# Getting to Know Someone in Ten Seconds: Social Role Theory and Perceived Personality in Entrepreneurial Pitch Videos

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**Abstract** 

This manuscript investigates first impressions of the Big Five personality traits in entrepreneurial

pitch videos through the lens of social role theory. We develop hypotheses which frame

perceived entrepreneurial personality as a configuration of perceived big five traits. We suggest

that first impressions of personality influence funding both directly and indirectly via funders'

perceptions of success. To test our hypotheses, participants examined the first ten seconds of 234

crowdfunding videos using established measures regarding perceived personality traits. We find

that perceptions of a stereotypically "entrepreneurial" personality indeed predict crowdfunding

success. Our findings uniquely contribute to the literatures of entrepreneurial personality, social

role theory, first impressions, entrepreneurial pitching, and resource acquisition.

Keywords: Crowdfunding, first impressions, heuristics, signaling, automatic processing, Big 5

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### 1. Introduction

Entrepreneurial personality influences new venture performance (Anglin et al., 2018; López-Núñez et al., 2020) and has been linked to opportunity recognition (Shane & Nicolaou, 2015) and entrepreneurial intentions (Laouiti et al., 2022; Zhao et al., 2010). Recent research has demonstrated that perceptions of personality can facilitate or hinder effective fundraising efforts. Indeed, displays of the traits warmth and competence are beneficial (Oo et al., 2022) while high levels of displayed narcissism are disadvantageous (Anglin et al., 2018). While prior research has studied the influence of Big Five personality traits on entrepreneurial outcomes (e.g., Antoncic et al., 2015; Volery et al., 2013), less is known about how potential funders' perceptions of such traits may be influential. Key to the entrepreneurial resource acquisition literature is unraveling why and how investors with bounded rationality and information asymmetry efficiently provide funding given the multitude of investment alternatives. A potential narrowing technique stems from stereotypes and first impressions of personality.

Social role theory explains that there are societal expectations (i.e., stereotypes) for a given role and that deviation from expectations is detrimental. Much of the prior research involving social role theory has used it to explain gender or race differences in entrepreneurship (e.g., Anglin et al., 2018). For instance, Gupta and colleagues (2019; 2022) examine the fit between gender roles and expectations regarding different forms of entrepreneurship. With the same underlying rationale, this paper diverges from prior social role theory literature in that rather than examining surface level characteristics (e.g., race, gender), we look at the fit between personality and that of the stereotypical entrepreneurial personality profile (henceforth, entrepreneurial personality). Much like surface level characteristics, personality can be quickly discerned (Willis & Todorov, 2006) and weighed against societally-derived entrepreneurial

personality. Proceeding with this approach, our research seeks to answer the question: *do first* impressions of personality matter for entrepreneurial funding?

Specifically, we study the Big Five personality traits as they encompass nearly all other traits, and are pervasively researched and universally recognized. The Big Five taxonomy (Costa & McCrae, 1985), is the most cross-culturally valid, widely accepted and best-established broad personality trait model in existence (Judge & Zapata, 2015; Obschonka et al., 2013). The first impressions literature holds that the five traits are innately, effortlessly, and with great speed perceived naturally by humans. Thus, our research offers a view into how perceptions of personality quickly lead to perceptions regarding likelihood of entrepreneurial success. We posit and find immediate perceptions of success subsequently lead to successful funding for entrepreneurs. We conduct our study in the context of crowdfunding, wherein entrepreneurs produce and display pitch videos (e.g., Allison et al., 2022). First impressions are especially salient in this context given the ease with which audiences may "click away" from pitch videos which fail to captivate in their opening seconds.

Our research contributes to the literature in three ways. First, we build on role theory to hypothesize that entrepreneurial personality (high levels of conscientiousness, extraversion, and openness to experience combined with low levels of agreeableness and neuroticism) is the stereotypically ideal configuration of the big-five model for nascent entrepreneurs seeking funding. Since this combination of traits happens to be highly associated with cultural stereotypes of entrepreneurs, a stereotypical personality profile is created about what defines an ideal entrepreneur. In this regard, a holistic person-oriented perspective (Obschonka & Stuetzer, 2017; Magnusson & Törestad, 1993) is taken. By considering the perceived facets of an entrepreneur's broad personality, we can understand the gestalt of the societally expected

entrepreneurial personality. Interactions with entrepreneurs do not involve isolated personality traits, but rather a myriad of combinations. Thus, our study shows that the stereotype of an entrepreneurial personality is more than the sum of its parts.

Second, we demonstrate the importance of first impressions in crowdfunding. Within ten seconds of viewing a pitch, perceivers may instinctively surmise if the project would receive funding. We extend research in other disciplines which has suggested that within the first few seconds of an advertisement, potential consumers determine to continue watching it and it is vital to captivate the audience immediately for continued interaction (Teixeira et al., 2012). Similarly, in online settings, when positive first impressions are not met, people typically click away within seconds (Lim et al., 2006; Sia et al., 2009). Our hypothesis development extending these prior areas of research contribute to the entrepreneurial pitch literature in two ways. First, our work builds on past research by examining not only *what* is important to funding pitches, but also by showing that *when* the phenomenon of interest occurs may also be of vital importance (cf. Jiang et al., 2019). Second, for practitioners, this suggests that it is vital for entrepreneurial pitches to quickly catch and hold people's attention.

Third, while most papers on influences on individual funding decisions make a reasonable assumption that individual decisions aggregate to result in the overall funding performance of a venture, this leaves unexplored the specific, individual-level perceptions which drive the decision to fund. While a number of papers have focused on intentions to support a crowdfunding campaign (e.g., Davis et al., 2017), we argue that in the all-or-nothing, rewards-based crowdfunding context, individual funding support comes when the funder is persuaded that the campaign itself is likely to succeed, given that nothing happens unless the campaign achieves its funding goal and given the funder needs to also be convinced that the campaign will

lead to the production of the promised rewards. Overall, this study uniquely contributes to the literatures of entrepreneurial personality, social role theory, first impressions, entrepreneurial pitching, and resource acquisition.

#### 2. Literature Review

# 2.1. Online Funding, heuristics, and first impressions

Earlier research on venture funding focuses on how systematic choices are made. This research involves signals or cues such as social capital (Colombo et al., 2015), geographical distance (Agrawal et al., 2010), education and experience (Knight, 1994; Hsu, 2007), product stage (Davis & Allison, 2013), media coverage (Deephouse, 2000), campaign purpose (Mollick & Kuppuswamy, 2014), trustworthiness (Guimtrandy & Burger-Helmchen, 2022), authenticity (Markowitz et al., 2023) and preparedness (Chen et al., 2009; Mollick, 2014) to make informed decisions. Such factors are typically conceived as receiving systematic processing.

Complementing the systematic processing of information in funding pitches is the automatic processing of heuristic cues that are conveyed alongside them (e.g., Chen et al., 2009; Mahajan et al., 2023; Mitteness et al., 2012; Sudek, 2006). Funding providers use heuristics to limit alternatives (Shanteau, 1992) and ultimately decide on them (Chen et al., 2009). Heuristics form the initial decision and any additional information is largely ignored (Zacharakis & Meyer, 2000). Stated differently, only a limited number of cues are used in decision making (Brehmer & Brehmer, 1988).

A small but growing body of recent research demonstrates the importance of heuristics in online funding (Ren et al., 2021; Schraven van Burg et al., 2020). At the platform level backers have to choose between thousands of projects on a multitude of sites, resulting in information

overload. Conversely, at the campaign level, information scarcity exists since backers rarely have personal interactions with the entrepreneurs as is common in venture capital settings. Thus, crowdfunding backers rely on heuristics to overcome information overload as well as information scarcity when considering funding (Schraven et al., 2020). Moreover, heuristics help backers save time since the comparison of all competing products is nearly impossible (Kaminski & Hopp, 2020). Prior research has shown that backers quickly narrow their funding decisions by targeting campaigns relating to sustainability (Chan et al., 2021), already backed by risk takers (Ren et al., 2021), started by women (Johnson et al., 2018; Oo et al., 2022), or logo complexity (Mahmood et al., 2019).

Individuals "tend to automatically attend to and process images more easily than written information" (Chan & Park, 2014, p. 1) and backers automatically process visual cues (Mahmood et al., 2019) which often highly influences their judgement (Tsay, 2021). Visual heuristics are particularly pertinent in this context because entrepreneurs are typically presented in video format, providing the initial source of information. Since information asymmetry is rampant and funders have limited knowledge, heuristics play a stronger role in decision making (Zuckerman & Chaiken, 1998). Pitch videos are especially important to campaign success (Mollick, 2014), as backers use heuristics such as facial expressions (Warnick et al., 2021), displays of joy (Jiang et al., 2019) and emotion (Ren et al., 2021) to guide funding decisions. These visualizations need to be aligned where the expectations of backers/consumers match the perception of the entrepreneur, and it is important to quickly produce impressions (Kaminski & Hopp, 2020). Indeed, the most vital or influential part of the crowdfunding pitch is at the beginning (Jiang et al., 2019). This aligns with research on first impressions.

Indeed, certain traits are immediately recognizable, causing decisions about entrepreneurs to be formed quickly, whereas additional information is unlikely to sway a decision. Humans are excellent judges of complex personality traits and social characteristics. These first impressions are rapidly formed, providing a basis for external interaction (Bar et al., 2006; Willis & Todorov, 2006). Funders immediately recognize certain traits (though often subconsciously), and when those impressions indicate congruence, competence, capability, or reliability, further information only increases confidence in decisions based on first impressions.

Cognitive research provides insights into how boundedly rational decision makers understand and solve very complex decisions (Schwenk, 1988). First impressions reinforce the fact that our first visionary impressions matter, including beliefs that nascent entrepreneurs are worth investing in. The appearance of an entrepreneur and their immediate actions cause funders to infer whether traits are desirable or not. An individual's ability to read personality through first impressions allows them to have their needs met and leads to information attainment, safety, and better social relations (Hall et al., 2008). It also allows for the detection of a stranger's traits including extraversion (Spain et al., 2000), conscientiousness (Little & Perrett, 2007), assertiveness (Schmid et al., 2003), and social anxiety (Creed & Funder, 1998). Additionally, specific visual cues imprint an individual's personality traits in the minds of others. For example, first impressions about facial expressions create beliefs about extraversion (Borkenau et al., 2009), shaved heads lead to impressions of dominance and power (Mannes, 2013), and those with specific facial dimensions create views of aggressiveness (Carré et al., 2009).

Visual cues provide first impression formation not influenced by fatigue, time, or amount of information delivered (Ambady & Gray, 2002; Chan & Park, 2014; Friedman & Förster, 2010). Even facial structures allow individuals to form both specific trait impressions and

pervasive impressions (Hassin & Trope, 2000). These inferences occur effortlessly, instantly, and can influence decisions unknowingly (Willis & Todorov, 2006). The Big Five personality traits are immediately recognizable and desirable traits related to perceptions of crowdfunding success. Initial views of entrepreneurs in their pitch videos cause backers to automatically attribute personality traits, which plays an important role in funding outcomes.

# 2.2. Entrepreneurship and the Big Five personality traits

In social sciences there is a renewed interest in understanding the relationship between personality and entrepreneurship (Obschonkaet al., 2013). Spanning nearly a century, seminal efforts have been interested in examining the entrepreneurial personality (e.g., Schumpeter, 1934). Much of this renewed investigation emerged as the big five personality factors gained traction and acceptance. Indeed, the big five is "unquestionably the most ubiquitous and widely accepted trait framework in the history of personality psychology" (Funder, 2001; Judge & Zapata, 2015, p. 1150). For over a quarter century, research on entrepreneurship has examined implications associated with an entrepreneur's big five personality traits. Prior research has focused on understanding the nature of an entrepreneur and the phenomena behind their actions (Ciavarella et al., 2004). In this, two common and sometimes intertwined streams have emerged. The first is observationally based on personality composition, as it looks into common traits of entrepreneurs and how they may differ from other populations (e.g., Antoncic et al., 2015; Zhao & Seibert, 2006). The second is predictive purporting that certain personality traits are linked to important entrepreneurial outcomes such as entrepreneurial performance or entrepreneurial intentions (e.g., Brandstätter, 2011; Zhao et al., 2010). Specifically, scholars set out to determine how an entrepreneur's personality traits differ from the general population and if these traits lead to success or a desire to become an entrepreneur.

Prior research has noted consistency between an entrepreneur's big five personality composition and key entrepreneurial outcomes. For example, "[r]esearch indicates that higher values in extraversion, conscientiousness, and openness and lower values in agreeableness and neuroticism relate to entrepreneurship" (López-Núñez, et al., 2020; Obschonka & Stuetzer 2017, p. 205). Taking a person-oriented approach, Obschonka and Stuetzer (2017) recommend focusing on the gestalt of an entrepreneur's personality and hence the dynamics of the personality traits. They argue that an "individual's personality is best defined as the totality of his or her personality components" (p. 204). As such, we take the person-oriented approach in our examination of first impressions of personality and its effect on funding. For brevity, henceforth, we call this shared big five personality profile entrepreneurial personality. It consists of someone who is high in openness, extraversion, conscientiousness and low in agreeableness and neuroticism. This composition matches López-Núñez et al.'s (2020) recent psychological profile of an entrepreneur formed from actual entrepreneurs and students with high scores in entrepreneurial intention. For further insight, we examine each big five factor in turn.

2.2.1. Openness to experience. Openness to experience is manifested through the novelty of new experiences and individual intellectual curiosity (McCrae & Costa, 1986; Elanain, 2008). Individuals high in this trait are creative, imaginative, versatile, and unafraid of new challenges (Llewellyn & Wilson, 2003) and feel the need to be creative while utilizing scarce resources (Nordvik & Brovold, 1998). Those high in openness to experience are also typically considered intellectual or intelligent (Ciavarella et al., 2004).

Compared to managers, entrepreneurs routinely have substantially higher scores for openness to experience (Zhao & Seibert, 2006; Zhao et al., 2010). Successful entrepreneurs use creativity and openness to new ideas for opportunity recognition (Ciavarella et al., 2004; Zhao et

al., 2010). High levels of openness to experience are linked to creativity and better outcomes in learning situations (e.g., Barrick & Mount, 1991; Costa & McCrae, 1992). They may even form the basis for the development and vision of a new venture, allowing entrepreneurs to question traditional ways of doing business, identify new opportunities, and offer new services or products (Zhao et al., 2010). Those who are more open to new experiences are more likely to establish a new venture than those lower in this factor (Brandstätter, 2011; Eckhardt & Shane, 2003). Once a business has launched, openness to experience influences new venture success through innovation, vision, and financial returns (Nga & Shamuganathan, 2010). Furthermore, the connection to innovativeness (Brandstätter, 2011; Zang & Huang, 2001) also shows a positive relationship with both venture creation and success (Rauch & Frese, 2007). As such, immediately recognizable characteristics encompassed by openness to experience fit the role of a stereotypical entrepreneur that is likely to succeed.

2.2.2. Extraversion. Extraversion is associated with the intensity and quantity of relationships, and manifests through high energy levels, excitement, sociability, and positive emotionality (DeNeve & Cooper, 1998). High extraversion indicates that individuals are friendly, gregarious, warm, and outgoing. People with high levels of this trait tend to dominate social situations. They are optimistic and seek out excitement and stimulation (Zhao et al., 2010). Compared to managers, entrepreneurs are more extraverted (Zhao & Seibert, 2006) and this factor is linked to intentions to start a new venture and venture performance (Zhao et al., 2010).

Extraversion is further related to people's common perceptions of those filling the leadership role (Lord et al., 1986). Extraversion is the strongest personality predictor of leadership (Judge et al., 2002) and is important for guiding a new venture (Vecchio, 2003). Entrepreneurial tasks involve social interactions such as negotiating with customers and

suppliers, building networks with stakeholders and backers, and establishing and building relationships among partners and employees (Markman & Baron, 2003). Extraversion facilitates effectiveness in these tasks.

Since a new venture's success requires effective management and selling know-how, extraversion is a desired attribute for entrepreneurs, especially in the initial stages (Ciavarella et al., 2004). From a crowdfunding perspective, extraversion is an essential component that investors look for, as it represents future expectations (e.g., building relationships with key stakeholders, product creation, and distributing timely rewards). This aids in the belief that entrepreneurs and their campaigns are capable of development and ultimate success.

Extraversion is immediately recognizable (Olivola & Todorov, 2010; Thoresen et al., 2012; Willis & Todorov, 2006) and provides positive future expectations about the entrepreneur. As such, funders associate it with the role of a successful entrepreneur.

2.2.3. Conscientiousness. "Conscientiousness describes a socially prescribed impulse control that facilitates task- and goal-directed behavior, such as thinking before acting, delaying gratification, following norms and rules, and planning, organizing, and prioritizing tasks" (Smithikrai, 2007, p. 135). Conscientiousness is a constant predictor of job performance across multiple contexts, including the management of others and occupations involving sales performance (Hurtz & Donovan, 2000; Barrick & Mount, 1991). It is related to both intentions to start a new venture and its future performance (Brandstätter, 2011; Zhao et al., 2010).

Individuals with high levels of conscientiousness are attracted to scenarios where they have control over outcomes, can appropriate risk, and receive concise feedback (Markman & Baron, 2003; McClelland, 1961; Zhao et al., 2010). All of these are consistent with an

entrepreneurial profession that emphasizes the importance of challenging work, motivation, and persistence (Baum & Locke, 2004; Chen et al., 1998; Zhao et al., 2010).

Conscientiousness is considered a work motivation variable (e.g., Costa & McCrae, 1992; Gellatly, 1996). In entrepreneurship, conscientiousness is a motivational trait relating to increased new venture growth (Zhao et al., 2010) and a significant predictor of long-term venture survivability. This suggests that attributes of perseverance and work ethic are important for new venture survivability, growth, and life span (Ciavarella et al., 2004; Zhao et al., 2010). Indeed, entrepreneurs that display the trait of conscientiousness signal to potential resource providers that they are hardworking, dependable, and reliable, thereby reducing perceived information asymmetries and promoting security in investment (Moss et al., 2015). This leads to increased funding for new and small enterprises (Moss et al., 2015). Because conscientiousness is immediately recognizable (Olivola & Todorov, 2010; Thoresen et al., 2012; Willis & Todorov, 2006) and commonly viewed in entrepreneurs, it has become an expected entrepreneurial trait. As such, the role of a successful entrepreneur is seen as one that is characteristic of high dependability and self-discipline. Stated differently, high conscientiousness fits the expected role of a successful entrepreneur.

2.2.4. Emotional stability. Funders expect emotional stability in entrepreneurs in order to create both a viable new venture and the product itself. Indeed, individuals characterized as neurotic typically do not establish a new venture and those that do have limited performance (Zhao et al., 2010). Emotionally stable people are characterized as even-tempered, hardy, and calm (Zhao & Seibert, 2006). Entrepreneurs are stereotypically described as steady, optimistic, and hardy during times of stress, uncertainty, and social pressures (Baron, 2000; Locke, 2000). They have the ability to battle physical and emotional burdens as they press forward in spite of

self-doubt, obstacles, and setbacks (Zhao et al., 2010). Taken together, this prior research suggests that individuals high in emotional stability share many characteristics of a successful entrepreneur. Thus, funders look for emotional stability when assessing an individual's role as an entrepreneur, since entrepreneurs must cope with the pressures of risk, ambiguity, uncertainty, financial burdens, and a heavy workload.

Emotional stability is perceived quickly based on appearances (Olivola & Todorov, 2010; Thoresen et al., 2012; Willis & Todorov, 2006) and provides positive future expectations about the success of entrepreneurs. Taken together, those high in neuroticism or low in emotional stability tend not to meet expectations of the stereotypical entrepreneur and are likely to appear contrary to the role of a successful entrepreneur if they appear to be anxious or easily upset. Entrepreneurs who embody characteristics of calmness and emotional stability are more likely to be viewed as fit for successful entrepreneurship.

2.2.5. Agreeableness. Prior research has yielded mixed results about the link between agreeableness and entrepreneurship. On one hand, agreeableness has been shown to decrease the likelihood of business failure (Wilfling et al., 2011) and increase the likelihood of repeat business (Chollet et al., 2014). On the other hand, it has been argued that agreeableness prevents entrepreneurs from making tough decisions (Haddoud et al., 2022) and limits their pursuit of self-interest (Zhao & Siebert, 2006). Further still, Herrmann and Nadkarni (2014) argue that a medium amount of agreeableness is most likely to facilitate strategic flexibility. More specifically, it is argued that too much disagreement fosters fear among entrepreneurial teams while too much agreement might stifle new or different ideas.

In our study, we consider agreeableness to be disadvantageous. Though entrepreneurs might need to possess these characteristics to a degree, they also need to participate in potentially

relationship destroying actions involved in exerting high energy levels and motivation (Antoncic et al., 2015). Indeed, competitive contexts conflict with the desire to avoid conflict and cooperate, negating the potential benefits of agreeableness on performance (Judge & Zapata, 2015). Competitive situations (like starting a business or running a new venture) are seen as more difficult, less rewarding and more problematic for those high in this trait (Graziano et al., 1997). Indeed, higher agreeableness is related to lower creative achievements (Chamorro-Premuzic & Furnham, 2005), inventive behaviors (Leutner et al., 2014), strategic change (Harrison et al., 2020) and less effective in risk taking (Herrmann & Nadkarni, 2014). Conversely, those lower in agreeableness are more suited to drawing a line in the sand and to behave in critical and nonconforming ways during negotiations (Obschonka et al., 2013). Most condemning is that agreeableness is negatively associated with becoming an entrepreneur (Wooten et al., 1999), being an entrepreneur, and entrepreneurial intentions (López-Núñez et al., 2020). Thus, the stereotypical entrepreneur is likely to have low agreeableness.

# 3. Hypothesis Development

The influence of the Big Five factors on entrepreneurship encompass traits that are instantaneously recognizable and necessary for the entrepreneurial role and future success. They are immediately identifiable (Willis & Todorov, 2006) and are important attributes leading to favorable entrepreneurial outcomes (e.g., Shane & Nicolaou, 2015; Zhao et al., 2010). As such, we expect them to impact both perceptions of entrepreneurial success and crowdfunding performance.

Stereotypes involve efficient, easy, and quick assumptions affecting inclinations towards members of a specific social group (Schneider, 2005; Yzerbyt & Demoulin, 2010). Stereotypes can both help and hinder people's roles as entrepreneurs (Zhang et al., 2021). Thus, stereotypical

entrepreneurs and social role theory go hand-in-hand. The theory lends itself well to the online funding context where funders have preconceived notions about what type of personality and characteristics an entrepreneur should have. Indeed, social role theory iterates that societal groups (e.g., occupations) create beliefs from typical interactions with those group members behaving in that role (Eagly 1987; Eagly et al., 2000; Eagly et al., 2004). Behaviors enacted by group members which fulfill their roles influence the characteristics that perceivers attribute as appropriate to the group (Diekman and Goodfriend, 2006; Gupta et al., 2019). This allows behaviors and attributes seen in those roles to be assumed by perceivers to be characteristic of the group as whole (Gawronski et al., 2003; Gilbert, 1998). "In essence, perceivers' inferences of group members' behaviors in their typical roles are generalized to the entire group, resulting in shared stereotypes that are widely held in society" (Gupta et al., 2019, p. 132). As such, a role is created or social position expectations are created (Biddle, 1986; Staines, 1986), with those behaviors or attributes weighted more heavily when perceived as more typical of group expectations (Gupta et al., 2019). Failure to conform to expectations carries 'social sanctions' against that individual (Anglin et al., 2018).

Anglin and colleagues (2018) argue that the role of an entrepreneur is adopted when raising funds and that certain characteristics persist and are expected (e.g., aggressiveness, charisma, creativity, confidence, narcissism, risk taking, and self-reliance). Evaluators of entrepreneurs look for such characteristics that are associated with successful entrepreneurs as it fits expectations and is prevalent in a crowdfunding context. Additionally, perceptions of warmth and competence (i.e., the stereotype content model) in entrepreneurs have been linked to trust, which in turn drives crowdfunding performance (Oo et al., 2022). These findings suggest that funders are influenced by characteristics associated with that of a successful entrepreneur and

that displaying aspects of particular traits "communicate qualities associated with the role of a successful entrepreneur" (Anglin et al., 2018, p. 782).

Zhao and Seibert (2006) expected and found entrepreneurs to have higher scores on openness to experience, extraversion, and conscientiousness while having reduced scores in agreeableness and neuroticism when compared to managers (Brandstätter, 2011). Similarly, they showed higher scores on openness to experience, extraversion, emotional stability (neuroticism reversed scored), and conscientiousness to be indicative of entrepreneurial intention and entrepreneurial performance. With similar findings to those, López-Núñez et al. (2020) found that the inclusion of low agreeableness was appropriate and helped to fit the profile of actual entrepreneurs. Given the aforementioned, we expect that when social roles displayed in crowdfunding pitches align with expectations regarding entrepreneur personality, campaigns are likely to receive more funding than those that do not. More specifically,

**Hypothesis 1:** Higher perceived entrepreneurial personality is positively associated with crowdfunding success.

### 3.1. Perceived success and the impact on actual funding success

Next, drawing on the integrated insights of social role theory and entrepreneurial personality literature, we start with the premise that favorable perceptions of entrepreneurial personality are associated with the likelihood of perceived success, which, in turn, affects crowdfunding campaigns' meeting or exceeding their goals.

An examination of first impressions investigates the immediate judgments of strangers (Todorov & Porter, 2014) and produces three interdependent responses (Greenlees et al., 2005). The first is the theoretical underpinnings of the preceding hypotheses (along with the 'expectancy response'): the 'attributive response' regarding judgments made concerning

personality traits. Symbiotically, an affect response is created causing an emotional response. The 'affective response' elicits an emotional response, or a generalized positive or negative feeling towards an individual or their perceived actions and associations. Both incite an 'expectancy response' which involves future expected behavior (Warr & Knapper, 1968) and outcomes (Greenlees et al., 2005).

As such, a positive or negative affective response to a first impression elicits expectations about outcomes. Positive affect can thereby lead to expectations that a crowdfunding campaign will succeed (i.e., a positive outcome) or contrarily, negative affect can lead to expectations that a campaign will fail (i.e., a negative outcome). Given the interdependent nature of first impression responses, cues are identified (e.g., fit to the successful entrepreneur role) that influence impressions people form about others (Argyle, 1994). This produces a generalized attitude/feeling towards people (e.g., hostility, intimidation, respect; Greenlees et al., 2005; Warr & Knapper, 1968), which in turn leads to expectations of failure or success.

A crowdfunding response entails a decision to back a given campaign or not. Positive affect increases willingness to support an entrepreneur as individuals back ventures that they believe are going to be successful. Indeed, people back campaigns they think will be successful (Colombo et al., 2015). Like other financing opportunities (e.g., venture capital), individuals tend to back or finance new ventures that they believe will be successful based on heuristic shortcuts (e.g., first impressions) and their decision remains unchanged even with additional information (Elstein & Bordage, 1988; Oskamp, 1982; Zacharakis & Meyer, 1998).

In crowdfunding, an attributive response elicits a generalized affective and expectancy response about the outcome of the campaign. Given a strong, positive, affective response due to positive automatic trait assignment or attributive response, positive beliefs or expectations about

the campaigns are formed and the likelihood of backing increases. Negative feelings towards the automatic trait assignments (attributive response) produces a negative affective response, and reduces expectancy relating to the potential of the campaign. These negative or positive beliefs about success or funding of a campaign lead to action or inaction. As such, positive beliefs lead to action in the form of funding, while a negative affect leads to no investment. Thus, a positive affect leads to positive expectations about project outcomes, which in turn leads to supportive action (i.e., funding).

**Hypothesis 2:** Perceived entrepreneurial personality has an indirect effect on actual crowdfunding performance via perceived success.

#### 4. Methods

# 4.1. Participants and procedure

The random sample and corresponding data were pulled from the crowdfunding platform Kickstarter during the year 2017. This is in line with previous research (e.g., Colombo et al, 2015; Mollick, 2014; Mollick & Kuppuswamy, 2014) as Kickstarter is the largest crowdfunding platform with \$5 Billion in funding as of 2020. A total of 2045 videos were randomly selected from actual Kickstarter campaigns using recommendations put forth by Colombo and colleagues (2015) as well as Mollick and Kuppuswamy (2014). They recommended exclusion of certain categories based on their dissimilarity with a typical new venture and inability for comparison with those new ventures typically recognized by venture capitalists. Specifically, videos were removed from the art, fashion, dance, film/video, photography, theater, and music categories. Thus, our final sample included 234 videos pulled from the remaining categories. Furthermore, the entrepreneur was required to appear for at least seven seconds. Following previous video testing formats (Davis et al., 2017; Elpers et al., 2004), respondents evaluated and viewed the

entrepreneur's pitch using randomly determined order sets, where the video order within was also randomized reducing potential biases from order effects. Each respondent watched five videos, answering the respective survey questions between each new video.

Participants consisted of 289 individuals (150 male and 139 female) who answered an open call on Amazon Mechanical-Turk (mTurk) for survey participants with prior crowdfunding experience<sup>1</sup>. All respondents were assured confidentiality and that data from responses would be used only for research purposes. In return for their participation, responders received \$2. Prior to beginning the survey, participants had to verify they had crowdfunding experience and were from the United States. Two attention checks were built into the survey questions (e.g., "If you're reading this, please select 'C' as the correct answer."). Out of 300 total respondents, 11 were removed from the sample for failing attention checks or responding to questions more rapidly than the videos could complete.

The participants were 31.5 years old on average and roughly 40% acknowledged having backed more than one campaign. This is in line with prior demographic findings about crowdfunding contributors, where the average funder's age ranged between 24 and 35 years old and roughly 31% provided funding to more than one venture (Davis et al., 2017; Fundable, 2014; Kickstarter, 2017). Since actual funding pitches were utilized, there existed differences among the entrepreneurs: such as the entrepreneur' ethnicity (83% Caucasian), sex (82% male), and age (median between 26 and 35. A commercial software program was used to cut the video at exactly ten seconds.

#### 4.2. Ten seconds

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<sup>&</sup>lt;sup>1</sup> We define prior crowdfunding experience as a person who has contributed money to a crowdfunding campaign in the past. Participants had to acknowledge this experience prior to agreeing to take the survey and again at the start of the survey. Any participants that did not indicate prior crowdfunding experience were not included in our sample.

It is commonly recognized in both the zero-acquaintance (Albright et al., 1988) and the thin slices of behavior (Ambady & Rosenthal, 1993) literature that a "few seconds" is all that is needed to evaluate or provide inferences about another's personality or performance potential (e.g., Eisenkraft, 2013; Praetorius et al., 2015; Rule & Ambady, 2011). More importantly, observers typically show agreement in trait judgements in ten seconds or less (Thoresen et al., 2012). In addition, ten seconds of in-person viewing (Albright et al., 1997), video viewing (Eisenkraft, 2013), and photographic exposure (Berry, 1990) allowed individuals to extract cues and come to an agreement regarding personality traits (e.g., the Big Five).

Consistent with this extant research, our study examines the first ten seconds of crowdfunding videos. Ten seconds represents the conservative extreme of timing for trait assignment and is in alignment with online first impressions literature (Everard & Galletta, 2005). As individuals begin to watch a video amongst a number of other campaigns, ten seconds provides enough time to both develop a first impression and recognize the fact that they are disinterested in the entrepreneur. Even if better information exists later in the video, early disinterest is likely to result in potential backers clicking away to another campaign.

### 4.3. Variables

Our dependent variable, crowdfunding success, was identified following previous studies (e.g., Colombo et al., 2015; Mollick, 2014) and was coded as a dichotomous dependent variable. Campaigns that met or exceeded their goal were coded one while those that failed to meet their goal were coded zero.

The mediator, perceived crowdfunding success, relied on the one-item questionnaire developed by Brooks, Huang, Kearney and Murray (2014). Similar to Davis et al. (2017), individuals rated the likelihood of success for five projects in crowdfunding on a seven-point

scale. This questionnaire is displayed in Appendix 1. Specifically, raters answered the question, "What would you predict the project's likelihood of success is?" using a scale from 1 (extremely unlikely to be successful) to 7 (extremely likely to be successful).

Our independent variable is entrepreneurial personality. Prior to operationalizing this variable, we had raters score each of the Big 5 personality traits on a seven-point scale ranging from 1 (disagree strongly) to 7 (agree strongly). Following the guidance of Todorov and colleagues (Olivola & Todorov, 2010; Todorov et al., 2005; Willis & Todorov, 2006) and multiple other first impression studies (e.g., Leikas et al., 2013; Gosling et al., 2007; Srivastava et al., 2010), we employed the Ten Item Personality Inventory or TIPI (Gosling et al., 2003) that measures the Big Five personality factors. This is a validated scale involving five pairs of traits to measure perceptions of entrepreneurs along the Big Five trait dimensions (Gosling et al., 2003; Olivola & Todorov, 2010). The TIPI instrument is displayed in Appendix 2. The pairs were averaged to assign a value (from one to seven) for each Big 5 trait. The five averages were then summed to measure entrepreneurial personality.

Finally, several control variables were included in our analyses. First, demographic variables of the entrepreneur were controlled to reduce alternative explanations for first impressions and guard against the possibility of homophily (Davis et al., 2017; Harrison & Mason, 2007; Willis & Todorov, 2006). As such we controlled for entrepreneur sex, ethnicity, and age using dummy variables. Quality and type of venture are controlled for using a quality measure rating (Cohen's kappa = 0.804) developed by Ciuchta, Letwin, Stevenson, and McMahon (2016), the natural log of funding goals and dummy variables for categories. These or similar controls have been used in prior crowdfunding research (e.g., Colombo et al., 2015; Davis et al., 2017; Mollick & Kuppuswamy, 2014; Josefy et al., 2017) and may influence first

impressions or perceived crowdfunding success. We additionally controlled for idea quality. Consistent with prior crowdfunding research, for this variable we used the validated three-item scale developed by Ciuchta et al. (2016). All videos were viewed by two authors to evaluate the degree to which each idea was practical, clever, and high quality. A check for inter-rater reliability suggested the raters had strong agreement (Cohen's kappa = 0.80). The raters lastly resolved all disagreements via discussion.

At the campaign level, we also controlled for campaign duration and campaign videos. The former was measured as the time, in days, that the campaign actively sought funding. The latter was measured as a count variable regarding the number of videos included on the campaign page. Finally, at the level of mTurk rater, we controlled for gender (female = 0; male = 1), ethnicity (Caucasian = 1, 0 otherwise), age (in years), and education (dummy variables reflecting highest degree earned).

# 4.4. Analysis

We tested our hypotheses using generalized structural equation modeling (GSEM). While simple structural equation models require continuous outcomes, GSEM allows for dichotomous dependent variables (Vismara, 2018). We examined a proprietary dataset consisting of mixed archival/survey information. Because each mTurk participant rated multiple videos, all analyses were clustered by a rater identification number.

#### 5. Results

Correlations, means and standard deviations for the primary variables are presented in Table 1. For simplicity, variables consisting of multiple dummy variables are not shown but are included in each model. With the exception of agreeableness, the perceived personality factors are all significantly correlated with actual crowdfunding success. Similarly, all perceived

personality factors are significantly correlated with external perceived success ratings. Due to multicollinearity issues commonly associated with first impression traits (Todorov & Porter, 2014), we checked variance inflation factors (VIF) for each variable. The results indicated no VIF scores above four, indicating that multicollinearity is not a concern.

Insert Table 1 about here

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Like others, we consider it important to study how personality traits independently influence first impressions (Oosterhof & Todorov, 2008; Todorov & Porter, 2014), especially in this previously unexamined context. This allows a clearer picture of how the Big Five Personality traits affect this phenomenon providing a unique understanding of the factors influence on funding success (Fayombo, 2010; Schimmack et al., 2004). Table 2a shows the results of hypothesis 1. The coefficient for entrepreneurial personality was significant and positive ( $\beta = 0.44$ ; p < 0.01), offering support for Hypothesis 1.

Table 2b provides the results of the indirect effect of perceived entrepreneurial personality on actual crowdfunding success, via the mediator of perceived success. To test our mediation hypothesis, we used GSEM to identify indirect effects. The indirect effect was found to be statistically significant (p = 0.001; C.I. 0.073 to 0.303). Thus, Hypothesis 2 is supported.

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Insert Tables 2a and 2b about here

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5.1. Robustness checks

As a robustness check, we tested our main effect hypothesis again, this time using a multilevel logistic regression model to account for both the nested data and our dichotomous dependent variable (Cholakova & Clarysse, 2015; Davis et al., 2017; Hildebrand et al., 2016; Josefy et al., 2017). The result remained consistent.

Furthermore, we ran additional robustness checks to see how the individual Big Five traits impacted crowdfunding success. Table 3a shows the results of the main effects. The coefficients for conscientiousness (Model 2) and extraversion (Model 3) were significant and positive when tested absent the other four Big 5 traits. However, the variables were no longer significant in full model (Model 6). Agreeableness and emotional stability were not found to be statistically significant drivers of crowdfunding success in any model. Openness to experience was found to positively impact crowdfunding success in both the individual (Model 5) and full (Model 6) models (p < 0.01).

Table 3b provides the results of the indirect effects of the perceived Big Five traits on actual crowdfunding success, via the mediator of perceived success. The indirect effect of agreeableness was not found to be statistically significant (p = 0.071; C.I. -0.001 to 0.026). However, significant indirect effects were found for conscientiousness (p = 0.007; C.I. 0.017 to 0.109), extraversion (p = 0.013; C.I. 0.005 to 0.039), emotional stability (p = 0.032; C.I. 0.002 to 0.039), and openness to experience (p = 0.016; C.I. 0.004 to 0.040).

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Insert Tables 3a and 3b about here

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In sum, the indirect effects for all Big Five traits except agreeableness were found to be statistically significant. Taken together with the main effects displayed in Table 3a, our findings

indicate complementary mediation (Zhao et al., 2010) for conscientiousness and for openness to experience, in that both direct and indirect effects exist and point in the same direction. This implies that perceptions of conscientiousness and openness to experience contribute to actual crowdfunding success both directly and through their effects on beliefs about potential success. Perceptions about extraversion and emotional stability, however, may only impact actual crowdfunding success through first impressions of perceived success. These results are considered in greater detail in the discussion section below.

# 6. Discussion

We join and inform the continually growing conversation exploring the influence of societal role expectations on important outcomes for entrepreneurs (e.g., Anglin et al., 2021; Anglin et al., 2018; Gupta et al., 2022). Focusing on social roles and their corresponding stereotypes, this work has pursued an understanding of the advantages (or disadvantages) of conforming to societal expectations. We advance this line of inquiry by incorporating a societally expected entrepreneurial personality profile (entrepreneurial personality), emphasizing that online fundraising may be in part driven by whether the perceived personality of an entrepreneur matches or runs counter to societal expectations of the stereotypical entrepreneur.

In accordance with this presumption, we find that entrepreneurs whose personality more closely resembles that of the stereotypical entrepreneurial personality experience a significant increase in both the total amount of money raised and in the likelihood of meeting funding goals. Like prior research has begun to illustrate (e.g., Anglin et al., 2018), we show social role theory's usefulness and applicability to entrepreneurship research outside the realm of surface level characteristics (gender and race studies). In doing so, we demonstrate that it can be a powerful

and useful vehicle in which to approach funding outcomes and other entrepreneurial studies where perceptions of entrepreneurs' matter.

In this vein, we find the idealized version of an entrepreneur's personality (entrepreneurial personality) is characterized by high conscientiousness, extraversion, and openness to experience and low agreeableness and neuroticism. As this Big Five constellation of traits is consistently noticed in entrepreneurs, a stereotypical personality profile is generated, creating expectations and biases. Social interactions with entrepreneurs do not involve single traits expressed one-at-a-time in a vacuum, but instead involve many traits interacting with each other in numerous combinations. Thus, our holistic person-oriented approach is unique to funding research. We find support for Obschonka and Stuetzer's (2017, p. 204) gestalt personality argument, that when it comes to personality "the whole is clearly more than just the sum of its parts." Only by considering all the facets of the entrepreneur's broad personality and their dynamics can we begin to understand the gestalt of the societally expected entrepreneurial personality. This approach could be especially fruitful to domains where stereotypes impact decisions (e.g., role congruence theory, expectancy violation theory, social role theory) or areas of research where characteristics of the entrepreneurs are noticed in intertwining succession.

By using this approach, we also hope to breathe new life into the Big Five personality factors and their place in entrepreneurship research. This manuscript is the first that we know of that indicates the Big Five factor model matters for entrepreneurial funding. From a personality context, most studies addressing entrepreneurship have examined which personality types are likely to become entrepreneurs (Gartner, 1988) or distinguish entrepreneurs from other populations (e.g., Zhao & Seibert, 2006) as opposed to financial selection or predictive outcomes. Recently, when it appears in predictive research, it is primarily used as a baseline for

other variables to overcome. However, this seems counter to its design and its real value as the highest regarded broad personality trait model. That is, it is purposefully broad and attempts to encapsulate all traits and encompasses the entirety of an entrepreneur's personality. As such, its real power may lie in contexts where the entirety of an entrepreneur's personality needs to be considered, like that of social role theory. Indeed, the findings support this notion as well as align with social role theory expectations.

First, our result suggest that entrepreneurial personality positively impacts crowdfunding success. As such, the entire Big Five personality trait profile plays a role in determining online funding over and above that of any individual trait. Not surprisingly, and in accordance with social role theory, openness to experience appears to be the most influential of the Big 5 Factors. In contrast, agreeableness seems to show extremely limited support, if any, in determining online funding. Social role theory purports that when role expectations are created, those behaviors or attributes perceived as more typical of the group are weighted more heavily (Gupta et al., 2019). Our robustness checks (and those of the other Big Five factors) parallel the vast research on actual entrepreneurial traits, on differences between entrepreneurs and other populations, and that of entrepreneurial intentions (See Kerr et al., 2018 for recent review) in that openness to experience is consistently a top indicator, while agreeableness has mixed results.

Providing new insights for research pertaining to societal role expectations, the Big Five factors, and online funding, we are the first that we know of to examine actual first impressions on funding outcomes instead of just alluding to them. Our results show that first impressions matter. This was achieved by limiting viewership of online pitches to only the first ten seconds. In doing this we also provided support for first impression literature's argument that automatically assigned personality trait judgements have important and considerable

consequences for those being judged (e.g., Olivola & Todorov, 2010; Willis & Todorov, 2006; Zebrowitz et al., 2007; Zebrowitz et al., 2013). It is our contention that in viewing an online pitch, potential backers immediately recognize Big Five characteristics and mentally compare it to the stereotypical entrepreneur personality. Those that more closely match are likely to garner further interest, while those that diverge are more likely to be dismissed. Our results support this contention. Of consequence for researchers and entrepreneurs alike is that decisions are made rapidly and further information may just be used to confirm prior notions.

For practitioners, our research suggests that it is vital for the pitch or project to catch and hold people's attention and that online funding likely shares similarities with that of webpages and commercials. Indeed, our study is in line with prior work on the first impressions of webpages (Lim et al., 2006) that shows the critical nature of the first few seconds in determining a user's decision to either continue on the site or browse another (Everard & Galletta, 2005; Lowry et al., 2008; Robins & Holmes, 2008). Findings suggest that 80% of internet users spend only a few seconds examining a site before advancing to the next one (Peracchio & Luna, 2006). We note a similar phenomenon in online funding websites. This suggests that online funding may potentially be viewed as a novel web page. This could provide a fruitful platform for cross-disciplinary research as information technology and entrepreneurship are likely to become increasingly entwined.

Our research also informs the literature in more specific and conspicuous ways. In a summary of the findings, this paper contributes to this aforementioned literature by examining quickly perceived personality traits of an entrepreneur and their impact on funding success. We find that a funder's first impression of an entrepreneur's personality traits, in the form of the Big Five factors, influence funding decisions and lead to crowdfunding success. More specifically,

this work finds that entrepreneurs who are quickly perceived as matching societal personality expectations of a stereotypical entrepreneur increase their likelihood of crowdfunding success and overall funding.

The results of the robustness checks are indicative of prior arguments - openness to experience appears to be the most influential of the Big 5 Factors as it is perceived as more typical of the group (Gupta et al., 2019) and is vital for jobs requiring creativity. This is in line with Maurer and colleagues' (2014) mental map of societal representations of entrepreneurship, who conclude that entrepreneurs are predominantly viewed as creative people doing creative things. This view also conforms to expectations from meta-analytic reviews (see Kerr et al., 2018). Similarly, conscientiousness and extraversion indicate a relationship with entrepreneurial funding and total funding received until openness to experience is considered. This aligns with expectations given the dearth of previous literature which argues that conscientiousness is a universal indicator of performance (Hurtz & Donovan, 2000; Barrick & Mount, 1991) and extraversion is important for guiding a new venture (Vecchio, 2003). From a social role theory perspective, it is easy to see why openness to experience appears to trump the other factors. It is the most salient for entrepreneurs. Its high importance for inclusion or success factors is unique to the entrepreneurial profession. Indeed, this seems to be the case for studies comparing entrepreneurs to other populations. The majority of studies find openness to experience to explain personality differences in entrepreneurs from other populations. For example, Zhao and Seibert (2006) find entrepreneurs to be higher in open to experience, but similar in extraversion to managers and Antoncic et al. (2015) conclude that conscientiousness and neuroticism is unlikely a distinguishing factor, but that openness to experience certainly is. Indeed, there

appears to be a broad consensus that entrepreneurs are more open than other populations while other traits vary (Kerr et al., 2018).

Furthermore, most aspects of the Big Five personality and entrepreneurial personality seem to inform gut feelings of success, which in-turn leads to actual online funding success. Joining others examining the Big Five personality's impact on successful work performance and job outcomes (e.g., Barrick & Mount, 1991; Barrick et al., 2001; Hurtz & Donovan, 2000), this manuscript determines how the Big Five leads to individual performance as it pertains to funding success and total amounts raised. The manuscript contends and finds evidence that first impressions of the Big Five elicit gut feelings about the potential success of a project and in turn these gut feelings can predict actual funding. Gut feelings after only a brief ten second viewing of an entrepreneurial pitch is correlated with actual online funding success. We find evidence that four out of five Big Five traits elicit an expectation that is able to impact the outcomes of funding campaigns. Agreeableness is in the right direction but only significant at the p < 0.10level. The same is true for entrepreneurial personality. These findings provide support for the interdependent response model (e.g., Greenlees et al., 2005; Warr & Knapper, 1968). More specifically, based on affective responses derived from an entrepreneur's fit with the expected entrepreneurial personality, a generalized attitude/feeling towards them is produced (e.g., hostility, intimidation, respect; Greenlees et al., 2005; Warr & Knapper, 1968), leading to expectations about funding failure or success that elicits a response in the form of a decision to back a campaign or not. This process is repeated by many individuals (the crowd) and when societal expectations are met, projects garnish support via the additive effect of multiple small contributions.

#### 6.1. Limitations and future research

Like most research, our study has some important limitations. Perhaps most notably, because our research design called for a thin slice approach wherein participants only watched ten seconds per pitch video, numerous factors that potential backers view on Kickstarter were omitted from our analysis (e.g., location, number of existing backers, or prototype specifications). Some factors may even influence perceptions of personality (e.g., having a large number of friends on social media may influence perceptions of agreeableness). Thus, future research might build on this study by examining the interplay of first impressions with other signals found within entrepreneurs' campaign pages. Our research design also limited the number of video clips viewed by each participant to five. While this approach is consistent with prior research (e.g., Willis & Todorov, 2006) and helps survey participants from becoming fatigued (Cowden et al., 2021; Davis et al., 2017), we acknowledge the possibility of video distribution having an effect on the outcome variable.

Second, using mTurk for participant recruitment provides both pros and cons. One such advantage is the ability to quickly draw nationally distributed samples (Gupta et al., 2019). However, while some researchers have noted mTurk to be the "ideal" recruitment method for studies related to entrepreneurship (Aguinis & Lawal, 2012), others argue that mTurk recruits are of lower quality since past experiences can be easily misrepresented (MacInnis et al, 2020). Despite our screening efforts, we cannot ensure that all participants had the crowdfunding experience we sought.

Third, future research on entrepreneurial personality is needed within other contexts such as venture capital, angel investment, or equity crowdfunding. The current research is set solely within rewards-based crowdfunding, wherein gender roles have been found to influence outcomes differently than in most other entrepreneurial settings. Indeed, several rewards-based

crowdfunding studies find an advantage for women entrepreneurs (e.g., Allison et al., 2017; Cowden et al., 2022; Patel et al., 2021), which is unique compared to more traditional fundraising settings. It is therefore possible that other social roles such as entrepreneurial personality also impact success differently across alternative contexts. Replication studies in other contexts are warranted before generalizability can be assumed. Further, future research could examine if a more deliberate process takes place after first impressions occur similar to Allison et al. 's (2017) study. Finally, as our focus was on perceptions of personality traits, future research should consider the extent to which the personality traits displayed by entrepreneurs in their funding pitch videos are reflective of their true personality traits. For example, it may be that through surface acting some entrepreneurs work to display a surface personality which is closer to the entrepreneurial stereotype and which is not reflective of their true personality.

Despite these limitations, the research informs extant literature while providing possibilities for refinement and expansion. We chose the Big Five personality model as it has broad traits that encompasses most of an entrepreneur's personality and is societally recognizable. However, other traits related to personality may be attributed to this role. Thus, additional study of situations where dual stereotypes exist would be valuable. For example, fit as a nerd and entrepreneur in the computing industry.

Finally, our study indicates that first impressions count. Further investigation of first impressions and societal fit is warranted in funding research and likely in most arenas that decisions need to be made about entrepreneurs. Along with societal fit, we feel that incorporating research from psychology that focuses on first impressions from an evolutionary perspective (e.g., aggressiveness, attractiveness) would strongly complement this line of research. That is,

nature and nurture are likely to both play a role. It is only through incorporating both that we are likely to achieve the greatest understanding of first impressions' influence on funding decisions.

6.2. Conclusion

Drawing from social role theory, we examine how first impressions of entrepreneurial personality and immediate gut feelings influence funding outcomes. We show that an entrepreneur whose personality closely resembles that of societally expected norms receives increased funding and is more likely to achieve their funding goal. Further, an entrepreneurial personality and, taken separately, aspects of the Big Five influence gut feelings towards the likelihood of success which subsequently lead to actual funding success. For entrepreneurs seeking funding, we offer awareness of the criticality of the first few moments of online pitches. For scholars, we provide an understanding of how societal role expectations, personality, and first impressions impact new venture funding, especially when viewed from a person-oriented perspective.

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Table 1. Descriptive statistics and correlations

		Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1	Entrepreneur Gender	0.80	0.40											
2	Entrepreneur Ethnicity	0.16	0.37	0.02										
3	Goal Amount	9.27	2.31	0.23	0.12									
4	Idea Quality	2.76	0.84	0.23	-0.02	0.50								
5	Campaign Duration	36.83	12.37	-0.20	0.16	0.15	-0.01							
6	Campaign Videos	1.41	1.23	0.02	0.04	0.14	0.12	0.04						
7	Rater Gender	0.64	0.48	-0.01	-0.01	0.00	-0.00	0.00	0.01					
8	Rater Ethnicity	0.32	0.47	-0.00	0.01	-0.01	-0.02	-0.01	0.00	0.10				
9	Rater Age	31.29	6.77	0.00	-0.01	0.02	0.05	-0.03	-0.03	-0.10	-0.12			
10	Entrepreneurial Personality	4.25	0.74	-0.14	0.02	-0.29	-0.21	-0.00	0.09	-0.06	-0.03	0.10		
11	Perceived Success	4.22	1.48	-0.02	0.05	0.07	0.15	0.00	0.13	-0.15	-0.04	0.04	0.50	
12	Crowdfunding Success	0.23	0.42	0.07	0.09	-0.19	0.09	-0.12	-0.04	-0.01	0.01	0.00	0.08	0.12

N=1,891; Correlations > |0.05| are significant at the p < 0.05 level. Correlations > |0.06| are significant at the p < 0.01 level.

Table 2a. Generalized SEM main effect

	Model 1
Controls	
Entrepreneur Gender	0.28
Entrepreneur Ethnicity	1.33**
Goal Amount	-0.51**
Idea Quality	0.64**
Campaign Duration	-0.01**
Campaign Videos	-0.04
Rater Gender	0.05
Rater Ethnicity	0.10
Rater Age	0.00
Perceived Success	0.16**
Main Effect	
Entrepreneurial Personality	0.44**
Constant	1.56**
Constant	1.50

Notes: Dummies for entrepreneur age, category, and rater education are included.

Table 2b. GSEM indirect effect

	Coef.	s.e.	Z	p >  z	[95%	[95% C.I.]	
Indirect Effect							
Entrepreneurial Personality → Perceived Success → Crowdfunding Success	0.19	0.06	3.20	0.001	0.073	0.303	

*Note*: N = 1,891

<sup>\*</sup>p < .05; \*\*p < .01; N = 1,891

**Table 3a. Generalized SEM results** 

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Controls						
Entrepreneur Gender	0.29	0.29	0.37*	0.27	0.31	0.31
Entrepreneur Ethnicity	1.36**	1.36**	1.27**	1.36**	1.32**	1.32**
Goal Amount	-0.52**	-0.52**	-0.51**	-0.52**	-0.52**	-0.51**
Idea Quality	0.63**	0.62**	0.64**	0.64**	0.65**	0.64**
Campaign Duration	-0.01**	-0.01**	-0.01**	-0.01**	-0.01**	-0.01**
Campaign Videos	-0.02	-0.02	-0.04	-0.02	-0.03	-0.04
Rater Gender	0.08	0.08	0.06	0.06	0.08	0.06
Rater Ethnicity	0.11	0.13	0.11	0.12	0.12	0.11
Rater Age	0.01	0.00	0.00	0.01	0.00	0.00
Perceived Success	0.24**	0.19**	0.15**	0.22**	0.19**	0.15**
Main Effects						
Agreeableness	-0.05					0.06
Conscientiousness		0.16*				0.11
Extraversion			0.11*			0.05
Emotional Stability				0.10		0.01
Openness to Experience					0.21**	0.17**
Constant	-0.80	-1.38*	-1.23*	-1.27*	-1.55**	-2.12**

*Notes*: Dummies for entrepreneur age, category, and rater education are included in all models.

<sup>\*</sup>p < .05; \*\*p < .01; N = 1,891

Table 3b. GSEM indirect effects

	Coef.	s.e.	Z	p >  z	[95% (	C.I.]
Indirect Effect					_	
Agreeableness → Perceived Success → Crowdfunding Success		0.01	-1.81	0.071	-0.026	0.001
Conscientiousness → Perceived Success → Crowdfunding Success	0.06	0.02	2.69	0.007	0.017	0.109
Extraversion → Perceived Success → Crowdfunding Success	0.02	0.01	2.49	0.013	0.005	0.039
Emotional Stability → Perceived Success → Crowdfunding Success	0.02	0.01	2.15	0.032	0.002	0.039
Openness to Experience → Perceived Success → Crowdfunding Success	0.02	0.01	2.42	0.016	0.004	0.040

*Note*: N = 1,891

## Appendix 1.

Perceived Success instrument (Brooks et al., 2014):

Rate the following question from 1 to 7 (1 = Extremely unlikely to be successful; 7 = Extremely likely to be successful):

What would you predict the project's likelihood of success is?

## Appendix 2.

#### TIPI instrument:

1 = Disagree strongly; 2 = Disagree moderately; 3 = Disagree a little; 4 = Neither agree nor disagree; 5 = Agree a little; 6 = Agree moderately; 7 = Agree strongly

I view the person in the video as:

- 1. Extraverted, enthusiastic.
- 2. Critical, quarrelsome.
- 3. Dependable, self-disciplined.
- 4. Anxious, easily upset.
- 5. Open to new experiences, complex.
- 6. Reserved, quiet.
- 7. Sympathetic, warm.
- 8. Disorganized, careless.
- 9. Calm, emotionally stable.
- 10. Conventional, uncreative.

TIPI scale scoring ("R" denotes reverse-scored items):

Extraversion: 1, 6R; Agreeableness: 2R, 7; Conscientiousness; 3, 8R; Emotional Stability: 4R, 9; Openness to Experiences: 5, 10R.

# Getting to Know Someone in Ten Seconds: Social Role Theory and Perceived Personality in Entrepreneurial Pitch Videos

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