceptionality, in contrast to weirdness, is not theoretically accompanied by reduced subjective well-being nor social pressure to change one's personality to better adhere to social norms (Wood et al., 2007). Further, unlike exceptionality, weirdness connotes a lack of awareness of or respect for social norms. It is this disregard for social norms that makes weirdness the focus of our current paper, as we propose that norm violation simultaneously holds both advantages and disadvantages for entrepreneurs.

#### 3 | ENTREPRENEUR WEIRDNESS AND CREATIVITY

Interestingly, in contrast to the "weird is wonderful" cultural movement, the non-normativity literature paints a relatively darker picture of weirdness, particularly in terms of its impact on social relationships and subjective well-being (e.g., Leone, 2010; Roberts et al., 2013; Wood et al., 2007). We found it surprising that there has been comparatively little research emphasis on the positive side of weirdness. As we outlined above, however, we believe a key outcome for which weirdness may be particularly beneficial is creativity. Indeed, the potential benefits and undercurrent of complexity are hinted at in research on mental illness, in which scholars have found that psychopathologies related to approach motivation (e.g., positive schizotypy and risk of bipolar disorder) are associated with increased creativity, whereas psychopathologies related to avoidance motivation (e.g., depressive mood and anxiety) are not (Baas et al., 2016). However, in contrast to existing work examining the "mad genius" hypothesis (e.g., Simonton, 2014), weirdness is a sub-clinical individual difference that exists on a spectrum from low to high levels. It is useful to examine because it allows us to investigate the influence of more general evaluations about norm adherence related to being odd or abnormal.

Specifically, we discuss how weirdness fits into the existing conversation about entrepreneur creativity and success. As highlighted above, the componential theory of creativity (Amabile, 1983, 1996) identifies creativity-relevant and domain-relevant processes as the two fundamental skill- and knowledge-based dimensions that predict creativity. Both entrepreneur creativity and entrepreneur competence are conceptualized as relatively stable individual differences that affect the entrepreneurial process, and as such, are essential for recognition, evaluation, and exploitation of entrepreneurial opportunities (Zhou, 2008). To expound, entrepreneur creativity and competence involve "individuals' characteristic patterns of thought, emotion, and behavior" (i.e., as personality traits; Funder, 2001, p. 198). At the same time, ratings of these individual differences—like all personality ratings—are subject to social perception; nonetheless, these social perceptions are posited to coalesce around realistic core attributes (Realistic Accuracy Model; Funder, 1995). In addition, we do not mean to imply that entrepreneur creativity/competence are somehow innate or impervious to influence by learning or by other attributes or proclivities. Indeed, we ultimately propose that one's characteristic willingness to violate (or inability to follow) norms can, for instance, enhance one's characteristic tendency to exhibit creativity, as we describe in more depth below. Our position is consistent with 21st-century paradigms within personality psychology, which hold that personality can be changed and influenced by numerous factors, while also exhibiting some stability (Roberts & Yoon, 2022).

Overall, we argue that entrepreneur weirdness influences product creativity through these two mechanisms (i.e., entrepreneur creativity and entrepreneur competence), and in turn affects investors' interest in a business venture. Below, we develop our logic for how weirdness relates to each pathway in turn: the entrepreneur creativity [creative thinking<sup>3</sup>] pathway, and the entrepreneur competence pathway (see Figure 1).

#### 3.1 | Entrepreneur creativity

Creativity-relevant processes refer to cognitive styles, skills, and personality characteristics that promote novel thinking—such as independence, risk taking, adopting fresh viewpoints, as well as an aptitude for idea generation (Amabile, 1983, 1996). Breaking free from perceptual and performance scripts is an illustration of having a creative

cognitive style, as is the capacity to synthesize information using broad, flexible categories (Amabile, 2013). Incidentally, weirdness is a personality characteristic that is arguably relevant to many core elements of the aforementioned creativity-promoting processes. Indeed, creativity scholars have long acknowledged that deviating from established norms (Gough, 1979; Morris & Leung, 2010; Warren, 2003) and being open to new experiences (Furnham & Bachtiar, 2008; Ma, 2009; Yao & Li, 2021) are key factors that facilitate creativity, and these tendencies are also hallmarks of weirdness (Wood et al., 2007).

Although there has been a dearth of research devoted to directly examining the relationship between weirdness and creativity, some limited evidence implicates potential sub-components or behavioral manifestations of being weird (e.g., unconventional behavior and non-conformity), which helps to inform our theorizing. For example, an experiment by Lissitz and Willhoft (1985) found that participants expressed the most originality when they were encouraged to embrace unusual, weird, or illogical ideas while brainstorming creative uses to which to put everyday objects. This indicates that people who have the propensity to think in unusual or weird ways may engage more readily with creativity promoting processes. Further, employees who are willing to break rules for prosocial reasons (an example of eschewing organizational social norms) have higher creative performance (Petrou et al., 2020). In addition, an intriguing study by Jaussi and Dionne (2003) found that being exposed to unconventional behavior enacted by an assigned leader in a lab (e.g., "standing on furniture" or "hanging ideas on clotheslines") prompted higher creativity among those in the weird role model condition (p. 475). One interpretation is that this situation served as a weirdness prompt, freeing participants to be weirder themselves, and through doing so enhanced creative production.

Thus, based on how weirdness is conceptualized and nascent empirical evidence, we argue that weirdness is conducive to core creative processes, such as taking new perspectives, "eschewing conformity" and making "unusual associations"—which have been highlighted as critical in the componential theory of creativity (Amabile & Pratt, 2016, p. 160) as well as in the creativity literature more broadly (e.g., Goncalo & Staw, 2006; Gough, 1992; Lua et al., 2023; Runco, 2004). As such, we expect that weird entrepreneurs will generally demonstrate greater creative propensities than those lower in weirdness. Based on this logic, we hypothesize the following:

Hypothesis 1a: Entrepreneur weirdness is positively related to entrepreneur creativity.

In addition to theorizing about the connection between entrepreneur weirdness and individual creativity, we examine the downstream evaluation of whether the product that an entrepreneur is pitching to investors is creative (see Figure 1). In particular, we test the contention that not only do weird individuals have greater creative propensities, but those general propensities have measurable effects on the eventual creative quality of their products (i.e., product creativity). This would suggest that there is in fact some legitimacy to the creative personality often ascribed to weird individuals. In this way, consistent with recommendations in the creativity literature regarding the need to differentiate between distinct creative criteria (Montag et al., 2012; Shalley et al., 2004), we distinguish the creativity of entrepreneurs' products (i.e., a specific creative outcome) from the creativity of the entrepreneurs themselves (i.e., enduring individual tendencies to think and act creatively).

Specifically, we investigate the premise that weird entrepreneurs tend to engage with creativity-relevant processes, and that this characteristic of individual creativity in turn prompts them to generate more creative products. This logical flow is consistent with the theory of non-normativity, which indicates that weirdness is associated with tendencies that would facilitate creative outcomes, as captured through the creativity-relevant processes pathway in the componential model of creativity (Amabile, 1983, 1996). Altogether, we expect to find support for the prediction that individual differences in entrepreneurs' creative tendencies mediate the effect of weirdness on product creativity.

**Hypothesis 1b**: Entrepreneur weirdness has a positive indirect effect on product creativity via entrepreneur creativity.

#### 3.2 | Entrepreneur competence

A second important set of processes necessary to enhance creative performance, according to the componential theory of creativity, is domain-relevant competence (Amabile, 1983, 1996). Competence refers to capabilities in the specific areas in which individuals are working—in this case, entrepreneurial venturing as well as domain-relevant expertise in the field of the business idea being pitched (Man et al., 2002). Competence in domain-relevant areas offers a solid foundation necessary to develop creative products. In addition to assisting with problem identification, such capabilities provide the expertise necessary for problem resolution. For example, competent entrepreneurs can develop robust representations and solutions, especially to complex problems (Baron & Ensley, 2006; Furr et al., 2012; Whittlesea, 1997). Entrepreneurs who possess higher levels of competence are more likely to comprehend a problem's underlying causes and to mix and recombine various ideas to come up with original solutions (Shane, 2000). In short, individuals should be competent in the domain in which they are striving to be creative in order to have the best opportunity to produce novel and useful outcomes. Entrepreneur competence is thus likely to enhance product creativity.

Drawing on non-normativity theory, we further argue that weirdness can be associated with lower competence. Weird individuals are those who do not follow norms, either due to personal preference or lack of social awareness regarding what those norms entail. This may be problematic to the extent that people who are weird can immerse themselves in an alternate reality where deadlines, practical obstacles, and others' opinions simply hold less weight. They may find rules and regulations restricting. Although these tendencies can help one to think creatively, entrepreneurs ultimately need to execute—commercializing a product or business idea that others find profitable while following relevant business principles and adhering to legal constraints. In other words, weird entrepreneurs must remain grounded enough to turn their innovative ideas into reality.

Although weirdness may help to enhance creativity through being nontraditional and fostering a willingness to break rules, some of these same features overlap with (lower) conscientiousness (John & Srivastava, 1999). It is not surprising then that weirdness has a moderate negative relationship with conscientiousness (Kim et al., 2023; Wood et al., 2007)—a trait linked to being self-disciplined, achievement-striving, organized, and reliable (Bakker et al., 2012). Conscientiousness contributes to task performance across many types of jobs (Barrick & Mount, 1991), including entrepreneurship (Zhao et al., 2010). Thus, it seems likely that weirdness, while enabling individuals' creativity, could also hinder their ability to develop a conducive working style necessary for developing important domain-relevant competencies. We therefore expect to find the following:

Hypothesis 2a: Entrepreneur weirdness is negatively related to entrepreneur competence.

Integrating the logic above, we also predict that entrepreneur weirdness will have an indirect negative effect on product creativity through deficits in entrepreneur competence. In particular, the maintenance of a working style that contributes to the acquisition of domain-relevant competence is considered an important factor in the componential model for enhancing creative production (Amabile, 1983). The tendency to be dreamers who "march to the beat of their own drum" could contribute to practical deficiencies that are critical to the process of turning a creative idea into a creative product that attracts investors. As a result, we propose that weirdness can negatively influence product creativity via a low-competence pathway.

**Hypothesis 2b**: Entrepreneur weirdness has a negative indirect effect on product creativity via entrepreneur competence.

#### 3.3 | The moderating role of entrepreneur warmth

In the sections above, we used the theory of non-normativity to propose that entrepreneur weirdness is a double-edged sword: it can boost entrepreneur creativity—but impair entrepreneur competence. Given this proposed pattern (that weirdness carries both advantages and disadvantages), we next examine whether an additional entrepreneur attribute could potentially interact with weirdness to both enhance its positive effects and buffer its negative effects. In the current work, we propose that a critical differentiating factor is entrepreneur warmth. Warmth is the tendency to be friendly, warm, and good natured; it has been identified as a fundamental dimension of human personality within interpersonal personality theory (i.e., warmth and dominance are the two core axes of the interpersonal circumplex that characterizes all interpersonal behavior; Wiggins, 1979, 1991). Warmth holds particular promise as a fundamental personality concept that might condition the effects of entrepreneur weirdness such that it acts as an antidote to the drawbacks of weirdness.

According to Van Kleef et al. (2015) norms serve to maintain social order, and norm violators (such as those who are atypical or weird) thus threaten society by endangering the continuity of implicit rules that govern behavior beneficial to the collective. In theory, weirdness (as a form of norm violation) can be a liability because it signals that an individual cannot be relied upon to behave in socially-sanctioned ways that contribute to the benefit of others. As a trait, warmth has the very opposite effect. According to Abele and Wojciszke (2007), warmth is the primary dimension in human personality dedicated to the profitability and well-being of others. Norm violation signals a threat to society, whereas warmth conveys an intention to care for and protect others in society. As such, when trait warmth is bundled with weirdness, it alleviates the primary threat that weirdness represents—it indicates that the weird individual does not pose harm to the collective. Accordingly, we expect that entrepreneur warmth will condition the effects of weirdness. It will both strengthen the positive effect of weirdness on entrepreneur creativity and weaken the negative impact of weirdness on entrepreneur competence. Altogether, we hypothesize the following:

**Hypothesis 3a**: Entrepreneur warmth moderates the relationship between entrepreneur weirdness and entrepreneur creativity, such that the relationship is more positive when entrepreneur warmth is higher.

**Hypothesis 3b:** Entrepreneur warmth moderates the relationship between entrepreneur weirdness and entrepreneur competence, such that the relationship is less negative when entrepreneur warmth is higher.

## 3.4 Integrated model of entrepreneur weirdness effects on product creativity and investor funding decisions

In the preceding sections, we have articulated two pathways through which entrepreneur weirdness may affect product creativity: (a) an entrepreneur creativity path (a positive indirect effect of weirdness on product creativity), and (b) an entrepreneur competence path (a negative indirect effect of weirdness on product creativity). Next, we establish that product creativity affects the actual success of the entrepreneur's pitch. In order to incorporate such practical consequences, we specify the downstream effects on investor funding decisions, in particular the number of bidders (i.e., the number of investors who bid on the product being pitched). The number of bidders has been studied when sellers need to attract potential buyers (e.g., bid competition, Carr, 2005; or in a public bid project, Shrestha & Pradhananga, 2010). A bid or offer generally indicates an investor's decision to fund the pitched idea (typically in return for some equity in the venture). As such, these are critical milestones for entrepreneurs pitching to investors (Boulton et al., 2019; Ciuchta et al., 2018). Since creative products are likely to be valued more by customers (Im et al., 2013) and demonstrate higher market potential (Nakata et al., 2018), we expect product creativity will relate positively to

investor funding decisions. On the basis of the aforementioned rationale, we propose the theoretical model depicted in Figure 1, which explains the effects of entrepreneur weirdness on entrepreneurship outcomes (product creativity and investor funding decisions). Our moderation hypotheses, when taken together with the mediation paths shown in Figure 1, imply moderated mediation effects:

Hypothesis 4: Entrepreneur warmth moderates the serial indirect effect of entrepreneur weirdness on investor funding decisions via entrepreneur creativity and product creativity, such that the serial indirect effect (i.e., Entrepreneur Weirdness  $\rightarrow$  Entrepreneur Creativity  $\rightarrow$  Product Creativity  $\rightarrow$  Investor Funding Decisions) is more positive when entrepreneur warmth is higher.

Hypothesis 5: Entrepreneur warmth moderates the serial indirect effect of entrepreneur weirdness on investor funding decisions via entrepreneur competence and product creativity, such that the serial indirect effect (i.e., Entrepreneur Weirdness → Entrepreneur Competence → Product Creativity → Investor Funding Decisions) is less negative when entrepreneur warmth is higher.

#### 4 | METHOD

#### 4.1 | Participants and procedure

To investigate our proposed model of entrepreneur weirdness and creativity, we used business pitches featured on the TV show *Shark Tank*. In this TV show, entrepreneurs pitch their products to potential investors (called *Sharks*) who then decide whether to invest in the opportunity. We utilized the most recent five seasons (i.e., Seasons 8 to 12), which included N = 213 single-entrepreneur pitches (69.5% men and 67.6% White). We chose to restrict our study to pitches by single entrepreneurs to avoid the difficulties associated with evaluating the personality traits of an entrepreneurial team (see Ciuchta et al., 2018 for a similar rationale).

In addition, three samples of raters<sup>5</sup> were used to evaluate (a) the weirdness of the Shark Tank entrepreneurs (Rater Sample 1, N = 389), (b) entrepreneur creativity and competence (Rater Sample 2, N = 837), and (c) the attributes of the products that appeared in each pitch, specifically product creativity (Rater Sample 3, N = 464). All raters were recruited via Amazon Mturk in 2022. The separate rater samples were used to reduce concerns associated with common method variance (Podsakoff et al., 2003).

Rater Sample 1: Entrepreneur weirdness. The first rater sample assessed the weirdness of the entrepreneurs based upon watching the video pitches. Specifically, we used CloudResearch to recruit raters who (1) were US citizens and native English speakers, (2) resided in the United States, and (3) had more than 1000 HITs approved and a  $\geq$ 95% approval rate. Of 402 initial responses, we removed 13 that failed to pass one or more of the four attention checks, leaving a total of 389 participants (50.4% men and 68.4% White). Participants were paid \$3.75 for completing the survey. Each rater viewed three randomly selected pitches, and each pitch was rated by 5.46 individuals on average (SD = 0.89).

Raters were shown just the pitch portion of each interaction. The pitch videos begin as an entrepreneur enters the Shark Tank stage and end when the pitch ends (e.g., the entrepreneur asks something like, "who wants to invest in this product?", shares a sample of their product with the Sharks, or begins to answer questions). The average length of the 213 pitches was 108.22 seconds (SD = 25.38). After watching each pitch, raters were asked to assess the entrepreneur's weirdness and the control variables (i.e., entrepreneur exceptionality and entrepreneur passion), described in more detail below. The average score across raters for each entrepreneur attribute was subsequently used for analyses.

Rater Sample 2: Entrepreneur creativity, competence, and warmth. In order to avoid common method bias, we used a second sample to measure entrepreneur creativity, entrepreneur competence, and entrepreneur warmth. The second sample watched the same video pitches seen by Rater Sample 1 and was recruited in the same fashion via

CloudResearch. Among the initial 886 responses, we removed 49 who did not pass one or more of the three attention checks (of the final 837 raters, 46.0% were men and 77.7% were White). Participants were paid \$3.75. Each rater viewed three randomly selected pitches and was asked to assess each entrepreneur's creativity, competence, and warmth. On average, each pitch was rated by 9.91 individuals (SD = 1.17). The average rater score for each entrepreneur attribute was used for analyses.

Rater Sample 3: Product creativity. The third sample of raters assessed the entrepreneurs' products based upon brief written descriptions of the product (without seeing the entrepreneur or the pitch) and was recruited using the same criteria on CloudResearch. Of 493 initial respondents, 29 were excluded for failing one or more of the two attention checks, leaving a final sample of 464 raters (51.6% men, 71.7% White). Participants were paid \$1.40. Raters were asked to read three randomly selected product descriptions. After reading about each product, raters were asked to rate the product's creativity. Each product was rated by 6.54 individuals on average (SD = 0.53). The average of the rater scores for each product was used for analyses.

To assess product creativity, we created short written descriptions of each Shark Tank product. This allowed us to reduce concerns due to common method variance (Podsakoff et al., 2003) because product creativity was rated by a separate sample and with a different medium (reading a short description versus watching a video). The written descriptions of each product were also unaffected by how the entrepreneur looked or behaved during the presentation (e.g., social cues), permitting a less contaminated estimate of the association between entrepreneur attributes and product creativity.

To create these written product descriptions, two research assistants who were blind to the study hypotheses were instructed to write approximately five sentences that captured each product's defining features. To standardize the information included in the descriptions, the research assistants relied upon the website http://allsharktankproducts.com/, which is an independently run website that compiles detailed information about all of the products shown on Shark Tank. Two of the manuscript's authors then reviewed the product descriptions and removed words that would directly signal the creativity of the products. Specifically, we excluded the following adjectives: creative, novel, original, innovative, unique, useful, effective, and functional. Further, we standardized the length of the product descriptions to be within  $\pm 1$ SD of the initial average number of words (initial product description length: M = 73.42 words, SD = 17.21 words). The final 213 product descriptions had an average of 73.96 words (SD = 10.96).

#### 4.2 Measures

Entrepreneur weirdness. We measured entrepreneur weirdness adapting Wood et al.'s (2007) 4-item normality scale for use with entrepreneurs. After watching each pitch, individuals from Rater Sample 1 were asked to rate the extent to which they agreed that each statement represents the entrepreneur (5-point Likert scale: 1 = strongly disagree, 5 = strongly agree). Items were: "This entrepreneur is weird"; "This entrepreneur is strange"; "This entrepreneur is abnormal"; and "This entrepreneur is odd" (Cronbach's  $\alpha = .98$ ; ICC2 = .63;  $M_{rWG(J)} = .60$ ;  $Med_{rWG(J)} = .74$ ).

Entrepreneur creativity. We measured entrepreneur creativity using four items derived from Helson et al. (1995). To measure individual differences in creativity concisely, we relied upon Helson et al.'s description of creative temperament (a subscale that can be scored from the California Psychological Inventory; Gough, 1987). In particular, Helson et al. (1995) noted, "According to Gough (1992), it correlates significantly with criteria of creativity in all cross-validating samples. The main themes are unconventionality, personal complexity, and imagination and breadth..." (p. 1176). In order to capture this broad domain of individual creativity, we asked Rater Sample 2 to rate the extent to which they agreed with each of 4 statements: "This entrepreneur is inventive"; "This entrepreneur is imaginative"; "This entrepreneur is unconventional"; and "This entrepreneur is original" (Cronbach's  $\alpha$  = .90; ICC2 = .64;  $M_{\text{rWG(J)}}$  = .75;  $Med_{\text{rWG(J)}}$  = .82).

Entrepreneur competence. We assessed entrepreneur competence using the five adjectives from the five-item competence measure of Fiske et al. (2002, p. 884). Rater Sample 2 was asked to rate the extent to which they agreed

with the statements "This entrepreneur is competent"; "This entrepreneur is confident"; "This entrepreneur is independent"; "This entrepreneur is competitive"; and "This entrepreneur is intelligent" (Cronbach's  $\alpha=.89$ ; ICC2 =.61;  $M_{rWG(J)}=.91$ ,  $Med_{rWG(J)}=.92$ ). To enhance face validity, and at the request of a helpful reviewer, we based all analyses on the single item, "this entrepreneur is competent" (ICC2 =.55;  $M_{rWG}=.69$ ;  $Med_{rWG}=.76$ ). The direction and pattern of statistical significance of the path coefficients and indirect effects remained unchanged when we used the single competence item versus the five-item measure.

Entrepreneur warmth. We measured entrepreneur warmth using the four adjectives from Fiske et al. (2002). Rater Sample 2 was asked to rate the extent to which they agreed with each of four statements: "This entrepreneur is warm"; "This entrepreneur is good natured"; "This entrepreneur is tolerant"; and "This entrepreneur is sincere" (Cronbach's  $\alpha = .92$ ; ICC2 = .52;  $M_{\text{rWG(J)}} = .88$ ;  $Med_{\text{rWG(J)}} = .91$ ).

**Product creativity.** In contrast to entrepreneur creativity, which represents the concept of creative personality, product creativity is focused on the object/product itself. It is well-accepted within the creativity literature that creativity outcome measures should assess both novelty and usefulness, in order to capture the full construct breadth (Amabile, 1983; Ford, 1996; Runco & Jaeger, 2012; Shalley et al., 2004). Thus, following these best practice recommendations, we measured both the novelty and usefulness of entrepreneurs' products (Amabile, 1988; Zhou & Hoever, 2014). Specifically, the novelty component was reflected by the adjectives *novel*, *original*, and *innovative* while the usefulness component was reflected by *useful*, *effective*, and *functional* (see Sullivan & Ford [2010], as well as Paletz & Peng [2008]). After reading each product description, Rater Sample 3 was asked to rate the extent to which they agreed with the six statements, "This product is novel"; "This product is original"; "This product is innovative"; "This product is useful"; "This product is effective"; and "This product is functional" (Cronbach's  $\alpha = .84$ ; ICC2 = .55;  $M_{\text{rWG(J)}} = .79$ ;  $Med_{\text{rWG(J)}} = .86$ ).

Investor funding decisions. Investor funding decisions (i.e., the number of bidders) was coded by research assistants who were blind to the study hypotheses. For each of the 213 pitches, the first research assistant coded all Sharks who made an offer to each entrepreneur. To test the reliability of this coding, a second coder independently coded a subset of 64 pitches (intercoder reliability r = .97). We utilized the following strategy to count the number of bidders. If there were no offers, we counted it as 0. If the same Shark made several offers, we counted it as 1 (e.g., if one Shark made three offers, it was counted as 1). If more than one Shark was involved in the same bid, we counted the number of Sharks involved in the bid (e.g., if two Sharks offered a joint bid, it was counted as 2). Finally, if the same combination of Sharks made several bids, we counted the number of Sharks involved (e.g., if the same two Sharks offered several bids, it was counted as 2).

Control variables. We also included several control variables. First, because the theory of non-normativity includes two non-normative traits—entrepreneur weirdness and entrepreneur exceptionality (Wood et al., 2007), we controlled for entrepreneur exceptionality when estimating the unique effects of weirdness. Using Rater Sample 1, we measured entrepreneur exceptionality using the four highest-loading adjectives from Wood et al.'s (2007) uniqueness scale. Items were: "This entrepreneur is exceptional"; "This entrepreneur is unique"; "This entrepreneur is extraordinary"; "This entrepreneur is remarkable" (Cronbach's  $\alpha = .94$ ; ICC2 = .37;  $M_{rWG(J)} = .63$ ;  $Med_{rWG(J)} = .77$ ). Second, we controlled for entrepreneur passion (at the request of a reviewer), as entrepreneur passion has been shown to predict investors' decisions to fund ventures (Chen et al., 2009). Using Rater Sample 1, entrepreneur passion was measured with the three highest-loading items from Chen et al.'s (2009) entrepreneur passion scale. Items were: "The entrepreneur had energetic body movements"; "The entrepreneur had rich body language"; and "The entrepreneur had an animated facial expression" (Cronbach's  $\alpha = .95$ ; ICC2 = .79;  $M_{rWG(J)} = .72$ ;  $Med_{rWG(J)} = .81$ ).

Lastly, we controlled for product category as there were diverse types of products that were pitched. We coded product category using http://sharktankshopper.com/, which is an independently run website that collects detailed information about all Shark Tank products. When product information was unavailable on this website, http://allsharktankproducts.com/ was used. In cases where there was more than one category for a product, a research assistant and the first author together chose the dominant product category. Using dummy codes for the categories that

**TABLE 1** Descriptive statistics and correlations.

	М	SD	1	2	3	4	5	6	7	8	9	10
1. Entrepreneur weirdness	2.16	0.75	(.98)									
2. Entrepreneur creativity	3.74	0.41	.17	(.90)								
3. Entrepreneur competence	4.19	0.30	32	.52	-							
4. Entrepreneur warmth	4.10	0.30	03	.44	.54	(.92)						
5. Product creativity	3.61	0.41	21	.30	.34	.11	(.84)					
6. Investor funding decisions (number of bidders)	1.46	1.25	07	.09	.06	.05	.19	-				
7. Entrepreneur exceptionality	3.38	0.54	.02	.45	.31	.27	.12	.08	(.94)			
8. Entrepreneur passion	4.23	0.80	.15	.17	03	.18	.05	.04	.30	(.95)		
9. Product category (Home, Kitchen, & Food) <sup>1</sup>	0.44	0.50	.08	.07	.05	08	.00	.07	.08	.01	-	
10. Product category (Gadgets & Apps) <sup>2</sup>	0.10	0.30	11	.02	.06	.12	.07	.02	03	08	29	-

Note: N = 213. |r| > .14 are statistically significant (p < .05). Reliability estimates appear in parentheses on the diagonal. Entrepreneur weirdness and exceptionality were rated by Rater Sample 1. Entrepreneur creativity, competence, and warmth were rated by Rater Sample 2. Product creativity was rated by Rater Sample 3.

contained >20 products in our current sample, we controlled the following product categories: (a) home, kitchen, & food, (b) gadgets & apps, and (c) other (these three categories contained 94, 21, and 98 products, respectively).

Confirmatory factor analysis. To investigate the factor structure of our study variables, we performed a confirmatory factory analysis (CFA). Product creativity was specified as a second-order factor, with first-order factors of product novelty and usefulness. The hypothesized six-factor oblique CFA model (i.e., entrepreneur weirdness, entrepreneur creativity, entrepreneur competence, entrepreneur warmth, entrepreneur exceptionality, and product creativity) produced acceptable fit (RMSEA = .087, CFI = .937, TLI = .925, SRMR = .082,  $\chi^2_{(df=214)} = 560.17$ ). All items' estimated factor loadings on their corresponding latent variables were adequate (standardized  $\lambda$  = .54-.99). Correlations among observed variables are reported in Table 1.<sup>7</sup> Further, we compared our hypothesized model (Measurement Model 1) against four alternative models: Measurement Model 2 (i.e., entrepreneur weirdness and entrepreneur creativity items load onto the same factor), Measurement Model 3 (i.e., entrepreneur weirdness and entrepreneur warmth items load onto the same factor), and Measurement Model 5 (i.e., entrepreneur weirdness, creativity, and competence items load onto the same factor). All competing models produced poorer fit compared to the hypothesized model (see Table 2).

#### 5 | RESULTS

#### 5.1 Testing hypothesized direct and indirect effects

In Table 3 and Figure 2, path coefficients and fit indices of the proposed model are provided. Model 1 (i.e., a model without interaction terms) exhibited acceptable fit indices (RMSEA = .056 [.000, .115], CFI = .981, TLI = .917, SRMR = .024,  $\chi^2_{(df=6)} = 10.07$ ). The hypothesized positive path from entrepreneur weirdness to entrepreneur creativity was statistically significant ( $\beta = 0.16$ , p = .008; supporting H1a). Further, the hypothesized negative path from entrepreneur weirdness to entrepreneur competence was also supported ( $\beta = -0.32$ , p < .001; supporting H2a). As depicted in the

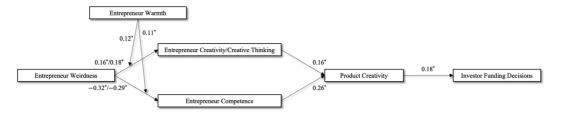
 $<sup>^{1}</sup>$ Home, Kitchen, & Food was coded as 1 (vs. other = 0).

 $<sup>^{2}</sup>$ Gadgets & Apps was coded as 1 (vs. other = 0).

**TABLE 2** Measurement model results.

	RMSEA	CFI	TLI	SRMR	$\chi^2$	df
Measurement Model 1: Oblique six-factor model (the hypothesized model)	.087	.937	.925	.082	560.17	214
Measurement Model 2: Oblique five-factor model (entrepreneur weirdness and creativity combined)	.159	.782	.749	.193	1405.06	219
Measurement Model 3: Oblique five-factor model (entrepreneur weirdness and competence combined)	.103	.909	.894	.126	713.96	218
Measurement Model 4: Oblique five-factor model (entrepreneur weirdness and warmth combined)	.150	.808	.778	.176	1265.89	219
Measurement Model 5: Oblique four-factor model (entrepreneur weirdness, creativity, and competence combined)	.165	.764	.731	.205	1509.93	222

Note: N = 213. All chi-square difference tests are significant at p < .001; and all  $\Delta CFI > .01$  (Cheung & Rensvold, 2002).



**FIGURE 2** Estimates for the theorized model of entrepreneur weirdness, product creativity, and investment outcomes.

Note. N = 213. Standardized coefficients before the slash (/) are from Model 1 (i.e., a model without the weirdness  $\times$  warmth interaction terms), after the slash are from Model 2 (i.e., a model with the weirdness  $\times$  warmth interaction terms). Model 1 fit indices: RMSEA = .056, CFI = .981, TLI = .917, SRMR = .024. Model 2 fit indices: RMSEA = .063, CFI = .971, TLI = .903, SRMR = .028. Control variable paths are not depicted (see Table 3 for the coefficients). \*p < .05.

model, there were also significant paths showing product creativity was positively predicted by both entrepreneur creativity ( $\beta = 0.16$ , p = .033) and entrepreneur competence ( $\beta = 0.26$ , p = .001), and that product creativity in turn predicted investor funding decisions ( $\beta = 0.18$ , p = .007).

To test the indirect effects, we utilized Monte Carlo simulation with 20,000 replications in the open-source software R (http://www.quantpsy.org/, Selig & Preacher, 2008). Table 4 summarizes indirect effect results for both the *creativity* mechanism and the *competence* mechanism. As shown in Table 4, the indirect path from entrepreneur weirdness to product creativity via entrepreneur creativity was positive and significant (indirect effect = 0.014, CI [0.001, 0.035]; supporting H1b), while the indirect path from entrepreneur weirdness to product creativity via entrepreneur competence was negative and significant (indirect effect = -0.045, CI [-0.080, -0.016]); supporting H2b). As such, entrepreneur weirdness was shown to be a double-edged sword, with both positive and negative indirect effects.

Further, we tested 3-path indirect effects. As expected, entrepreneur weirdness showed a positive indirect effect on investor funding decisions through entrepreneur creativity-to-product creativity (entrepreneur weirdness  $\rightarrow$  entrepreneur creativity  $\rightarrow$  product creativity  $\rightarrow$  investor funding decisions; 3-path indirect effect = 0.008, CI [0.0001, 0.023]). Also as expected, entrepreneur weirdness had a negative indirect effect on investor funding decisions through entrepreneur competence-to-product creativity (entrepreneur weirdness  $\rightarrow$  entrepreneur competence  $\rightarrow$  product creativity  $\rightarrow$  investor funding decisions; 3-path indirect effect = -0.025, CI [-0.057, -0.004]).

**TABLE 3** Results for hypothesized models.

	ш	Entrepreneur creativity	r creativity		E	Entrepreneur competence	r compete	nce	Product	Product creativity	Investor funding decisions (number of bidders)	Investor funding decisions number of bidders)
	Model 1	lel 1	Moc	Model 2	Moc	Model 1	M	Model 2				
		В		В		В		В		В		В
	B	(SE)	Ø	(SE)	Ø	(SE)	B	(SE)	Ø	(SE)	Ø	(SE)
Intercept	5.81	2.37	*66.9	2.85	11.38*	3.90	11.50	3.95	*4.01	1.64	-0.71	-0.88
		(0.19)		(0.17)		(0.16)		(0.13)		(0.35)		(0.86)
Control variables												
Product category (Home, Kitchen, & Food) $^{\rm 1}$	0.04	0.04	0.07	90:0	90:0	0.04	0.10	0.07	-0.01	-0.01	0.07	0.19
		(0.05)		(0.05)		(0.04)		(0.04)		(90:0)		(0.18)
Product category (Gadgets $\&$ Apps) $^2$	0.07	0.09	0.04	0.05	0.04	0.05	-0.00	-0.00	0.05	0.07	0.03	0.12
		(0.09)		(0.08)		(0.07)		(90:0)		(0.09)		(0:30)
Entrepreneur exceptionality	***************************************	0.33	0.36	0.27	0.34	0.21	0.23*	0.14				
		(0.05)		(0.05)		(0.04)		(0.04)				
Entrepreneur passion	0.02	0.01	-0.03	-0.01	-0.08	-0.03	-0.14	-0.06	0.03	0.02	0.04	90:0
		(0.03)		(0.03)		(0.03)		(0.02)		(0.03)		(0.11)
<u>Predictors</u>												
Entrepreneur weirdness (A)	0.16	0.09	0.18	0.10	-0.32	-0.15	-0.29	-0.13				
		(0.03)		(0.03)		(0.03)		(0.02)				
Entrepreneur warmth (B)			0.35	0.48			0.50	0.57				
				(0.08)				(0.06)				
$A \! \times \! B$			$0.12^*$	0.22			$0.11^*$	0.18				
				(0.10)				(0.08)				

TABLE 3 (Continued)

	Ë	Entrepreneur creativity	reativity		Ent	Entrepreneur competence	competenc	e O	Product	Product creativity	Investor funding decisions (number of bidders)	funding ons bidders)
	Model 1	11	Model 2	12	Model 1	11	Model 2	el 2				
	Ø	В	B	В	β	В	β	В	B	В	Ø	В
		(SE)		(SE)		(SE)		(SE)		(SE)		(SE)
Entrepreneur creativity									0.16	0.16		
										(0.08)		
Entrepreneur competence									0.26	0.31		
										(0.09)		
Product creativity											0.18	0.56
												(0.21)
	$R^2 = .23$	23	$R^2 = .36$	36	$R^2 = .22$	.22	$R^2 = .45$	.45	$R^2 = .14$	.14	$R^2 = .04$	40

with the weirdness x warmth interaction terms) fit indices: RMESA = .063; CFI = .971; TLI = .903; SRMR = .028. For the path coefficients predicting product creativity and investor funding Note: N = 213.5E = standard error. p < 05. Model 1 (i.e., without the weirdness × warmth interaction terms) fit indices: RMESA = .056; CFI = .981; TLI = .917; SRMR = .024. Model 2 (i.e., decisions, path estimates are identical between Models 1 and 2 (thus only one set of path estimates needs to be displayed under each of these DVS). <sup>1</sup>Home, Kitchen, & Food was coded as 1 (vs. other = 0). <sup>2</sup>Gadgets & Apps was coded as 1 (vs. other = 0).

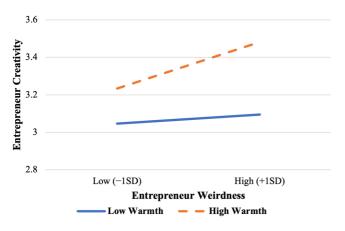


**TABLE 4** Summary of indirect effects results.

	Indirect effect	95% CI [LL, UL]
Indirect effect of Entrepreneur weirdness		
$Weirdness \rightarrow Entrepreneur  Creativity \rightarrow \\ Product  Creativity$	0.014	[0.001, 0.035]
Weirdness → Entrepreneur Creativity → Product Creativity → Investor Funding Decisions	0.008	[0.0001, 0.023]
$\label{eq:Weirdness} \begin{array}{l} \text{Weirdness} \rightarrow \text{Entrepreneur Competence} \rightarrow \\ \text{Product Creativity} \end{array}$	-0.045	[-0.080, -0.016]
Weirdness $\rightarrow$ Entrepreneur Competence $\rightarrow$ Product Creativity $\rightarrow$ Investor Funding Decisions	-0.025	[-0.057, -0.004]

Note: Indirect effects are from Model 1.

Abbreviations: CI = confidence interval; LL = lower limit; UL = upper limit.



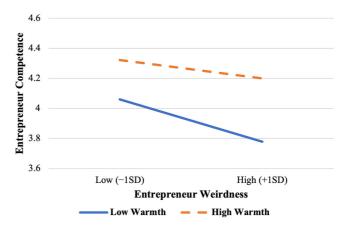
**FIGURE 3** Plot of entrepreneur weirdness × entrepreneur warmth interaction effect on entrepreneur creativity.

#### 5.2 | Testing hypothesized moderation effects

Entrepreneur weirdness and warmth were mean-centered to test the moderation effects. Model 2 (i.e., a model with interaction terms) exhibited acceptable fit (RMSEA = .063 [.005, .107], CFI = .971, TLI = .903, SRMR = .028,  $\chi^2$  ( $_{df=10}$ ) = 18.39). As shown in Table 3, entrepreneur warmth significantly moderated the positive entrepreneur weirdness effect on entrepreneur creativity ( $\beta$  = 0.12, p = .033). In particular, weirdness more strongly and positively predicted entrepreneur creativity at +1SD warmth ( $simple\ slope_{+1SDwarmth}$  = 0.16, t = 3.72, p < .001) compared to at -1SD warmth ( $simple\ slope_{-1SD\ warmth}$  = 0.03, t = .74, p = .458; Figure 3). In addition, entrepreneur warmth significantly moderated the negative entrepreneur weirdness effect on entrepreneur competence ( $\beta$  = 0.11, p = .028). Specifically, the negative relationship between weirdness and competence was weaker (less negative/more positive) when warmth was higher ( $simple\ slope_{+1SD\ warmth}$  = -0.08, t = -2.35, p = .019;  $simple\ slope_{-1SD\ warmth}$  = -0.19, t = -5.64, p < .001; Figure 4). These results support Hypotheses 3a and 3b.

Next, we tested moderated mediation effects, using a Monte Carlo simulation with 20,000 replications. We first tested whether entrepreneur warmth moderates the serial indirect effect of entrepreneur weirdness on investor funding decisions through entrepreneur creativity and product creativity sequentially (i.e., the 3-path indirect effect: entrepreneur weirdness  $\rightarrow$  entrepreneur creativity  $\rightarrow$  product creativity  $\rightarrow$  investor funding decisions). Although the serial indirect effect was supported (Table 4), results showed that entrepreneur warmth did not significantly moderate this 3-path indirect effect (estimate = 0.020, 95% CI [-0.001, 0.063]), failing to support H4.

**FIGURE 4** Plot of entrepreneur weirdness × entrepreneur warmth interaction effect on entrepreneur competence.



To elaborate, the 3-path indirect effect was significant at +1SD entrepreneur warmth (3-path indirect effect +1SD warmth = 0.015, 95% CI [0.0003, 0.041]), but was not significant at -1SD entrepreneur warmth (3-path indirect effect -1SD warmth = 0.003, 95% CI [-0.006, 0.016]), and the serial indirect effects did not significantly differ in magnitude between high and low warmth.

Further, we tested whether entrepreneur warmth moderates the serial indirect effect of entrepreneur weirdness on investor funding decisions through entrepreneur competence and product creativity sequentially (i.e., the 3-path indirect effect: entrepreneur weirdness  $\rightarrow$  entrepreneur competence  $\rightarrow$  product creativity  $\rightarrow$  investor funding decisions). Results showed that entrepreneur warmth significantly moderated this 3-path indirect effect (estimate = 0.030, 95% CI [0.001, 0.083]), supporting H5. Additionally, the negative 3-path indirect effect was significant at -1SD entrepreneur warmth (3-path indirect effect  $_{-1$ SD warmth</sub> = -0.032, 95% CI [-0.073, -0.006]); but it was not significant at +1SD entrepreneur warmth (3-path indirect effect  $_{+1$ SD warmth</sub> = -0.013, 95% CI [-0.039, 0.0001]). These conditional indirect effects were significantly different from each other at -1SD versus +1SD for entrepreneur warmth (diff. = 0.018, 95% CI [-0.001, 0.050]). Taken together, these results suggest that entrepreneur warmth reduces the negative indirect effects of weirdness, via entrepreneur competence, on product creativity and investor funding decisions.

#### 5.3 | Supplemental analyses

As further support for the causal sequence specified in Figure 1, we also tested an alternative model in which entrepreneur creativity and competence predict entrepreneur weirdness (i.e., where weirdness is an outcome rather than an antecedent of creativity and competence). This alternative model exhibited much worse fit (RMSEA = .168 [.135, .203], CFI = .665, TLI = .161, SRMR = .095,  $\chi^2_{(df=12)}$  = 84.22), in contrast to the better-fitting, hypothesized model shown in Figure 1 (RMSEA = .056 [.000, .115], CFI = .981, TLI = .917, SRMR = .024,  $\chi^2_{(df=6)}$  = 10.07). Results support the sequence shown in Figure 1 in which entrepreneur weirdness drives creativity and competence, not vice versa.

#### 6 | DISCUSSION

Our study suggests that entrepreneur weirdness can be both an advantage and a liability—being weird predicts that entrepreneurs will have enhanced creativity but diminished competence. Further, these countervailing propensities associated with weirdness are transmitted through product creativity and then ultimately influence investors' decisions to offer funding. We also provide insight into who gets the most out of being weird. Interpersonal warmth

helps weird entrepreneurs to secure more of the benefits and fewer of the costs associated with being weird. Overall, our study sought to answer three questions pertinent to entrepreneur weirdness. Does being weird help [or hurt] entrepreneurs? If so, why is this the case? And, how can the negative effects of entrepreneur weirdness be ameliorated and the positive effects enhanced? By answering these questions, the current work offers a theoretical framework as to how, when and why entrepreneur weirdness may affect important entrepreneurial outcomes. The current study introduces weirdness as a novel individual difference in entrepreneurship—shedding light on the underlying processes through which it impacts creative performance and in turn the ability to attract investors, while also revealing how entrepreneur warmth conditions these effects.

#### 6.1 | Theoretical implications

Entrepreneurship usually starts with novel ideas. How entrepreneurs get these creative ideas, however, remains a theoretically and practically important question in the field of entrepreneurship. Integrating Wood et al.'s (2007) theory of non-normativity and Amabile's (1983, 1996) componential theory of creativity, our paper advances the entrepreneurship literature by identifying weirdness as a particularly relevant individual difference in need of further exploration. Although being strange or odd often seems to align with common stereotypes about entrepreneurs, weirdness as an individual characteristic has up to this point gone largely unexplored in the entrepreneurship domain. One possible reason could be that scholars in the entrepreneurship field have been mostly unaware of existing research on non-normativity within the field of psychology, which offers both a theoretical conceptualization and a measurement tool designed to scientifically capture what it means to be weird. We see our work as bridging the divide between these siloed literatures. Our paper enhances awareness of this interesting individual characteristic among management and entrepreneurship scholars, which will hopefully encourage additional research into the implications of non-normativity for entrepreneurship and other management topics.

In addition, our model reveals that approaching weirdness as a blanket advantage or disadvantage is too simplistic and would misspecify how weirdness affects entrepreneurship outcomes. Weirdness, like other individual differences, comes with both advantages and disadvantages, yet has tended to be oversimplified by academics and practitioners alike. Our findings explain and refine both the widely-held assumption among lay audiences that weirdness carries an advantage for entrepreneurs as well as the dominant tendency in the academic non-normativity literature to approach weirdness as a disadvantage. Specifically, our introduction of entrepreneurial outcomes to the nomological net of non-normativity theory allows us to shift the current academic conversation—primarily focused on the drawbacks of weirdness—to reveal performance benefits in the entrepreneurship domain. We hope this more nuanced perspective is carried forward by future research on the outcomes of weirdness.

Furthermore, our paper has implications for creativity theory. The stereotype that eccentric individuals demonstrate enhanced creative production has long interested creativity researchers (e.g., Barron, 1993; Van Tilburg & Igou, 2014). We extend the componential theory of creativity by introducing weirdness as a unique personality variable that has countervailing effects on the dual pathways theorized to predict creative performance. That is, our model confirms that weirdness exhibits distinct and contrasting effects via two key mechanisms (i.e., creativity and competence), elaborating on the process through which an entrepreneur produces creative outcomes. These contrasting effects of weirdness are consistent with the observation that creative people possess "contradictory extremes"—attributes that seem to be inconsistent (e.g., smart vs. naïve), yet reside in the same individual (Csikszentmihalyi, 1997, 2014). Our work thus answers recent calls to more directly examine both the beneficial and detrimental effects of unconventional attributes and behaviors in the workplace (Lemoine, 2021).

Finally, we addressed the question: who does being weird help the most? To boost the positive aspects of weirdness while mitigating its drawbacks, we demonstrated the critical role of interpersonal warmth. The inclusion of warmth builds upon non-normativity theory, which emphasizes the social penalties often accrued by those who are weird (Wood et al., 2007). Warmth potentially reduces concerns about those who are odd, by reassuring others of their

positive intentions, thereby helping to counteract uncertainty associated with their likelihood of violating norms. This finding also aligns with the notion that interpersonal relationships (e.g., social networks: Salavisa et al., 2009; Shaw & Conway, 2000) or other-oriented attitudes (e.g., perspective-taking: Grant & Berry, 2011; Hoever et al., 2012) play an important role in entrepreneurship and creativity. Accordingly, we found that for those who are nice, weirdness offers a creativity advantage, which is accompanied by less liability for lower competence. <sup>11</sup>

For clarity, it is crucial to highlight that entrepreneur weirdness positively influenced investor funding behavior through enhanced entrepreneur creativity (i.e., the overall serial indirect effect through entrepreneur creativity was significant; see Table 4). Although the moderated mediation in Hypothesis 4 was not supported (i.e., the 3-path indirect effect through entrepreneur creativity was not stronger for high-warmth entrepreneurs than it was for low-warmth entrepreneurs), the simple slopes test for this serial indirect effect was nonetheless supported for entrepreneurs high in warmth (i.e., significant 3-path indirect effect via entrepreneur creativity for entrepreneurs high in warmth; see Results section).

#### 6.2 | Practical implications

Entrepreneurship transforms innovative ideas into the products and services that fuel change (Schumpeter, 1934; Shane & Venkataraman, 2000). Yet, this kind of innovation is frequently only possible if fledgling companies are lucky enough to secure startup funding (Smith & Viceisza, 2018). Many household names (e.g., Fortune 100 tech companies like Google and Apple) would not have taken off without early investor capital. For example, in 1977, Mike Markkula invested US \$250,000 (comparable to US \$1 million today) of his own money to get Apple up and running—otherwise, we may never have had the iPhones, iPads, and Macs that are now ubiquitous. Indeed, the entrepreneurship literature has emphasized the importance of financial support from the likes of angel investors (Cumming & Johan, 2017; Freear et al., 1994) and venture capitalists (Amit et al., 1998; Barry et al., 1990). Thus, understanding entrepreneur characteristics that affect outcomes associated with investor funding decisions has important practical implications for predicting which entrepreneurs and companies will get funded.

Because weirdness engenders higher creativity but lower competence, investors should assess weirdness cautiously. A Rather than simply accepting weird behavior as indicative of creativity, or rejecting entrepreneurs because of socially awkward or strange interactions, investors would be better served to adopt a balanced perspective. Weirdness is a mixed bag. Therefore, our results should not be interpreted as a reason to encourage weird entrepreneurs to act more normally. Not only could this jeopardize their creative advantage, but it may also produce facades of conformity (i.e., "false representations employees create to appear as if they embrace organizational values"), which could result in emotional exhaustion and work withdrawal (Hewlin, 2009, p. 727). Instead, in light of our findings, we recommend identifying strategies that retain the benefits of weirdness while limiting its costs. For example, investors can help weird entrepreneurs thrive by putting in place a supportive environment that is accepting of differences and encourages employees to deviate from accepted norms (Mainemelis, 2010). It may further help to educate weird entrepreneurs about the benefits of expressing warmth toward others, as well as techniques for how to do so (e.g., smilling; Tu et al., 2022). In addition, weird entrepreneurs might benefit from consciously selecting partners and team members who complement their skill sets (e.g., finding partners who are more sensitive to norms).

Lastly, although the current study focused on entrepreneurs, our findings could extend to other workers as well, including in the selection of leaders. Existing leadership research has stressed the negative aspects of a leader's norm violations such as unethical leadership styles (e.g., Hassan et al., 2023) and their detrimental consequences (e.g., follower's intention to leave; Ditrich et al., 2019). In contrast, we demonstrated here that companies can sometimes benefit from attracting and selecting employees who tend to deviate from norms (i.e., employees who are weird)— a suggestion consistent with work regarding unconventional leaders' occasionally advantageous effects on follower creativity (e.g., Jaussi & Dionne, 2003). Our findings are also consistent with Mainemelis' (2010) work on creative deviance. If organizational control is too rigid, then employees may not have room to express their non-normativity.

Adopting cultures that encourage non-normativity, or hiring applicants and promoting leaders who are non-normative, can potentially improve organizations' creative performance. In this way, our advice aligns with Tony Hsieh's strategy of trying to hire weird employees in order to build and sustain Zappos' wacky, but creative, culture (Kero, 2019).

#### 6.3 | Limitations and future research directions

As with any empirical study, there are weaknesses in the current work that can be improved upon in future work. First, we did not have access to self-reports from entrepreneurs. We nonetheless were able to leverage multisource data—including three separate samples of raters (one sample rated entrepreneur weirdness, a different sample rated entrepreneur creativity and competence, and a third sample rated written descriptions of the products to assess product creativity), as well as research assistants who coded the number of bidders for each product. The use of several separate samples of raters mitigates common method variance (e.g., halo or mood effects). Further, each variable was rated by multiple raters to better achieve valid and reliable estimates for each entrepreneur (consistent with recommendations in the personality and creativity literatures; Amabile, 1983; Borkenau et al., 2004; Levesque & Kenny, 1993). Indeed, whereas we measure entrepreneur creativity/competence using rater perceptions, we maintain that these ratings are a reflection of real entrepreneur attributes and tendencies (Funder, 1995).

Although it might have been informative to collect self-reports of weirdness, there is evidence that observers can accurately rate the personality traits of others (even at minimal acquaintance; Naumann et al., 2009), and in fact that there can be advantages to using observer reports, since individuals often do not have accurate self-conceptions (Kolar et al., 1996; Oh et al., 2011). Indeed, entrepreneur pitch contests are, by their nature, based upon very brief presentations by the entrepreneur (often only a couple minutes in duration). Past research on personality assessments using thin slices of videotaped behavior has suggested that such brief encounters can yield reliable personality ratings (e.g., mean interrater correlation = .69; 4 judges per target; Borkenau et al., 2004), so long as the trait is being rated by several judges (the current study relied upon at least 5 judges per entrepreneur).

In addition, the entrepreneurs in our sample appeared on *Shark Tank*, which may raise concerns about the generalizability of our results. For example, entrepreneurs are selected to participate in Shark Tank and may thus be more competent or established than many other entrepreneurs seeking funding. Notwithstanding this possibility, we found that variation in entrepreneur competence and creativity were meaningfully predicted in the current sample, and in turn explained significant variability in the entrepreneur outcomes. Indeed, despite appearing on TV, *Shark Tank* depicts real investors bidding on real products/businesses with their own money, and many of the entrepreneurs in this sample are not successful in securing an investor (i.e., the dependent variable has considerable variance). Past entrepreneurship research has also used Shark Tank (e.g., Ciuchta et al., 2018; Maxwell et al., 2011; Pollack et al., 2012), as well as the Canadian version, Dragon's Den (e.g., Jeffrey et al., 2016). In particular, Pollack et al. (2012) noted that *Shark Tank* is not scripted, and Sharks are not forced to make any investment decisions.

Nonetheless, *Shark Tank* may have various unique features whose influence upon the current results is as yet unknown. For example, parts of the entrepreneur-investor interactions are edited out of the condensed television program, investors may be more cavalier in their assessments of products in order to produce good television, investors may not consistently follow through on their commitments, or the average level of entrepreneur weirdness on the show may differ from the general entrepreneur population due to the need to consider television ratings. Although the current sample used real entrepreneurs and real investors making high-stakes decisions, it will still be helpful to replicate the current findings using other samples of entrepreneurs and additional types of pitch contests.

Our model also specifically focused on predicting investor interest and did not include long-term entrepreneurial outcomes such as longevity or financial success. However, Smith and Viceisza's (2018) study using Shark Tank showed that the amount of funding entrepreneurs received was positively associated with the long-run existence of the venture. It seems that either Sharks are relatively good at predicting entrepreneurs' success or that the funding they provide helps to ensure the venture's survival. One possible future research direction involves examining

whether weird individuals are more likely to become, or to succeed as, serial entrepreneurs (Plehn-Dujowich, 2010)—entrepreneurs who generate and sell off a string of business ideas or delegate the running of businesses as they take on new ventures. In some cases, such entrepreneurs could continue to be involved in the creative aspects at which they excel, but leave those elements outside of their skillset or interest to someone else. An additional limitation is that our model omits the investors' attributes, such as investors' area of expertise or past investments; an interesting avenue for future work would be to incorporate such variables.

We also did not directly investigate whether entrepreneur weirdness impacts relationship building (e.g., with investors, potential customers, business partners, and employees). Our findings involving entrepreneur warmth suggest that relationship building, as well as other related social skills and motives, might play a role as moderators of entrepreneur weirdness effects on valued outcomes. A further point, as detailed in Endnote 9, is that our results did not change when control variables were omitted, with the exception that the weirdness x warmth interaction was only observed when controlling for exceptionality. This may suggest that the tendency for warmth to mitigate the negative effects and amplify the positive effects of weirdness, might be easier to observe when weirdness (weird, strange, odd) is clearly distinguished from exceptionality (exceptional, extraordinary, remarkable). It is also worth noting that entrepreneurs often work as a team and most new ventures are founded by two or more individuals (i.e., entrepreneurial teams; Lazar et al., 2020). As such, weird entrepreneurs could seek out partners with greater norm awareness, or who have nonredundant technical expertise. A good case in point is Apple during its early days. Whereas Steve Jobs was undoubtedly the visionary who did things unconventionally, Steve Wozniak was the technical expert primarily responsible for designing Apple I and II, and Mike Markkula soon joined as the savvy marketing and business professional. In recent times, it is even easier to strategically select cofounders due to growth in founder pair-up events or matching platforms (Cohen, 2013; Cohen & Hochberg, 2014; Lazar et al., 2020). Future researchers may study how weird entrepreneurs can assemble functional collaborative teams.

Furthermore, it would be interesting to investigate the role played by the national culture in which entrepreneurs are embedded. In our study, based upon contestants appearing on a US TV show, there was not sufficient variability to examine cultural differences. However, cultural tightness-looseness is clearly relevant to our interest in trait non-normativity, as it relates to how tolerant cultures are of norm breaking (Gelfand et al., 2011). Tight cultures provide greater order and predictability but are generally less accepting of non-conformers and would be likely to provide a more hostile environment for those higher in weirdness. Based on this logic, future research could assess whether weird entrepreneurs would be less likely to succeed in tight (as opposed to loose) cultures.

#### 7 | CONCLUSION

The current study draws on non-normativity theory (Wood et al., 2007) and the componential theory of creativity (Amabile, 1983, 1996) to investigate the effects of entrepreneur weirdness on creativity and investor funding decisions. We demonstrated that weird entrepreneurs exhibit enhanced creative propensities that help to develop novel and useful products. At the same time, weird entrepreneurs face potential hurdles (likely associated with the flipside of their free-spirited tendencies) that may make accruing competence more challenging. Through both its positive and negative pathways, entrepreneur weirdness displayed indirect effects on product creativity and investor funding decisions. Finally, we found that interpersonal warmth can help weird entrepreneurs to better leverage the advantages and mitigate the liabilities of weirdness. Overall, our study contributes to understanding the bright and dark sides of being a weird entrepreneur.

#### DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author.

#### ORCID

Jun-Yeob Kim https://orcid.org/0000-0002-3675-9866

Daniel A. Newman https://orcid.org/0000-0002-5876-4498

#### **ENDNOTES**

- <sup>1</sup> Drawing upon Waller (1999) and Saucier (1997), Wood et al. (2007) defined normality [weirdness] as whether an individual tends to "adhere to some ideal standard for proper social functioning...," and noted that "normality evaluations act primarily as a barometer of whether individuals are acting in accordance with standards for acceptable or proper behavior..." (p. 863).
- <sup>2</sup>Wood et al. (2007) originally labeled the two dimensions of non-normality as *normality* and *uniqueness*, but we relabel them *weirdness* and *exceptionality*. We chose new labels because: (a) in Wood et al.'s factor analysis, the adjectives *weird* and *exceptional* had higher loadings on their corresponding factors, compared to *normal* and *unique*, respectively, (b) most items composing weirdness were negatively valenced (i.e., weird, abnormal, and odd), so we chose a negatively valenced label, (c) non-normality was ambiguously used by Wood et al. both as an umbrella term (that includes weirdness and exceptionality) and to refer to the normality/weirdness sub-dimension, and (d) the term normality is associated with probability distributions (e.g., O'Boyle & Aguinis, 2012), and the term uniqueness is used in the creativity literature (e.g., Dollinger, 2003) and in factor analysis (e.g., Williams et al., 2009). We thus recommend the terms weirdness and exceptionality.
- <sup>3</sup> A helpful reviewer recommended using the term "creative thinking" to distinguish this construct from other creativity constructs in the organizational behavior literature, which focus on outputs (e.g., creative products and services). For brevity, we use the terms entrepreneur creativity and entrepreneur creative thinking interchangeably in the current paper.
- <sup>4</sup> A helpful reviewer asked that we provide empirical evidence to support our arguments for the conceptual role of conscientiousness in the negative relationship between entrepreneur weirdness and competence. We thus empirically tested the relationships of conscientiousness with entrepreneur weirdness and entrepreneur competence (using 3 conscientiousness items from the BFI-2-XS [Soto & John, 2017]; Cronbach's  $\alpha = .76$ ; in our Rater Sample 1). Consistent with our theorizing, this supplemental analysis showed entrepreneur weirdness negatively related to entrepreneur conscientiousness ( $\beta = -.42$ , p < .001) and entrepreneur conscientiousness positively related to entrepreneur competence ( $\beta = .27$ , p < .001).
- <sup>5</sup> Rater Sample 1, University of Illinois IRB Approval# 22476 (Protocol title: Entrepreneurs' Personality Traits). Rater Sample 2 and 3, University at Buffalo IRB Approval# 0006490 (Protocol title: Entrepreneurs and Perceived Product Creativity).
- <sup>6</sup> All of the measures in this study except for investor funding decisions used a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree).
- <sup>7</sup>The weirdness variable had mean = 2.16 and SD = .75, suggesting ~87% of the sample would be below the scale midpoint of 3 (on a 5-pt Likert scale). To gauge how unusual this is, we compiled means and SDs from every 5-pt Likert variable reported in *Personnel Psychology* in 2022 (204 variables in total), and found that 93/204 = 46% of these variables had ≥87% of the sample on one side of the scale midpoint. So the distribution of the weirdness variable is not unusual, compared to other variables in our field. However, future scholars should be aware that a relatively small portion (~13%) of our sample was above the scale midpoint on the weirdness scale, suggesting future opportunities exist for identifying other populations in which the rate of individuals above the scale midpoint on weirdness might be higher.
- <sup>8</sup> We note that warmth and competence, two socially desirable personal attributes, are positively correlated in the current results. We did not hypothesize this warmth-competence relationship, nor do we advance any causal predictions about this association. Rather, we proposed in Hypothesis 3b that warmth is a moderator, which predicts the relationship between weirdness and competence. When testing this warmth × weirdness interaction, we naturally controlled for both main effects of warmth and weirdness on competence.
- <sup>9</sup> All study results (i.e., the direction and pattern of statistical significance for path coefficients and indirect effects) did not change when control variables were omitted, with the exception that the moderation effects of entrepreneur warmth were no longer statistically significant without controlling for entrepreneur exceptionality (moderation effect of warmth on weirdness-competence link:  $\beta = 0.10$ , p = .068; moderation effect of warmth on weirdness-creativity link:  $\beta = 0.09$ , p = .133). That is, the weirdness × warmth interaction effects depend upon isolating weirdness from exceptionality. All other hypotheses are unaffected by the control variables.
- <sup>10</sup> In other words, we found the positive 3-path indirect effect via entrepreneur creativity (entrepreneur weirdness → entrepreneur creativity → product creativity → investor funding decisions) was significant at high entrepreneur warmth, while the negative 3-path indirect effect via entrepreneur competence (entrepreneur weirdness → entrepreneur competence → product creativity → investor funding decisions) was not significant at high entrepreneur warmth—see Results section.
- <sup>11</sup>A reviewer posed the intriguing idea that, if weirdness is defined to entail either the lack of motivation to follow norms or the lack of ability to follow norms, then perhaps the lack of motivation drives the positive creativity mechanism, whereas the lack of ability drives the negative competence mechanism (see Figure 1). Although we cannot test the reviewer's idea here, it is a compelling avenue for future research.

#### REFERENCES

- Abele, A. E., & Wojciszke, B. (2007). Agency and communion from the perspective of self versus others. Journal of Personality and Social Psychology, 93(5), 751-763. https://doi.org/10.1037/0022-3514.93.5.751
- Adarves-Yorno, I., Postmes, T., & Haslam, S. A. (2007). Creative innovation or crazy irrelevance? The contribution of group norms and social identity to creative behavior. Journal of Experimental Social Psychology, 43(3), 410-416. https://doi.org/10. 1016/j.jesp.2006.02.013
- Amabile, T. M. (1983). The social psychology of creativity. Springer-Verlag, https://doi.org/10.1007/978-1-4612-5533-8
- Amabile, T. M. (1988). A model of creativity and innovation in organizations. Research in Organizational Behavior, 10(1), 123-
- Amabile, T. M. (1996). Creativity in context: Update to the social psychology of creativity. Westview. https://doi.org/10.4324/ 9780429501234
- Amabile, T. M. (2013). Componential theory of creativity. In E. H. Kessler (Ed.), Encyclopedia of management theory (pp. 135-140). Sage Publications. https://doi.org/10.4135/9781452276090
- Amabile, T. M., & Pratt, M. G. (2016). The dynamic componential model of creativity and innovation in organizations: Making progress, making meaning. Research in Organizational Behavior, 36, 157-183. https://doi.org/10.1016/j.riob.2016.10.001
- Amit, R., Brander, J., & Zott, C. (1998). Why do venture capital firms exist? Theory and Canadian evidence. Journal of Business Venturing, 13(6), 441-466. https://doi.org/10.1016/S0883-9026(97)00061-X
- Asch, S. E. (1948). The doctrine of suggestion, prestige and imitation in social psychology. Psychological Review, 55(5), 250-276. https://doi.org/10.1037/h0057270
- Baas, M., Nijstad, B. A., Boot, N. C., & De Dreu, C. K. (2016). Mad genius revisited: Vulnerability to psychopathology, biobehavioral approach-avoidance, and creativity. Psychological Bulletin, 142(5), 668-692. https://doi.org/10.1037/ bul0000049
- Bakker, A. B., Demerouti, E., & Lieke, L. T. (2012). Work engagement, performance, and active learning: The role of conscientiousness. Journal of Vocational Behavior, 80(2), 555-564. https://doi.org/10.1016/j.jvb.2011.08.008
- Balachandra, L., Briggs, T., Eddleston, K., & Brush, C. (2019). Don't pitch like a girl!: How gender stereotypes influence investor decisions. Entrepreneurship Theory and Practice, 43(1), 116-137. https://doi.org/10.1177/1042258717728028
- Baron, R. A., & Ensley, M. D. (2006). Opportunity recognition as the detection of meaningful patterns: Evidence from comparisons of novice and experienced entrepreneurs. Management Science, 52(9), 1331-1344. https://doi.org/10.1287/mnsc.
- Barrick, M. R., & Mount, M. K. (1991). The big five personality dimensions and job performance: A meta-analysis. Personnel Psychology, 44(1), 1-26. https://doi.org/10.1111/j.1744-6570.1991.tb00688.x
- Barron, F. (1993). Controllable oddness as a resource in creativity. Psychological Inquiry, 4(3), 182-184. https://doi.org/10. 1207/s15327965pli0403\_3
- Barry, C. B., Muscarella, C. J., Peavy, J. W., III, & Vetsuypens, M. R. (1990). The role of venture capital in the creation of public companies: Evidence from the going-public process. Journal of Financial Economics, 27(2), 447-471. https://doi.org/10. 1016/0304-405X(90)90064-7
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. Psychological Bulletin, 117(3), 497-529. https://doi.org/10.1037/0033-2909.117.3.497
- Benet-Martínez, V., & Waller, N. G. (2002). From adorable to worthless: Implicit and self-report structure of highly evaluative personality descriptors. European Journal of Personality, 16(1), 1-41. https://doi.org/10.1002/per.431
- Borkenau, P., Mauer, N., Riemann, R., Spinath, F. M., & Angleitner, A. (2004). Thin slices of behavior as cues of personality and intelligence. Journal of Personality and Social Psychology, 86(4), 599-614. https://doi.org/10.1037/0022-3514.86.4.599
- Boulton, T. J., Shohfi, T. D., & Zhu, P. (2019). Angels or sharks? The role of personal characteristics in angel investment decisions. Journal of Small Business Management, 57(4), 1280-1303. https://doi.org/10.1111/jsbm.12409
- Brogan, C. (2014). The freaks shall inherit the earth: Entrepreneurship for Weirdos, Misfits, and World Dominators. Wiley.
- Carr, P. G. (2005). Investigation of bid price competition measured through prebid project estimates, actual bid prices, and number of bidders. Journal of Construction Engineering and Management, 131(11), 1165-1172. https://doi.org/10.1061/ (ASCE)0733-9364(2005)131:11(1165)
- Chen, X. P., Yao, X., & Kotha, S. (2009). Entrepreneur passion and preparedness in business plan presentations: A persuasion analysis of venture capitalists' funding decisions. Academy of Management Journal, 52(1), 199-214. https://doi.org/10.5465/ amj.2009.36462018
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. Structural Equation Modeling, 9(2), 233-255. https://doi.org/10.1207/S15328007SEM0902\_5
- Ciuchta, M. P., Letwin, C., Stevenson, R., McMahon, S., & Huvaj, M. N. (2018). Betting on the coachable entrepreneur: Signaling and social exchange in entrepreneurial pitches. Entrepreneurship Theory and Practice, 42(6), 860-885. https://doi.org/10. 1177/1042258717725520

- Cohen, S. (2013). How to accelerate learning: Entrepreneurial ventures participating in accelerator programs. The University of North Carolina at Chapel Hill. https://doi.org/10.5465/ambpp.2013.14803abstract
- Cohen, S., & Hochberg, Y. V. (2014). Accelerating startups: The seed accelerator phenomenon. SSRN Electronic Journal, 1–16. https://doi.org/10.2139/ssrn.2418000
- Csikszentmihalyi, M. (1997). Creativity: Flow and the psychology of discovery and invention. Harper Perennial.
- Csikszentmihalyi, M. (2014). The systems model of creativity: The collected works of Mihaly Csikszentmihalyi. Springer. https://doi.org/10.1007/978-94-017-9085-7
- Cumming, D., & Johan, S. (2017). The problems with and promise of entrepreneurial finance. *Strategic Entrepreneurship Journal*, 11(3), 357–370. https://doi.org/10.1002/sej.1265
- Deutsch, M., & Gerard, H. B. (1955). A study of normative and informational social influences upon individual judgment. *Journal of Abnormal and Social Psychology*, 51(3), 629–636. https://doi.org/10.1037/h0046408
- Ditrich, L., Lüders, A., Jonas, E., & Sassenberg, K. (2019). Leader's group-norm violations elicit intentions to leave the group-If the group-norm is not affirmed. *Journal of Experimental Social Psychology*, 84, 103798. https://doi.org/10.1016/j.jesp.2019. 03.009
- Dollinger, S. J. (2003). Need for uniqueness, need for cognition, and creativity. *Journal of Creative Behavior*, 37(2), 99–116. https://doi.org/10.1002/j.2162-6057.2003.tb00828.x
- Eisenman, R. (1990). Creativity, preference for complexity, and physical and mental illness. *Creativity Research Journal*, 3(3), 231–236. https://doi.org/10.1080/10400419009534355
- Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, 82(6), 878–902. https://doi.org/10.1037/0022-3514.82.6.878
- Freear, J., Sohl, J. E., & Wetzel Jr, W. E. (1994). Angels and non-angels: Are there differences? *Journal of Business Venturing*, 9(2), 109–123. https://doi.org/10.1016/0883-9026(94)90004-3
- Furr, N. R., Cavarretta, F., & Garg, S. (2012). Who changes course? The role of domain knowledge and novel framing in making technology changes. Strategic Entrepreneurship Journal, 6(3), 236–256. https://doi.org/10.1002/sej.1137
- Ford, C. M. (1996). A theory of individual creative action in multiple social domains. Academy of Management Review, 21(4), 1112–1142. https://doi.org/10.2307/259166
- Funder, D. C. (1995). On the accuracy of personality judgment: A realistic approach. *Psychological Review*, 102(4), 652–670. https://doi.org/10.1037/0033-295X.102.4.652
- Funder, D. C. (2001). Personality. Annual Review of Psychology, 52, 197–221. https://doi.org/10.1146/annurev.psych.52.1.197 Furnham, A., & Bachtiar, V. (2008). Personality and intelligence as predictors of creativity. Personality and Individual Differences, 45(7), 613–617. https://doi.org/10.1016/j.paid.2008.06.023
- Gelfand, M. J., Raver, J. L., Nishii, L., Leslie, L. M., Lun, J., Lim, B. C., Duan, L., Almaliach, A., Ang, S., Arnadottir, J., Aycan, Z., Boehnke, K., Boski, P., Cabecinhas, R., Chan, D., Chhokar, J., D'Amato, A., Ferrer, M., Fischlmayr, I. C., ... Yamaguchi, S. (2011). Differences between tight and loose cultures: A 33-nation study. Science, 332(6033), 1100–1104. https://doi.org/10.1126/science.1197754
- Gilad, B. (1984). Entrepreneurship: The issue of creativity in the market place. *Journal of Creative Behavior*, 18(3), 151–224. https://doi.org/10.1002/j.2162-6057.1984.tb00379.x
- Goldberg, L. R. (1990). An alternative" description of personality": The big-five factor structure. *Journal of Personality and Social Psychology*, 59(6), 1216–1229. https://doi.org/10.1037/0022-3514.59.6.1216
- Goncalo, J. A., & Staw, B. M. (2006). Individualism-collectivism and group creativity. *Organizational Behavior and Human Decision Processes*, 100(1), 96–109. https://doi.org/10.1016/j.obhdp.2005.11.003
- Gough, H. G. (1979). A creative personality scale for the adjective check list. *Journal of Personality and Social Psychology*, 37(8), 1398–1405. https://doi.org/10.1037/0022-3514.37.8.1398
- Gough, H. G. (1987). Administrator's guide for the California Psychological Inventory. Educational and Psychological Measurement, 46, 205–213.
- Gough, H. G. (1992). Assessment of creative potential in psychology and the development of a creative temperament scale for the CPI. In J. C. Rosen & P. McReynolds (Eds.), Advances in psychological assessment (Vol. 8, pp. 225–257). Plenum. https:// doi.org/10.1007/978-1-4757-9101-3
- Grant, A. M., & Berry, J. W. (2011). The necessity of others is the mother of invention: Intrinsic and prosocial motivations, perspective taking, and creativity. *Academy of Management Journal*, 54(1), 73–96. https://doi.org/10.5465/amj.2011. 59215085
- Hassan, S., Kaur, P., Muchiri, M., Ogbonnaya, C., & Dhir, A. (2023). Unethical leadership: Review, synthesis and directions for future research. *Journal of Business Ethics*, 183, 511–550. https://doi.org/10.1007/s10551-022-05081-6
- Helson, R., Roberts, B., & Agronick, G. (1995). Enduringness and change in creative personality and the prediction of occupational creativity. *Journal of Personality and Social Psychology*, 69(6), 1173–1183. https://doi.org/10.1037/0022-3514.69.6. 1173

- Hewlin, P. F. (2009). Wearing the cloak: Antecedents and consequences of creating facades of conformity. *Journal of Applied Psychology*, 94(3), 727–741. https://doi.org/10.1037/a0015228
- Hogan, R., & Shelton, D. (1998). A socioanalytic perspective on job performance. *Human Performance*, 11(2-3), 129–144. http://dx.doi.org/10.1080/08959285.1998.9668028
- Hoever, I. J., Van Knippenberg, D., Van Ginkel, W. P., & Barkema, H. G. (2012). Fostering team creativity: Perspective taking as key to unlocking diversity's potential. *Journal of Applied Psychology*, *97*(5), 982–996. https://doi.org/10.1037/a0029159
- Im, S., Montoya, M. M., & Workman Jr, J. P. (2013). Antecedents and consequences of creativity in product innovation teams. Journal of Product Innovation Management, 30(1), 170–185. https://doi.org/10.1111/j.1540-5885.2012.00887.x
- Isaacson, W. (2011). Steve Jobs. Simon & Schuster.
- Jaussi, K. S., & Dionne, S. D. (2003). Leading for creativity: The role of unconventional leader behavior. *Leadership Quarterly*, 14(4-5), 475–498. https://doi.org/10.1016/S1048-9843(03)00048-1
- Jeffrey, S. A., Lévesque, M., & Maxwell, A. L. (2016). The non-compensatory relationship between risk and return in business angel investment decision making. *Venture Capital*, 18(3), 189–209. https://doi.org/10.1080/13691066.2016.1172748
- John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), Handbook of personality: Theory and research (2nd ed., pp. 102–138). Guilford Press.
- Kero, V. (2019). How to answer Zappos CEO Tony Hsieh's quirky interview question. CNBC. https://www.cnbc.com/2019/01/25/how-to-answer-zappos-ceo-tony-hsiehs-strange-interview-question.html
- Kim, J.-Y., Newman, D. A., Harms, P. D., & Wood, D. (2023). Perceived Weirdness: A Multitrait-Multisource Study of Self and Other Normality Evaluations. *Personality Science*, 4, 1–23. https://doi.org/10.5964/ps.7399
- Kim, J.-Y., Hsu, N., Newman, D. A., Harms, P. D., & Wood, D. (2020). Leadership perceptions, gender, and dominant personality: The role of normality evaluations. *Journal of Research in Personality*, 87, Article 103984. https://doi.org/10.1016/j.jrp.2020. 103984
- Kolar, D. W., Funder, D. C., & Colvin, C. R. (1996). Comparing the accuracy of personality judgments by the self and knowledgeable others. *Journal of Personality*, 64(2), 311–337. https://doi.org/10.1111/j.1467-6494.1996.tb00513.x
- Lazar, M., Miron-Spektor, E., Agarwal, R., Erez, M., Goldfarb, B., & Chen, G. (2020). Entrepreneurial team formation. *Academy of Management Annals*, 14(1), 29–59. https://doi.org/10.5465/annals.2017.0131
- Lemoine, G. J. (2021). Leadership and creativity. In M. Hitt et al. (eds.), Oxford research encyclopedia of business and management. Oxford University Press.
- Leone, T. (2010). Does conforming make us more liked? perceptions of conformist and non-conformist behaviour [Doctoral dissertation].
- Levesque, M. J., & Kenny, D. A. (1993). Accuracy of behavioral predictions at zero acquaintance: A social relations analysis. Journal of Personality and Social Psychology, 65(6), 1178–1187. https://doi.org/10.1037/0022-3514.65.6.1178
- Lissitz, R. W., & Willhoft, J. L. (1985). A methodological study of the Torrance Tests of Creativity. *Journal of Educational Measurement*, 22(1), 1–11. https://doi.org/10.1111/j.1745-3984.1985.tb01044.x
- Lua, E., Liu, D., & Shalley, C. E. (2023). Multilevel outcomes of creativity in organizations: An integrative review and agenda for future research. *Journal of Organizational Behavior*, 1–25. https://doi.org/10.1002/job.2690
- Ma, H. H. (2009). The effect size of variables associated with creativity: A meta-analysis. *Creativity Research Journal*, 21(1), 30–42. https://doi.org/10.1080/10400410802633400
- Mainemelis, C. (2010). Stealing fire: Creative deviance in the evolution of new ideas. Academy of Management Review, 35, 558–578. http://dx.doi.org/10.5465/amr.35.4.zok558
- Man, T. W., Lau, T., & Chan, K. F. (2002). The competitiveness of small and medium enterprises: A conceptualization with focus on entrepreneurial competencies. *Journal of Business Venturing*, 17(2), 123–142. https://doi.org/10.1016/S0883-9026(00) 00058-6
- Martucci, B. (2022). How to win a startup pitch competition -12 tips for business success. Money Crashers. https://www.moneycrashers.com/startup-pitch-competition-guide/
- Matousek, M. (2019). The 16 most bizarre things Elon Musk has said he believes. Business Insider. https://www.businessinsider.com/13-crazy-elon-musk-quotes-things-he-believes-2016-10
- Maxwell, A. L., Jeffrey, S. A., & Lévesque, M. (2011). Business angel early stage decision making. *Journal of Business Venturing*, 26(2), 212–225. https://doi.org/10.1016/j.jbusvent.2009.09.002
- Montag, T., Maertz Jr, C. P., & Baer, M. (2012). A critical analysis of the workplace creativity criterion space. Journal of Management, 38(4), 1362–1386. https://doi.org/10.1177/0149206312441835
- Morris, M. W., & Leung, K. (2010). Creativity east and west: Perspectives and parallels. *Management and Organization Review*, 6(3), 313–327. https://doi.org/10.1111/j.1740-8784.2010.00193.x
- Nakata, C., Rubera, G., Im, S., Pae, J. H., Lee, H. J., Onzo, N., & Park, H. (2018). New product creativity antecedents and consequences: Evidence from South Korea, Japan, and China. *Journal of Product Innovation Management*, 35(6), 939–959. https://doi.org/10.1111/jpim.12436

- Naumann, L. P., Vazire, S., Rentfrow, P. J., & Gosling, S. D. (2009). Personality judgments based on physical appearance. Personality and Social Psychology Bulletin, 35(12), 1661–1671. https://doi.org/10.1177/0146167209346309
- Nemeth, C. J., & Staw, B. M. (1989). The tradeoffs of social control and innovation in groups and organizations. *Advances in Experimental Social Psychology*, 22, 175–210. https://doi.org/10.1016/S0065-2601(08)60308-1
- Newell, A., Shaw, J. C., & Simon, H. A. (1979). The processes of creative thinking. In H. Simon (Ed.), *Models of thought* (pp. 144–174). Yale University Press.
- O'Boyle, E., Jr., & Aguinis, H. (2012). The best and the rest: Revisiting the norm of normality of individual performance. *Personnel Psychology*, 65(1), 79–119. https://doi.org/10.1111/j.1744-6570.2011.01239.x
- Offer, D., & Sabshin, M. (1966). Normality: Theoretical and clinical concepts of mental health. Basic Books.
- Offer, D., & Sabshin, M. (1991). Normatology: The next step. In D. Offer & M. Sabshin (Eds.), *The diversity of normal behavior* (pp. 405–419). Basic Books.
- Oh, I. S., Wang, G., & Mount, M. K. (2011). Validity of observer ratings of the five-factor model of personality traits: A meta-analysis. *Journal of Applied Psychology*, 96(4), 762–773. https://doi.org/10.1037/a0021832
- Owen, M. (2022). Steve Jobs wasn't a good engineer, had to learn communication & sales says Wozniak. AppleInsider. https://appleinsider.com/articles/22/03/07/steve-jobs-wasnt-a-good-engineer-had-to-learn-communication-sales-says-wozniak
- Paletz, S. B., & Peng, K. (2008). Implicit theories of creativity across cultures: Novelty and appropriateness in two product domains. *Journal of Cross-Cultural Psychology*, 39(3), 286–302. https://doi.org/10.1177/0022022108315112
- Petrou, P., van der Linden, D., & Salcescu, O. C. (2020). When breaking the rules relates to creativity: The role of creative problem-solving demands and organizational constraints. *Journal of Creative Behavior*, 54(1), 184–195. https://doi.org/10.1002/jocb.354
- Plehn-Dujowich, J. (2010). A theory of serial entrepreneurship. Small Business Economics, 35, 377–398. https://doi.org/10.1007/s11187-008-9171-5
- Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. (2003). Common methods biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879
- Pollack, J. M., Rutherford, M. W., & Nagy, B. G. (2012). Preparedness and cognitive legitimacy as antecedents of new venture funding in televised business pitches. Entrepreneurship Theory and Practice, 36(5), 915–939. https://doi.org/10.1111/j.1540-6520.2012.00531.x
- Roberts, A. L., Rosario, M., Slopen, N., Calzo, J. P., & Austin, S. B. (2013). Childhood gender nonconformity, bullying victimization, and depressive symptoms across adolescence and early adulthood: An 11-year longitudinal study. *Journal of the American Academy of Child & Adolescent Psychiatry*, 52(2), 143–152. https://doi.org/10.1016/j.jaac.2012.11.006
- Roberts, B. W., Wood, D., & Smith, J. L. (2005). Evaluating five factor theory and social investment perspectives on personality trait development. *Journal of Research in Personality*, 39(1), 166–184. https://doi.org/10.1016/j.jrp.2004.08.002
- Roberts, B. W., & Yoon, H. J. (2022). Personality psychology. *Annual Review of Psychology*, 73, 489–516. https://doi.org/10.1146/annurev-psych-020821-114927
- Runco, M. A. (2004). Creativity. Annual Review of Psychology, 55, 657–687. https://doi.org/10.1146/annurev.psych.55.090902. 141502
- Runco, M. A., & Jaeger, G. J. (2012). The standard definition of creativity. Creativity Research Journal, 24(1), 92–96. https://doi.org/10.1080/10400419.2012.650092
- Salavisa, I., Videira, P., & Santos, F. (2009). Entrepreneurship and social networks in IT sectors: The case of the software industry in Portugal. *Journal of Innovation Economics*, 2(2), 15–39. https://doi.org/10.3917/jie.004.0015
- Sanchez-Ruiz, P., Wood, M. S., & Long-Ruboyianes, A. (2021). Persuasive or polarizing? The influence of entrepreneurs' use of ingratiation rhetoric on investor funding decisions. *Journal of Business Venturing*, 36(4), 106120. https://doi.org/10.1016/j. jbusvent.2021.106120
- Saucier, G. (1997). Effects of variable selection on the factor structure of person descriptors. *Journal of Personality and Social Psychology*, 73(6), 1296–1312. https://doi.org/10.1037/0022-3514.73.6.1296
- Saucier, G., & Goldberg, L. (1996). The language of personality: Lexical perspectives on the five-factor model. In J. Wiggins (Ed.), The five factor model of personality (pp. 21–50). Guilford Press.
- Schumpeter, J. A. (1934). The theory of economic development. Harvard University Press.
- Scudamore, B. (2017). 6 weird quirks of highly successful entrepreneurs (and why they work). Inc.com. https://www.inc.com/brian-scudamore/why-oddballs-make-the-best-entrepreneurs.html
- Selig, J. P., & Preacher, K. J. (2008). Monte Carlo method for assessing mediation: An interactive tool for creating confidence intervals for indirect effects [Computer software]. Available from http://quantpsy.org/
- Shalley, C. E., Zhou, J., & Oldham, G. R. (2004). The effects of personal and contextual characteristics on creativity: Where should we go from here? *Journal of Management*, 30(6), 933–958. https://doi.org/10.1016/j.jm.2004.06.007

- Shane, S. (2000). Prior knowledge and the discovery of entrepreneurial opportunities. Organization Science, 11(4), 448–469. https://doi.org/10.1287/orsc.11.4.448.14602
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. Academy of Management Review, 25(1), 217–226. https://doi.org/10.5465/amr.2000.2791611
- Shaw, E., & Conway, S. (2000). Networking and the small firm. In S. Carter & D. Jones Evans (Eds.), Enterprise and small business (pp. 367–383). Financial Times/Prentice Hall.
- Shoben, E. J. (1957). Toward a concept of the normal personality. *American Psychologist*, 12(4), 183–189. https://doi.org/10.1037/h0045253
- Shrestha, P. P., & Pradhananga, N. (2010). Correlating bid price with the number of bidders and final construction cost of public street projects. *Transportation Research Record*, 2151(1), 3–10. https://doi.org/10.3141/2151-01
- Simonton, D. K. (2014). The mad-genius paradox: Can creative people be more mentally healthy but highly creative people more mentally ill? *Perspectives on Psychological Science*, 9(5), 470–480. https://doi.org/10.1177/1745691614543973
- Sims, P. (2013). Five of Steve Jobs's biggest mistakes. *Harvard Business Review*. https://hbr.org/2013/01/five-of-steve-jobss-biggest-mi
- Smith, B., & Viceisza, A. (2018). Bite me! ABC's Shark Tank as a path to entrepreneurship. Small Business Economics, 50, 463–479. https://doi.org/10.1007/s11187-017-9880-8
- Soto, C. J., & John, O. P. (2017). Short and extra-short forms of the Big Five Inventory–2: The BFI-2-S and BFI-2-XS. *Journal of Research in Personality*, 68, 69–81. https://doi.org/10.1016/j.jrp.2017.02.004
- Sullivan, D. M., & Ford, C. M. (2010). The alignment of measures and constructs in organizational research: The case of testing measurement models of creativity. *Journal of Business and Psychology*, 25, 505–521. https://doi.org/10.1007/s10869-009-9147-8
- Sternberg, R. J. (1985). Implicit theories of intelligence, creativity, and wisdom. *Journal of Personality and Social Psychology*, 49(3), 607–627. https://doi.org/10.1037/0022-3514.49.3.607
- Sutton, R. I. (2002). Weird ideas that work: 11 1/2 practices for promoting, managing and sustaining innovation. Free Press.
- Taylor, D. (2015). 13 examples of Steve Jobs being crazy. *HowStuffWorks*. https://entertainment.howstuffworks.com/13-examples-of-steve-jobs-being-crazy.htm
- Terry, P. (2017). Warren Buffett Is Weird. Collaborative Gain. https://collaborativegain.com/warren-buffett-is-weird/
- The Citizen (2021). Corporate sufi: Becoming a creative leader. *The Citizen*. https://www.thecitizen.co.tz/tanzania/oped/corporate-sufi-becoming-a-creative-leader-2693184
- Tibken, S. (2011). Apple's Steve Jobs takes \$1 salary again. The Wall Street Journal. https://www.wsj.com/articles/SB10001424052748704739504576067693546859346
- Tu, M. H., Gilbert, E. K., & Bono, J. E. (2022). Is beauty more than skin deep? Attractiveness, power, and nonverbal presence in evaluations of hirability. *Personnel Psychology*, 75(1), 119–146. https://doi.org/10.1111/peps.12469
- Vaillant, G. E. (2003). Mental health. American Journal of Psychiatry, 160(8), 1373–1384. https://doi.org/10.1176/appi.ajp.160. 8.1373
- Van Kleef, G. A., Wanders, F., Stamkou, E., & Homan, A. C. (2015). The social dynamics of breaking the rules: Antecedents and consequences of norm-violating behavior. *Current Opinion in Psychology*, *6*, 25–31. https://doi.org/10.1016/j.copsyc.2015.
- Van Tilburg, W. A. P., & Igou, E. R. (2014). From Van Gogh to Lady Gaga: Artist eccentricity increases perceived artistic skill and art appreciation. European Journal of Social Psychology, 44(2), 93–10. https://doi.org/10.1002/ejsp.1999
- Waller, N. G. (1999). Evaluating the structure of personality. In C. Cloninger (Ed.), *Personality and psychopathology* (pp. 155–197). American Psychiatric Association.
- Ward, T. B. (2004). Cognition, creativity, and entrepreneurship. *Journal of Business Venturing*, 19(2), 173–188. https://doi.org/10.1016/S0883-9026(03)00005-3
- Warren, D. E. (2003). Constructive and destructive deviance in organizations. *Academy of Management Review*, 28(4), 622–632. https://doi.org/10.2307/30040751
- Whittlesea, B. W. A. (1997). The representation of general and particular knowledge. In D. S. Lamberts (Ed.), *Knowledge, concepts, and categories* (pp. 211–261). MIT Press. https://doi.org/10.4324/9780203765418
- Wiggins, J. S. (1979). A psychological taxonomy of trait-descriptive terms: The interpersonal domain. *Journal of Personality and Social Psychology*, 37(3), 395–412. https://doi.org/10.1037/0022-3514.37.3.395
- Wiggins, J. S. (1991). Agency and communion as conceptual coordinates for the understanding and measurement of interpersonal behavior. In D. Cicchetti & W. M. Grove (Eds.), Thinking clearly about psychology: Essays in honor of Paul E. Meehl, Vol. 1. Matters of public interest; Vol. 2. Personality and psychopathology (pp. 89–113). University of Minnesota Press.
- Williams, L. J., Vandenberg, R. J., & Edwards, J. R. (2009). 12 structural equation modeling in management research: A guide for improved analysis. Academy of Management Annals, 3(1), 543–604. https://doi.org/10.5465/19416520903065683
- Wood, D., Gosling, S. D., & Potter, J. (2007). Normality evaluations and their relation to personality traits and well-being. *Journal of Personality and Social Psychology*, 93(5), 861–879. https://doi.org/10.1037/0022-3514.93.5.861

- Yao, X., & Li, R. (2021). Big five personality traits as predictors of employee creativity in probation and formal employment periods. *Personality and Individual Differences*, 182, 109914. https://doi.org/10.1016/j.paid.2020.109914
- Zhao, H., Seibert, S. E., & Lumpkin, G. T. (2010). The relationship of personality to entrepreneurial intentions and performance: A meta-analytic review. *Journal of Management*, 36(2), 381-404. https://doi.org/10.1177/0149206309335187
- Zhou, J. (2008). New look at creativity in the entrepreneurial process. Strategic Entrepreneurship Journal, 2(1), 1–5. https://doi.org/10.1002/sej.38
- Zhou, J., & Hoever, I. J. (2014). Research on workplace creativity: A review and redirection. *Annual Review Organizational Psychology Organizational Behavior*, 1, 333–359. https://doi.org/10.1146/annurev-orgpsych-031413-091226

How to cite this article: Kim, J.-Y., Grijalva, E., Newman, D. A., & Li, Y. (2023). Entrepreneur weirdness as a double-edged sword: Effects on product creativity and investor attraction. *Personnel Psychology*, 1–28. Advance online publication. https://doi.org/10.1111/peps.12613