The More Enthusiastic, the Better? Unveiling a Negative Pathway From Entrepreneurs’ Displayed Enthusiasm to Funders’ Funding Intentions

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Abstract
Displaying enthusiasm (an emotional manifestation of passion) is a common practice for entrepreneurs to attract crowdfunding. However, we propose that funders may attribute an entrepreneur’s displayed enthusiasm to impression management motives, which can in turn reduce their funding intentions. Moreover, this negative pathway is more likely to occur when the entrepreneur is perceived to have lower domain expertise. We found consistent support for these hypotheses from a survey and an experiment. Our findings suggest that displaying enthusiasm may not always be effective for entrepreneurs because there are both positive and negative pathways underlying the influence of displayed enthusiasm on funders.

Keywords
displayed enthusiasm, crowdfunding, passion, impression management motives, domain expertise, entrepreneurial financing

Introduction
Entrepreneurs are frequently observed to express their enthusiasm, an emotional manifestation of passion, through nonverbal cues (e.g., enthusiastic facial expressions and body movements) to attract financial resources and potential resource providers (Chen et al., 2009). However, prior studies revealed mixed evidence regarding the effect of entrepreneurs’ displayed enthusiasm. Some studies found that potential funders react more positively to entrepreneurs who express stronger enthusiasm and evaluate their ventures more favorably (Li et al., 2017; Mitteness et al., 2012; Shane et al., 2019). Other studies found that entrepreneurs’ expressed enthusiasm does not
have a significant impact on funding performance (Cardon et al., 2017; Chen et al., 2009). Interestingly, some recent studies reported that entrepreneurs’ expressions of positive emotions can sometimes negatively influence funding outcomes (Jiang et al., 2019; Warnick et al., 2021).

These mixed findings present an empirical challenge to the theoretical assumption that entrepreneurs’ displayed enthusiasm influences funders’ funding decisions through positive pathways (e.g., emotional contagion; see Li et al., 2017). We argue that one way to reconcile the mixed findings is to acknowledge the possibility of negative pathways. Displayed enthusiasm may influence potential funders’ funding decisions through both positive and negative pathways, thereby causing prior studies to observe different effects under various situations. Some scholars have started to probe the negative pathways by positing that funders might disregard entrepreneurs’ enthusiasm as merely a tactic or putting on an act (Cardon et al., 2017; Chen et al., 2009). Jiang et al. (2019) speculated that potential funders might associate an entrepreneur’s positive emotional expressions with strategic tactics for increasing the odds of success in raising funds. Warnick et al. (2021) further argued that the expression of positive emotions can lead to the perceptions of inappropriateness or insincerity and subsequently to negative reactions from potential funders. These studies speculated the existence of negative pathways. However, no research has directly examined the existence of and the boundary conditions for a negative pathway from displayed enthusiasm to entrepreneurial funding.

Drawing on the impression management literature (Bolino et al., 2015; Gardner & Martinko, 1988; Lam et al., 2007), we investigate a potential negative pathway underlying the impact of displayed enthusiasm: funders’ perceptions of entrepreneurs’ impression management motives. Impression management motives refer to one’s desire to purposively enhance one’s personal image and control how one appears to others (Gardner & Martinko, 1988; Lam et al., 2007). Entrepreneurs may have such impression management motives because they can benefit from creating a desired image in front of potential funders. A common way to manage impression is to express or display “desirable” emotions (Johnson et al., 2016). Because enthusiasm is commonly perceived as desirable in the fundraising context (Chen et al., 2009), we argue that a stronger display of an entrepreneur’s enthusiasm can make potential funders more strongly perceive that the entrepreneur’s expressions are driven by impression management motives. We also propose that this association is stronger when potential funders perceive the entrepreneur as having lower domain expertise. Finally, we propose that the perceptions of the entrepreneur’s impression management motives can in turn reduce funders’ willingness to invest in the entrepreneur.

We further empirically examine the coexistence of both negative and positive pathways for the impact of displayed enthusiasm on funding intentions. To do so, we consider the positive pathways suggested by prior studies: emotional contagion (Li et al., 2017) and funders’ perceptions of entrepreneurs’ self-confidence (Cardon et al., 2017; Mitteness et al., 2012). The conceptual model is shown in Figure 1, which includes the known positive pathways together with our hypothesized negative pathway and a contingency factor. We test this conceptual model using data from a survey taken by 1811 participants for 182 crowdfunding projects (Study 1) and cross-verify the results using a randomized experiment with 273 participants (Study 2).

This research contributes to the literature on emotions in entrepreneurship (Cardon et al., 2012; Jiang et al., 2019; Warnick et al., 2021). We provide a novel explanation for why entrepreneurs’ displays of enthusiasm, a common entrepreneur emotion and manifestation of passion, may not always have a positive effect on funding (Cardon et al., 2017; Chen et al., 2009). The presence of a negative pathway for entrepreneurs’ displayed enthusiasm to decrease the likelihood of funding may offset the effect of a positive pathway. By providing evidence for the coexistence of both negative and positive pathways, our findings contribute to a more complete understanding of the benefits and risks of entrepreneurs displaying enthusiasm during a funding pitch. Moreover, our
findings suggest a boundary condition for the negative pathway. The negative pathway can be weakened when funders perceive an entrepreneur as a domain expert. When perceived as an expert, an entrepreneur’s displayed enthusiasm is less likely to cause funders to perceive the entrepreneur as having impression management motives. This finding extends the recent evidence for the complementarity between costly signals (e.g., domain expertise) and costless signals (e.g., displaying enthusiasm) for attracting funding (Scheaf et al., 2018).

Our research also contributes to the entrepreneurship research on impression management. Much of this literature has focused on the benefits of impression management (e.g., Allison et al., 2014; Nagy et al., 2012; Parhankangas & Ehrlich, 2014). We extend this research by showing that the display of enthusiasm for impression management can produce paradoxical effects. Our verification of this possibility also opens up exciting new avenues for future research to explore whether the paradoxical effects could exist when entrepreneurs use other impression management tactics.

**Literature Review and Hypotheses Development**

**Attracting Funding for New Ventures**

To raise funding for their ventures, entrepreneurs need to reduce information asymmetry and signal the value of their ventures (Ahlers et al., 2015; Scheaf et al., 2018; Steigenberger & Wilhelm, 2018). Entrepreneurs can demonstrate the value of their ventures by providing substantive information about the ventures or themselves (e.g., their expertise and credentials; Connelly et al., 2011). Recent research suggests that entrepreneurs can also influence potential funders through peripheral information, including their verbal or nonverbal cues (Allison et al., 2014, 2017; Anglin et al., 2018; Jiang et al., 2019; Li et al., 2017; Parhankangas & Renko, 2017; Steigenberger & Wilhelm, 2018). These cues can be especially salient in crowdfunding, where
funders are mostly inexperienced investors (Mollick & Nanda, 2015). Such funders tend to be less able or less motivated to decipher substantive information and instead rely on easier cues (Allison et al., 2017). Examples of verbal cues that can create a favorable impression and attract crowdfunding funders include self-promotional language and the framing of a venture as an opportunity to help others (Allison et al., 2014; Parhankangas & Ehrlich, 2014).

A growing body of research in recent years has also examined the role of emotional expressions through nonverbal cues in entrepreneurial financing. Some studies have looked at entrepreneurs’ facial expressions of basic emotions (e.g., joy and anger; Davis et al., 2021; Jiang et al., 2019; Warnick et al., 2021). For example, Jiang et al. (2019) and Warnick et al. (2021) examined entrepreneurs’ expressions of joy, a basic positive emotion, and found that displayed joy has a positive effect on funding success, but the effect can turn negative when entrepreneurs spend too much time on expressing joy. Other studies have looked at a specific form of positive emotional expression that is highly relevant in the entrepreneurial setting: entrepreneurs’ displayed enthusiasm (Cardon et al., 2017; Chen et al., 2009; Davis et al., 2017; Li et al., 2017; Shane et al., 2019). Entrepreneurs’ displayed enthusiasm is the observable expression of entrepreneurs’ very positive emotions (e.g., the affective component of passion) toward their venture, product, or service (Cardon et al., 2017; Chen et al., 2009).1 Some of these studies found that entrepreneurs’ displayed enthusiasm can cause positive reactions and evaluations from funders (Li et al., 2017; Mitteness et al., 2012; Shane et al., 2019). However, other studies documented that the effect was not statistically significant (Cardon et al., 2017; Chen et al., 2009).

What is missing in this literature is a more complete examination of the underlying pathways that can explain the observed relationships. Examining the underlying pathways is important because it allows us to better understand the relationships and boundary conditions. Li et al. (2017) considered emotional contagion as a pathway for explaining the positive effects of entrepreneurs’ displayed enthusiasm on funding. However, the observation of mixed findings from this growing literature motivates us to look beyond the positive pathways and consider the possibility of a negative pathway. The presence of a negative pathway can offset the effect of positive pathways, thereby providing a unique explanation for the observed non-effects or negative effects in prior studies.

We theorize a potential negative pathway by drawing on the impression management literature (Bolino et al., 2015; Gardner & Martinko, 1988; Lam et al., 2007). Although entrepreneurs’ displayed enthusiasm may impress potential funders (Cardon et al., 2017), it may also increase potential funders’ perceptions of the entrepreneur’s impression management motives, which in turn can reduce the funders’ funding intentions. In the following, we build on the impression management literature to develop our hypotheses.

**Impression Management**

Impression management describes “efforts by an actor to create, maintain, protect, or otherwise alter an image held by a target audience” (Bolino et al., 2008, p. 1080). People may engage in impression management to shape or change the target audience’s impressions of or attitudes toward them (Leary, 2019). Since changing the attitudes of others is persuasion (Eagly & Chaiken, 1998; Petty et al., 1997), persuasion can be viewed as a key purpose of impression management (Johnson et al., 2016). For example, attorneys may use impression management to persuade judges or juries (Higdon, 2008), and interviewees may use impression management to persuade interviewers (Stevens & Kristof, 1995). In the context of our study, persuasion is also an important purpose since entrepreneurs aim to persuade funders to provide financial support (Parhankangas & Ehrlich, 2014).
In order to impress or persuade the target audience, people may use various verbal or nonverbal impression management tactics (Gardner & Martinko, 1988; Johnson et al., 2016; Schneider, 1981). Impression management through verbal behaviors (i.e., linguistic communication through written or spoken language; Bonaccio et al., 2016) includes the use of assertive and defensive tactics, with assertive tactics further including ingratiating, self-promotion, intimidation, exemplification, and supplication (Jones & Pittman, 1982; Stevens & Kristof, 1995). Impression management through nonverbal behaviors refers to the use of nonlinguistic communication (such as facial expressions, gestures, touch, and interpersonal distancing; Bonaccio et al., 2016) to manage impression, and has also been recognized as playing an important role in various settings (Gardner & Martinko, 1988; Johnson et al., 2016). Drawing on the impression management literature, entrepreneurship research has examined how entrepreneurs may use their verbal or nonverbal communication to manage impressions and attract funders (Chen et al., 2009; Nagy et al., 2012; Parhankangas & Ehrlich, 2014).

It is important to note that a person may not intend to engage in impression management to alter others’ impressions or attitudes. Some people may engage in a behavior (e.g., smiling) subconsciously or out of habit, although it may end up altering others’ impressions or attitudes. What distinguishes such a subconscious behavior from an intentional impression management behavior is the absence or presence of an impression management motive: that is, whether the behavior is purposively driven by the actor’s conscious motive to create calculated and desired impressions or change others’ attitudes in a desired direction (Gardner & Martinko, 1988; Lam et al., 2007).

Regardless of whether a person engages in a behavior with or without an impression management motive, the perceptions of the beholders are more important. Even though a person may perform a verbal or nonverbal behavior subconsciously without an impression management motive, observers may still perceive the person’s behaviors as being driven by an impression management motive. For example, when an employee seeks feedback from supervisors, supervisors may interpret that the employee uses feedback-seeking intentionally to impress supervisors for a future benefit (Lam et al., 2007). That is, supervisors perceive that the employee’s feedback-seeking is driven by the employee’s underlying impression management motive to control how he/she appears to others and gain a favorable exchange in the future, even though the employee may not actually have this motive. Examining others’ perceptions is important because these perceptions might weaken or even reverse the intended benefit of impression management (Eastman, 1994; Lam et al., 2007; Stevens & Kristof, 1995). For example, a prior study found that although a job applicant’s nonverbal behaviors (e.g., smiling and eye contact) can positively influence interviewers’ evaluation, interviewers’ perceptions that the applicant intentionally uses nonverbal behaviors as impression management tactics not only do not improve the evaluation of the applicant’s suitability but also reduce interviewers’ intention to pursue the applicant (Stevens & Kristof, 1995).

**Displayed Enthusiasm and Perceived Impression Management Motives**

Following the impression management research above, we examine funders’ perceptions of an entrepreneur’s impression management motives, which is the extent to which funders perceive that the entrepreneur engages in impression management intentionally for the purpose of enhancing self-image, persuading funders, and gaining desired benefits. It is important to note that what we examine is not an entrepreneur’s actual motives but a funder’s perception of the entrepreneur’s impression management motives. After all, perceptions in the eyes of the beholders are what ultimately influence how the beholders make decisions (Lam et al., 2007).

We argue that potential funders will perceive an entrepreneur’s impression management motives more strongly when the entrepreneur displays more enthusiasm during a funding pitch. According to the impression management literature, an actor’s behaviors are perceived as more
purposive and intentional when the actor is expected to benefit from the behaviors and foster a desired impression in others (Stevens & Kristof, 1995). When an actor can gain impression management benefit from a behavior, the actor will likely have a stronger incentive to use the behavior intentionally. In the context of entrepreneurial pitching, entrepreneurs are often known to benefit personally from impressing potential funders through showing enthusiasm. An entrepreneur’s displayed enthusiasm can lead funders to feel more positive, become more engaged (Li et al., 2017; Shane et al., 2019), and view the entrepreneur as more confident (Cardon et al., 2017; Mitteness et al., 2012). Public media and past research also highlight the benefits to entrepreneurs of showing enthusiasm or passion for their products (Gasca, 2014; Harroch, 2020; Warnick et al., 2018). Hence, when potential funders see an entrepreneur displaying enthusiasm, they are likely to recollect that the entrepreneur may be using enthusiastic expressions intentionally to boost self-image, persuade funders, and gain the desired funding. Nonverbal displays of enthusiasm are also vivid and noticeable, so the more enthusiastic an entrepreneur’s display is, the more likely it is to trigger funders’ perceptions that the entrepreneur is using the enthusiastic displays for impression management purposes. Therefore, although an enthusiastic display can make funders feel excited or engaged (Li et al., 2017; Shane et al., 2019), it may also lead funders to perceive, to a greater extent, that the entrepreneur has an underlying impression management motive.

**Hypothesis 1.** An entrepreneur’s displayed enthusiasm during a funding pitch is positively related to potential funders’ perceptions of the entrepreneur’s impression management motives.

**The Moderating Effect of Perceived Domain Expertise**

We propose that an entrepreneur’s domain expertise (i.e., expertise in the subject areas related to the venture) perceived by potential funders can moderate the effect in Hypothesis 1, such that displayed enthusiasm is less likely to trigger funders’ perceptions of the entrepreneur’s impression management motives when the entrepreneur is viewed as having a stronger domain expertise. Being a domain expert is the result of prolonged and deliberate efforts in the domain (Ericsson et al., 1993). Hence, when perceiving an entrepreneur as a domain expert, funders are more likely to assume that the entrepreneur has devoted tremendous time and effort to the subject areas. Since sustained devotion often requires a strong drive that can motivate a person, potential funders are more likely to perceive the entrepreneur’s displayed enthusiasm as a natural expression of his/her strong innate drive rather than merely an impression management tactic.

Moreover, entrepreneurs with weaker perceived domain expertise may have a stronger incentive to use impression management tactics to attract funders, so their displayed enthusiasm is more likely to be perceived as being driven by an impression management motive. Domain expertise is a key determinant of source credibility in a persuasion context (Pommitakpan, 2004; Wilson & Sherrell, 1993). If they lack expertise on matters in the domain, entrepreneurs are viewed as not credible or persuasive (Giffin, 1967; Klucharev et al., 2008). As such, when entrepreneurs are perceived as having low domain expertise, they often must compensate for their weakness by relying on other means to boost their persuasiveness. One common way that helps people to compensate for their shortcomings is the use of impression management tactics (Schlenker & Weigold, 1992). Positive impressions may distract the observers from the actor’s shortcoming. Therefore, entrepreneurs with lower perceived domain expertise may be more motivated to use impression management. As a result, their displays of enthusiasm (a common impression management tactic) are more likely to be viewed as being driven by impression management motives.
**Hypothesis 2.** The positive effect of an entrepreneur’s displayed enthusiasm on potential funders’ perceptions of the entrepreneur’s impression management motives is stronger when the entrepreneur is viewed as having a lower level of domain expertise.

**The Negative Impact of Impression Management Motives on Funding Intentions**

We also predict that funders’ perceptions of an entrepreneur’s impression management motives reduce funders’ willingness to support the entrepreneur. In studies of employees’ organizational citizenship behaviors, researchers have demonstrated that when supervisors perceive an employee’s behaviors as being driven by the motive of enhancing self-image, the behaviors are rewarded less by the supervisors (Eastman, 1994). Lam et al. (2007) found that when supervisors perceive that an employee uses feedback-seeking as an impression management tactic to boost their self-image and impress supervisors, the employee’s feedback-seeking behavior is no longer positively received. Similarly, Stevens & Kristof (1995) found that interviewers’ perceptions of a job applicant using impression management tactics during an interview reduce their willingness to pursue the applicant (Stevens & Kristof, 1995). The overall reasoning behind these findings is that the perception of an actor engaging in seemingly positive behaviors for the purpose of self-promotion can lead to the actor being considered as calculating and even untruthful (Crant, 1996).

Reactance theory offers another explanation: people are wary of their choice being pressured and influenced (Clee & Wicklund, 1980). If people perceive someone else as trying to intentionally influence their choice, they will be more reluctant to react favorably (Campbell & Kirmani, 2000). For instance, customers who believe that a salesperson is persuading them into buying a product rather than serving them would feel pressured and uncomfortable. As a result, they have a higher resistance to purchasing the product (Wicklund et al., 1970). Therefore, when potential funders perceive that an entrepreneur is behaving with an impression management motive to intentionally influence their perceptions and choices, they will become less willing to support the entrepreneur. Thus, we hypothesize the following:

**Hypothesis 3.** Potential funders’ perceptions of an entrepreneur’s impression management motives are negatively related to the funders’ funding intentions.

Thus far, Hypotheses 1 and 3 describe a potential negative indirect effect of an entrepreneur’s displayed enthusiasm on funders’ funding intentions through funders’ perceptions of the entrepreneur’s impression management motives. Hypothesis 2 suggests that this negative pathway can be moderated by an entrepreneur’s perceived domain expertise. Integrating the above theorizing and hypotheses, we propose the following mediation and moderated mediation hypotheses.

**Hypothesis 4.** An entrepreneur’s displayed enthusiasm can negatively influence potential funders’ funding intentions indirectly through potential funders’ perceptions of the entrepreneur’s impression management motives.

**Hypothesis 5.** An entrepreneur’s perceived domain expertise moderates the indirect effect of the entrepreneur’s displayed enthusiasm on potential funders’ funding intentions through potential funders’ perceptions of the entrepreneur’s impression management motives, such that when the entrepreneur is viewed as having a lower level of domain expertise, the indirect effect will become more negative.
The Positive Pathways

It is important to note that prior studies often focused on the positive effects of displayed enthusiasm on funding, thereby assuming the presence of positive pathways (e.g., Cardon et al., 2017; Chen et al., 2009; Li et al., 2017; Shane et al., 2019). One positive pathway that has been demonstrated is emotional contagion (Davis et al., 2017; Li et al., 2017). Funders develop positive emotions through automatically mimicking entrepreneurs’ facial expressions (Hess & Blairy, 2001; Neumann & Strack, 2000). The felt positive emotions can then color funders’ subjective evaluations (Eberly et al., 2013; Oikawa et al., 2011; Schwarz & Clore, 1983). For instance, Li et al. (2017) documented that the displayed enthusiasm of entrepreneurs significantly predicts potential funders’ positive affect, which in turn promotes funding intentions.

The other positive pathway is cognitive reasoning: for example, potential funders making an inference about the entrepreneur’s self-confidence (Baron, 2008). Enthusiastic nonverbal cues, such as animated facial expressions, are powerful ways to make people appear confident (Smith, 2013). Communicators’ confidence is in turn effective in persuading the audience (van Zant & Berger, 2020). In the case of entrepreneurs, their self-confidence is positively related to venture outcomes, such as firm performance (Chandler & Jansen, 1992) and growth (Baum & Locke, 2004). When potential funders view an entrepreneur as confident, their perceived venture risk decreases, and they are more inclined to invest. As a result, entrepreneurs’ self-confidence can be a positive pathway through which displayed enthusiasm facilitates potential funders’ funding intentions. Such a pathway has been assumed in prior studies (Cardon et al., 2017; Mitteness et al., 2012), but it has not been empirically tested.

We account for both positive pathways in our empirical models. One pathway is affective (making funders get caught up in the excitement of the entrepreneur), and the other is cognitive (making funders infer that the entrepreneur is self-confident). Both pathways can lead funders to support the entrepreneur. Our goal is to examine whether our hypothesized negative pathway still emerges even after accounting for these positive pathways and whether positive and negative pathways coexist.

Methods

We tested our hypotheses in the crowdfunding context. Crowdfunding has become an increasingly important source of funding for entrepreneurs (Schwienbacher & Larralde, 2012). Some crowdfunding platforms explicitly advise entrepreneurs to display enthusiasm through pitch videos (Indiegogo, 2015; Kickstarter, 2015). An interesting question is what potential funders have in mind when they observe that an entrepreneur displays strong enthusiasm but lacks the domain expertise for the project. To obtain a qualitative answer to this question, we conducted an exploratory study with 304 Amazon Mechanical Turk (MTurk) participants in which we asked them the above open-ended question. MTurk participants have been frequently used in crowdfunding research because they resemble crowdfunding platform visitors in terms of their technology interests and income profiles (Chan & Parhankangas, 2017; Mason & Suri, 2012). The response from these participants reassured us that the perception of impression management motives is a frequently observed inference (see Appendix 1).

To test our conceptual model (Figure 1), we conducted two different studies with complementary methods. In Study 1, we tested the model using a survey sample of 1811 participants, each of whom evaluated one of 182 real crowdfunding projects. In Study 2, we recruited another sample of participants and conducted a between-subject randomized experiment to confirm the causal impact of displayed enthusiasm.
Study 1: Survey of a Crowdfunding Sample

Procedure and Sample

We identified a sample of crowdfunding projects on a randomly selected date from Kickstarter.com, one of the largest crowdfunding platforms. We began with all projects that would still be raising funds during the one-week time window when we collected responses for the study. We then limited the projects to only those that had a pitch video in which the entrepreneurs presented the product/service, so that participants could observe entrepreneurs’ displayed enthusiasm through watching the video (Chen et al., 2009). We also limited our sample of projects to those in the technology and product design categories; these projects were most similar to the ventures previously studied with regard to entrepreneurs’ enthusiasm (Chen et al., 2009; Mitteness et al., 2012), thereby facilitating better ties and comparisons to prior research. We further removed projects that were location specific (which were less likely to be applicable to participants in general) or sexually or politically offensive. These steps led to a sample of 183 crowdfunding projects.

We then recruited participants from Amazon MTurk to evaluate these crowdfunding projects. The participants were different from those we recruited for the exploratory study mentioned earlier. To make the evaluation task more relevant to participants, we showed each participant three projects randomly drawn from the 183 projects and let the participant choose one project that interested them. To minimize the likelihood of introducing confounds, we only let participants see a very brief description of each project (e.g., “Revolutionary Window Security to Bring Peace and Added Protection to Your Home”), without seeing any video or other information about the project. Thus, their project choices were unlikely to be based on the substance information that they would later use to evaluate the project. One of the 183 projects was chosen by only one participant; as a result, this project was dropped from the analysis because we needed at least two participants to rate each project so that we could compute interrater reliability for the measurement of entrepreneurs’ displayed enthusiasm.

Our final sample included 1811 participants who evaluated 182 projects. Each project was evaluated by an average of approximately 10 participants (standard deviation = 4.18). Each participant watched a project pitch video before making their funding decision. To rule out other potential factors of funding decisions (e.g., funding levels shown on the project website), we created a controlled environment, such that participants saw only the pitch video embedded within the survey. Based on the information in the video, participants indicated their intentions to fund the project. Afterward, we asked participants to share their feelings and perceptions regarding the entrepreneurs and projects.

Measures

Funding Intention. We measured participants’ intentions to invest in a project using two questions: “How likely would you be to back this project?” and “How likely would you be to purchase the product/service proposed in this project?” We included the second question because it was context specific: prepaying for a product/service before it is developed or launched in the market is a very common form of supporting a venture on Kickstarter. Participants selected their answers using a 7-point Likert scale that ranged from very unlikely (1) to very likely (7). The Cronbach’s α for the items was .89, indicating a high level of internal consistency between the items. We took the average of the items to measure funding intentions.

Displayed Enthusiasm. We measured entrepreneurs’ displayed enthusiasm based on participants’ ratings using a six-item scale from prior research (Cardon et al., 2017; Chen et al., 2009). Participants indicated the extent to which they agreed with the statements using a 7-point Likert
scale (α = .92; see items in Appendix 2). Then, following Li et al. (2017), we aggregated the ratings from all participants evaluating the same project to represent this project’s final score for displayed enthusiasm. We found sufficient between-project variance and within-project consistency to justify project-level aggregation (ICC [1] = .15; ICC [2] = .77; Mean Rwg = .81). The ICC (1) value exceeded the median value of .12 (James, 1982), the ICC (2) value exceeded the recommended level of .60 (Glick, 1985; Liu et al., 2017), and the mean Rwg value exceeded the recommended .70 level (Gong et al., 2013; Liu et al., 2017).

**Perceived Domain Expertise.** We measured participants’ perceptions of entrepreneurs’ domain expertise using an eight-item scale from prior research (McCroskey, 1966). This scale has been shown to be a reliable measure of expertise-based credibility and is most applicable when an evaluator is not familiar with the individual being evaluated (Elsbach & Elofson, 2000). Example items include “The creator(s) is well-informed on this subject” and “I would consider this creator(s) to be an expert on the topic.” Participants indicated the extent to which they agreed with the statements using a 7-point Likert scale (α = .95; see the full scale in Appendix 2).

**Perceived Impression Management Motives.** The scale used in this study captured potential funders’ perceptions of an entrepreneur’s impression management motives for the purpose of persuasion (Campbell & Kirmani, 2000). While impression management can be used for non-persuasion purposes, our study centered on a persuasion situation in which entrepreneurs were persuading potential funders to support them. Hence, we measured potential funders’ perceptions of entrepreneurs’ impression management motives using items adapted from prior research within the persuasion context (Campbell & Kirmani, 2000; Williams et al., 2004). Example items include “The creator(s) used his/her emotions as a way to influence or persuade potential backers” and “The creator(s) was using impression management tactics to get people to back his/her project.” We asked participants to indicate the degree to which they disagreed or agreed with each statement using a 7-point Likert scale (α = .84; see Appendix 2).

**Accounting for the Positive Pathways**

As mentioned earlier, prior research has suggested mechanisms that explain the positive effect of an entrepreneur’s displayed enthusiasm on funders’ funding intentions: emotional contagion and inferences regarding the entrepreneur’s self-confidence (e.g., Cardon et al., 2017; Li et al., 2017). We included these two additional mediators when testing the mediating effect of perceived impression management motives (Hypotheses 4 and 5) in order to examine whether this negative pathway remains viable even after we account for the positive pathways.

To measure the extent of emotional contagion, we asked participants to report how they felt (participant’s positive emotions) immediately after watching their selected video using a 10-item, 5-point Likert scale of positive affect (Mackinnon et al., 1999; α = .95). We measured participants’ perceptions of entrepreneurs’ self-confidence using a four-item, 7-point bipolar scale adapted from prior research (Baum et al., 2001; Chen et al., 2001; α = .94).

**Control Variables**

We controlled for other variables that could influence the participants’ decisions. First, we asked participants to report their perceptions of entrepreneurs’ preparedness to take the venture forward using a five-item scale from prior research (α = .90) which has been demonstrated to be a strong predictor of investors’ funding intentions (Chen et al., 2009; Pollack et al., 2012). Second, creating a well-made pitch video is highly recommended by Kickstarter, so we measured
participants’ perceptions of video quality using four items ($\alpha = .89$). Third, participants may view early-stage projects differently from late-stage projects (Rose et al., 2020), so we asked participants to rate stage of development, assigning the value of 1 if the entrepreneurs seemed to be just beginning the project with a rough concept, 2 if the entrepreneurs seemed to be seeking funding for continued development, and 3 if the entrepreneurs already had a product/service and were ready to take it to the market. We further controlled for project category using a dummy variable coded as 1 if the product was in the technology category and 0 if it was in the design category.

We also controlled for participant-related variables that could affect their funding intentions. These included participant’s domain expertise related to the project ($\alpha = .92$); backing experience, measured by the number of crowdfunding projects to which each participant had contributed prior to participating in this study (Osnabrugge, 1998); risk aversion ($\alpha = .90$; Hoffmann et al., 2013); self-reported annual household pretax income, education level, birth gender (1 for male and 0 for female), and age. The summary statistics of all the variables are shown in Table 1.

**Multicollinearity and Common Method Variance**

To test for the presence of multicollinearity, we followed Neter et al.’s (1985) recommended procedure and calculated the variance inflation factors (VIFs) of all variables entering the regression analysis. None of the VIF scores was more than 3, far below the commonly accepted threshold of 10 that indicates potential multicollinearity problems.

Given that the study participants provided measures for many of the variables, common method bias might be a concern (Podsakoff et al., 2003). Aggregating the variable displayed enthusiasm among multiple participants alleviated this concern to some extent. To detect the level of common method variance among the other nine variables that were measured using multi-item survey scales, we followed Podsakoff et al. (2003) and conducted a common latent factor analysis. We ran a confirmatory factor analysis (CFA) by including all nine latent factors ($\chi^2 = 7754.657$, df = 953; CFI = .904, RMSEA = .063). Based on this CFA model, we added a common latent factor to be uncorrelated with the other latent factors ($\chi^2 = 5506.731$, df = 907; CFI = .935, RMSEA = .053). All factor loadings on the nine latent factors remained statistically significant ($ps < .05$). However, the improvement in the model fit suggested the presence of common method variance. To assess the size of this variance, we re-estimated the model with all factor loadings on the common latent factor being equal. From the equal factor loading (.447), we observed that the common factor explained about 20% of the variance, which is below the recommended level of 50% (e.g., Nielsen et al., 2018; Shneor & Munim, 2019). Moreover, to further address any remaining concern of common method bias, we conducted Study 2 to eliminate this bias by manipulating the independent variable exogenously.

**Results**

We tested Hypotheses 1 to 3 using OLS regression with project-level random effects. We also conducted a robustness check by controlling for project-level fixed effects to cross-verify results for Hypotheses 2 and 3 (as explained later). The results from the random-effect analysis are presented in Table 2. Displayed enthusiasm was positively associated with participants’ perceptions of impression management motives ($b = .317$, $p < .01$, Model 1), supporting Hypothesis 1. Moreover, the interaction between entrepreneurs’ displayed enthusiasm and perceived domain expertise was statistically significant ($b = -.074$, $p < .05$, Model 2), supporting Hypothesis 2. To interpret this interaction effect, we computed the change in marginal effects from Model 2: When the entrepreneurs were perceived as very incompetent (= 1 on a Likert scale ranging from
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Notes:
1. \( N = 1811 \). All correlation coefficients above 0.048 or below -0.048 are significant at 0.05 level.
2. For participants’ income, we asked participants to report their annual household pretax income using the following categories with values ranging from 1 to 8, respectively: Less than USD 25,000, USD 25,000 to 34,999, USD 35,000 to 49,999, USD 50,000 to 74,999, USD 75,000 to 99,999, USD 100,000 to 124,999, USD 125,000 to 149,999, USD 150,000 or more.
3. For participants’ education, we asked participants to report their highest education levels achieved using the following categories with values ranging from 1 to 7, respectively: 12th grade or less, some high school, high school, some college with no degree, bachelor’s degree, master’s degree, and doctoral degree.
4. For participants’ age, we asked participants to report their age using the following categories with values ranging from 1 to 6, respectively: 18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, and 65 and over.
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Table 2. Random Effect Regression Analysis Results From Study 1

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<th>Variables</th>
<th>Model 1 (H1)</th>
<th>Model 2 (H2)</th>
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<td>Displayed enthusiasm</td>
<td>0.317** (0.041)</td>
<td>0.719** (0.208)</td>
<td>−0.228 (0.196)</td>
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<td>Perceived domain expertise</td>
<td>−0.181** (0.040)</td>
<td>0.163 (0.162)</td>
<td>−0.081 (0.161)</td>
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<td>Displayed enthusiasm × perceived domain expertise</td>
<td>−0.074* (0.036)</td>
<td>0.052 (0.035)</td>
<td>−0.089*** (0.028)</td>
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<td>Participant’s positive emotions</td>
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<td>0.845** (0.041)</td>
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<td>Participant’s perception of the entrepreneur’s self-confidence</td>
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<td>0.101*** (0.036)</td>
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<td>Preparedness</td>
<td>0.074+ (0.039)</td>
<td>0.076* (0.039)</td>
<td>0.161*** (0.052)</td>
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<td>Video quality</td>
<td>0.046 (0.032)</td>
<td>0.042 (0.032)</td>
<td>0.093* (0.037)</td>
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<td>−0.053 (0.038)</td>
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<td>Project category</td>
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<td>−0.100+ (0.057)</td>
<td>0.120 (0.076)</td>
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<td>Participant’s domain expertise</td>
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<td>0.097** (0.022)</td>
<td>0.108** (0.025)</td>
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<td>Participant’s crowdfunding backing experiences</td>
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<td>0.036 (0.027)</td>
<td>0.068** (0.025)</td>
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<td>Participant’s risk aversion</td>
<td>0.065** (0.025)</td>
<td>0.067** (0.025)</td>
<td>−0.087*** (0.029)</td>
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<td>Participant’s income</td>
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<td>Participant’s education</td>
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<td>Participant’s age</td>
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<td>0.048* (0.023)</td>
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<td>Constant</td>
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Robust standard errors in parentheses.

** p < 0.01, * p < 0.05, + p < 0.10.

1 to 7), a one standard deviation (SD) increase in entrepreneurs’ displayed enthusiasm increased participants’ perceptions of impression management motives by .72 SD (p < .01); in contrast, when the entrepreneurs were perceived as very competent (= 7), a one SD increase in displayed enthusiasm
increased participants’ perceptions of impression management motives by only .22 SD ($p < .01$). Finally, we found that participants’ perceptions of impression management motives had a negative effect on funding intentions ($b = -.089$, $p < .01$, Model 3), thus supporting Hypothesis 3.

To test the hypothesized mediation and moderated mediation (Hypotheses 4–5) as well as the presence of positive pathways, we followed the bootstrapping approach recommended by Preacher & Hayes (2008). We conducted the bootstrapping analysis through the SPSS PROCESS macro, using Model 4 to test mediation and Model 7 to test moderated mediation, with 10,000 bootstrap resamples (Hayes, 2015). We included the entrepreneur’s displayed enthusiasm as the independent variable, the participant’s perceptions of the entrepreneur’s impression management motives as a mediator, and two additional mediators for the positive pathways: the participant’s positive emotions and perception of the entrepreneur’s self-confidence. We included the entrepreneur’s perceived domain expertise as a moderator (used in PROCESS Model 7), the participant’s funding intention as the dependent variable, and the remaining variables as control variables.

We found support for Hypotheses 4 and 5. Participants’ perceptions of entrepreneurs’ impression management motives mediated the effect of entrepreneurs’ displayed enthusiasm on participants’ funding intentions (indirect effect = -.031, 95% CI = [−.050, −.014]), thus supporting Hypothesis 4. The index of moderated mediation was also statistically significant ($= .008, 95\% \text{CI} = [0.01, 0.18]$, supporting Hypothesis 5. The mediation effect of the negative pathway when perceived domain expertise was 1SD below the mean (indirect effect = −.042, 95% CI = [−.067, −.020]) was nearly twice as large as the mediation effect when perceived domain expertise was 1SD above the mean (indirect effect = −.024, 95% CI = [−.043, −.009]).

Regarding the two positive pathways suggested by prior literature, we found that the indirect effect through each participant’s perception of entrepreneurs’ self-confidence was statistically significant (indirect effect = .012, 95% CI = [0.002, 0.026]), but the indirect effect through participants’ own positive emotions was not (indirect effect = −.023, 95% CI = [−.070, .022]). The effects of displayed enthusiasm on participants’ perceptions of entrepreneurs’ self-confidence or participants’ positive emotions were not moderated by entrepreneurs’ perceived domain expertise ($ps > .4$). Note that the positive indirect effect through perceptions of entrepreneurs’ self-confidence ($= .012$) was less than a half of the negative indirect effect through perceptions of impression management motives ($= −.031$). Hence, the total effect of displayed enthusiasm on funding intentions was nonsignificant (total effect = .02, $p = .690$). Together, these results suggest that the effects of the negative pathway might have canceled out the effects of the positive pathways, thus making the total effect nonsignificant in this study.

Examining the control variables (Model 3 of Table 2), we found that the following factors contributed positively to participants’ funding intentions in our sample: participants’ perceptions of entrepreneurs’ preparedness, pitch video quality, participants’ own expertise in the domains related to the project, and participants’ own backing experiences. In contrast, participants with high risk aversion and high education levels were less likely to fund the projects. In addition, male participants were less likely to fund a project than female participants. Participants’ age and income, as well as their perceptions of the project’s stage of the development, had no significant influence in our sample.

Robustness Analyses

We conducted several robustness checks. First, due to the high correlation between entrepreneurs’ perceived preparedness and domain expertise, we dropped the former, reran our analyses above, and found consistent results. Second, we included additional control variables to rule out potential confounds. We added a control for the number of participants who evaluated the project to control for the potential influence of project popularity. We also controlled for the possible verbal impression management tactics that entrepreneurs may use in project videos by following the
approach in Parhankangas & Ehrlich (2014). The results after controlling for these additional variables continued to support our hypotheses. Finally, to further rule out alternative explanations due to projects or entrepreneurs, we ran a fixed-effect regression model. This analysis allowed us to rule out any project-level fixed effects, including (but not limited to) project popularity and verbal impression management tactics. The results continued to support Hypotheses 2 and 3. Nevertheless, we could not perform a fixed-effect analysis to test Hypotheses 1, 4, and 5 because these hypotheses examine the effects of displayed enthusiasm, which is a project-level variable that perfectly correlates with project-level fixed effects. To fully rule out the project-level differences as alternative explanations, we turn to the next study.

Study 2: A Randomized Experiment

We conducted an experimental study to cross-verify Study 1’s findings and address its limitations. Specifically, we eliminated project-level unobserved differences by holding constant project attributes that were outside our interest. Participants watched the same entrepreneur pitching for the same project with the same spoken content; the entrepreneur’s pitch differed only in terms of the levels of displayed enthusiasm and domain expertise. Moreover, to rule out the impact of participants’ individual differences, we randomly assigned participants to one of the experimental conditions. Thus, Study 2 allowed us to better isolate the causal effect of displayed enthusiasm. This study also allowed us to more fully address the concern of common method bias (Podsakoff et al., 2003) since displayed enthusiasm and perceived domain expertise were manipulated through the experiment and not measured based on the participants’ responses. Finally, the measure of the perceptions of impression management motives in Study 1 was specific to the persuasion context. In Study 2, we tested the robustness of our findings by using a more general impression management motives scale.

Participants and Procedure

We conducted a 2 (high vs. low displayed enthusiasm) × 2 (high vs. low domain expertise) between-subject experiment to test our hypotheses. Three hundred and twenty-one MTurk participants located in the United States participated in the study. Participants were randomly assigned to one of the four conditions, and they watched a pitch video for a crowdfunding project. In the video, the project creator, named Eric, was proposing to develop Power2Go—a new wireless charger that can attach to a phone easily and charge the phone on the go. To screen out participants who did not pay attention to the video, we included two simple memory check questions at the end of the study asking about the content in the video. Participants who did not answer the questions correctly failed the attention test and were dropped; thus, the final sample comprised 273 participants.

Experimental Conditions and Measures

We manipulated displayed enthusiasm by following the prior literature (Li et al., 2017). Specifically, we hired a professional actor to produce two pitch videos using the same script, displaying high enthusiasm in one video and little enthusiasm in the other by varying their facial expressions, body movements, vocal pitch, and vocal tone. We focused on these nonverbal attributes to be consistent with the measurement scale of displayed enthusiasm used in our Study 1 and prior studies (Chen et al., 2009; Li et al., 2017). The script for the video was created based on a Kickstarter project named BricksPower and included the articulation of consumer need, existing charging solutions with various deficiencies, the proposed product and its functions, and the
request for funding support. Both videos were approximately 2 minutes long and showed the entrepreneur (i.e., actor) wearing the same outfit and against the same background.

We manipulated participants’ perceptions of an entrepreneur’s domain expertise by showing additional information about the entrepreneur. We created two statements about the entrepreneur and his team’s knowledge, education, and professional background related to the project. Participants in the high (or low) domain expertise conditions read a high (or low) expertise statement (see Table 3).

After watching the video and reading about the entrepreneur, participants reported their experienced emotions, willingness to fund the project, and perceptions regarding the entrepreneur (e.g., impression management motives, self-confidence). To account for a potential order effect, we counterbalanced whether a participant answered the funding questions (the dependent variable) before or after the mediator questions. In our analysis, we controlled for this order as a dummy variable.

For the perceptions of impression management motives in Study 1, we used a scale to capture participants’ perceptions of entrepreneurs’ impression management motives for the purpose of persuasion (Campbell & Kirmani, 2000). Although persuasion is an important purpose of impression management, impression management tactics can be used for other purposes (e.g., creating a good impression). Hence, in Study 2, we used a more general scale adapted from Lam et al. (2007) to capture funders’ perceptions of an entrepreneur’s impression management motives ($\alpha = .91$). The items are listed in Appendix 2.

Lastly, for manipulation checks, we asked the same questions regarding the entrepreneur’s enthusiasm ($\alpha = .99$) and domain expertise ($\alpha = .97$) as in Study 1.

**Results**

The manipulation check confirmed that compared to participants in the low entrepreneur enthusiasm conditions, participants in the high enthusiasm conditions viewed the entrepreneur as displaying stronger enthusiasm ($M = 5.87$ vs. $1.42$, $SE_{diff} = .11$, $F(1, 271) = 1659.34$, $p < .01$). Moreover, compared to participants in the low domain expertise conditions, participants in the high expertise conditions perceived the entrepreneur as possessing greater domain expertise ($M = 5.46$ vs. $2.92$, $SE_{diff} = .15$, $F(1, 271) = 300.44$, $p < .01$). Thus, the manipulation of both variables was successful.

**Table 3. Expertise Statements Used in Study 2**

<table>
<thead>
<tr>
<th>Statement</th>
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<tbody>
<tr>
<td><strong>Low expertise</strong></td>
</tr>
<tr>
<td>Eric is a novice in the mobile accessory industry. He does not have a degree in engineering or industrial design. He is not a member of the mobile accessory industry association. Eric did not have experience in designing mobile accessory products in the past. He is also not familiar with the manufacturing and supply chain management for mobile accessory products. For the Power2Go project, Eric has assembled a team of friends, and none of them are experts from this industry</td>
</tr>
<tr>
<td><strong>High expertise</strong></td>
</tr>
<tr>
<td>Eric is an expert in the mobile accessory industry. He has master’s degrees in engineering and industrial design. He is an active and long-standing member of the mobile accessory industry association. During his 15 years’ experiences in the mobile accessories industry, Eric created many new mobile accessory products. Two of his designs won the industry’s Best Design Award (a highly selective prize) for mobile devices in 2016 and 2018. Throughout the years, Eric has also developed strong expertise in the manufacturing and supply chain management for mobile accessory products. For the Power2Go project, Eric has assembled a team of experts from this industry</td>
</tr>
</tbody>
</table>
We conducted an ANCOVA analysis with displayed enthusiasm and domain expertise as two independent variables, perceptions of impression management motives as the outcome variable, and the order of answering the dependent and mediating variables’ questions as a categorical control. The results revealed that displayed enthusiasm had a positive effect on participants’ perceptions of impression management motives \((M = 4.95 \text{ vs. } 2.77, SE_{\text{diff}} = .15, F(1, 268) = 202.84, p < .01)\), thus supporting Hypothesis 1. Moreover, this effect was significantly moderated by the entrepreneur’s domain expertise \((F(1, 268) = 6.43, p = .01)\). Pairwise comparisons revealed that the impact of displayed enthusiasm on the perception of impression management motives was stronger in the low expertise conditions \((M = 5.48 \text{ vs. } 2.92, SE_{\text{diff}} = .22, p < .01)\) than in the high expertise conditions \((M = 4.41 \text{ vs. } 2.62, SE_{\text{diff}} = .22, p < .01; \text{see Figure 2})\). These results provide support for Hypothesis 2.

To test the hypothesized mediation and moderated mediation (Hypotheses 4–5) as well as the positive pathways, we used SPSS PROCESS models 4 and 7. Again, we entered the entrepreneur’s displayed enthusiasm as the independent variable, the participant’s perceptions of the entrepreneur’s impression management motives and self-confidence, and the participant’s positive emotions as the three mediators, the entrepreneur’s domain expertise as a moderator (used in PROCESS Model 7), funding intention as the dependent variable, and the question order as a covariate.

We again found support for Hypotheses 3 to 5. Participants’ perceptions of impression management motives had a negative effect on funding intention \((b = -.159, p = .01)\), and it mediated the effect of displayed enthusiasm on funding intention (indirect effect = -.345, 95% CI = [-.631, -.067]), thereby supporting Hypotheses 3 and 4. Moreover, this mediation effect was stronger when the entrepreneur’s domain expertise was low (indirect effect = -.620, 95% CI = [-.951, -.304]) than when it was high (indirect effect = -.432, 95% CI = [-.684, -.211]). The index of moderated mediation was statistically significant (=.187, 95% CI = [.040, .389]), supporting Hypothesis 5.6

Regarding the effects of the two positive mediation paths based on the prior literature, we found both pathways to be statistically significant (indirect effect through the participant’s positive emotions = .404, 95% CIs = [.206, .611]; indirect effect through the participant’s perceptions of the entrepreneur’s self-confidence = .601, 95% CIs = [.354, .865]). The indirect effect through the participant’s perceptions of the entrepreneur’s self-confidence was moderated by the
entrepreneur’s domain expertise (index of moderated mediation CI = [−.557, −.059]). Moreover, the indirect effects through the participant’s positive emotions (β = .404) and the participant’s perceptions of the entrepreneur’s self-confidence (β = .601) were both greater in absolute value than the indirect effect through the perceptions of impression management motives (β = −.345). As such, the total effect of displayed enthusiasm on funding intention was positive in this study (total effect = .77, p < .01). We discuss why the total effect here seems to differ from the total effect found in Study 1 in the next section.

**General Discussion and Conclusion**

The main purpose of our studies was to examine a potential negative pathway for the impact of the entrepreneur’s displayed enthusiasm during a funding pitch on potential funders’ funding intentions. By combining a survey study (Study 1) and a randomized experiment (Study 2), we gained several meaningful insights. We found that the entrepreneur’s displayed enthusiasm can increase potential funders’ perceptions of the entrepreneur’s impression management motives, especially when the entrepreneurs are perceived to have lower domain expertise. This perception of impression management motives can in turn reduce funders’ willingness to support entrepreneurs. Both studies revealed that the perceptions of impression management motives mediate the effects of displayed enthusiasm on potential funders’ funding intentions, even after accounting for the positive pathways suggested by prior studies (i.e., emotional contagion and positive inferences regarding the entrepreneur’s self-confidence). Overall, our findings advance the literature in several valuable ways and have the following interesting implications.

**Theoretical Implications**

*Implications for Entrepreneurship Research on Displayed Emotions.* A main contribution of this research is that it uncovered an underlying mechanism by which the entrepreneur’s displays of enthusiasm can negatively influence potential funders’ funding decisions. Past research has suggested that the entrepreneur’s displayed enthusiasm can lead to positive reactions and evaluations by potential funders (Li et al., 2017; Shane et al., 2019). However, some studies found no effect of the entrepreneur’s displayed enthusiasm on funders’ funding intentions (Cardon et al., 2017; Chen et al., 2009). More recent research even revealed a negative effect of expressing positive emotions on funding outcomes, speculating that, under some circumstances, expressions of positive emotions may be perceived as merely a tactic for persuasion (Jiang et al., 2019; Warnick et al., 2021). Our studies are, to the best of our knowledge, the first to directly identify and empirically test an underlying mechanism that can potentially explain why displayed enthusiasm could have a negative effect on funding outcomes.

Additionally, our studies extend prior studies that suggest emotional contagion as the positive pathway (Li et al., 2017; Davis et al., 2017) by not only replicating this pathway (in Study 2) but also empirically demonstrating another positive pathway. That is, enthusiastic expressions can lead potential funders to perceive an entrepreneur as being confident, thereby evaluating a project favorably (Cardon et al., 2017; Mitteness et al., 2012). Our finding on the coexistence of these positive and negative mechanisms may explain why prior studies have observed mixed effects of displayed enthusiasm on funding outcomes under different circumstances. Hence, our results contribute to a more comprehensive understanding of how displayed enthusiasm can determine the entrepreneur’s success in persuading potential funders.

Our studies also offer valuable insight on a boundary condition for the negative pathway. Across both studies, we found that the effect of the negative pathway increased when the
entrepreneurs were perceived as having lower domain expertise. Expertise is a costly signal for indicating the entrepreneur’s quality because expertise is relatively hard to obtain, requiring costly-to-earn credentials or past achievements. Signaling theory has long suggested that credible signals that differentiate low-quality agents from high-quality agents must be costly (Connelly et al., 2011). Recent entrepreneurship research has revealed that not all funders make rational decisions or have the motivation or ability to fully assess costly signals; in particular, crowdfunding funders may rely instead on heuristics and costless signals for making decisions (Allison et al., 2017; Anglin et al., 2018). Our research echoes recent research that suggests that costless signals are more influential in tandem with costly signals (e.g., media coverage, patent ownership; Scheaf et al., 2018). With a costly signal (domain expertise), entrepreneurs who display enthusiasm (i.e., a costless signal) are less likely to be perceived as driven by impression management motives, thereby increasing the chance of obtaining positive funding outcomes. Hence, although displaying one’s enthusiasm toward a venture or product is a powerful way to impress funders, enthusiasm alone may not be sufficient to make a difference.

Moreover, our research reveals that the interpersonal influence of entrepreneur emotions takes place via both affective (automatic) and cognitive (deliberate) processes. This endeavor mirrors a recent study that aimed to advance our understanding of how the entrepreneur’s passion may influence employees through both affective and cognitive processes (Hubner et al., 2019). According to the theory of emotion in interpersonal contexts (Hareli & Rafaeli, 2008; van Kleef et al., 2012), both processes matter because potential funders’ decisions are shaped not only by the automatically evoked emotions while watching an entrepreneur’s pitch but also by how the funders make sense of the displayed emotions. Hence, our research implies that future research should take a more holistic approach and examine both the affective and cognitive influences of the entrepreneur’s emotional expressions in an interpersonal context like crowdfunding.

Implications for Impression Management Research in Entrepreneurship. Our research advances the impression management research in entrepreneurship by showing that displaying enthusiasm can produce paradoxical effects. Past research about employee work behaviors has recognized that engaging in impression management behaviors is not without risk (Crant, 1996; Lam et al., 2007), but such risk has rarely been examined in entrepreneurship research. Entrepreneurship research has mostly focused on the benefits of impression management (Nagy et al., 2012; Parhankangas & Ehrlich, 2014). Our results imply that the entrepreneur’s displays of enthusiasm may be beneficial to the extent that they do not trigger funders’ strong perceptions of impression management motives. When funders perceive the entrepreneur’s behaviors as being driven by impression management motives, this perception will engender negative reactions. By demonstrating the potential risk of displaying enthusiastic expressions, our research shows the possibility that this risk can also arise when entrepreneurs use other types of nonverbal or verbal behaviors for managing impressions, such as high energetic vocal tones (van Zant & Berger, 2020) and verbal self-promotion (e.g., Parhankangas & Ehrlich, 2014). Thus, future research should examine which types of nonverbal or verbal behaviors can more easily trigger observers’ perceptions of impression management motives, thereby triggering a negative pathway like the one we found in this paper.

Practical Implications

Entrepreneurs are often advised to show enthusiasm or passion when pitching to potential funders (Gasca, 2014; Harroch, 2020). However, our studies highlight both the benefits and risks of showing enthusiasm. Although an entrepreneur’s enthusiastic expressions may make potential funders feel more positive or perceive the entrepreneur as more confident, enthusiastic expressions can also lead potential funders to perceive that the expressions were intentional for impression
management. This perception of impression management motives can in turn lower funders’ willingness to support the entrepreneur. For entrepreneurs who are truly enthusiastic about their work, displaying enthusiasm may be imperative and can have an added benefit, so they certainly do not want their enthusiastic expressions to have an unintended effect. To mitigate this problem, we suggest that entrepreneurs should clearly communicate their expertise related to the project to potential funders during a pitch. When perceiving an entrepreneur as a domain expert as opposed to a novice, potential funders are less likely to associate the entrepreneur’s displayed enthusiasm with an ulterior impression management motive. Therefore, if entrepreneurs express their enthusiasm during a funding pitch, it is important that they also emphasize their relevant credentials, experience, background, and hard-earned skills in carrying out the projects. Such emphasis can make the entrepreneur’s displays of enthusiasm more effective in attracting crowdfunding.

Limitations and Future Research

First, although our findings about the negative pathway were consistent across the two studies, some differences are worthy of further scholarly inquiry. In particular, the positive pathway of emotional contagion and the total effect of displayed enthusiasm on funding intention were significant in Study 2, but not in Study 1. These different results may be driven by the different methods (i.e., survey vs. experiment) and project heterogeneity across two studies (i.e., Study 1 included a variety of projects, and Study 2 involved only one project to control for project heterogeneity). For different types of projects, the effect of emotional contagion may differ because emotional contagion is known to be context dependent (Hatfield et al., 2014). For example, projects that are higher in personal relevance may evoke greater emotional contagion, thus making this pathway stronger in a study where personal relevance is higher. There could be other project features that change the strength of emotional contagion or other pathways. More broadly, project heterogeneity in two studies may influence the relative weights (or effect sizes) of positive versus negative pathways, leading to different total effects of displayed enthusiasm under various circumstances. Hence, future research can explore what project-level heterogeneity may change the relative strengths of these pathways, thereby leading to a better understanding of when displayed enthusiasm can have an overall positive or negative influence on funding outcomes.

Second, although our experimental design in Study 2 manipulated the independent variable and eliminated the common method bias that can account for the relationship between the independent and dependent variables, the mediators and the dependent variable were still measured from the same participants, raising the possibility of percept–percept inflation (Crampton & Wagner, 1994). However, our proposed model and hypotheses dictated that the mediators and outcome variables had to be measured from the same source (i.e., individual potential funders). One typical remedy is to ask the same participants to answer questions regarding mediators and dependent variables at different times (e.g., multi-wave studies with a time interval of days or weeks). However, such a temporal separation approach has its own limitations, causing additional respondent-based bias, especially when the psychological process is short lived like in many psychological experiments (Rindfleisch et al., 2008). As Podsakoff et al. (2003, p. 888) noted, temporal separation may allow contaminating factors to intervene and thus “could mask a relationship that really exists.” Others have suggested manipulating the mediation process directly as a remedy (Spencer et al., 2005), but this is often not applicable when the mediating process is challenging to manipulate. As such, it is very common for experimental studies to measure mediators and the dependent variable from the same participants within the same study (Judd et al., 2014).

Third, our studies predicted each potential funder’s funding intention rather than a project’s overall funding success. We chose individuals rather than projects as the level of analysis because the mechanism that we aimed to test (e.g., perceptions of impression management motives) was
each potential funder’s own perception or feeling. The small number of projects in our Study 1 (182 projects) also prevented us from conducting a project-level analysis reliably with 17 independent variables. Nevertheless, future research may adopt a different approach and a larger sample to extend our studies to the project level.

Fourth, our paper focuses on the entrepreneur’s enthusiastic expressions, but entrepreneurs may use other means of expression to impress funders. Our robustness analysis in Study 1 regarding the entrepreneur’s verbal impression management tactics and how they influence funders’ perceptions of impression management motives and funding intentions revealed interesting results that need further investigation by future research. For example, we found that the entrepreneur’s ingratiation through opinion conformity increased potential funders’ perceptions of impression management motives and reduced funding intentions. Given that prior research showed that opinion conformity increases funders’ funding support (Sanchez-Ruiz et al., 2021), opinion conformity may be another impression management behavior that can have a bearing on funding intentions through both positive and negative pathways. Future research can more fully investigate these pathways. In addition, our research suggests that by taking an impression management perspective, we can explain an often-neglected notion that expressing a positive emotion may have negative interpersonal consequences (van Kleef et al., 2012). Future research can also adopt the impression management perspective and probe whether the expressions of other positive emotions (e.g., pride) can trigger funders’ perceptions of impression management motives and negative reactions.

Fifth, future research can investigate other possible negative pathways. For example, psychology research has revealed that intense happiness can be inferred by others as being naïve and ignorant (Barasch et al., 2016). Accordingly, displaying strong enthusiasm might also be associated with naivety (see our Appendix 1 for an exploratory study on this issue). Even regarding the negative pathway we examined, there may be a distinction between the perceptions of honest and dishonest impression management motives (Roulin et al., 2015). It is likely that the perception of dishonest impression management motives may be a stronger negative pathway than the perception of honest impression management motives. Moreover, enthusiasm toward products and ventures may be perceived very differently by potential funders (Warnick et al., 2018), thus leading to possibly different perceptions. Extending our current studies in these directions opens up opportunities to more fully understand the roles of displayed emotions in entrepreneurship and generate practical suggestions on how entrepreneurs can effectively communicate with potential stakeholders through their emotional expressions.

Finally, our studies focus on the entrepreneur’s perceived domain expertise as a boundary condition for the negative pathway. However, other project or entrepreneur attributes may also moderate the effect of the negative pathway. For example, recent research shows that female and male entrepreneurs benefit differently from expressing happiness, sadness, anger, and disgust because some emotions (e.g., happiness and sadness) are viewed as more agentic and communal than others (Davis et al., 2021). Building on Davis et al. (2021) and our work, scholars could explore whether displayed enthusiasm is more associated with agentic or communal characteristics and if so whether displayed enthusiasm is more or less likely to be perceived as impression management tactics depending on the gender of the entrepreneurs. Furthermore, recent research shows that certain combinations of costless signals (e.g., indication of passion and openness to feedback) can lead to positive funding outcomes (Warnick et al., 2018). Hence, researchers could study whether displayed enthusiasm can interplay with other costless signals to shape potential funders’ perceptions and funding decisions. Additionally, potential funders’ own characteristics may influence how they interpret the entrepreneur’s displayed enthusiasm. Funders who are less suspicious and more agreeable may be less likely to associate the entrepreneur’s enthusiastic displays with impression management motives. Funders who have received more training in funding evaluations may be more likely to associate displayed enthusiasm with impression
management motives. Training may allow funders to be more aware of the impression management motives that actors might use to influence others. In fact, past research found job applicants’ self-promotion tactics became less effective in influencing the evaluations of interviewers who had received interview training, compared with those who had received no training (Howard & Ferris, 1996). Accordingly, for well-trained funders, researchers might observe a stronger mediating effect of perceived impression management motives than in our studies.

Conclusion

In summary, this research deepens our understanding of the interpersonal influence of the entrepreneur’s displayed enthusiasm during their pitches and makes novel contributions to the entrepreneurship research in the crowdfunding context. In contrast to prior research’s focus on the positive effect of displayed enthusiasm on the entrepreneur’s resource acquisition, we are among the first to show the negative indirect effect through funders’ perceptions of the entrepreneur’s impression management motives. We also found that this negative indirect effect is stronger if the entrepreneurs are perceived as having weaker domain expertise. Moreover, this research reveals that the displayed enthusiasm of entrepreneurs influences funders’ decision-making through both positive and negative mechanisms and through both emotional and cognitive processes. Overall, our studies provide a novel and more holistic understanding of the interpersonal influence of the entrepreneur’s displayed enthusiasm in crowdfunding.

Appendix 1 An Exploratory Qualitative Study

We conducted an exploratory qualitative study to understand what inferences potential funders could make when observing an entrepreneur who makes an enthusiastic pitch but lacks the domain expertise for the project. We asked this open-ended question among 304 MTurk participants (a different sample than those used in Studies 1 and 2). We told them that there was no right or wrong answer, and we simply wanted to hear their honest opinions.

A frequent comment from the participants was related to the entrepreneur’s motives to manage impressions. For example, participants commented: “The entrepreneur wants to seek attention to get money,” and “make up for weakness with a good impression.” These qualitative observations help to support our claim that when observing an entrepreneur’s displayed enthusiasm, especially if the entrepreneur has weak domain expertise, potential funders are likely to perceive that the entrepreneurs have an underlying impression management motive.

Other frequently observed inferences include the entrepreneur’s naivete and being a scam. We picked the naivete inferences to explore further. For example, one participant commented that “It is easy to be enthusiastic when you aren’t stressed with all the things that you don’t know and that need to be done...”. Another participant said that “I think the entrepreneur is in over his head.” When we designed the new Study 2, we added a direct measure of the participant’s perceptions of the entrepreneur’s naivete. We asked participants the extent to which they disagreed or agreed with the following items: “He seems to be naive about what it takes to finish the project,” “He is ignorant about what is needed to carry ideas through to completion,” “He is not aware of the difficulties of the project,” and “He does not know the ins and outs of the industry.” We developed this scale ourselves based on the definition of naivete and the participant’s written inferences from our exploratory study because there is no existing scale on entrepreneur naiveness. These items have an alpha value of 0.97. Then we performed a supplementary analysis and examined the effect of displayed enthusiasm and domain expertise on potential funders’ perceptions of naiveness. We found that displayed enthusiasm negatively influenced the perceptions of naiveness, and this effect did not depend on the entrepreneur’s domain expertise.
### Appendix 2

#### Variables and Measurement Items

<table>
<thead>
<tr>
<th>Variables</th>
<th>Measurement Items</th>
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<tbody>
<tr>
<td>Funding Intention</td>
<td>How likely would you be to back this project? How likely would you be to purchase the product/service proposed in this project?</td>
</tr>
<tr>
<td>Displayed enthusiasm</td>
<td>The creator(s) had energetic body movements  \nThe creator(s) had rich body language  \nThe creator(s) showed animated facial expression  \nThe creator(s) used a lot of gestures  \nThe creator(s)’s face lit up when he/she talked  \nThe creator(s) talked with varied tone and pitch</td>
</tr>
<tr>
<td>Domain expertise</td>
<td>This creator(s) is a reliable source of information on the topic  \nI have confidence in this creator(s)  \nThis creator(s) has considerable knowledge of the factors involved with this subject  \nI believe that this creator(s) is quite intelligent  \nThe creator(s) is well-informed on this subject  \nThis creator(s) is an authority on the topic  \nThis creator(s) has had substantial experience with this subject  \nI would consider this creator(s) to be an expert on the topic</td>
</tr>
<tr>
<td>Preparedness</td>
<td>The video content had substance  \nThe content was thoughtful and in-depth  \nThe content was coherent and logical  \nThe video well articulated the relationship between the project plan and the broader context  \nThe video cited facts to support arguments</td>
</tr>
<tr>
<td>Video quality</td>
<td>The project video has great use of cinematographic techniques (such as the choice of shot, and camera movement)  \nThe project video has great use of visual aids (e.g., charts, texts, or animations in videos)  \nThe video was well made  \nThe video was easy to understand</td>
</tr>
<tr>
<td>Participant’s expertise</td>
<td>I consider myself an expert in this project’s industry  \nI am knowledgeable about the product/service proposed in this project  \nI have expertise related to this project  \nI feel that I am experienced with the product/service proposed in this project</td>
</tr>
<tr>
<td>Participant’s risk aversion</td>
<td>I prefer certainty over uncertainty when investing  \nI avoid risks when investing  \nI do not like to take financial risks  \nI prefer to “play it safe” when investing</td>
</tr>
</tbody>
</table>

(continued)
(continued)

| Participant’s perception of the entrepreneur’s impression management motives (Study 1) | The creator(s) used his/her emotions as a way to influence or persuade potential backers  
The creator(s) was using his/her emotions to manipulate potential backers  
The creator(s) had an ulterior motive for displaying emotions  
The creator(s) obviously was trying to influence or persuade potential backers  
The creator(s) was using impression management tactics to get people to back his/her project |
| Participant’s perception of the entrepreneur’s impression management motives (Study 2) | The project creator’s nonverbal expressions in the video were mainly driven by his…  
Desire to boost his self-image (e.g., to make the audience think that he is great)  
Desire to get good impressions for a later exchange (e.g., asking for money at the end of the video)  
Desire to seek attention to get money  
Desire to make an impression that he is better than he really is  
Desire to benefit himself by obtaining more funding |
| Participant’s positive emotions | Now, please read each word and indicate to what extent you feel this way right now, that is, at the present moment: Interested, Excited, Strong, Enthusiastic, Proud, Alert, Inspired, Determined, Attentive, Active |
| Participant’s perception of the entrepreneurs’ confidence | The creator(s) is not sure at all/very sure that he/she can perform well in the project  
The creator(s) is not sure at all/very sure that he/she can successfully bring the product/service to customers  
The creator(s) is not sure at all/very sure that he/she can accomplish the goal in the project  
The creator(s) is not sure at all/very sure that he/she can overcome challenges in the project |

Note: The anchor points for each scale are mentioned in the paper.

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Notes

1. An entrepreneur’s displayed enthusiasm has been viewed as the entrepreneur’s expression of their underlying passion (Cardon et al., 2017). Although some research has referred to enthusiasm as a proxy for passion (Chen et al., 2009; Davis et al., 2017), passion includes not only positive feelings such as enthusiasm but also other elements, such as a cognitive component and a sense of self-identity (Cardon et al., 2009; Chen et al., 2009). Entrepreneurial passion has also been measured in different ways based on expressed nonverbal cues, perceptions by observers, or the entrepreneur’s own felt obsessive/harmonious passion (Chen et al., 2009; Mitteness et al., 2012; Murnieks et al., 2016; Stroe et al., 2020). Note that studies that examine felt passion typically focus on its intrapersonal influence (e.g., Stroe et al., 2020). Given our focus on the interpersonal influence of emotions and the relative clarity of defining and measuring displayed enthusiasm, we follow Cardon et al. (2017) and focus on displayed enthusiasm.

2. Although the increase in R-square from Model 1 to Model 2 (with the addition of the interaction term XZ) is small, the change in R-square is not an ideal metric for measuring the size of an interaction effect due to the inevitability of shared variance between the X, Z, and XZ terms (Dawson, 2014). Even when reliable interaction effects are found, the improvement in R-squared is often disconcertingly low (Aguinis et al., 2005; McClelland & Judd, 1993). Instead, we followed the recommended approach (Aguinis et al., 2005; Dawson, 2014) and computed $f^2$ (ratio of variance explained by the interaction term alone to the unexplained variance in the final model). The resulting $f^2 (= .003)$ is similar to the median level of $f^2 (.002)$ reported by a comprehensive review study that looked at interaction effects across 30 years of research in three leading journals in management and applied psychology (Aguinis et al., 2005). Moreover, given the often very low variance attributed to an interaction term, Dawson (2014) suggests that researchers should focus on the practical relevance of findings (e.g., the change in the X and Y association as a result of a change in Z) rather than their statistical significance alone.

3. The lower bound of the 95% CI being near zero means that the $p$-value of this test is approaching 0.05.

4. Parhankangas & Ehrlich (2014) provided a detailed account of how to measure each of 10 verbal impression management tactics that entrepreneurs may use when soliciting funding: organizational promotion through positive language, organizational promotion through emphasizing innovativeness, ingratiation through opinion conformity, exemplification, supplication, intimidation, blasting, boasting, burnishing, and blaring. Since our results supported our hypotheses with or without these variables and controlling for these variables would reduce the statistical power of our analysis, we did not include them in our main analysis. The results with verbal impression management variables are available from the authors upon request.

5. Two simple multiple-choice questions were utilized to verify whether participants paid attention. In one question, we asked participants to choose the feature of Power2Go mentioned in the video (among four options); in the other question, we asked participants which alternative product the project creator compared Power2Go with in the video. Both questions were very easy and straightforward to answer based on the content of the video.

6. While we do not see a clear theoretical reason for a second-path moderation (perceived domain expertise moderating the effect of perceived impression management motives on funding intention), we did an exploratory analysis and included both the first-path and second-path moderations using PROCESS Model 58. The results for the second-path moderation were inconclusive and not robust: it was present in Study 1 ($p < .05$) but absent in Study 2 ($p > .9$). In both studies, the first-path moderation that we hypothesized remained statistically significant.
7. When the entrepreneur was perceived as having greater domain expertise, the indirect effect through the perception of the entrepreneur’s self-confidence was smaller. This means that for high domain-expertise entrepreneurs, the relevance of displayed enthusiasm for participants to judge the entrepreneur’s self-confidence is reduced.

References


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