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When emotions become (in-) appropriate: How social-contextual factors moderate the effect of emotional expressions on investment decisions in reward-based crowdfunding

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ABSTRACT

Investment decisions in reward-based crowdfunding are significantly shaped by the emotional appeal of campaign presentations. However, it remains still largely unclear how intensively emotional expressions should be used to most effectively persuade investors to fund a project. Building upon Emotions as Social Information theory, which suggests that effective emotional expressions must match social expectations and be perceived as appropriate by recipients, we studied the effect of emotional expressions in the text, pictures, and pitch videos of 16,967 Kickstarter campaigns. We found that the impact of emotional expressions on the investment decision is curvilinear across all modalities, meaning that it deteriorates or even reverses with higher intensities. We also found that this effect is moderated by the nature of the relationship between the entrepreneur and investors and by the perceived economic risk under which the investment decision is made. These factors seem to influence investors' tolerance of more intensive emotional expressions.

1. Introduction

Reward-based crowdfunding platforms such as Kickstarter provide a new financial instrument for entrepreneurs to raise funds directly from the crowd to realize novel business ideas. On these platforms, entrepreneurs typically ask for the funding of projects to realize new products that are still in the prototype stage or not ready for the market yet (Mollick, 2014). To convince potential investors, they specify a funding goal and publish a multi-modal presentation of the project idea, which can include a text, pictures, and a pitch video (Bollaert et al., 2019). For investors, the project presentation serves as the main source of information to decide if and to what extent a project should be funded (Mollick, 2014).

Since its inception, the reward-based crowdfunding market has quickly gained popularity and grown significantly in size. Despite the increased transaction volume, however, many projects still seem to fail to attract enough investors (Feng et al., 2024; Moradi et al., 2023). Apart from the increased competitive pressure, one reason for this observation seems to be that the mechanisms of the new financial instrument are not yet fully understood. In particular, it remains unclear how project presentations should be designed to best possibly convince potential investors (Lin and Boh, 2021; Tafesse 2021). Knowing how to strategically use the available communication modalities to convince investors and influence their funding behavior hence becomes a critical success factor.

Given that the advertised products cannot be experienced yet and potential investors typically lack the expertise or motivation to conduct serious due diligence, prior research found that investment decisions in the reward-based crowdfunding domain are not so much influenced by technical product specifications, business plans, or financial numbers, but rather by more intuitive impressions such as the emotional appeal of the product and its presentation (Li et al., 2017b; Xiang et al., 2019). Literature specifically provides indications that transmitting emotional expressions as cues through the available communication modalities can have a positive impact on the funding decision of investors (Koch and Siering, 2019; Warnick et al., 2021). Conveying emotional expressions in the project presentation could therefore prove to be an effective strategy for entrepreneurs to persuade potential investors to finance a reward-based crowdfunding project.

So far, however, it remains unclear how emotional a project

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presentation should be, i.e., how intensively it should convey emotional expressions, to most effectively influence the investment decision. While some studies observed a positive impact on funding decisions that increases with the intensity of the transmitted emotional expressions (Koch and Siering, 2019; Letwin et al., 2024), others reported a negative effect that seems to become stronger with the intensity of emotional expressions (Li et al., 2021; Tafesse, 2021). There seem to be theoretical arguments for both observations: generally, emotional expressions can provide a substitute for missing information and thus have the potential to help shaping a decision-maker's appraisal of a situation and/or a product, especially when decisions are made under uncertainty (Achar et al., 2016; van Kleef 2014). However, it has also been shown that the effectiveness of emotional expressions depends on their perceived appropriateness, which is determined by the communication context and social-contextual factors that shape the prevailing display rules (van Kleef and Côté, 2022). In professional business contexts such as reward-based crowdfunding, in which social relationships between entrepreneurs and investors are rather distant and primarily serve the conduct of transactions, emotional conversations generally are less expected and emotional expressions are thus more likely to be perceived as inappropriate by recipients (Cheshin, 2020). From both a theoretical and empirical perspective, it therefore remains to be clarified to what extent emotional expressions should be used to effectively influence the funding decisions of investors.

To contribute to the closure of this research gap, we present the results of a study in which we examined the effects of emotional expressions on the investment decision in reward-based crowdfunding from a social-contextual perspective. To find out how emotional project presentations should ideally be in order to convince potential investors, we examine the following two research questions: *How does the intensity of the emotional expressions contained in a campaign presentation influence the investment decision in the reward-based crowdfunding context? How does the influence of emotional expressions depend on social-contextual factors that shape the prevailing display rules?* Building upon on previous definitions in the literature, we thereby understand the intensity of emotional expressions as a complex concept that encompasses their magnitude, duration, and recurrence during the communication (Frijda et al., 1992; Sonnemans and Frijda, 1994).

To answer our research questions, we build upon the Emotions as Social Information (EASI) theory as conceptual foundation. It provides a framework that describes the effects of a sender's emotional expressions on the recipient. Thereby, EASI theory not only describes how emotions are processed by recipients. It also posits that the effect of emotional expressions is shaped by their perceived appropriateness, which is determined by situational, social-contextual factors such as the nature of the interpersonal relationship and the willingness of the recipients to engage in deliberate information processing. Against this background, we make assumptions about how the reward-based crowdfunding context shapes the effect of emotional expressions and hypothesize that there exists an optimal intensity level of emotional expressions which should be conveyed to influence the funding behavior. Moreover, we propose that two sets of social-contextual factors might influence the effect that the intensity of emotional expressions has on the investment decision.

To test the hypotheses, we analyze the effects of the emotional expressions contained in 16,967 campaign presentations that we gathered from Kickstarter, a leading reward-based crowdfunding platform. Our analysis encompasses the impact of emotional words (in the text), emotional speech (in the pitch video), and facial emotional expressions (in the pictures and pitch video). The emotional expressions contained in the text and speech were identified using a dictionary approach (LIWC, Pennebaker et al., (2015)). Facial emotional expressions shown in pictures and videos were recognized using a machine-learning algorithm (Emotion API, Microsoft (2023)). We conducted multiple regression analyses (MRA) on the resulting data to study their effects on the funding behavior.

The results of our study contribute new insights to the current research stream that analyzes the effect of emotional expressions on the investment decision in reward-based crowdfunding. Our findings show that the intensity of the conveyed emotional expressions unfolds an inverted u-shaped effect on the funding behavior: transmitting emotional expressions more intensively increases the effect on the investment decision until an optimal level is reached, after which the additional effect becomes negative. By uncovering that emotional expressions can unfold both positive and negative effects depending on their intensity, we resolve the seemingly contradictory results of previous studies and integrate them into a coherent picture. Our results suggest that entrepreneurs should not simply maximize the intensity of emotional expressions, although they might indeed support the investment decision. Instead, the intensity of emotional expressions needs to be matched to the professional social context in which the investment decision is made. However, our results also show that the influence of emotional expressions is moderated by the social distance between the entrepreneur and potential investors and by the economic risk involved. By creating a more personal relationship with potential investors, entrepreneurs can apparently increase their tolerance for more emotional communication. Our findings hence suggest that display rules and norms in the professional communication context are not set in stone but can gradually adapt depending on the nature of the relationship between the communication partners. For entrepreneurs, these insights offer new strategies for using emotional expressions in the presentations of reward-based crowdfunding projects. The results of our study also inform research related to EASI theory. By analyzing how the interplay of social-contextual factors jointly shapes the effect of emotional expressions, we take a fresh perspective that has rather sporadically been explored so far. Our study moreover is among the few that aim at identifying potential moderating influences, which "have received little or no attention" (van Kleef and Côté, 2022, p. 648) so far.

We proceed as follows: next, we discuss theoretical foundations and related work. We then develop the hypotheses underlying our study. After providing details of our research approach, we present and discuss the results of our study in detail. The manuscript is concluded with a short summary of the central findings.

2. Theoretical background and related work

2.1. The influence of emotional expressions on decision-making

Reward-based crowdfunding platforms allow entrepreneurs to source capital from the masses over the Internet. To convince potential investors to fund the project, the entrepreneur publishes a funding goal, a deadline, one or more rewards such as a product or service, and a multi-modal presentation of the project idea. The presentation typically consists of a written description of the project that can be accompanied by pictures and a pitch video with a spoken voice-over. It serves as the main source of information for the investors, which individually decide whether and to what extent they fund a project (Mollick 2014). Their individual decisions result in the funding behavior that is continuously accumulated and reported on the project page.

To convince potential investors, the entrepreneur can use the available modalities to communicate both detailed information about the project idea and more implicit cues such as emotional expressions. Generally, cues are information snippets that support the recipient's learning about a specific context. Research has shown verbal emotional expressions in the written and spoken narration and facial emotional expressions in pictures and videos can affect investment decisions in the reward-based crowdfunding domain (e.g., Allison et al., 2022; Koch and Siering, 2019; Lin and Boh, 2021; Raab et al., 2020). To explain this effect, extant studies often refer to the theoretical concept of primitive emotional contagion. It explains the spreading of emotional expressions from the sender to the recipients as a natural, subconscious affective reaction in which the recipient catches the displayed emotion (Hatfield

et al., 1993). Emotional expressions can thus evoke an emotional state in the recipients similar to that of the sender (van Kleef 2009), which in turn affects their decision-making and the behavioral response.

While the concept of primitive emotional contagion (Hatfield et al., 1993) is widely acknowledged today, it is not able to explain empirical findings, which indicate that the effects of emotional expressions are significantly shaped by the context in which the communication occurs (van Kleef and Côté, 2022). To better understand how and why emotional expressions can influence investors' attitudes and decision-making behavior, we therefore build upon the Emotions as Social Information (EASI) theory (van Kleef 2014). It introduces an intrapersonal and an interpersonal perspective to describe the effects of emotional expressions. The intrapersonal perspective explains how emotional expressions are perceived and evaluated by recipients. EASI theory posits that emotional expressions can trigger affective and/or inferential responses in recipients. Similarly as the concept of primitive emotional contagion, it assumes that emotional expressions can elicit affective reactions in those who experience them and thus affect their emotional state (Cheshin et al., 2018; van Kleef 2014). For example, expressed joy can elicit reciprocal feelings of joy in the recipient. The perceived joy can alter situational impressions and influence interpersonal liking (Achar et al., 2016; Loewenstein et al., 2003). According to EASI theory, emotional expressions can also trigger inferential processes. By interpreting the expressed emotions, recipients can draw conclusions about the senders' feelings, attitudes, and behavior. For instance, when confronted with someone's joy, recipients may conclude that the sender is enthusiastic about what (s)he is doing.

The interpersonal perspective describes how transmitted emotional expressions shape the behavioral response of the recipients. It views emotional expressions as social information that – through the mechanisms describe above – can help recipients to better understand the sender's appraisal of a situation, product, or service (van Kleef 2009; van Kleef 2014). Literature has shown that this information can influence behavioral responses such as economic decisions especially if the recipients otherwise have limited insights into the sender's actual motivations (Loewenstein et al., 2003; Zhang et al., 2024). In such situations, emotional expressions can provide a substitute for missing information. However, EASI theory also posits that the relative effects of affective reactions and inferential processes are regulated by the perceived appropriateness of the emotional expressions, which can vary depending on the social context in which the communication occurs. Generally, emotional expressions are considered appropriate by the recipients if they are "correct for the situation and in correct proportion to the evoking circumstances" (Shields 2005, p. 7). This means that displayed emotional expressions must match the social context in which they occur both qualitatively (i.e., showing emotions with the proper valence) and quantitatively (i.e., showing emotions with proper intensity) to be effective. The valence of emotional expressions thereby refers to the intrinsic positive or negative quality of an emotional stimulus and indicates whether an emotional expression is felt as pleasant or unpleasant. The intensity of emotional expressions characterizes the arousal of the sender. It refers to their magnitude, duration, and recurrence (Frijda et al., 1992; Sonnemans and Frijda, 1994).

Whether emotional expressions are perceived as appropriate by the recipients particularly seems to be contingent on social-contextual factors such as the nature of the interpersonal relationship between the communication partners and the willingness of the recipients to engage in deliberate information processing. Together, these factors characterize the communication context and shape situational display rules and expectations regarding emotional expressions (van Kleef and Côté, 2022). Generally, emotions are more likely to occur in socially close relationships between people who share a long history of interaction and who care more about each other (Frijda et al., 1992). In such relationships, communication is often informal and occurs in a casual, less guarded atmosphere that makes it easier to express emotions (van Kleef and Côté, 2022). In such close personal relationships, more emotional conversations are hence more expected and more likely to be perceived as appropriate than in business relationships, which are typically less close and serve specific purposes such as the conduct of transactions (van Kleef and Côté, 2022). As business relationships are more goal-oriented than personal relationships, the motivation of the recipients to engage in the processing of explicit information also tends to be higher (Cheshin 2020). In such scenarios, more emotional conversations will therefore more likely be perceived as a distraction and accordingly be viewed as inappropriate. In business relationships, communication instead is rather formal, fact-oriented, and guided by display rules that require strict control of emotional expressions, often both in terms of their valence and intensity (Cheshin 2020). Although emotional expressions provide social information that can help shaping the recipient's appraisal of a situation and/or a product, they may hence be perceived as inappropriate and rejected if their valence and/or intensity does not match the expectations of the communication context.

With its interpersonal perspective, EASI theory provides a framework that appears promising to explain the effects of an entrepreneur's emotional expressions on potential investors. Its consideration of moderators furthermore has the potential to enhance our comprehension of how investors perceive and respond to emotional expressions. We therefore use EASI theory as a theoretical foundation for our analysis in the following chapters.

2.2. Related work and research gap

Prior studies have already investigated the impact of emotional expressions on the investment decision in the reward-based crowdfunding domain. While the observed variables slightly varied (from funding amount raised to number of investors to binary measures of funding success), most of the studies have focused only on investigating the emotional expressions conveyed through individual modalities. Typically, they also assumed a linear relationship between conveyed emotional expressions and funding behavior, meaning that the effect on the funding behavior becomes stronger the more emotional the presentation is. While these studies have found that emotional expressions can influence the investment decision regardless of their valence, they reported diverse findings regarding the intensity. Several studies have observed that expressions of positive emotions in the textual project description can increase funding behavior (Costello and Lee, 2022; Franzoni and Tenca, 2023; Koch and Siering, 2019; Moradi and Badrinarayanan, 2021; Moradi et al., 2023; Wang et al., 2017; Yosipof et al., 2024; Yuan et al., 2021). Likewise, studies reported that expressions of negative emotions in the text can positively affect investment decisions (Kim et al., 2016; Moradi and Dass, 2019). Positive effects on the funding behavior were also observed for spoken emotional words in the pitch video (Allison et al., 2022; Chen et al., 2024; Miao et al., 2024) and for facial emotional expressions in the pitch video (Lin and Boh, 2021).

However, there also exist studies that found no significant effect of written emotional words (Allison et al., 2017; Tafesse 2021), spoken emotional words (Parhankangas and Renko, 2017), or facial emotional expressions in the pitch video (Li et al., 2021). Some studies even reported a negative impact of written emotional words (Wang et al., 2024) and facial emotional expressions in the pictures (Wang et al., 2016). Others observed unstable effects that varied depending on the chosen dependent variable (Chen et al., 2023; Patel et al., 2020; Younkin and Kuppuswamy, 2018). Taken together, the findings of studies that assumed a linear relationship between conveyed emotional expressions and funding behavior therefore remain inconclusive and appear to be contradictory. A few studies, however, provide indications that the relationship between conveyed emotional expressions and funding behavior might actually be non-linear in nature. In addition to a positive effect of written emotional words on funding behavior, Zhou et al., (2016) for instance observed that the effect turned negative for high intensities.

While the effect that higher intensities of emotional expressions have

on the funding behavior is still debated, some studies that have assumed a linear relationship have begun to investigate potential moderators that might influence the effect. Prior studies have particularly analyzed if the effect of emotional expressions changes in relation to *product characteristics* such as the type of the product (Chen et al., 2023; Lohmar et al., 2023; Parhankangas and Renko, 2017; Tafesse 2021; Xiang et al., 2019), the prominence of the brand (Moradi and Badrinarayanan, 2021), perceived product innovativeness and creativity (Davis et al., 2017; Li et al., 2017a), or the availability of technical demonstrators (Steigenberger and Wilhelm, 2018). Others have investigated *personality traits of the investors* such as their experience and motivation to participate in the crowdfunding project (Allison et al., 2017; Franzoni and Tenca, 2023; Lin and Boh, 2021; Yuan et al., 2021). A third set of studies has concentrated on *personality traits of the entrepreneurs* such as their gender (Letwin et al., 2024), perceived domain expertise (Jiang et al., 2023), and their motives behind the projects (Yoo et al., 2023).

These studies have in common that the effect of moderating influences was not examined for all available communication modalities. While extant studies have looked at the product and the parties involved to identify potential moderating factors, they have so far ignored the nature of the relationship between the entrepreneur and potential investors and their motivation to engage in deliberate information processing. From the point of view of EASI theory, however, such social-contextual factors also seem to be important determinants that could shape the effect of emotional expressions in the reward-based crowdfunding domain (van Kleef 2009; van Kleef and Côté, 2022). By taking EASI theory as a basis to analyze the effect of multi-modal emotional expressions on the investment decision and to identify potential moderating factors, we hence focus on an unexplored but potentially impactful research direction.

3. Hypotheses development and research model

3.1. Non-linear effect of the intensity of emotional expressions on funding behavior

Investment decisions in the reward-based crowdfunding domain are typically made under uncertainty with respect to the manufacturability and the subsequent user experience of the product for several reasons. On the one hand, project presentations can hardly describe the technical features of products in their entire complexity, and the advertised products cannot be experienced at the time of decision-making. On the other hand, potential investors in the reward-based crowdfunding domain regularly lack the expertise and/or motivation to conduct serious due diligence (Li et al., 2017a; Xiang et al., 2019). Studies in other domains where purchasing or investment decisions are made have shown that emotional expressions, which are directed at the decision-maker through the presentation, can positively influence the decision-making process and the resulting behavior especially in such scenarios (Achar et al., 2016; van Kleef 2014). According to EASI theory, emotional expressions provide social information that can help decision-makers to reflect and better understand the sender's appraisal of a situation and/or a product (van Kleef 2009; van Kleef 2014).

We assume that emotional expressions have a similar potential in the reward-based crowdfunding domain. Given that the ability/motivation of potential investors to engage in deliberate information processing is lower than in professional investment domains, prior research found that investment decisions in the reward-based crowdfunding domain are not so much influenced by technical product specifications, business plans, or financial numbers, but rather by more intuitive impressions such as the emotional appeal of the product and its presentation (Li et al., 2017a; Xiang et al., 2019). Prior studies found that positive emotional expressions such as happiness can signal enthusiasm and passion, entrepreneurial qualities that are considered advantageous in attracting investors (Li et al., 2017a). Furthermore, they are associated with valued entrepreneurial qualities such as competence and assertiveness, which can positively influence funding decisions (Anglin et al., 2018; Lyubomirsky et al., 2005; McMullen and Shepherd, 2006). While negative emotions are expressed much less frequently in the presentations of reward-based crowdfunding projects (Warnick et al., 2021; Younkin and Kuppuswamy, 2018), we assume that they can also transport relevant information for the decision-making process. For instance, expressions of anger can signal determination and ambition when they relate to the severity of a problem or the lack of something (Harmon-Jones et al., 2011; van Kleef et al., 2010; Veling et al., 2011). Such entrepreneurial qualities can increase the willingness of investors to fund a project (Warnick et al., 2021). When discussing challenges or threats, expressions of fear regarding business uncertainty can signal risk awareness and problem seriousness, which justifies the need for external support and can increase the disposition of potential investors to fund a project (Ruebottom 2013; Warnick et al., 2021). Similarly, expressions of sadness that accompany sincere requests for support can evoke empathy and prosocial responses in potential investors. This can foster a desire to mitigate adverse outcomes and accordingly increase the motivation to support a project (DeSteno et al., 2004; Small and Verrochi, 2009; Warnick et al., 2021).

While it would thus seem plausible that transmitting as many emotional expressions as possible through the presentation of reward-based crowdfunding projects might be a promising strategy to convince potential investors, such a perspective ignores that their effects are significantly shaped by their perceived appropriateness (Shields 2005; van Kleef and Côté, 2022). According to EASI theory, the perceived appropriateness is particularly determined by the nature of the interpersonal relationship between the communication partners, which characterizes the communication context (van Kleef and Côté, 2022). In the reward-based crowdfunding domain, the entrepreneur und potential investors are in an online-mediated, socially distant business relationship that serves the purpose of conducting investment transactions (Kraus et al., 2016). Research has shown that emotional conversations in rather fact-oriented business relationships are much less expected and thus more likely perceived as inappropriate than in socially close, personal relationships (van Kleef and Côté, 2022). Accordingly, communication in business contexts is typically guarded by display rules that require strict control or even complete avoidance of emotional expressions to maintain a professional attitude (Cheshin 2020).

We assume that such display rules guard communication in the reward-based crowdfunding domain as well. Prior studies found indications that more pronounced expressions of emotions were perceived as inappropriate by potential investors. For instance, they observed that potential investors judged entrepreneurs who express positive emotions decisively to be overly confident about their projects (Jiang et al., 2020). Overconfidence is associated with concerns about the ability to reflect critically and the motivation to respond appropriately to problems, which decreases the willingness of investors to fund the project (Barasch et al., 2016; Shipman and Mumford, 2011). Presentations with decisive expressions of positive emotions may also be viewed as unprofessional by potential investors (Jiang et al., 2020). They may therefore become cautious about the motives or conclude that the presentation is manipulative (Weber and Wirth, 2014). Analogously, prior studies found that pronounced displays of anger were perceived as impulsive and reckless by potential investors, attributes that are associated with poor entrepreneurial performance (Forbes 2005; Geddes and Callister, 2007; Hmieleski and Baron, 2008; Warnick et al., 2018). Pronounced expressions of sadness evoked impressions of resignation and helplessness in potential investors, which can negatively affect the perception of the entrepreneur's capability and motivation and reduce the willingness to fund a project (Tiedens 2001; Warnick et al., 2021).

Taken together, the effects of emotional expressions in the reward-based crowdfunding domain seem hence to be determined by two opposing factors: the potential of the information they contain and their conformance to situational display rules and expectations of the

professional communication context. Literature related to EASI theory makes no assumption whether one factor dominates over the other, however. In addition, it is not yet clear how strictly display rules in the reward-based crowdfunding domain require the control of emotional expressions to maintain professionality. As we have found evidence for both positive and negative impacts of emotional expressions on the funding behavior, we surmise that their effect is determined by the interaction of both factors. We propose that the transmission of emotional expressions, regardless of their valence, initially has a positive effect on the funding decision as the information potential for potential investors outweighs a possible violation of situational norms and expectations. With increasing intensity of emotional expressions, however, the violation of situational norms and expectations becomes more severe, while the additional information potential decreases. We thus suggest that the transmission of emotional expressions has a positive effect on the funding behavior until an optimal intensity is reached, after which the effect deteriorates, and posit:

***H1**: Conveying emotional expressions in the project presentation has an inverted u-shaped effect on funding behavior.*

3.2. Moderating influence of social-contextual factors

While we assume that the communication context in the reward-based crowdfunding domain allows for a limited number of emotional expressions, we also want to examine how the tolerance of emotional expressions by potential investors depends on the manifestation of the social-contextual factors, which characterize the communication context. EASI theory posits that the perceived appropriateness of emotional expressions is particularly shaped by the nature of the relationship between the communication partners and the motivation of the recipients to engage in deliberate information processing (van Kleef and Côté, 2022). We assume that the manifestation of both factors also influences the tolerance of emotional expressions by investors in reward-based crowdfunding.

3.2.1. Moderating influence of the nature of the relationship

In the reward-based crowdfunding domain, relationships between the entrepreneur and potential investors are typically characterized by a high degree of social distance for two reasons. On the one hand, the relationship is business-oriented in nature, which means that it is entered for a limited time and solely for the purpose of conducting investment transactions (Mollick 2014). Usually, the entrepreneur and the potential investor have no prior relationship and therefore have no previous experience to draw upon. On the other hand, the interaction between the entrepreneur and the potential investor is mediated by information technology and carried out solely through the crowdfunding platform. While the business-oriented nature of the relationship can hardly be changed, the entrepreneur can use several features of the crowdfunding platform to reduce the social distance.

One such approach for the entrepreneur might be to participate in the investor community by *supporting other projects* as an investor. Such activities are visible for potential investors in the profile of the entrepreneur on many crowdfunding platforms. Entrepreneurs who engage in the funding of other projects show a commitment to the crowdfunding community beyond their own projects and showcase their authentic interest in supporting the success of other crowdfunding endeavors (Koch and Siering, 2015; Zvilichovsky et al., 2015). This activity also signals that entrepreneurs have experience with and know the information needs and concerns of potential investors (Koch and Siering, 2015; Zvilichovsky et al., 2015). By showing friendliness and positive intentions towards others, entrepreneurs can stir the impression of social warmth in potential investors, which generally fosters feelings of connection, trust, and belonging (Cuddy et al., 2008). We hence assume that such feelings contribute to establishing a more personal form of relationship between the entrepreneur and his/her investors.

Entrepreneurs could also interact more intensively with the community by regularly *posting updates* and/or *replying to comments*, which are both visible on the project page. Updates can be used to provide latest information on the project's progress or to express appreciation for the funding progress (Mollick 2014; Xu et al., 2014). By replying to comments, entrepreneurs can directly interact with potential investors and address individual concerns, provide additional information, or express appreciation for provided feedback (Bao et al., 2022; Clauss et al., 2017; Zheng et al., 2016). Studies have shown that frequent communication can be an effective tool for entrepreneurs to connect to investors and support relationship building (Beaulieu et al., 2015; Wang et al., 2018; Wang et al., 2021). Frequent interactions with the community especially signal that entrepreneurs are willing to devote time and effort to develop a relationship with investors (Clauss et al., 2017; Koch and Siering, 2015; Mollick 2014; Xu et al., 2014). By creating a "sense of being with another" (Biocca et al., 2003, p. 456), entrepreneurs can stimulate the feeling of social presence in potential investors, which can stir a greater sense of belonging and thus a stronger bond (Raab et al., 2017). Accordingly, we surmise that such feelings contribute to establishing a more personal relationship between the entrepreneur and potential investors.

We hypothesize that the above-mentioned endeavors to reduce social distance and create a more personal relationship with potential investors also have a moderating influence on the effect of transmitting higher intensities of emotional expressions. EASI theory currently does not provide information on whether display rules and situational expectations of the recipients are rigidly fixed or partially flexible in a particular communication context. As display rules and situational expectations are shaped by the nature of the interpersonal relationship and emotional expressions are typically more expected in closer, more personal relationships (Berscheid and Ammazzalorso, 2003; Cheshin 2020; Smoski and Bachorowski, 2003), we assume that they gradually change with the degree of social distance. We therefore suggest that potential investors are more tolerant of higher intensities of emotional expressions and perceive them as less inappropriate in socially closer relationships with entrepreneurs, whereas they perceive higher intensities of emotional expressions as more inappropriate in more distant relationships. Accordingly, we hypothesize that the inverted u-shaped relationship between transmitted emotional expressions and the resulting funding behavior should be less pronounced (i.e., the curve should be flatter) if the social relationship is closer and be more pronounced (i.e., the curve should be steeper) if the social relationship is more distant. With respect to the individual measures that entrepreneurs could take, this means (cf. Fig. 1):

***H2(a):** The inverted u-shaped relationship between emotional expressions and funding behavior will be flattened (steepened) when the number of backed projects by the entrepreneur is higher (lower).*

***H2(b):** The inverted u-shaped relationship between emotional expressions and funding behavior will be flattened (steepened) when the number of updates by the entrepreneur is higher (lower).*

***H2(c):** The inverted u-shaped relationship between emotional expressions and funding behavior will be flattened (steepened) when the number of comments by the entrepreneur is higher (lower).*

3.2.2. Moderating influence of the willingness to engage in deliberate information processing

Research has found that investment decisions in the reward-based crowdfunding domain are often shaped by rather intuitive impressions as potential investors typically lack the capability and/or motivation to conduct serious due diligence and inspect technical product specifications or financial numbers of business plans (Li et al., 2017a; Xiang et al., 2019). Since potential investors are less willing (and able) to engage in deliberate information processing than in professional investment domains, they might be more susceptible to emotional communication, which might therefore have a greater potential to influence the investment decision.

However, research has shown that people's motivation to engage in

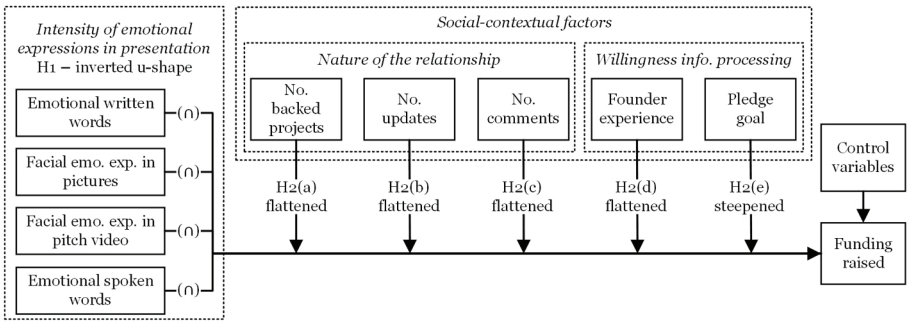

Fig. 1. Research model.

deliberate information processing tends to increase when the stakes are higher in a certain situation (van Kleef and Côté, 2022). In such situations, potential investors tend to prefer access to explicit information over emotional expressions in the campaign presentation. Communication that emphasizes emotions over facts may therefore more likely be perceived as inappropriate by potential investors when the economic risk associated with the investment decision increases. We hence suggest that potential investors are more tolerant of higher intensities of emotional expressions and perceive them as less inappropriate when the perceived economic risk of the investment decision is lower, whereas they perceive higher intensities of emotional expressions are more inappropriate when the perceived risk increases. Accordingly, we hypothesize that the inverted u-shaped relationship between transmitted emotional expressions and the resulting funding behavior should be more pronounced (i.e., the curve should be steeper) if the economic risk is higher and be less pronounced (i.e., the curve should be flatter) if the economic risk is lower.

Research has found that the perceived economic risk in the reward-based crowdfunding domain particularly depends on the *pledge goal* and the *experience of the entrepreneur* (Koch and Siering, 2015; Koch and Siering, 2019; Mollick 2014). Higher pledge goals are typically associated with larger and/or more complex projects that may be more difficult to implement than originally planned. In addition, higher pledge goals are more difficult to achieve because they require a larger number of investors and/or a higher investment amount per investor. This may be of particular concern if the entrepreneur is allowed to keep the funds raised even if the pledge goal is not met (Koch and Siering, 2015; Koch and Siering, 2019; Mollick 2014). The perceived economic risk also seems to be reduced when the project is conducted by experienced entrepreneurs. Entrepreneurs who have previously been engaged in conducting projects have gained knowledge, competencies, and learned to better understand the risks associated with crowdfunding (Kim et al., 2017; Kleinert 2023; Koch and Siering, 2015). They are hence perceived as more competent than novice entrepreneurs (Koch and Siering, 2019). We hence posit:

H2(d): *The inverted u-shaped relationship between emotional expressions and funding behavior will be flattened (steepened) when the entrepreneur's founding experience is higher (lower).*

H2(e): *The inverted u-shaped relationship between emotional expressions and funding behavior will be steepened (flattened) when the project's pledge goal is higher (lower).*

4. Data and research approach

We adopted a data-driven research methodology (Mollick 2014) to evaluate our hypotheses, collecting our dataset from the reward-based crowdfunding platform Kickstarter. Our initial dataset consisted of 17,736 projects and focused on publicly accessible data concerning entrepreneurs and projects, spanning all projects, both successful and unsuccessful, from September 2016 to May 2017. To help limiting the impact of projects that may be considered outliers, we followed the recommendations of Mollick (2014). Firstly, we excluded 246 projects aiming for a funding goal above $200,000 as projects typically do not exceed that amount. Higher pledge goals are set by far less than one percent of all projects. Moreover, we excluded projects with durations shorter than seven days (92 projects) or descriptions under 100 words (431 projects), as both generally suggest a minimal effort toward fundraising (Beaulieu et al., 2015; Cumming et al., 2017; Mollick 2014). Although the exclusion of these projects is consistent with the current literature, we conducted robustness tests to ensure the validity of our results (cf. section 5.2). To maintain consistency in the analysis of verbal expressions, we also excluded projects that were not presented in English language. Our final dataset comprised 16,967 projects.

4.1. Variable descriptions

Dependent Variable. To evaluate the effects of emotional expressions conveyed through both verbal and nonverbal modalities on funding behavior, we focus on the total amount of funding raised at the end of the campaign. This metric, *"funding raised,"* captures the effectiveness of entrepreneurs in creating a persuasive project presentation that influences investors' decision-making processes. It also reflects the culmination of investors' decisions to financially back the entrepreneurs' ideas, regardless of whether the campaign has met its initial pledge goal (Jiang et al., 2020; Li et al., 2017a).

Independent Variables. Following our definition of the intensity of emotional expressions (cf. chapter 2), we operationalized our independent variables (H1) based on the number, strength, and duration of emotional expressions embedded in each modality, where applicable. Specifically, we investigated the emotional expressions embedded in textual descriptions (emotional written words), speech (emotional spoken words), pictures (facial emotional expressions), and the pitch video (facial emotional expressions), the main modalities that are typically used to present the campaign (Mollick 2014).

To quantitatively measure the amount of emotional expressions in the project description and the speech of the transcribed pitch video, we used the Linguistic Inquiry Word Count software (LIWC, Version 2015) (Pennebaker et al., 2015). LIWC is widely adopted in psychology, entrepreneurship, and information systems to quantify linguistic constructs of text samples (e.g., Lin and Boh, 2021; Yoo et al., 2023). LIWC contains a validated, well-documented dictionary based on psychological and linguistic theory that classifies each word and word steam consistently into one or more linguistic categories. This allows for reproducible analysis across different texts and studies. To measure the emotional aspects of written and spoken language, we utilized the LIWC category *"affect."* This category accounts for all words that have an emotional appeal and trigger affective responses in the recipients, e.g., "happy," "love," "ugly," or "cried" (Pennebaker et al., 2015). The amount of written and spoken emotional words (i.e., *emo. words* and *emo. speech*) is the sum of *affect*-labeled words expressed within the written description and spoken pitch video, respectively.

To quantitatively measure the emotional expressions embedded in

pictures and the pitch video, we calculated the amount of facial emotional expressions displayed. We utilized the "Emotion API", a machine learning algorithm (Microsoft 2023), to identify the facial emotional expressions depicted within images. The algorithm identifies human faces and characterizes their emotional expression using a vector of confidence scores for seven basic emotions: anger, contempt, disgust, fear, happiness, sadness, and surprise. The emotional expression scores are calculated and normalized to values between zero and one for each face. Values closer to "one" indicate a more strongly expressed emotion. For example, a displayed face is likely to have a broad smile if the algorithm returns a value of "one" for happiness. If the algorithm detected more than one face in a picture, we added up all the individual emotional expression scores within the picture. In so doing, we factored in that more faces can display a higher bandwidth of emotional expressions. Likewise, we added up all the aggregated emotional expression scores for all the pictures to obtain the total score for each project (i.e., *emo. pictures*). To achieve consistency, we followed the same approach for the pitch video using the same algorithm to recognize facial expressions in each video frame. Likewise, in case the algorithm detected more than one face in a frame, we added up all the individual emotional expression scores within the frame. Finally, we added up the aggregated emotional expression scores of all frames to obtain the total score for the full video divided by the number of frames per second to account for different frame rates (i.e., *emo. video*). For example, if the algorithm returns the score "ten," the video shows highly emotional facial expressions for ten seconds.

Moderating Variables. Regarding the social-contextual factors (H2) reflecting the perceived economic risk under which the investment decision must be made, we measured the amount entrepreneurs seek to raise (*pledge goal*) (Mollick 2014) and the entrepreneurs' experience as the number of previously created projects (*no. created*) (Kleinert 2023; Koch and Siering, 2015). Concerning the nature of the relationship between entrepreneurs and investors, we measured the number of previously backed projects (*no. backed*) (Koch and Siering, 2015; Zvilichovsky et al., 2015). *No. created* and *no. backed* reflect the number of previously created and backed projects by the entrepreneur prior to the launch of the entrepreneur's project in question. Regarding actions that can reduce social distance, we measured the number of posted updates (*no. updates*) (Beier and Wagner, 2015; Kunz et al., 2016) and the number of comments written by the entrepreneur during the funding period (*no. comments*) (Clauss et al., 2017; Wang et al., 2021). Table 1 shows the descriptive statistics of the researched dependent, independent, and moderating variables together with their correlation matrix.

Control Variables. Based on previous research, we also included additional project and presentation-related control variables that can influence funding performance. We controlled for the campaign's category (Chan and Parhankangas, 2017), the project duration (Anglin et al., 2018; Mollick 2014), the project description's number of words, the number of pictures (Koch and Siering, 2019), as well as the pitch video's duration (Raab et al., 2020) and number of spoken words (Parhankangas and Renko, 2017).

4.2. Research approach

To answer our research questions, we employed ordinary least squares regressions with funding raised as the dependent variable. To mitigate the influence of extreme values, we winsorized the variables at the 1st and 99th percentile. Instead of removing these data points, winsorizing replaces them with the specified percentile. This ensures that the analysis is not overly influenced by outliers while retaining the overall structure of the data (e.g., Haans et al., 2016; Lohmar et al., 2023). As some variables had a right-skewed distribution, we normalized them by conducting an inverse hyperbolic sine (IHS) transformation for variables with skewness greater than two:

$\sinh^{-1}(y) = \log(y + (y^2 + 1)^{1/2})$. The IHS transformation is similar to a logarithmic transformation $\log(y + 1)$. However, it is not only defined for positive values but for all numbers, thus also including zero and negative values. Following its widespread application in crowdfunding research (e.g., Anglin et al., 2018; Seigner et al., 2024; Sewaid et al., 2024), we decided to use IHS transformation to preserve the interpretation of the zero values. These are meaningful data points as they represent, for example, the absence of an emotional expression in the respective modality (Friedline et al., 2015). As the dependent and independent variables are characterized by high variability, the application of both winsorization and IHS transformation reduces the impact of extreme values and stabilizes the variance across the dataset (Cumming et al., 2024).

5. Results

5.1. Regression analyses

Table 2 presents the findings of our regression analyses. The outcomes of Model 1, which includes only the control and moderating variables, are in line with prior research investigating entrepreneur- and presentation-related factors (e.g., Koch and Siering, 2019; Mollick 2014; Wang et al., 2021). Model 2 introduces the emotion-related independent variables and their squared terms to answer H1. A conducted F-test comparing Model 1 with Model 2 indicates that the addition of the independent variables (emotional expressions) increased the model fitness (F-Test χ^2 (8, 16,934) = 109.10, $p < 0.001$).

Hypothesis H1 assumes an inverted u-shaped relationship between emotional expressions and funding raised. Following the recommendations of Lind et al. (2010), we used a three-step procedure to formally establish this relationship: First, the squared term has to be negative and significant. Second, the slopes at the end of each data range must be sufficiently steep. Third, the turning point must fall within the data range. To test steps two and three, it is recommended to conduct an appropriate u-test (Haans et al., 2016; Lind and Mehlum, 2010).

Model 2 shows a positive and significant impact of emotional words ($\beta = 0.248$, $p < 0.001$) and a negative and significant impact of its squared term ($\beta = -0.167$, $p < 0.001$). The turning point is 47.94, located within the observed data range. The u-test furthermore confirms

Table 1
Descriptive statistics and correlations.

	Variables	Mean	SD	Min	Max	1	2	3	4	5	6	7	8	9
1	Funding raised	9,235	26,390	0	190,832									
2	Pledge goal	13,865	21,834	77	200,000	0.26								
3	No. backed	6.14	17.24	0	117	0.16	−0.07							
4	No. created	0.83	2.15	0	14	0.09	−0.10	0.45						
5	No. updates	2.87	4.21	0	21	0.43	0.03	0.32	0.18					
6	No. comments	3.26	11.64	0	875	0.69	0.12	0.26	0.18	0.49				
7	Emo. words	28.25	26.48	0	139	0.29	0.14	0.20	0.09	0.40	0.28			
8	Emo. pictures	0.75	1.78	0	10.02	0.26	0.11	0.08	0.00	0.23	0.15	0.35		
9	Emo. video	15.29	29.44	0	153.37	0.06	0.03	0.00	−0.07	0.10	−0.03	0.15	0.20	
10	Emo. speech	9.91	12.51	0	54	0.19	0.11	0.04	0.07	0.20	0.09	0.30	0.23	0.59

Notes: n = 16,967; all variables are winsorized at the 1st and 99th percentiles; all correlations equal or above |0.03| are significant at $p < 0.05$.

Table 2
Regression results.

	(1) Funding raised [a]			(2) Funding raised [a]			*U* test		(3) Funding raised [a] Z = No. backed [a]			(4) Funding raised [a] Z = No. updates [a]			(5) Funding raised [a] Z = No. comments [a]			(6) Funding raised [a] Z = No. created [a]			(7) Funding raised [a] Z = Pledge goal [a]		
Control variables																							
Category dummy	included			included					included			included			included			included			included		
No. words	0.153	***	(0.02)	0.202	***	(0.04)			0.192	***	(0.04)	0.197	***	(0.04)	0.205	***	(0.04)	0.206	***	(0.04)	0.183	***	(0.04)
No. pictures	0.498	***	(0.03)	0.390	***	(0.03)			0.378	***	(0.03)	0.386	***	(0.03)	0.404	***	(0.03)	0.369	***	(0.03)	0.361	***	(0.03)
Video duration	0.142	***	(0.03)	0.090	**	(0.03)			0.044		(0.03)	0.025		(0.03)	0.044		(0.03)	0.075	*	(0.03)	0.110	***	(0.03)
No. spoken words	0.391	***	(0.03)	0.066		(0.06)			0.052		(0.06)	0.089		(0.06)	0.072		(0.06)	0.064		(0.06)	0.030		(0.06)
Duration	−0.137	***	(0.02)	−0.118	***	(0.02)			−0.109	***	(0.02)	−0.122	***	(0.02)	−0.111	***	(0.02)	−0.109	***	(0.02)	−0.116	***	(0.02)
Moderator variables																							
Pledge goal [a]	0.164	***	(0.02)	0.096	***	(0.02)			0.121	***	(0.02)	0.133	***	(0.02)	0.102	***	(0.02)	0.108	***	(0.02)	0.348	***	(0.04)
No. backed [a]	0.409	***	(0.02)	0.346	***	(0.02)			0.129	***	(0.04)	0.350	***	(0.02)	0.335	***	(0.02)	0.361	***	(0.02)	0.356	***	(0.02)
No. created [a]	−0.028		(0.02)	0.002		(0.02)			−0.034	◦	(0.02)	−0.034	◦	(0.02)	−0.021		(0.02)	−0.239	***	(0.04)	0.010		(0.02)
No. updates [a]	1.325	***	(0.02)	1.211	***	(0.02)			1.180	***	(0.02)	0.919	***	(0.04)	1.169	***	(0.02)	1.188	***	(0.02)	1.204	***	(0.02)
No. comments [a]	0.455	***	(0.03)	0.512	***	(0.03)			0.547	***	(0.02)	0.577	***	(0.03)	0.484	***	(0.04)	0.544	***	(0.03)	0.493	***	(0.03)
Main effects																							
Emo. words				**0.248**	***	**(0.05)**	**t =**	***	0.240	***	(0.05)	0.230	***	(0.05)	0.222	***	(0.05)	0.244	***	(0.05)	0.257	***	(0.05)
Emo. words [2]				**−0.167**	***	**(0.01)**	**9.17**		−0.154	***	(0.01)	−0.153	***	(0.01)	−0.156	***	(0.01)	−0.165	***	(0.01)	−0.173	***	(0.01)
Emo. pictures [a]				**0.322**	***	**(0.04)**	**t = 2.28**	*	0.378	***	(0.04)	0.432	***	(0.04)	0.356	***	(0.04)	0.323	***	(0.04)	0.293	***	(0.04)
Emo. pictures [a 2]				**−0.077**	***	**(0.02)**			−0.090	***	(0.02)	−0.099	***	(0.02)	−0.086	***	(0.02)	−0.078	***	(0.02)	−0.078	***	(0.02)
Emo. video [a]				**0.369**	***	**(0.03)**	**t =**		0.369	***	(0.03)	0.346	***	(0.03)	0.377	***	(0.03)	0.379	***	(0.03)	0.387	***	(0.03)
Emo. video [a 2]				**−0.092**	**	**(0.03)**	**0.16**		−0.100	***	(0.03)	−0.086	**	(0.03)	−0.111	***	(0.03)	−0.108	***	(0.03)	−0.096	***	(0.03)
Emo. speech				**0.373**	***	**(0.06)**	**t =**	***	0.407	***	(0.06)	0.385	***	(0.06)	0.378	***	(0.06)	0.366	***	(0.06)	0.358	***	(0.06)
Emo. speech [2]				**−0.163**	***	**(0.02)**	**8.24**		−0.164	***	(0.02)	−0.159	***	(0.02)	−0.153	***	(0.02)	−0.156	***	(0.02)	−0.161	***	(0.02)
Moderation effects | Z = moderator																							
Emo. words × Z									−0.330	***	(0.03)	−0.358	***	(0.03)	−0.311	***	(0.03)	−0.153	***	(0.03)	0.154	***	(0.03)
Emo. words [2] × Z									**0.086**	***	**(0.01)**	**0.097**	***	**(0.01)**	**0.078**	***	**(0.01)**	**0.045**	***	**(0.01)**	**−0.029**	*	**(0.01)**
Emo. pictures [a] × Z									−0.297	***	(0.04)	−0.368	***	(0.04)	−0.238	***	(0.03)	−0.156	***	(0.04)	0.147	***	(0.04)
Emo. pictures [a 2] × Z									**0.079**	***	**(0.02)**	**0.112**	***	**(0.02)**	**0.082**	***	**(0.01)**	**0.044**	*	**(0.02)**	**−0.045**	*	**(0.02)**
Emo. video [a] × Z									−0.135	***	(0.03)	−0.132	***	(0.03)	−0.153	***	(0.03)	−0.123	***	(0.03)	0.071	*	(0.03)
Emo. video [a] [2] × Z									**0.103**	***	**(0.03)**	**0.078**	**	**(0.03)**	**0.045**		**(0.03)**	**0.071**	*	**(0.03)**	**−0.063**	*	**(0.03)**
Emo. speech × Z									−0.136	***	(0.03)	−0.151	***	(0.03)	−0.080	*	(0.03)	−0.129	***	(0.04)	0.184	***	(0.04)
Emo. speech [2] × Z									**0.067**	***	**(0.02)**	**0.060**	***	**(0.01)**	**0.043**	**	**(0.01)**	**0.069**	***	**(0.02)**	**−0.049**	**	**(0.02)**
Adjusted R^2	0.528			0.551					0.564			0.566			0.560			0.556			0.556		

Notes: ◦ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; n = 16,967; [a] inverse hyperbolic sine transformation (ihs); standard error in parentheses.

the inverted u-shape ($t = 9.17$, $p < 0.001$). The amount of facial expressions in pictures has a positive and significant impact on the total funding raised ($\beta = 0.322$, $p < 0.001$), its squared term is negative and significant ($\beta = -0.077$, $p < 0.001$). The turning point is 3.52 (ihs: 1.97), located within the observed data range. The u-test furthermore confirms the inverted u-shape ($t = 2.28$, $p < 0.05$).

The amount of facial expressions in the pitch video has a positive and significant impact ($\beta = 0.369$, $p < 0.001$). Its squared term is negative and significant ($\beta = -0.092$, $p < 0.01$). The turning point is 128.96 (ihs: 5.55), located within the observed data range. The u-test could not confirm an inverted u-shaped relationship ($t = 0.16$, $p > 0.05$), as the slope at the upper bound reflecting high intensities of facial expressions is not significant, i.e., is not sufficiently steep. The amount of emotional spoken words has a positive and significant impact ($\beta = 0.373$, $p < 0.001$). Its squared term is negative and significant ($\beta = -0.163$, $p < 0.001$). The turning point is 24.20, located within the observed data range. The u-test furthermore confirms the inverted u-shape ($t = 8.24$, $p < 0.001$). Thus, our results confirm an inverted u-shape relationship for emotional expressions in all modalities except for emotional facial expressions in the pitch video, supporting H1. Summing up, conveying approximately 48 written emotional words through the textual description is most beneficial. Likewise, when embedding approximately 24 spoken emotional words in the pitch video, the most profound influence can be achieved. Facial expressions in pictures are most effective when approximately 3.5 people express an intense emotional expression. The most beneficial impact of facial emotional expressions in the pitch video occurs when they are displayed for approximately 129 s, reflecting the turning point. The non-linear effect (Haans et al., 2016; Lind and Mehlum, 2010) of non-verbal emotional expressions in the pitch video is further supported by Fig. 2.

To analyze whether a flattening or steepening can be measured to determine moderating influences, we followed the recommendations of Haans et al., (2016). We therefore included the interactions between the squared terms for each emotional expression and each moderating variable in Model 3–7 to answer H2(a)–H2(e).

In Model 3 ($H2_a$), we analyze if the number of projects that entrepreneurs backed previously moderates the relationship between the emotional expressions and funding raised. The positive and significant coefficients for each *emotional expression*^{2} × *no. backed projects* indicate that the slopes of the curvilinear relationships are flatter for projects when entrepreneurs have supported more projects previously, supporting H2(a). In Model 4 ($H2_b$), we analyze if the *number of updates* moderates the relationship between the *emotional expressions* and *funding raised*. The positive and significant coefficients for each *emotional expression*^{2} × *no. updates* indicate that the slopes of the curvilinear relationships are flatter for entrepreneurs who posted more updates, supporting H2(b). In Model 5 ($H2_c$), we analyzed if the *number of comments* moderates the relationship between the *emotional expressions* and *funding raised*. The positive and significant coefficients for *emo. words*^{2} × *no. comments, emo. pictures*^{2} × *no. comments,* and *emo. speech*^{2} × *no. comments* indicate that the slopes of the curvilinear relationships are flatter for entrepreneurs who participated with more comments. Although in the hypothesized direction, no significant moderating effect could be reported for *emo. video*^{2} × *no. comments*. Thus, H2(c) is largely supported.

In Model 6 ($H2_d$), we analyzed if the *number of created projects* moderates the relationship between the *emotional expressions* and *funding raised*. The positive and significant coefficients for each *emotional expression*^{2} × *no. created* indicate that the slopes of the curvilinear relationships are flatter for entrepreneurs with more created projects, supporting H2(d). In Model 7 ($H2_e$), we analyzed if the *pledge goal* moderates the relationship between the *emotional expressions* and *funding raised*. The negative and significant coefficients for each *emotional expression*^{2} × *pledge goal* indicate that the slopes of the curvilinear relationships are steeper for projects with a higher requested pledge goal, supporting H2(e).

To illustrate the moderating effects and to support the interpretation of the results, we calculate the average marginal effects for the interaction at different levels of each moderating variable (i.e., –1 SD, mean, +1 SD) and depict the effect sizes in Fig. 3. Note that we only show the moderating effects on *emotional spoken words* in Fig. 3. All graphical representations for each reported moderation are accessible via the appendix (see Appendix A | Figs. A1–A5).

5.2. Robustness checks

We also conducted robustness checks to verify the stability of our results. These results can be accessed via the appendix (see Appendix B | Tables B1−B11). First, we calculated the variance inflation factors (VIFs) of Model 1–7 to check for multicollinearity among the

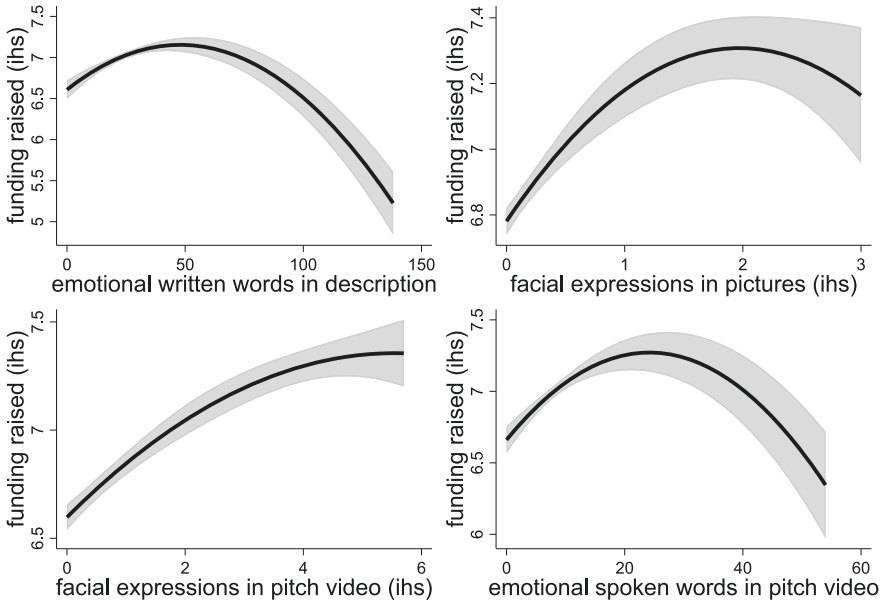

Fig. 2. Non-linear effects of emotional expressions on funding performance (H1).

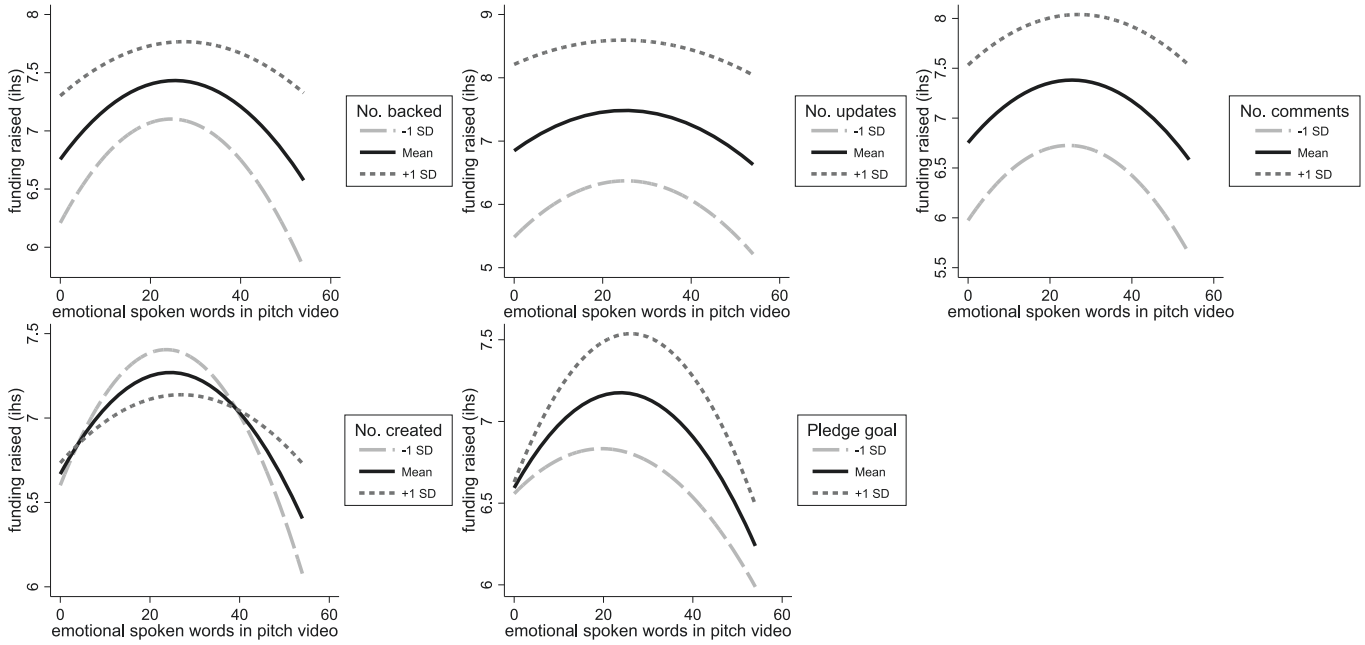

Fig. 3. Moderating effects of each social-contextual factor on emotional speech (H2).

independent and moderating variables. Our results indicate that all VIFs are below the commonly recommended threshold of 10, except for *No. spoken words* (10.97 – 11.04) and *Emotional speech* (12.31 – 12.57) that are slightly above the recommended threshold. Multicollinearity, however, is not likely to be a concern, as *Emotional speech* is mutually dependent on *No. spoken words* (Neter et al., 1990). When excluding the control variable *No. spoken words*, all VIFs are below the recommended threshold. Also, the model fit did not change after removing *No. spoken words* (F-Test χ^2 (1, 16,934) = 1.34, p = 0.246). Moreover, the results remain robust (Table B1).

Second, we checked for bias introduced by winsorization (e.g., Haans et al., 2016; Lohmar et al., 2023) and conducted our analyses of Model 1–7 with winsorization at the 2nd and 98th, as well as 3rd and 97th percentiles, respectively. The results remain robust (Tables B2 and B3).

Third, we evaluated the robustness of our findings with different operationalizations of our dependent variable to verify the stability of our regression analysis. We operationalized the impact of emotional expressions on investment decisions by accounting for how many people have been persuaded to support the project (*no of backers*) (Jiang et al., 2020). The results remain robust for all interactions but *emo. words*^{2} × *pledge goal* and *emo. video*^{2} × *pledge goal*, in which the coefficients have still the same direction but are no longer significant (Table B4). Also, we accounted for the average amount an investor pledged in a particular project by dividing the amount of money raised by the number of investors (*backer pledged*) (Chan and Parhankangas, 2017). The results remain robust for all interactions but *emo. video*^{2} × *no. created*, in which the coefficient has still the same direction but is not significant (Table B5).

Fourth, as our *emotion* variables reflect the total emotional appeal of a modality, we also used a different operationalization that reflects the most dominantly expressed emotion (e.g., Koch and Siering, 2019; Warnick et al., 2021). Thus, we account for the effects of positive verbal and nonverbal emotional expressions. To do so, we utilized the LIWC category "*posemo*" for positive verbal expressions and facial emotional expressions of *happiness* for positive nonverbal expressions. The results remain robust (Table B6). Overall, these additional analyses increase our confidence in the reliability of our results.

Sixth, instead of the IHS transformation, we also applied the natural logarithm to transform skewed variables with an additional approach. The results remain robust (Table B7).

Seventh, to ascertain that our criteria to exclude outliers did not influence the outcomes, we conducted additional tests with varying funding goal thresholds, excluding projects with a funding goal above $500,000 as well as $100,000 (Kuppuswamy and Bayus, 2017; Mollick 2014). Furthermore, a robustness test was conducted without the application of exclusion criteria. The results remain robust (Tables B8, B9, and B10).

Finally, we implemented a robustness test utilizing robust standard errors as the regression model contradicts the assumption of homoscedasticity. The objective of robust standard errors is to correct for heteroskedasticity by providing standard errors that are valid in the context of heteroskedasticity (Croux et al., 2004). The results remain robust (Table B11).

5.3. Post-hoc analysis

Given the suggestion in previous research that different types of projects might benefit from different persuasion strategies (Chen et al., 2024; Chen et al., 2023; Gafni et al., 2019; Tafesse 2021), we conducted an additional analysis of our findings with respect to project category. In particular, we examined the moderating influence of project category on the non-linear effects of emotional expressions on funding behavior. In accordance with previous research (Chen et al., 2023; Manning and Bejarano, 2017; Tafesse 2021), we thereby broadly distinguished between projects aiming for tangible and intangible outcomes. Projects that aim to raise funds to realize tangible products like gadgets, hardware, apparel, or crafts, are classified as tangible. Projects that seek to raise funds for the creation of intangible services and experiences, focusing on more amorphous outcomes such as film and video, music, games, or literature, are classified as intangible.

To test for the moderating impact of the project *category*, a binary variable was constructed (tangible = 1, intangible = 0). The negative and significant coefficients ($p < 0.1$) for each *emotional expression*^{2} × *category* provide preliminary indications that the slopes of the curvilinear relationships are steeper for projects raising funds for tangible products and flatter for intangible services and experiences (Model 3 in

Table C1, Appendix).

These results extend those of recent studies examining the moderating impact of product characteristics, such as the category, which have traditionally assumed linear relationships between emotional expressions and funding behavior (Chen et al., 2023; Lohmar et al., 2023; Tafesse 2021). Specifically, we emphasize a novel non-linear perspective and suggest that higher intensities of emotional expressions are rather tolerated when the project is raising funds for intangible services and experiences. Investors may perceive emotional expressions as an integral aspect of intangible services and experiences, such as film and video, music, or literature, particularly when the functional benefits are challenging to quantify. In this context, emotional expressions may play a more significant role in the decision-making process. In contrast, higher intensities of emotional expressions seem to be less tolerated when the project is raising funds for tangible products. Investors tend to seek objective information when evaluating gadgets, hardware, or apparel, which are primarily designed to provide functional benefits. Therefore, higher intensities of emotional expressions may rather be perceived as a distraction, an attempt at manipulation, or an impression management strategy (Chen et al., 2016; Moradi and Dass, 2019; Tafesse 2021). Note that in contrast to the category of a project, social-contextual factors, such as the nature of the relationship quality and willingness to engage in deliberate information processing, can be shaped by the actions of the entrepreneurs.

Additionally, the data set was divided into two subsamples (tangible and intangible). For both subsamples, the results confirm an inverted u-shaped relationship for emotional expressions in all modalities except for facial emotional expressions in the pitch video (Model 2 in Tables C2 and C3, Appendix). The results are also robust with respect to most of the observed moderating effects. However, for projects with tangible products, the *pledge goal* does not appear to moderate the relationship between the *emotional expressions* and *funding raised*. We speculate that a higher pledge goal does not exert a significant impact on the curvilinear relationship due to the typically higher pledge goal target associated with these types of projects (M = 18,432, SD = 24,891).

6. Discussion

6.1. Key findings

The results of our study show that investment decisions in reward-based crowdfunding are considerably shaped by the emotional appeal of campaign presentations. Conveying emotions in the form of emotional written words (in the text), emotional spoken words (in the video), and facial emotional expressions (in the pictures and video) can positively influence funding behavior. Despite this positive influence, however, our results indicate that emotional expressions should not be transmitted in maximum intensity but that their number ought to be adapted to the professional business-oriented context of reward-based crowdfunding in two ways.

First, the regression analysis shows that the effect of emotional expressions is *non-linear* across all modalities. We provide empirical support that the positive impact of displaying emotional expressions decreases beyond a certain threshold and, in most cases, even turns negative. Our results suggest that the turning point, in which the intensity of emotional expressions has the greatest impact on funding performance, reflects an optimal level of emotional expressions that should be transmitted in the project presentation. From the perspective of EASI theory, this turning point seems to describe the intensity of emotional expressions that potential investors perceive as most appropriate. Research has shown that emotional expressions can provide a substitute for missing information and help shaping a decision-maker's appraisal of a situation and/or a product especially when decisions are made under uncertainty (Li et al., 2017a; van Kleef 2009). Despite this potential, however, our findings suggest that the intensity of transmitted emotional expressions also needs to be perceived as appropriate by potential backers to be effective. We found that high intensities of emotional expressions unfold a negative effect on the investment decision in reward-based crowdfunding. Obviously, they violate prevailing display rules of professional communication and lead to investors not supporting the project. To optimally exploit their information potential and ensure their acceptance among potential investors, entrepreneurs should therefore transmit a moderate intensity of emotional expressions in their project presentations.

Second, the results of our moderation analyses indicate that the effect of emotional expressions on the funding behavior is not uniform for all crowdfunding projects but is moderated by the concrete manifestations of situational *social-contextual factors*. On the one hand, our results show that the nature of the relationship between the entrepreneur and potential investors influences investors' tolerance of higher intensities of emotional expressions. In particular, higher intensities of emotional expressions seem to be more tolerated and thus more effective when the entrepreneur manages to establish a closer, more familiar and trusted relationship with investors. To achieve this goal, entrepreneurs could actively back other projects, provide updates for their own projects, and respond to comments of investors on the project page. On the other hand, the results of our study indicate that investors' tolerance of higher intensities of emotional expressions is influenced by their willingness to engage in deliberate information processing. Higher intensities of emotional expressions particularly seem to be more tolerated when potential investors perceive the economic risk as lower. To make the risk perception more favorable, entrepreneurs could for instance consider lowering the pledge goal.

The results of our robustness tests moreover indicate that investors' tolerance of higher intensities of emotional expressions is influenced by the category of the project. According to our findings, investors seem to tolerate higher intensities of emotional expressions particularly if funds are raised for intangible services and experiences. In these contexts, emotional expressions seem to be an even more integral part of a communication strategy. Taken together, the results of our study deliver a new perspective on the effects of emotional expressions, which have so far mainly been examined based on linear assumptions. While our results reinforce the notion that an emotional project presentation plays a vital role in persuading potential investors and increasing the funding performance of reward-based crowdfunding campaigns, they call for a moderate approach to convey emotional expressions.

6.2. Implications for academia

The results of our study have implications for academia and practice. By transferring EASI theory to the context of reward-based crowdfunding, our study offers a novel and more nuanced perspective on the mechanisms through which emotional expressions influence the investment decision. Previous studies have mostly assumed a linear or monotonous effect and have reported contradictory results regarding the question of whether emotional expressions influence investment decisions positively or negatively. By uncovering that emotional expressions can unfold both positive and negative effects depending on their intensity, we resolve these seemingly contradictory findings of previous studies and integrate them into a coherent picture. Our research contextualizes the effect of emotional expressions on investment decisions within a core principle of EASI, the concept of perceived appropriateness (van Kleef and Côté, 2022): for emotional expressions to be effective, they must conform to the social-contextual factors which characterize the communication context and shape prevailing display rules. Against this background, we explain the effects of emotional expressions in the reward-based crowdfunding domain as the result of two opposing factors that interact with each other: the information potential resulting from the reduced motivation of investors to engage in deliberate information processing and the situational norms resulting from the socially distant, business-oriented nature of the relationship.

Our study moreover belongs to the few that investigate potential

moderating factors. While extant studies provide indications that the effect of emotional expressions in reward-based crowdfunding depend on the social context in which the interaction occurs (e.g., Lohmar et al., 2023; Tafesse 2021), they have so far only looked at characteristics of the product/service and personality traits of the entrepreneur and potential investors. By looking at the nature of their interpersonal relationship and the willingness of potential investors to engage in deliberate information processing, we take a new, social-relational perspective that – to our best knowledge – has not been investigated before in the reward-based crowdfunding domain.

The results of our study also inform research related to EASI theory. While ongoing research mostly concentrates on identifying social-contextual factors that shape the effects of emotional expressions in various communication scenarios, it is still not entirely clear how these factors interact and how the resulting effect is jointly shaped. By analyzing the interplay of social-contextual factors, we take a fresh perspective that has rather sporadically been explored so far. Our study furthermore is among the few that aim at identifying potential moderating influences, which so far "have received little or no attention" (van Kleef and Côté, 2022, p. 648). The results of our study indicate that display rules, which are jointly shaped by the prevailing social-contextual factors, are not set in stone. Rather, social-contextual factors seem to set a scope within which display rules can vary depending on the specific manifestations of the social-contextual factors in a particular communication scenario. It might therefore be worthwhile to also search for situational moderating factors that can influence the manifestations of social-contextual factors.

6.3. Implications for practice

For practice, our results provide new guidelines on how emotional expressions can be effectively used in reward-based crowdfunding campaigns. To convince potential investors, entrepreneurs should include emotional expressions into their campaign presentations. While a certain intensity level of emotional expressions seems desirable to achieve an optimal impact, entrepreneurs should use high intensities with caution as they tend to unfold negative effects and may put off potential investors. To effectively employ emotional expressions to influence investors, entrepreneurs hence must ensure that they keep following emotional display rules of the professional, business-oriented communication context. That said, there also exist moderating factors that can influence investors' tolerance of higher intensity levels of emotional expressions. Because it can be difficult to accurately hit the optimal intensity level in practice, these factors can be used strategically to mitigate adverse effects if the intensity level deviates slightly. Drawing from our results, entrepreneurs could support other projects, add frequent updates to their own campaign presentation, and reply to comments to build a closer, more personal relationship with investors. In closer and more personal relationships, higher intensities of emotional expressions seem to be tolerated to a greater extent, meaning that they are perceived as less inappropriate than in distant relationships. Higher intensities of emotional expressions are also more likely to be tolerated by investors if the economic risk under which the funding decision is made is perceived as lower. The higher the pledge goal and the more inexperienced the entrepreneur, the more cautious they should hence be when using high intensities of emotional expressions. Next to entrepreneurs, our results also have implications for platform operators such as Kickstarter, who could develop guidelines on how to use emotional expressions based on our findings.

6.4. Limitations and future research

The results of our study should be interpreted in the light of several limitations, which provide opportunities for future research. First, we have only used data gathered from Kickstarter as a single source. While it is one of the worldwide leading reward-based crowdfunding platforms, future research could verify our results with data from platforms such as Indiegogo, which implement slightly different funding models. Second, our results are dependent on the tools and algorithms utilized to identify emotions. Although LIWC is widely acknowledged and often applied due to its validated dictionaries and reproducibility (e.g., Yoo et al., 2023; Yuan et al., 2021) and the Microsoft Emotion API identifies emotional expressions on a level comparable to humans (Kuntzler et al., 2021), it is conceivable that other tools would have produced slightly different results. Future research could therefore verify our results using other tools that can, for example, consider word combinations or the sentence structure when accounting for the number of emotional words. Third, we so far have focused on the impact of emotional words in the written/spoken narration and facial emotional expressions in the pictures/video. To expand the scope of our investigation, future studies could also examine the impact of visual elements such as color, body movements, postures, and gestures, which can also communicate emotional expressions. Likewise, analyzing auditory elements such as speech rate, pitch, or loudness could provide further insights into how emotional expressions affect funding performance. Future research should moreover investigate the role of additional social-contextual factors such as culture or the relative power of the participants (van Kleef and Côté, 2022). Finally, we must emphasize that we could not directly measure perceived appropriateness as a variable in this study. Instead, we inferred the mechanisms behind the observed effects based on EASI theory. As both the theoretical prediction of the effects and the proposed moderating factors were consistent with our observations, we consider the conducted inferences to be plausible. However, future research should try to replicate our findings using experimental designs, in which the impact of intense emotional expressions on perceived appropriateness can be directly measured.

7. Conclusion

Research has shown that incorporating emotional expressions into campaign presentations can positively affect funding behavior in the reward-based crowdfunding domain (Koch and Siering, 2019; Lin and Boh, 2021). While confirming the potential benefit of emotional expressions, our study contributes to drawing a more differentiated picture of their effect. Our results show that the effect of emotional expressions is curvilinear in nature across all modalities, which means that the positive impact on funding behavior will eventually deteriorate or even reverse with higher intensities of emotional expressions. Building on EASI theory, we therefore suggest that emotional expressions should not simply be used with maximum intensity but need to be adapted to the social context and its situational emotional display rules and expectations to be effective. While our results indicate that there exists an optimal peak level of emotional expressions that is perceived as most appropriate by the investors, we also identified social-contextual factors that shape emotional display rules and expectations and thus moderate the effect. Our results suggest that investors tend to perceive higher intensities of emotional expressions as less inappropriate if the entrepreneur manages to establish a closer, more personal relationship with them. We also found that the tolerance for a larger number of emotional expressions tends to increase as the perceived economic risk under which the investment decision is made decreases. These results show that the effect of emotional expressions should not be studied in isolation but taking into account the specific context in which the interaction occurs. With our findings, we hope to motivate further endeavors in this direction.

CRediT authorship contribution statement

Maximilian Raab: Writing – original draft, Validation, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Sebastian Schlauderer:** Writing – original draft, Visualization, Supervision, Methodology, Investigation, Conceptualization. **Sven Overhage:**

Writing – original draft, Visualization, Supervision, Methodology, Investigation, Conceptualization.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A:. Visualization of moderation effects

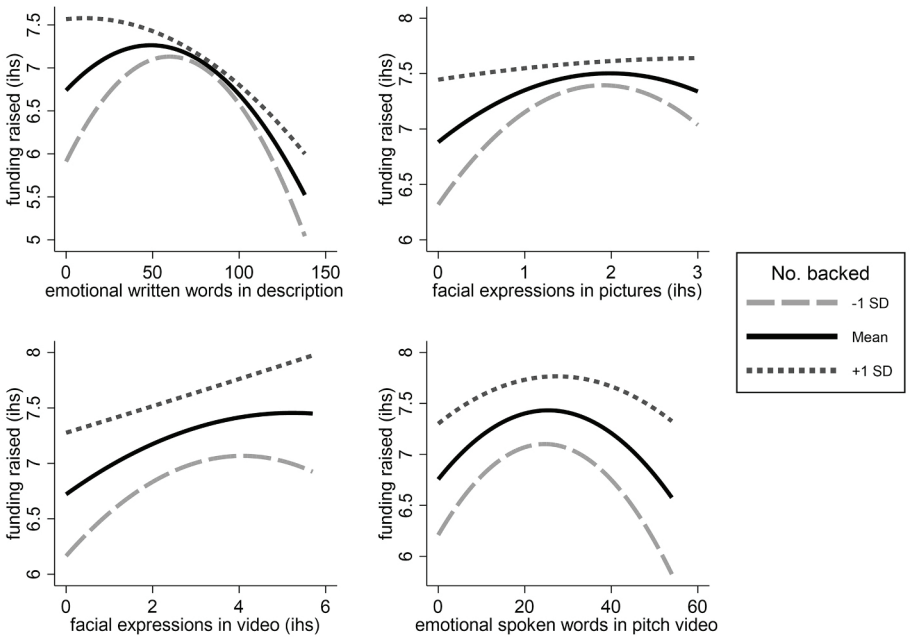

Fig. A1. Non-linear effect of emotional expressions on funding performance moderated by "No. backed".

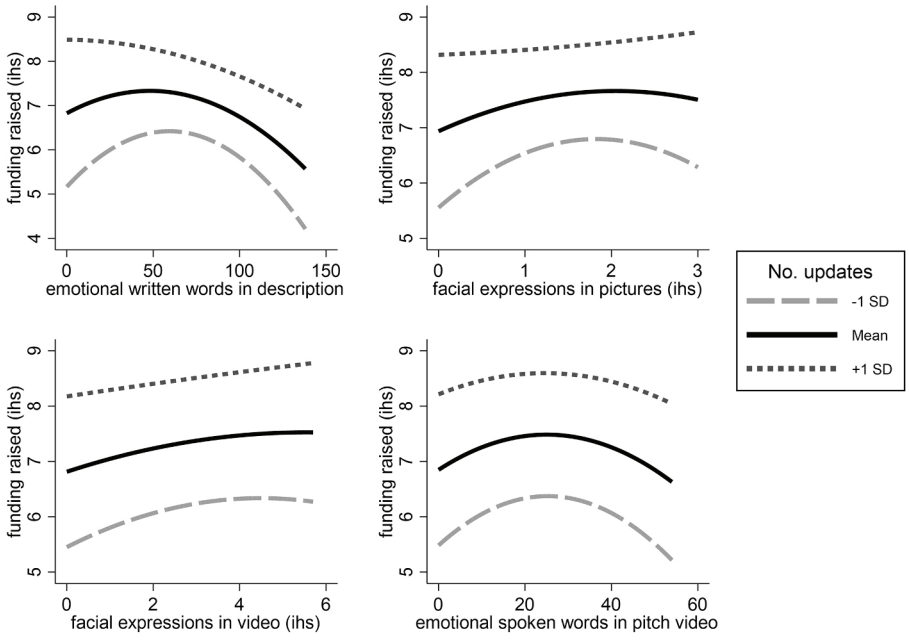

Fig. A2. Non-linear effect of emotional expressions on funding performance moderated by "No. updates".

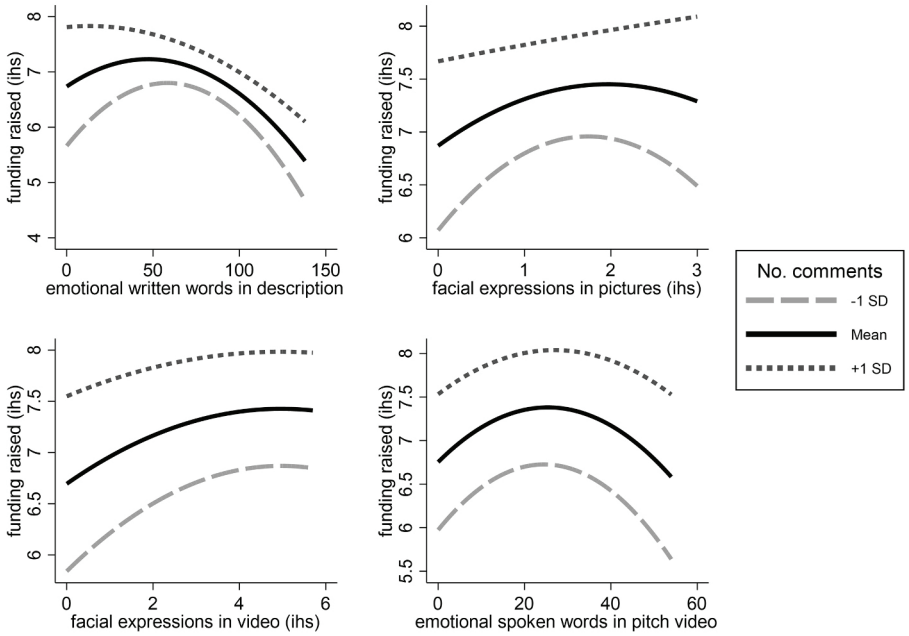

Fig. A3. Non-linear effect of emotional expressions on funding performance moderated by "No. comments".

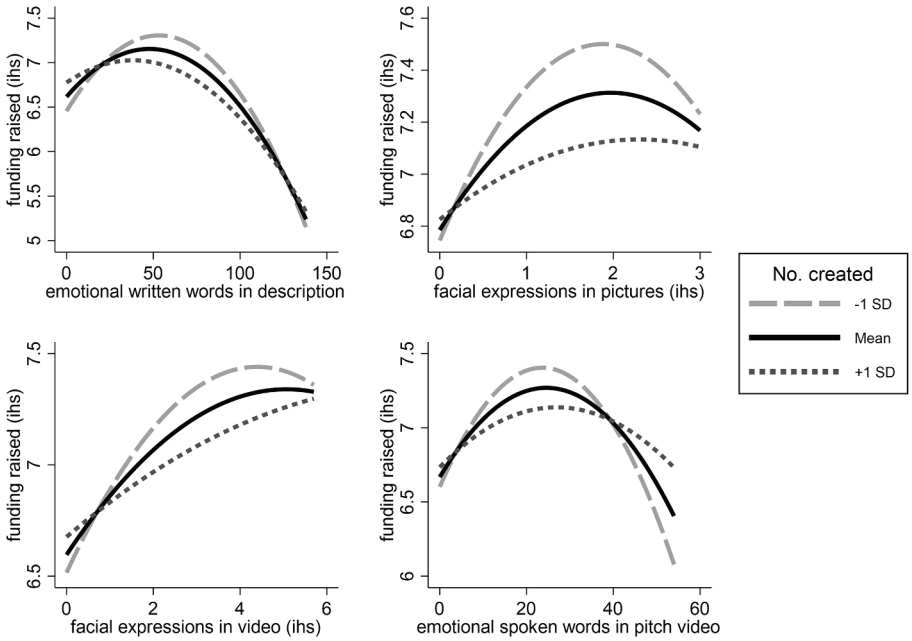

Fig. A4. Non-linear effect of emotional expressions on funding performance moderated by "No. created".

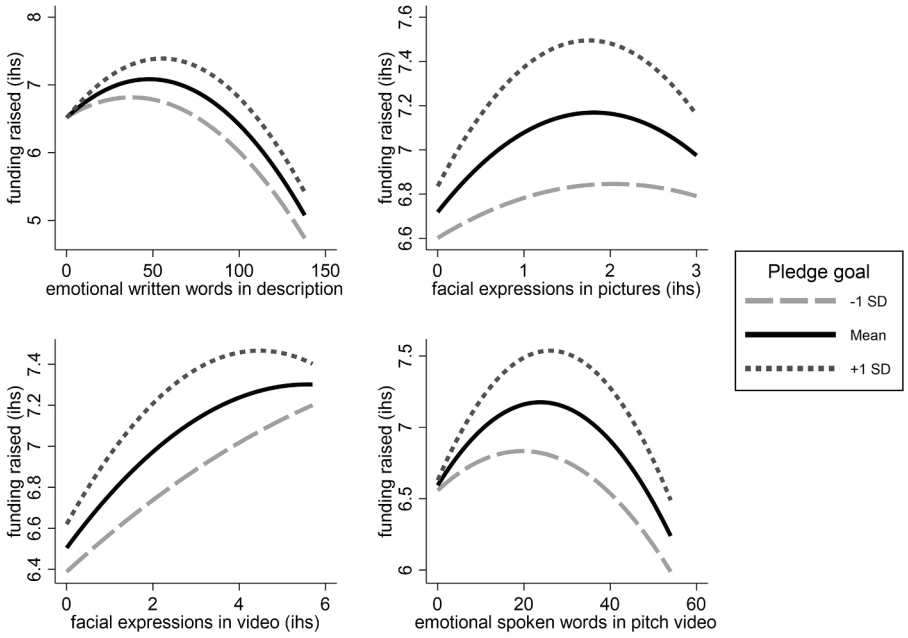

Fig. A5. Non-linear effect of emotional expressions on funding performance moderated by "Pledge goal".

Appendix B:. Robustness checks

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Table B1
Robustness test | Control variable "No. spoken words" excluded.

	(1) Funding raised [a]			(2) Funding raised [a]			*U* test		(3) Funding raised [a] Z = No. backed [a]			(4) Funding raised [a] Z = No. updates [a]			(5) Funding raised [a] Z = No. comments [a]			(6) Funding raised [a] Z = No. created [a]			(7) Funding raised [a] Z = Pledge goal [a]		
Control variables																								
Category dummy	included			included					included			included			included			included			included		
No. words	0.170	***	(0.02)	0.213	***	(0.04)			0.201	***	(0.04)	0.212	***	(0.04)	0.217	***	(0.04)	0.217	***	(0.04)	0.188	***	(0.04)
No. pictures	0.481	***	(0.03)	0.388	***	(0.03)			0.376	***	(0.03)	0.384	***	(0.03)	0.402	***	(0.03)	0.368	***	(0.03)	0.360	***	(0.03)
Video duration	0.460	***	(0.02)	0.106	***	(0.03)			0.056		(0.03)	0.047		(0.03)	0.062	*	(0.03)	0.091	**	(0.03)	0.117	***	(0.03)
~~No. spoken words~~	–			–					–			–			–			–			–		
Duration	−0.146	***	(0.02)	−0.118	***	(0.02)			−0.109	***	(0.02)	−0.122	***	(0.02)	−0.112	***	(0.02)	−0.109	***	(0.02)	−0.116	***	(0.02)
Moderator variables																								
Pledge goal [a]	0.179	***	(0.02)	0.096	***	(0.02)			0.121	***	(0.02)	0.134	***	(0.02)	0.102	***	(0.02)	0.108	***	(0.02)	0.348	***	(0.04)
No. backed [a]	0.424	***	(0.02)	0.346	***	(0.02)			0.129	***	(0.04)	0.350	***	(0.02)	0.334	***	(0.02)	0.361	***	(0.02)	0.355	***	(0.02)
No. created [a]	−0.041		(0.02)	0.002		(0.02)			−0.034		(0.02)	−0.034		(0.02)	−0.021		(0.02)	−0.239	***	(0.04)	0.010		(0.02)
No. updates [a]	1.344	***	(0.02)	1.211	***	(0.02)			1.180	***	(0.02)	0.921	***	(0.04)	1.169	***	(0.02)	1.188	***	(0.02)	1.204	***	(0.02)
No. comments [a]	0.456	***	(0.03)	0.512	***	(0.03)			0.547	***	(0.02)	0.577	***	(0.03)	0.484	***	(0.04)	0.544	***	(0.03)	0.493	***	(0.03)
Main effects																								
Emo. words				0.237	***	(0.05)	t =	***	0.231	***	(0.05)	0.215	***	(0.05)	0.210	***	(0.05)	0.233	***	(0.05)	0.252	***	(0.05)
Emo. words [2]				−0.167	***	(0.01)	9.10		−0.154	***	(0.01)	−0.153	***	(0.01)	−0.156	***	(0.01)	−0.165	***	(0.01)	−0.173	***	(0.01)
Emo. pictures [a]				0.321	***	(0.04)	t =	*	0.377	***	(0.04)	0.430	***	(0.04)	0.355	***	(0.04)	0.322	***	(0.04)	0.292	***	(0.04)
Emo. pictures [a 2]				−0.077	***	(0.02)	2.26		−0.090	***	(0.02)	−0.098	***	(0.02)	−0.085	***	(0.02)	−0.077	***	(0.02)	−0.078	***	(0.02)
Emo. video [a]				0.369	***	(0.03)	t =		0.369	***	(0.03)	0.347	***	(0.03)	0.378	***	(0.03)	0.380	***	(0.03)	0.387	***	(0.03)
Emo. video [a 2]				−0.090	**	(0.03)	0.06		−0.099	***	(0.03)	−0.083	**	(0.03)	−0.109	***	(0.03)	−0.106	***	(0.03)	−0.095	***	(0.03)
Emo. speech				0.424	***	(0.04)	t =	***	0.448	***	(0.04)	0.455	***	(0.04)	0.434	***	(0.04)	0.416	***	(0.04)	0.381	***	(0.04)
Emo. speech [2]				−0.166	***	(0.02)	8.34		−0.166	***	(0.02)	−0.163	***	(0.02)	−0.156	***	(0.02)	−0.159	***	(0.02)	−0.162	***	(0.02)
Moderation effects | Z = moderator																								
Emo. words × Z									−0.330	***	(0.03)	−0.357	***	(0.03)	−0.311	***	(0.03)	−0.153	***	(0.03)	0.154	***	(0.03)
Emo. words [2] × Z									0.086	***	(0.01)	0.097	***	(0.01)	0.078	***	(0.01)	0.045	***	(0.01)	−0.029	*	(0.01)
Emo. pictures [a] × Z									−0.297	***	(0.04)	−0.368	***	(0.04)	−0.239	***	(0.03)	−0.155	***	(0.04)	0.146	***	(0.04)
Emo. pictures [a 2] × Z									0.079	***	(0.02)	0.112	***	(0.02)	0.082	***	(0.01)	0.044	*	(0.02)	−0.044	*	(0.02)
Emo. video [a] × Z									−0.135	***	(0.03)	−0.130	***	(0.03)	−0.152	***	(0.03)	−0.124	***	(0.03)	0.072	*	(0.03)
Emo. video [a 2] × Z									0.103	***	(0.03)	0.077	**	(0.03)	0.045		(0.03)	0.071	*	(0.03)	−0.063	*	(0.03)
Emo. speech × Z									−0.136	***	(0.03)	−0.152	***	(0.03)	−0.081	*	(0.03)	−0.128	***	(0.04)	0.184	***	(0.04)
Emo. speech [2] × Z									0.067	***	(0.02)	0.059	***	(0.01)	0.043	**	(0.01)	0.069	***	(0.02)	−0.049	**	(0.02)
Adjusted R^2	0.524			0.551					0.564			0.566			0.560			0.556			0.556		

Notes: ∘ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; n = 16,967; [a] inverse hyperbolic sine transformation (ihs); standard error in parentheses.

Table B2
Robustness test | Winsorization at the 2nd and 98th percentile.

	(1) Funding raised [a]			(2) Funding raised [a]			*U* test		(3) Funding raised [a] Z = No. backed [a]			(4) Funding raised [a] Z = No. updates [a]			(5) Funding raised [a] Z = No. comments [a]			(6) Funding raised [a] Z = No. created [a]			(7) Funding raised [a] Z = Pledge goal [a]		
Control variables																							
Category dummy	included			included					included			included			included			included			included		
No. words	0.237	***	(0.02)	0.262	***	(0.05)			0.241	***	(0.05)	0.254	***	(0.05)	0.256	***	(0.05)	0.263	***	(0.05)	0.243	***	(0.05)
No. pictures	0.565	***	(0.03)	0.439	***	(0.03)			0.421	***	(0.03)	0.428	***	(0.03)	0.451	***	(0.03)	0.412	***	(0.03)	0.408	***	(0.03)
Video duration	0.205	***	(0.03)	0.116	***	(0.03)			0.061	○	(0.03)	0.055		(0.03)	0.059	○	(0.03)	0.097	**	(0.03)	0.136	***	(0.03)
No. spoken words	0.451	***	(0.03)	0.059		(0.06)			0.043		(0.06)	0.075		(0.06)	0.068		(0.06)	0.054		(0.06)	0.015		(0.06)
Duration	−0.148	***	(0.02)	−0.125	***	(0.02)			−0.116	***	(0.02)	−0.131	***	(0.02)	−0.117	***	(0.02)	−0.114	***	(0.02)	−0.123	***	(0.02)
Moderator variables																							
Pledge goal [a]	0.063	**	(0.02)	0.003		(0.02)			0.036		(0.02)	0.043	*	(0.02)	0.016		(0.02)	0.019		(0.02)	0.272	***	(0.05)
No. backed [a]	0.581	***	(0.02)	0.492	***	(0.02)			0.220	***	(0.04)	0.471	***	(0.02)	0.467	***	(0.02)	0.502	***	(0.02)	0.500	***	(0.02)
No. created [a]	−0.042		(0.02)	−0.011		(0.02)			−0.048	*	(0.02)	−0.039	○	(0.02)	−0.037	○	(0.02)	−0.293	***	(0.04)	−0.001		(0.02)
No. updates [a]	0.800	***	(0.03)	0.735	***	(0.02)			0.754	***	(0.02)	0.606	***	(0.04)	0.731	***	(0.02)	0.728	***	(0.02)	0.728	***	(0.02)
No. comments [a]	0.556	***	(0.03)	0.610	***	(0.03)			0.630	***	(0.03)	0.641	***	(0.03)	0.558	***	(0.04)	0.640	***	(0.03)	0.590	***	(0.03)
Main effects																							
Emo. words				0.350	***	(0.05)	t =	***	0.320	***	(0.05)	0.265	***	(0.05)	0.291	***	(0.05)	0.341	***	(0.05)	0.367	***	(0.05)
Emo. words [2]				−0.251	***	(0.01)	12.52		−0.215	***	(0.01)	−0.187	***	(0.02)	−0.212	***	(0.01)	−0.245	***	(0.01)	−0.264	***	(0.01)
Emo. pictures [a]				0.383	***	(0.04)	t =	**	0.443	***	(0.05)	0.450	***	(0.05)	0.417	***	(0.05)	0.384	***	(0.04)	0.354	***	(0.05)
Emo. pictures [a 2]				−0.100	***	(0.02)	2.58		−0.114	***	(0.02)	−0.109	***	(0.02)	−0.107	***	(0.02)	−0.101	***	(0.02)	−0.103	***	(0.02)
Emo. video [a]				0.407	***	(0.03)	−/−		0.404	***	(0.03)	0.376	***	(0.03)	0.413	***	(0.03)	0.419	***	(0.03)	0.425	***	(0.03)
Emo. video [a 2]				−0.072	*	(0.03)			−0.083	**	(0.03)	−0.071	*	(0.03)	−0.098	**	(0.03)	−0.091	**	(0.03)	−0.076	*	(0.03)
Emo. speech				0.450	***	(0.06)	t =	***	0.488	***	(0.06)	0.447	***	(0.06)	0.452	***	(0.06)	0.445	***	(0.06)	0.444	***	(0.06)
Emo. speech [2]				−0.215	***	(0.02)	8.93		−0.217	***	(0.02)	−0.204	***	(0.02)	−0.201	***	(0.02)	−0.207	***	(0.02)	−0.216	***	(0.02)
Moderation effects | Z = moderator																							
Emo. words × Z									−0.382	***	(0.03)	−0.498	***	(0.03)	−0.389	***	(0.03)	−0.184	***	(0.03)	0.160	***	(0.03)
Emo. words [2] × Z									0.102	***	(0.01)	0.130	***	(0.01)	0.103	***	(0.01)	0.058	***	(0.01)	−0.034	*	(0.01)
Emo. pictures [a] × Z									−0.342	***	(0.04)	−0.367	***	(0.04)	−0.282	***	(0.04)	−0.190	***	(0.04)	0.164	***	(0.05)
Emo. pictures [a 2] × Z									0.093	***	(0.02)	0.117	***	(0.02)	0.097	***	(0.02)	0.049	*	(0.02)	−0.050	*	(0.02)
Emo. video [a] × Z									−0.131	***	(0.03)	−0.100	**	(0.03)	−0.169	***	(0.03)	−0.121	***	(0.03)	0.065	○	(0.03)
Emo. video [a 2] × Z									0.112	***	(0.03)	0.087	**	(0.03)	0.050	○	(0.03)	0.076	*	(0.03)	−0.056	○	(0.03)
Emo. speech × Z									−0.163	***	(0.04)	−0.178	***	(0.03)	−0.113	***	(0.03)	−0.162	***	(0.04)	0.202	***	(0.04)
Emo. speech [2] × Z									0.088	***	(0.02)	0.074	***	(0.02)	0.061	***	(0.02)	0.093	***	(0.02)	−0.057	**	(0.02)
Adjusted R^2	0.472			0.505					0.523			0.525			0.519			0.512			0.511		

Notes: ○ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; n = 16,967; [a] inverse hyperbolic sine transformation (ihs); standard error in parentheses.

Table B3
Robustness test | Winsorization at the 3rd and 97th percentile.

	(1) Funding raised [a]			(2) Funding raised [a]			*U* test		(3) Funding raised [a] Z = No. backed [a]			(4) Funding raised [a] Z = No. updates [a]			(5) Funding raised [a] Z = No. comments [a]			(6) Funding raised [a] Z = No. created [a]			(7) Funding raised [a] Z = Pledge goal [a]		
Control variables																							
Category dummy	included			included					included			included			included			included			included		
No. words	0.236	***	(0.02)	0.257	***	(0.05)			0.236	***	(0.05)	0.247	***	(0.05)	0.249	***	(0.05)	0.258	***	(0.05)	0.239	***	(0.05)
No. pictures	0.569	***	(0.03)	0.456	***	(0.03)			0.434	***	(0.03)	0.440	***	(0.03)	0.461	***	(0.03)	0.429	***	(0.03)	0.425	***	(0.03)
Video duration	0.210	***	(0.03)	0.116	***	(0.03)			0.062	○	(0.03)	0.053		(0.03)	0.059	○	(0.03)	0.097	**	(0.03)	0.136	***	(0.03)
No. spoken words	0.445	***	(0.03)	0.079		(0.06)			0.062		(0.06)	0.100	○	(0.06)	0.089		(0.06)	0.071		(0.06)	0.031		(0.06)
Duration	−0.149	***	(0.02)	−0.127	***	(0.02)			−0.119	***	(0.02)	−0.132	***	(0.02)	−0.119	***	(0.02)	−0.117	***	(0.02)	−0.126	***	(0.02)
Moderator variables																							
Pledge goal [a]	0.048	*	(0.02)	−0.002		(0.02)			0.030		(0.02)	0.039	○	(0.02)	0.011		(0.02)	0.013		(0.02)	0.283	***	(0.05)
No. backed [a]	0.557	***	(0.02)	0.479	***	(0.02)			0.194	***	(0.04)	0.461	***	(0.02)	0.456	***	(0.02)	0.489	***	(0.02)	0.486	***	(0.02)
No. created [a]	−0.039		(0.02)	−0.015		(0.02)			−0.050	*	(0.02)	−0.043	*	(0.02)	−0.041	○	(0.02)	−0.303	***	(0.04)	−0.005		(0.02)
No. updates [a]	0.849	***	(0.03)	0.784	***	(0.02)			0.801	***	(0.02)	0.615	***	(0.04)	0.777	***	(0.02)	0.776	***	(0.02)	0.777	***	(0.02)
No. comments [a]	0.508	***	(0.03)	0.561	***	(0.03)			0.581	***	(0.03)	0.593	***	(0.03)	0.496	***	(0.04)	0.590	***	(0.03)	0.541	***	(0.03)
Main effects																							
Emo. words				0.341	***	(0.05)	t =	***	0.304	***	(0.05)	0.250	***	(0.05)	0.277	***	(0.05)	0.332	***	(0.05)	0.361	***	(0.05)
Emo. words [2]				−0.273	***	(0.01)	12.84		−0.228	***	(0.02)	−0.199	***	(0.02)	−0.225	***	(0.02)	−0.266	***	(0.01)	−0.288	***	(0.02)
Emo. pictures [a]				0.372	***	(0.05)	t =	**	0.432	***	(0.05)	0.440	***	(0.05)	0.404	***	(0.05)	0.375	***	(0.05)	0.343	***	(0.05)
Emo. pictures [a 2]				−0.104	***	(0.02)	2.55		−0.118	***	(0.02)	−0.110	***	(0.02)	−0.107	***	(0.02)	−0.105	***	(0.02)	−0.106	***	(0.02)
Emo. video [a]				0.384	***	(0.03)	−/−		0.383	***	(0.03)	0.356	***	(0.03)	0.392	***	(0.03)	0.396	***	(0.03)	0.402	***	(0.03)
Emo. video [a 2]				−0.059	○	(0.03)			−0.070	*	(0.03)	−0.059	○	(0.03)	−0.087	**	(0.03)	−0.077	*	(0.03)	−0.062	*	(0.03)
Emo. speech				0.423	***	(0.06)	t =	***	0.463	***	(0.06)	0.418	***	(0.06)	0.424	***	(0.06)	0.424	***	(0.06)	0.425	***	(0.06)
Emo. speech [2]				−0.227	***	(0.02)	8.56		−0.229	***	(0.02)	−0.215	***	(0.02)	−0.211	***	(0.02)	−0.219	***	(0.02)	−0.231	***	(0.02)
Moderation effects | *Z = moderator*																							
Emo. words × Z									−0.364	***	(0.03)	−0.465	***	(0.03)	−0.366	***	(0.03)	−0.177	***	(0.03)	0.177	***	(0.03)
Emo. words [2] × Z									0.105	***	(0.01)	0.134	***	(0.01)	0.105	***	(0.01)	0.062	***	(0.01)	−0.045	**	(0.02)
Emo. pictures [a] × Z									−0.331	***	(0.04)	−0.364	***	(0.04)	−0.273	***	(0.04)	−0.177	***	(0.04)	0.169	***	(0.05)
Emo. pictures [a 2] × Z									0.092	***	(0.02)	0.115	***	(0.02)	0.092	***	(0.02)	0.045	*	(0.02)	−0.058	*	(0.02)
Emo. video [a] × Z									−0.132	***	(0.03)	−0.113	***	(0.03)	−0.174	***	(0.03)	−0.118	***	(0.03)	0.058		(0.03)
Emo. video [a 2] × Z									0.113	***	(0.03)	0.091	**	(0.03)	0.055	○	(0.03)	0.078	*	(0.03)	−0.051		(0.03)
Emo. speech × Z									−0.167	***	(0.04)	−0.182	***	(0.03)	−0.119	***	(0.03)	−0.162	***	(0.04)	0.204	***	(0.04)
Emo. speech [2] × Z									0.095	***	(0.02)	0.083	***	(0.02)	0.064	***	(0.02)	0.101	***	(0.02)	−0.062	**	(0.02)
Adjusted R^2	0.477			0.507					0.524			0.527			0.520			0.515			0.513		

Notes: ○ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; n = 16,967; [a] inverse hyperbolic sine transformation (ihs); standard error in parentheses.

Table B4
Robustness test | Number of investors as dependent variable.

	(1) No. backers [a]			(2) No. backers [a]			*U* test		(3) No. backers [a] Z = No. backed [a]			(4) No. backers [a] Z = No. updates [a]			(5) No. backers [a] Z = No. comments [a]			(6) No. backers [a] Z = No. created [a]			(7) No. backers [a] Z = Pledge goal [a]		
Control variables																							
Category dummy	included			included					included			included			included			included			included		
No. words	0.056	***	(0.01)	0.003		(0.02)			−0.002		(0.02)	0.002		(0.02)	0.005		(0.02)	0.005		(0.02)	−0.006		(0.02)
No. pictures	0.265	***	(0.01)	0.192	***	(0.01)			0.186	***	(0.01)	0.192	***	(0.01)	0.199	***	(0.01)	0.182	***	(0.01)	0.176	***	(0.01)
Video duration	0.032	○	(0.02)	0.007		(0.02)			−0.015		(0.02)	−0.016		(0.02)	−0.013		(0.02)	0.000		(0.02)	0.018		(0.02)
No. spoken words	0.256	***	(0.02)	0.097	**	(0.03)			0.090	**	(0.03)	0.107	***	(0.03)	0.099	**	(0.03)	0.096	**	(0.03)	0.076	*	(0.03)
Duration	−0.089	***	(0.01)	−0.079	***	(0.01)			−0.074	***	(0.01)	−0.080	***	(0.01)	−0.076	***	(0.01)	−0.074	***	(0.01)	−0.077	***	(0.01)
Moderator variables																							
Pledge goal [a]	0.053	***	(0.01)	0.015		(0.01)			0.027	*	(0.01)	0.029	**	(0.01)	0.018		(0.01)	0.021	○	(0.01)	0.108	***	(0.02)
No. backed [a]	0.343	***	(0.01)	0.306	***	(0.01)			0.194	***	(0.02)	0.308	***	(0.01)	0.301	***	(0.01)	0.313	***	(0.01)	0.312	***	(0.01)
No. created [a]	−0.023	*	(0.01)	−0.004		(0.01)			−0.022	○	(0.01)	−0.018		(0.01)	−0.014		(0.01)	−0.131	***	(0.02)	0.000		(0.01)
No. updates [a]	0.886	***	(0.01)	0.821	***	(0.01)			0.806	***	(0.01)	0.682	***	(0.02)	0.802	***	(0.01)	0.810	***	(0.01)	0.816	***	(0.01)
No. comments [a]	0.512	***	(0.01)	0.548	***	(0.01)			0.567	***	(0.01)	0.577	***	(0.01)	0.539	***	(0.02)	0.566	***	(0.01)	0.538	***	(0.01)
Main effects																							
Emo. words				0.217	***	(0.03)	t =	***	0.212	***	(0.03)	0.209	***	(0.03)	0.204	***	(0.03)	0.215	***	(0.03)	0.223	***	(0.03)
Emo. words [2]				−0.089	***	(0.01)	11.16		−0.081	***	(0.01)	−0.086	***	(0.01)	−0.082	***	(0.01)	−0.088	***	(0.01)	−0.096	***	(0.01)
Emo. pictures [a]				0.205	***	(0.02)	t =	*	0.232	***	(0.02)	0.257	***	(0.02)	0.221	***	(0.02)	0.205	***	(0.02)	0.192	***	(0.02)
Emo. pictures [a 2]				−0.042	***	(0.01)	1.67		−0.048	***	(0.01)	−0.054	***	(0.01)	−0.047	***	(0.01)	−0.042	***	(0.01)	−0.047	***	(0.01)
Emo. video [a]				0.188	***	(0.02)	−/−		0.188	***	(0.02)	0.179	***	(0.02)	0.192	***	(0.02)	0.194	***	(0.02)	0.198	***	(0.02)
Emo. video [a 2]				−0.026	○	(0.02)			−0.031	*	(0.02)	−0.027	○	(0.02)	−0.033	*	(0.02)	−0.031	*	(0.02)	−0.032	*	(0.02)
Emo. speech				0.183	***	(0.03)	t =	***	0.202	***	(0.03)	0.187	***	(0.03)	0.185	***	(0.03)	0.180	***	(0.03)	0.180	***	(0.03)
Emo. speech [2]				−0.096	***	(0.01)	7.87		−0.096	***	(0.01)	−0.094	***	(0.01)	−0.091	***	(0.01)	−0.092	***	(0.01)	−0.095	***	(0.01)
Moderation effects | *Z = moderator*																							
Emo. words × Z									−0.170	***	(0.02)	−0.148	***	(0.02)	−0.155	***	(0.02)	−0.078	***	(0.02)	0.066	***	(0.02)
Emo. words [2] × Z									0.042	***	(0.01)	0.042	***	(0.01)	0.037	***	(0.00)	0.019	***	(0.01)	−0.003		(0.01)
Emo. pictures [a] × Z									−0.150	***	(0.02)	−0.173	***	(0.02)	−0.117	***	(0.02)	−0.073	***	(0.02)	0.083	***	(0.02)
Emo. pictures [a] [2] × Z									0.038	***	(0.01)	0.053	***	(0.01)	0.040	***	(0.01)	0.018	○	(0.01)	−0.019	○	(0.01)
Emo. video [a] × Z									−0.047	**	(0.02)	−0.037	*	(0.02)	−0.063	***	(0.02)	−0.052	**	(0.02)	0.044	*	(0.02)
Emo. video [a 2] × Z									0.063	***	(0.02)	0.040	**	(0.02)	0.020		(0.02)	0.045	**	(0.02)	−0.010		(0.02)
Emo. speech × Z									−0.073	***	(0.02)	−0.058	**	(0.02)	−0.031	○	(0.02)	−0.075	***	(0.02)	0.085	***	(0.02)
Emo. speech [2] × Z									0.030	***	(0.01)	0.024	**	(0.01)	0.018	*	(0.01)	0.041	***	(0.01)	−0.023	*	(0.01)
Adjusted R^2	0.645			0.663					0.671			0.669			0.668			0.667			0.667		

Notes: ○ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; n = 16,967; [a] inverse hyperbolic sine transformation (ihs); standard error in parentheses.

Table B5
Robustness test | Pledge per investor as dependent variable.

	(1) Pledge p. backer [a]			(2) Pledge p. backer [a]			*U* test		(3) Pledge p. backer [a] Z = No. backed [a]			(4) Pledge p. backer [a] Z = No. updates [a]			(5) Pledge p. backer [a] Z = No. comments [a]			(6) Pledge p. backer [a] Z = No. created [a]			(7) Pledge p. backer [a] Z = Pledge goal [a]		
Control variables																								
Category dummy	included			included					included			included			included			included			included		
No. words	0.104	***	(0.01)	0.211	***	(0.03)			0.205	***	(0.03)	0.207	***	(0.03)	0.212	***	(0.03)	0.213	***	(0.03)	0.201	***	(0.03)
No. pictures	0.245	***	(0.02)	0.205	***	(0.02)			0.198	***	(0.02)	0.202	***	(0.02)	0.211	***	(0.02)	0.194	***	(0.02)	0.191	***	(0.02)
Video duration	0.118	***	(0.02)	0.089	***	(0.02)			0.063	**	(0.02)	0.044	*	(0.02)	0.062	**	(0.02)	0.081	***	(0.02)	0.099	***	(0.02)
No. spoken words	0.142	***	(0.02)	−0.033		(0.04)			−0.041		(0.04)	−0.018		(0.04)	−0.029		(0.04)	−0.034		(0.04)	−0.049		(0.04)
Duration	−0.047	***	(0.01)	−0.038	**	(0.01)			−0.033	**	(0.01)	−0.040	***	(0.01)	−0.034	**	(0.01)	−0.033	**	(0.01)	−0.037	**	(0.01)
Moderator variables																								
Pledge goal [a]	0.090	***	(0.01)	0.057	***	(0.01)			0.071	***	(0.01)	0.082	***	(0.01)	0.060	***	(0.01)	0.064	***	(0.01)	0.221	***	(0.03)
No. backed [a]	0.073	***	(0.01)	0.044	**	(0.01)			−0.071	**	(0.02)	0.047	**	(0.01)	0.038	**	(0.01)	0.053	***	(0.01)	0.049	**	(0.01)
No. created [a]	−0.008		(0.01)	0.003		(0.01)			−0.017		(0.01)	−0.020		(0.01)	−0.010		(0.01)	−0.118	***	(0.03)	0.008		(0.01)
No. updates [a]	0.461	***	(0.02)	0.407	***	(0.02)			0.391	***	(0.02)	0.239	***	(0.03)	0.384	***	(0.02)	0.396	***	(0.02)	0.405	***	(0.02)
No. comments [a]	−0.062	***	(0.02)	−0.039	*	(0.02)			−0.022		(0.02)	−0.000		(0.02)	−0.065	**	(0.02)	−0.024		(0.02)	−0.050	**	(0.02)
Main effects																								
Emo. words				0.035		(0.03)	t =	***	0.032		(0.03)	0.024		(0.03)	0.023		(0.03)	0.033		(0.03)	0.038		(0.03)
Emo. words [2]				−0.084	***	(0.01)	4.99		−0.078	***	(0.01)	−0.072	***	(0.01)	−0.079	***	(0.01)	−0.083	***	(0.01)	−0.083	***	(0.01)
Emo. pictures [a]				0.129	***	(0.03)	t =	*	0.161	***	(0.03)	0.192	***	(0.03)	0.150	***	(0.03)	0.130	***	(0.03)	0.113	***	(0.03)
Emo. pictures [a 2]				−0.037	**	(0.01)	2.11		−0.045	***	(0.01)	−0.049	***	(0.01)	−0.043	***	(0.01)	−0.037	**	(0.01)	−0.035	**	(0.01)
Emo. video [a]				0.194	***	(0.02)	t =	○	0.195	***	(0.02)	0.180	***	(0.02)	0.199	***	(0.02)	0.199	***	(0.02)	0.203	***	(0.02)
Emo. video [a 2]				−0.072	***	(0.02)	1.58		−0.075	***	(0.02)	−0.064	***	(0.02)	−0.083	***	(0.02)	−0.083	***	(0.02)	−0.069	***	(0.02)
Emo. speech				0.198	***	(0.04)	t =	***	0.216	***	(0.04)	0.207	***	(0.04)	0.201	***	(0.04)	0.194	***	(0.04)	0.185	***	(0.04)
Emo. speech [2]				−0.072	***	(0.01)	5.05		−0.072	***	(0.01)	−0.069	***	(0.01)	−0.066	***	(0.01)	−0.068	***	(0.01)	−0.069	***	(0.01)
*Moderation effects	Z = moderator*																							
Emo. words × Z									−0.174	***	(0.02)	−0.225	***	(0.02)	−0.165	***	(0.02)	−0.083	***	(0.02)	0.093	***	(0.02)
Emo. words [2] × Z									0.047	***	(0.01)	0.058	***	(0.01)	0.043	***	(0.01)	0.028	***	(0.01)	−0.026	***	(0.01)
Emo. pictures [a] × Z									−0.160	***	(0.02)	−0.210	***	(0.03)	−0.131	***	(0.02)	−0.084	***	(0.03)	0.068	*	(0.03)
Emo. pictures [a 2] × Z									0.045	***	(0.01)	0.065	***	(0.01)	0.048	***	(0.01)	0.027	*	(0.01)	−0.024	○	(0.01)
Emo. video [a] × Z									−0.094	***	(0.02)	−0.103	***	(0.02)	−0.095	***	(0.02)	−0.072	***	(0.02)	0.029		(0.02)
Emo. video [a 2] × Z									0.044	*	(0.02)	0.044	*	(0.02)	0.026		(0.02)	0.027		(0.02)	−0.055	**	(0.02)
Emo. speech × Z									−0.073	**	(0.02)	−0.103	***	(0.02)	−0.054	**	(0.02)	−0.063	**	(0.02)	0.104	***	(0.03)
Emo. speech [2] × Z									0.042	***	(0.01)	0.039	***	(0.01)	0.027	**	(0.01)	0.032	**	(0.01)	−0.027	*	(0.01)
Adjusted R^2	0.229			0.250					0.266			0.275			0.261			0.256			0.255		

Notes: ○ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; n = 16,967; [a] inverse hyperbolic sine transformation (ihs); standard error in parentheses.

Table B6
Robustness test | Positive verbal and nonverbal emotional expressions as the main effects.

	(1) Funding raised [a]			(2) Funding raised [a]			*U* test		(3) Funding raised [a] Z = No. backed [a]			(4) Funding raised [a] Z = No. updates [a]			(5) Funding raised [a] Z = No. comments [a]			(6) Funding raised [a] Z = No. created [a]			(7) Funding raised [a] Z = Pledge goal [a]		
Control variables																								
Category dummy	included			included					included			included			included			included			included		
No. words	0.153	***	(0.02)	0.128	**	(0.04)			0.123	**	(0.04)	0.121	**	(0.04)	0.129	**	(0.04)	0.134	**	(0.04)	0.115	**	(0.04)
No. pictures	0.498	***	(0.03)	0.390	***	(0.03)			0.380	***	(0.03)	0.387	***	(0.03)	0.407	***	(0.03)	0.374	***	(0.03)	0.363	***	(0.03)
Video duration	0.142	***	(0.03)	0.093	**	(0.03)			0.049		(0.03)	0.027		(0.03)	0.052		(0.03)	0.079	*	(0.03)	0.114	***	(0.03)
No. spoken words	0.391	***	(0.03)	0.024		(0.05)			0.025		(0.05)	0.057		(0.05)	0.040		(0.05)	0.024		(0.05)	−0.014		(0.05)
Duration	−0.137	***	(0.02)	−0.120	***	(0.02)			−0.110	***	(0.02)	−0.124	***	(0.02)	−0.112	***	(0.02)	−0.111	***	(0.02)	−0.118	***	(0.02)
Moderator variables																								
Pledge goal [a]	0.164	***	(0.02)	0.100	***	(0.02)			0.125	***	(0.02)	0.136	***	(0.02)	0.105	***	(0.02)	0.112	***	(0.02)	0.331	***	(0.04)
No. backed [a]	0.409	***	(0.02)	0.346	***	(0.02)			0.151	***	(0.04)	0.348	***	(0.02)	0.335	***	(0.02)	0.359	***	(0.02)	0.354	***	(0.02)
No. created [a]	−0.028		(0.02)	0.008		(0.02)			−0.032		(0.02)	−0.027		(0.02)	−0.016		(0.02)	−0.233	***	(0.04)	0.016		(0.02)
No. updates [a]	1.325	***	(0.02)	1.215	***	(0.02)			1.185	***	(0.02)	0.936	***	(0.04)	1.175	***	(0.02)	1.194	***	(0.02)	1.208	***	(0.02)
No. comments [a]	0.455	***	(0.03)	0.513	***	(0.03)			0.545	***	(0.03)	0.574	***	(0.03)	0.471	***	(0.04)	0.541	***	(0.03)	0.495	***	(0.03)
Main effects																								
Positive words				0.321	***	(0.05)	t = 10.91	***	0.309	***	(0.05)	0.300	***	(0.05)	0.292	***	(0.05)	0.317	***	(0.05)	0.328	***	(0.05)
Positive words [2]				−0.167	***	(0.01)			−0.150	***	(0.01)	−0.143	***	(0.01)	−0.151	***	(0.01)	−0.165	***	(0.01)	−0.178	***	(0.01)
Happiness in pic [a]				0.309	***	(0.04)	t = 1.62	○	0.362	***	(0.04)	0.435	***	(0.05)	0.351	***	(0.04)	0.304	***	(0.04)	0.275	***	(0.05)
Happiness in pic [a 2]				−0.063	***	(0.02)			−0.078	***	(0.02)	−0.095	***	(0.02)	−0.076	***	(0.02)	−0.063	***	(0.02)	−0.062	**	(0.02)
Happiness in video [a]				0.398	***	(0.04)	t = 0.64		0.392	***	(0.03)	0.380	***	(0.03)	0.405	***	(0.03)	0.400	***	(0.03)	0.407	***	(0.04)
Happiness in video [a 2]				−0.099	***	(0.03)			−0.104	***	(0.03)	−0.094	***	(0.03)	−0.113	***	(0.03)	−0.111	***	(0.03)	−0.100	***	(0.03)
Positive speech				0.423	***	(0.06)	t = 8.02	***	0.447	***	(0.06)	0.425	***	(0.06)	0.417	***	(0.06)	0.421	***	(0.06)	0.418	***	(0.06)
Positive speech [2]				−0.163	***	(0.02)			−0.165	***	(0.02)	−0.159	***	(0.02)	−0.155	***	(0.02)	−0.158	***	(0.02)	−0.164	***	(0.02)
Moderation effects | Z = moderator																								
Positive words × Z									−0.329	***	(0.03)	−0.334	***	(0.03)	−0.294	***	(0.03)	−0.140	***	(0.03)	0.159	***	(0.03)
Positive words [2] × Z									0.083	***	(0.01)	0.086	***	(0.01)	0.072	***	(0.01)	0.039	***	(0.01)	−0.027	*	(0.01)
Happiness in pic [a] × Z									−0.289	***	(0.04)	−0.361	***	(0.04)	−0.233	***	(0.03)	−0.183	***	(0.04)	0.119	*	(0.05)
Happiness in pic [a 2] × Z									0.078	***	(0.02)	0.110	***	(0.02)	0.078	***	(0.01)	0.056	**	(0.02)	−0.034	○	(0.02)
Happiness in video [a] × Z									−0.115	***	(0.03)	−0.121	***	(0.03)	−0.157	***	(0.03)	−0.110	**	(0.03)	0.065	○	(0.04)
Happiness in video [a 2] × Z									0.069	**	(0.03)	0.066	**	(0.03)	0.054	*	(0.03)	0.050	○	(0.03)	−0.050	○	(0.03)
Positive speech × Z									−0.163	***	(0.03)	−0.186	***	(0.03)	−0.093	**	(0.03)	−0.154	***	(0.03)	0.200	***	(0.04)
Positive speech [2] × Z									0.073	***	(0.02)	0.068	***	(0.01)	0.044	**	(0.01)	0.078	***	(0.02)	−0.054	**	(0.02)
Adjusted R^2	0.524			0.550					0.563			0.564			0.559			0.555			0.555		

Notes: ○ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; n = 16,967; [a] inverse hyperbolic sine transformation (ihs); standard error in parentheses.

Table B7
Robustness test | Log-transformation.

	(1) Funding raised [a]			(2) Funding raised [a]			*U* test		(3) Funding raised [a] Z = No. backed [a]			(4) Funding raised [a] Z = No. updates [a]			(5) Funding raised [a] Z = No. comments [a]			(6) Funding raised [a] Z = No. created [a]			(7) Funding raised [a] Z = Pledge goal [a]		
Control variables																								
Category dummy	included			included					included			included			included			included			included		
No. words	0.145	***	(0.02)	0.190	***	(0.04)			0.182	***	(0.04)	0.186	***	(0.04)	0.193	***	(0.04)	0.194	***	(0.04)	0.173	***	(0.04)
No. pictures	0.488	***	(0.02)	0.379	***	(0.03)			0.367	***	(0.02)	0.375	***	(0.02)	0.391	***	(0.02)	0.359	***	(0.02)	0.352	***	(0.03)
Video duration	0.129	***	(0.03)	0.080	**	(0.03)			0.038		(0.03)	0.020		(0.03)	0.037		(0.03)	0.066	*	(0.03)	0.099	**	(0.03)
No. spoken words	0.385	***	(0.03)	0.072		(0.05)			0.059		(0.05)	0.094		(0.05)	0.077		(0.05)	0.070		(0.05)	0.037		(0.05)
Duration	−0.135	***	(0.02)	−0.116	***	(0.02)			−0.107	***	(0.02)	−0.120	***	(0.02)	−0.110	***	(0.02)	−0.107	***	(0.02)	−0.114	***	(0.02)
Moderator variables																								
Pledge goal [a]	0.180	***	(0.02)	0.115	***	(0.02)			0.137	***	(0.02)	0.150	***	(0.02)	0.120	***	(0.02)	0.126	***	(0.02)	0.347	***	(0.04)
No. backed [a]	0.377	***	(0.02)	0.317	***	(0.02)			0.129	***	(0.03)	0.322	***	(0.02)	0.307	***	(0.02)	0.334	***	(0.02)	0.328	***	(0.02)
No. created [a]	−0.015		(0.02)	0.013		(0.02)			−0.022		(0.02)	−0.021		(0.02)	−0.009		(0.02)	−0.212	***	(0.04)	0.020		(0.02)
No. updates [a]	1.275	***	(0.02)	1.165	***	(0.02)			1.137	***	(0.02)	0.906	***	(0.04)	1.125	***	(0.02)	1.143	***	(0.02)	1.158	***	(0.02)
No. comments [a]	0.447	***	(0.02)	0.505	***	(0.02)			0.539	***	(0.02)	0.571	***	(0.02)	0.493	***	(0.03)	0.537	***	(0.02)	0.486	***	(0.02)
Main effects																								
Emo. words				0.243	***	(0.05)	t =	***	0.233	***	(0.05)	0.223	***	(0.05)	0.216	***	(0.05)	0.238	***	(0.05)	0.251	***	(0.05)
Emo. words [2]				−0.162	***	(0.01)	9.52		−0.149	***	(0.01)	−0.144	***	(0.01)	−0.149	***	(0.01)	−0.160	***	(0.01)	−0.168	***	(0.01)
Emo. pictures [a]				0.311	***	(0.04)	t =	**	0.361	***	(0.04)	0.414	***	(0.04)	0.343	***	(0.04)	0.312	***	(0.04)	0.282	***	(0.04)
Emo. pictures [a 2]				−0.072	***	(0.02)	2.35		−0.083	***	(0.02)	−0.092	***	(0.02)	−0.080	***	(0.02)	−0.072	***	(0.02)	−0.073	***	(0.02)
Emo. video [a]				0.365	***	(0.03)	t =		0.366	***	(0.03)	0.344	***	(0.03)	0.373	***	(0.03)	0.375	***	(0.03)	0.382	***	(0.03)
Emo. video [a 2]				−0.097	***	(0.02)	0.70		−0.105	***	(0.02)	−0.093	***	(0.02)	−0.113	***	(0.02)	−0.112	***	(0.03)	−0.101	***	(0.03)
Emo. speech				0.357	***	(0.06)	t =	***	0.388	***	(0.06)	0.365	***	(0.06)	0.361	***	(0.06)	0.350	***	(0.06)	0.343	***	(0.06)
Emo. speech [2]				−0.157	***	(0.01)	8.42		−0.158	***	(0.01)	−0.153	***	(0.01)	−0.147	***	(0.01)	−0.150	***	(0.01)	−0.155	***	(0.02)
Moderation effects | *Z = moderator*																								
Emo. words × Z									−0.312	***	(0.03)	−0.346	***	(0.03)	−0.305	***	(0.03)	−0.145	***	(0.03)	0.145	***	(0.03)
Emo. words [2] × Z									0.080	***	(0.01)	0.090	***	(0.01)	0.074	***	(0.01)	0.042	***	(0.01)	−0.027	*	(0.01)
Emo. pictures [a] × Z									−0.281	***	(0.03)	−0.346	***	(0.04)	−0.226	***	(0.03)	−0.152	***	(0.04)	0.141	***	(0.04)
Emo. pictures [a 2] × Z									0.073	***	(0.01)	0.103	***	(0.02)	0.076	***	(0.01)	0.041	**	(0.02)	−0.040	*	(0.02)
Emo. video [a] × Z									−0.120	***	(0.03)	−0.119	***	(0.03)	−0.142	***	(0.03)	−0.117	***	(0.03)	0.068	*	(0.03)
Emo. video [a 2] × Z									0.090	***	(0.02)	0.071	**	(0.02)	0.044	○	(0.03)	0.064	*	(0.03)	−0.053	○	(0.03)
Emo. speech × Z									−0.129	***	(0.03)	−0.141	***	(0.03)	−0.077	**	(0.03)	−0.124	***	(0.03)	0.176	***	(0.04)
Emo. speech [2] × Z									0.063	***	(0.01)	0.055	***	(0.01)	0.042	**	(0.01)	0.066	***	(0.01)	−0.048	**	(0.02)
Adjusted R^2	0.541			0.564					0.578			0.580			0.574			0.570			0.570		

Notes: ○ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; n = 16,967; [a] natural logarithm transformation; standard error in parentheses.

Table B8
Robustness test | Removing projects aiming for a pledge goal above $500,000.

	(1) Funding raised [a]			(2) Funding raised [a]			*U* test		(3) Funding raised [a] Z = No. backed [a]			(4) Funding raised [a] Z = No. updates [a]			(5) Funding raised [a] Z = No. comments [a]			(6) Funding raised [a] Z = No. created [a]			(7) Funding raised [a] Z = Pledge goal [a]		
Control variables																								
Category dummy	included			included					included			included			included			included			included		
No. words	0.162	***	(0.02)	0.209	***	(0.04)			0.201	***	(0.04)	0.206	***	(0.04)	0.213	***	(0.04)	0.214	***	(0.04)	0.188	***	(0.04)
No. pictures	0.506	***	(0.03)	0.395	***	(0.03)			0.383	***	(0.03)	0.392	***	(0.03)	0.409	***	(0.03)	0.375	***	(0.03)	0.366	***	(0.03)
Video duration	0.135	***	(0.03)	0.088	**	(0.03)			0.044		(0.03)	0.026		(0.03)	0.043		(0.03)	0.074	*	(0.03)	0.108	***	(0.03)
No. spoken words	0.404	***	(0.03)	0.077		(0.06)			0.064		(0.06)	0.101	○	(0.06)	0.084		(0.06)	0.075		(0.06)	0.039		(0.06)
Duration	−0.131	***	(0.02)	−0.112	***	(0.02)			−0.103	***	(0.02)	−0.116	***	(0.02)	−0.106	***	(0.02)	−0.103	***	(0.02)	−0.109	***	(0.02)
Moderator variables																								
Pledge goal [a]	0.133	***	(0.02)	0.067	***	(0.02)			0.092	***	(0.02)	0.103	***	(0.02)	0.073	***	(0.02)	0.079	***	(0.02)	0.315	***	(0.04)
No. backed [a]	0.411	***	(0.02)	0.347	***	(0.02)			0.134	***	(0.04)	0.351	***	(0.02)	0.336	***	(0.02)	0.362	***	(0.02)	0.357	***	(0.02)
No. created [a]	−0.034		(0.02)	−0.003		(0.02)			−0.039		(0.02)	−0.038		(0.02)	−0.025		(0.02)	−0.241	***	(0.04)	0.006		(0.02)
No. updates [a]	1.325	***	(0.02)	1.208	***	(0.02)			1.177	***	(0.02)	0.920	***	(0.04)	1.166	***	(0.02)	1.186	***	(0.02)	1.202	***	(0.02)
No. comments [a]	0.459	***	(0.03)	0.517	***	(0.03)			0.552	***	(0.02)	0.582	***	(0.03)	0.493	***	(0.04)	0.549	***	(0.03)	0.498	***	(0.03)
Main effects																								
Emo. words				0.247	***	(0.05)	t =	***	0.238	***	(0.05)	0.227	***	(0.05)	0.220	***	(0.05)	0.242	***	(0.05)	0.257	***	(0.05)
Emo. words [2]				−0.167	***	(0.01)	9.18		−0.154	***	(0.01)	−0.154	***	(0.01)	−0.157	***	(0.01)	−0.166	***	(0.01)	−0.174	***	(0.01)
Emo. pictures [a]				0.326	***	(0.04)	t =	*	0.381	***	(0.04)	0.434	***	(0.04)	0.359	***	(0.04)	0.327	***	(0.04)	0.299	***	(0.04)
Emo. pictures [a 2]				−0.077	***	(0.02)	2.22		−0.089	***	(0.02)	−0.098	***	(0.02)	−0.085	***	(0.02)	−0.077	***	(0.02)	−0.080	***	(0.02)
Emo. video [a]				0.369	***	(0.03)	t =		0.368	***	(0.03)	0.345	***	(0.03)	0.377	***	(0.03)	0.379	***	(0.03)	0.389	***	(0.03)
Emo. video [a 2]				−0.090	**	(0.03)	0.06		−0.097	***	(0.03)	−0.083	**	(0.03)	−0.109	***	(0.03)	−0.105	***	(0.03)	−0.095	***	(0.03)
Emo. speech				0.378	***	(0.06)	t =	***	0.412	***	(0.06)	0.389	***	(0.06)	0.382	***	(0.06)	0.371	***	(0.06)	0.362	***	(0.06)
Emo. speech [2]				−0.169	***	(0.02)	8.41		−0.170	***	(0.02)	−0.166	***	(0.02)	−0.158	***	(0.02)	−0.162	***	(0.02)	−0.163	***	(0.02)
*Moderation effects	Z = moderator*																							
Emo. words × Z									−0.330	***	(0.03)	−0.357	***	(0.03)	−0.311	***	(0.03)	−0.156	***	(0.03)	0.156	***	(0.03)
Emo. words [2] × Z									0.085	***	(0.01)	0.098	***	(0.01)	0.079	***	(0.01)	0.046	***	(0.01)	−0.027	*	(0.01)
Emo. pictures [a] × Z									−0.294	***	(0.04)	−0.363	***	(0.04)	−0.235	***	(0.03)	−0.151	***	(0.04)	0.148	***	(0.04)
Emo. pictures [a 2] × Z									0.077	***	(0.02)	0.110	***	(0.02)	0.080	***	(0.01)	0.042	*	(0.02)	−0.042	*	(0.02)
Emo. video [a] × Z									−0.130	***	(0.03)	−0.124	***	(0.03)	−0.149	***	(0.03)	−0.119	***	(0.03)	0.057	○	(0.03)
Emo. video [a 2] × Z									0.099	***	(0.03)	0.073	**	(0.03)	0.041		(0.03)	0.068	*	(0.03)	−0.047		(0.03)
Emo. speech × Z									−0.139	***	(0.03)	−0.156	***	(0.03)	−0.084	**	(0.03)	−0.129	***	(0.04)	0.202	***	(0.04)
Emo. speech [2] × Z									0.071	***	(0.01)	0.064	***	(0.01)	0.046	**	(0.01)	0.071	***	(0.02)	−0.065	***	(0.02)
Adjusted R^2	0.527			0.550					0.564			0.565			0.559			0.555			0.556		

Notes: ○ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; n = 17,131; [a] inverse hyperbolic sine transformation (ihs); standard error in parentheses.

Table B9
Robustness test | Removing projects aiming for a pledge goal above $100,000.

	(1) Funding raised [a]			(2) Funding raised [a]			*U* test		(3) Funding raised [a] Z = No. backed [a]			(4) Funding raised [a] Z = No. updates [a]			(5) Funding raised [a] Z = No. comments [a]			(6) Funding raised [a] Z = No. created [a]			(7) Funding raised [a] Z = Pledge goal [a]		
Control variables																								
Category dummy	included			included					included			included			included			included			included		
No. words	0.152	***	(0.02)	0.200	***	(0.04)			0.190	***	(0.04)	0.195	***	(0.04)	0.203	***	(0.04)	0.205	***	(0.04)	0.183	***	(0.04)
No. pictures	0.492	***	(0.03)	0.384	***	(0.03)			0.372	***	(0.03)	0.381	***	(0.03)	0.399	***	(0.03)	0.364	***	(0.03)	0.356	***	(0.03)
Video duration	0.144	***	(0.03)	0.094	**	(0.03)			0.047		(0.03)	0.029		(0.03)	0.047		(0.03)	0.079	*	(0.03)	0.116	***	(0.03)
No. spoken words	0.383	***	(0.03)	0.050		(0.06)			0.034		(0.06)	0.071		(0.06)	0.056		(0.06)	0.047		(0.06)	0.012		(0.06)
Duration	−0.141	***	(0.02)	−0.122	***	(0.02)			−0.112	***	(0.02)	−0.125	***	(0.02)	−0.115	***	(0.02)	−0.112	***	(0.02)	−0.120	***	(0.02)
Moderator variables																								
Pledge goal [a]	0.191	***	(0.02)	0.120	***	(0.02)			0.145	***	(0.02)	0.158	***	(0.02)	0.125	***	(0.02)	0.133	***	(0.02)	0.378	***	(0.04)
No. backed [a]	0.406	***	(0.02)	0.344	***	(0.02)			0.131	***	(0.04)	0.349	***	(0.02)	0.332	***	(0.02)	0.359	***	(0.02)	0.353	***	(0.02)
No. created [a]	−0.020		(0.02)	0.009		(0.02)			−0.026		(0.02)	−0.027		(0.02)	−0.013		(0.02)	−0.224	***	(0.04)	0.017		(0.02)
No. updates [a]	1.315	***	(0.02)	1.202	***	(0.02)			1.171	***	(0.02)	0.918	***	(0.04)	1.159	***	(0.02)	1.179	***	(0.02)	1.193	***	(0.02)
No. comments [a]	0.455	***	(0.03)	0.511	***	(0.03)			0.544	***	(0.03)	0.575	***	(0.03)	0.485	***	(0.04)	0.543	***	(0.03)	0.492	***	(0.03)
Main effects																								
Emo. words				0.242	***	(0.05)	t =	***	0.233	***	(0.05)	0.221	***	(0.05)	0.214	***	(0.05)	0.237	***	(0.05)	0.249	***	(0.05)
Emo. words [2]				−0.164	***	(0.01)	8.98		−0.148	***	(0.01)	−0.144	***	(0.01)	−0.150	***	(0.01)	−0.162	***	(0.01)	−0.170	***	(0.01)
Emo. pictures [a]				0.326	***	(0.04)	t =	**	0.383	***	(0.04)	0.441	***	(0.04)	0.361	***	(0.04)	0.326	***	(0.04)	0.289	***	(0.04)
Emo. pictures [a 2]				−0.081	***	(0.02)	2.50		−0.096	***	(0.02)	−0.107	***	(0.02)	−0.091	***	(0.02)	−0.081	***	(0.02)	−0.077	***	(0.02)
Emo. video [a]				0.368	***	(0.03)	t =		0.368	***	(0.03)	0.343	***	(0.03)	0.376	***	(0.03)	0.379	***	(0.03)	0.386	***	(0.03)
Emo. video [a 2]				−0.093	**	(0.03)	0.20		−0.100	***	(0.03)	−0.085	**	(0.03)	−0.113	***	(0.03)	−0.111	***	(0.03)	−0.097	***	(0.03)
Emo. speech				0.379	***	(0.06)	t =	***	0.416	***	(0.06)	0.395	***	(0.06)	0.385	***	(0.06)	0.373	***	(0.06)	0.363	***	(0.06)
Emo. speech [2]				−0.159	***	(0.02)	8.08		−0.160	***	(0.02)	−0.156	***	(0.02)	−0.149	***	(0.02)	−0.151	***	(0.02)	−0.157	***	(0.02)
Moderation effects | Z = moderator																								
Emo. words × Z									−0.328	***	(0.03)	−0.353	***	(0.03)	−0.309	***	(0.03)	−0.155	***	(0.03)	0.145	***	(0.03)
Emo. words [2] × Z									0.082	***	(0.01)	0.090	***	(0.01)	0.075	***	(0.01)	0.045	***	(0.01)	−0.024	*	(0.01)
Emo. pictures [a] × Z									−0.301	***	(0.04)	−0.376	***	(0.04)	−0.243	***	(0.03)	−0.156	***	(0.04)	0.160	***	(0.04)
Emo. pictures [a 2] × Z									0.083	***	(0.02)	0.118	***	(0.02)	0.086	***	(0.01)	0.045	*	(0.02)	−0.054	**	(0.02)
Emo. video [a] × Z									−0.135	***	(0.03)	−0.129	***	(0.03)	−0.150	***	(0.03)	−0.118	***	(0.03)	0.072	*	(0.03)
Emo. video [a 2] × Z									0.097	***	(0.03)	0.070	*	(0.03)	0.039		(0.03)	0.062	*	(0.03)	−0.065	*	(0.03)
Emo. speech × Z									−0.139	***	(0.03)	−0.157	***	(0.03)	−0.083	**	(0.03)	−0.133	***	(0.04)	0.192	***	(0.04)
Emo. speech [2] × Z									0.068	***	(0.02)	0.061	***	(0.01)	0.045	**	(0.01)	0.070	***	(0.02)	−0.046	**	(0.02)
Adjusted R^2	0.527			0.550					0.565			0.566			0.559			0.555			0.555		

Notes: ∘ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; n = 16,723; [a] inverse hyperbolic sine transformation (ihs); standard error in parentheses.

Table B10
Robustness test | No exclusion criteria.

	(1) Funding raised [a]			(2) Funding raised [a]			*U* test		(3) Funding raised [a] Z = No. backed [a]			(4) Funding raised [a] Z = No. updates [a]			(5) Funding raised [a] Z = No. comments [a]			(6) Funding raised [a] Z = No. created [a]			(7) Funding raised [a] Z = Pledge goal [a]		
Control variables																							
Category dummy	included			included					included			included			included			included			included		
No. words	0.167	***	(0.02)	0.185	***	(0.04)			0.177	***	(0.04)	0.181	***	(0.04)	0.188	***	(0.04)	0.190	***	(0.04)	0.166	***	(0.04)
No. pictures	0.514	***	(0.03)	0.395	***	(0.03)			0.385	***	(0.03)	0.395	***	(0.03)	0.411	***	(0.03)	0.377	***	(0.03)	0.368	***	(0.03)
Video duration	0.134	***	(0.03)	0.086	**	(0.03)			0.041		(0.03)	0.024		(0.03)	0.037		(0.03)	0.071	*	(0.03)	0.104	**	(0.03)
No. spoken words	0.409	***	(0.03)	0.058		(0.06)			0.047		(0.06)	0.084		(0.06)	0.069		(0.06)	0.058		(0.06)	0.018		(0.06)
Duration	−0.135	***	(0.02)	−0.116	***	(0.02)			−0.107	***	(0.02)	−0.122	***	(0.02)	−0.111	***	(0.02)	−0.108	***	(0.02)	−0.112	***	(0.02)
Moderator variables																							
Pledge goal [a]	0.111	***	(0.02)	0.047	*	(0.02)			0.072	***	(0.02)	0.081	***	(0.02)	0.051	**	(0.02)	0.059	**	(0.02)	0.287	***	(0.04)
No. backed [a]	0.411	***	(0.02)	0.347	***	(0.02)			0.141	***	(0.04)	0.352	***	(0.02)	0.337	***	(0.02)	0.362	***	(0.02)	0.355	***	(0.02)
No. created [a]	−0.048	*	(0.02)	−0.015		(0.02)			−0.050	*	(0.02)	−0.050	*	(0.02)	−0.038	○	(0.02)	−0.247	***	(0.04)	−0.007		(0.02)
No. updates [a]	1.325	***	(0.02)	1.203	***	(0.02)			1.175	***	(0.02)	0.929	***	(0.04)	1.160	***	(0.02)	1.183	***	(0.02)	1.198	***	(0.02)
No. comments [a]	0.461	***	(0.03)	0.523	***	(0.03)			0.560	***	(0.02)	0.590	***	(0.03)	0.509	***	(0.04)	0.555	***	(0.03)	0.506	***	(0.02)
Main effects																							
Emo. words				0.292	***	(0.05)	t =	***	0.286	***	(0.05)	0.273	***	(0.05)	0.266	***	(0.05)	0.289	***	(0.05)	0.304	***	(0.05)
Emo. words [2]				−0.176	***	(0.01)	10.06		−0.164	***	(0.01)	−0.162	***	(0.01)	−0.166	***	(0.01)	−0.174	***	(0.01)	−0.184	***	(0.01)
Emo. pictures [a]				0.342	***	(0.04)	t =	*	0.396	***	(0.04)	0.455	***	(0.04)	0.378	***	(0.04)	0.341	***	(0.04)	0.313	***	(0.04)
Emo. pictures [a 2]				−0.079	***	(0.02)	2.29		−0.091	***	(0.02)	−0.102	***	(0.02)	−0.088	***	(0.02)	−0.079	***	(0.02)	−0.082	***	(0.02)
Emo. video [a]				0.368	***	(0.03)	−/−		0.367	***	(0.03)	0.344	***	(0.03)	0.376	***	(0.03)	0.378	***	(0.03)	0.389	***	(0.03)
Emo. video [a 2]				−0.082	**	(0.03)			−0.090	**	(0.03)	−0.074	**	(0.03)	−0.101	***	(0.03)	−0.097	***	(0.03)	−0.087	**	(0.03)
Emo. speech				0.414	***	(0.06)	t =	***	0.447	***	(0.06)	0.425	***	(0.06)	0.416	***	(0.06)	0.405	***	(0.06)	0.398	***	(0.06)
Emo. speech [2]				−0.175	***	(0.02)	9.03		−0.177	***	(0.02)	−0.173	***	(0.02)	−0.165	***	(0.02)	−0.168	***	(0.02)	−0.166	***	(0.02)
Moderation effects | *Z = moderator*																							
Emo. words × Z									−0.341	***	(0.03)	−0.380	***	(0.03)	−0.320	***	(0.03)	−0.163	***	(0.03)	0.118	***	(0.03)
Emo. words [2] × Z									0.088	***	(0.01)	0.103	***	(0.01)	0.082	***	(0.01)	0.047	***	(0.01)	−0.016		(0.01)
Emo. pictures [a] × Z									−0.284	***	(0.04)	−0.363	***	(0.04)	−0.240	***	(0.03)	−0.137	***	(0.04)	0.164	***	(0.04)
Emo. pictures [a 2] × Z									0.074	***	(0.02)	0.109	***	(0.02)	0.080	***	(0.01)	0.039	*	(0.02)	−0.045	*	(0.02)
Emo. video [a] × Z									−0.115	***	(0.03)	−0.114	***	(0.03)	−0.145	***	(0.03)	−0.117	***	(0.03)	0.040		(0.03)
Emo. video [a 2] × Z									0.085	**	(0.03)	0.063	*	(0.03)	0.034		(0.03)	0.065	*	(0.03)	−0.033		(0.03)
Emo. speech × Z									−0.152	***	(0.03)	−0.149	***	(0.03)	−0.090	**	(0.03)	−0.127	***	(0.04)	0.224	***	(0.04)
Emo. speech [2] × Z									0.077	***	(0.01)	0.062	***	(0.01)	0.047	***	(0.01)	0.071	***	(0.02)	−0.079	***	(0.02)
Adjusted R^2	0.522			0.546					0.560			0.561			0.556			0.551			0.551		

Notes: ○ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; n = 17,736; [a] inverse hyperbolic sine transformation (ihs); standard error in parentheses.

Table B11
Robustness test | Robust standard errors.

	(1) Funding raised [a]			(2) Funding raised [a]			*U* test		(3) Funding raised [a] Z = No. backed [a]			(4) Funding raised [a] Z = No. updates [a]			(5) Funding raised [a] Z = No. comments [a]			(6) Funding raised [a] Z = No. created [a]			(7) Funding raised [a] Z = Pledge goal [a]		
Control variables																							
Category dummy	included			included					included			included			included			included			included		
No. words	0.153	***	(0.02)	0.202	***	(0.04)			0.192	***	(0.04)	0.197	***	(0.04)	0.205	***	(0.04)	0.206	***	(0.04)	0.183	***	(0.04)
No. pictures	0.498	***	(0.02)	0.390	***	(0.02)			0.378	***	(0.02)	0.386	***	(0.02)	0.404	***	(0.02)	0.369	***	(0.02)	0.361	***	(0.02)
Video duration	0.142	***	(0.04)	0.090	*	(0.04)			0.044		(0.04)	0.025		(0.04)	0.044		(0.04)	0.075	*	(0.04)	0.110	**	(0.04)
No. spoken words	0.391	***	(0.03)	0.066		(0.06)			0.052		(0.06)	0.089		(0.06)	0.072		(0.06)	0.064		(0.06)	0.030		(0.06)
Duration	−0.137	***	(0.02)	−0.118	***	(0.02)			−0.109	***	(0.02)	−0.122	***	(0.02)	−0.111	***	(0.02)	−0.109	***	(0.02)	−0.116	***	(0.02)
Moderator variables																							
Pledge goal [a]	0.164	***	(0.02)	0.096	***	(0.02)			0.121	***	(0.02)	0.133	***	(0.02)	0.102	***	(0.02)	0.108	***	(0.02)	0.348	***	(0.04)
No. backed [a]	0.409	***	(0.02)	0.346	***	(0.02)			0.129	***	(0.03)	0.350	***	(0.02)	0.335	***	(0.02)	0.361	***	(0.02)	0.356	***	(0.02)
No. created [a]	−0.028		(0.02)	0.002		(0.02)			−0.034		(0.02)	−0.034		(0.02)	−0.021		(0.02)	−0.239	***	(0.03)	0.010		(0.02)
No. updates [a]	1.325	***	(0.02)	1.211	***	(0.02)			1.180	***	(0.02)	0.919	***	(0.04)	1.169	***	(0.02)	1.188	***	(0.02)	1.204	***	(0.02)
No. comments [a]	0.455	***	(0.02)	0.512	***	(0.02)			0.547	***	(0.02)	0.577	***	(0.02)	0.484	***	(0.03)	0.544	***	(0.02)	0.493	***	(0.02)
Main effects																							
Emo. words				0.248	***	(0.05)	t =	***	0.240	***	(0.05)	0.230	***	(0.05)	0.222	***	(0.05)	0.244	***	(0.05)	0.257	***	(0.05)
Emo. words [2]				−0.167	***	(0.01)	9.57		−0.154	***	(0.01)	−0.153	***	(0.01)	−0.156	***	(0.01)	−0.165	***	(0.01)	−0.173	***	(0.01)
Emo. pictures [a]				0.322	***	(0.03)	t =	**	0.378	***	(0.04)	0.432	***	(0.04)	0.356	***	(0.04)	0.323	***	(0.03)	0.293	***	(0.03)
Emo. pictures [a 2]				−0.077	***	(0.01)	2.98		−0.090	***	(0.02)	−0.099	***	(0.02)	−0.086	***	(0.02)	−0.078	***	(0.01)	−0.078	***	(0.01)
Emo. video [a]				0.369	***	(0.03)	t =		0.369	***	(0.03)	0.346	***	(0.03)	0.377	***	(0.03)	0.379	***	(0.03)	0.387	***	(0.03)
Emo. video [a 2]				−0.092	***	(0.03)	0.17		−0.100	***	(0.03)	−0.086	**	(0.03)	−0.111	***	(0.03)	−0.108	***	(0.03)	−0.096	***	(0.03)
Emo. speech				0.373	***	(0.06)	t =	***	0.407	***	(0.06)	0.385	***	(0.06)	0.378	***	(0.06)	0.366	***	(0.06)	0.358	***	(0.06)
Emo. speech [2]				−0.163	***	(0.02)	8.34		−0.164	***	(0.02)	−0.159	***	(0.02)	−0.153	***	(0.02)	−0.156	***	(0.02)	−0.161	***	(0.02)
Moderation effects | *Z = moderator*																							
Emo. words × Z									−0.330	***	(0.02)	−0.358	***	(0.03)	−0.311	***	(0.02)	−0.153	***	(0.02)	0.154	***	(0.03)
Emo. words [2] × Z									0.086	***	(0.01)	0.097	***	(0.01)	0.078	***	(0.01)	0.045	***	(0.01)	−0.029	**	(0.01)
Emo. pictures [a] × Z									−0.297	***	(0.03)	−0.368	***	(0.03)	−0.238	***	(0.02)	−0.156	***	(0.03)	0.147	***	(0.04)
Emo. pictures [a 2] × Z									0.079	***	(0.01)	0.112	***	(0.02)	0.082	***	(0.01)	0.044	***	(0.01)	−0.045	**	(0.02)
Emo. video [a] × Z									−0.135	***	(0.02)	−0.132	***	(0.03)	−0.153	***	(0.02)	−0.123	***	(0.02)	0.071	*	(0.03)
Emo. video [a 2] × Z									0.103	***	(0.02)	0.078	**	(0.03)	0.045	*	(0.02)	0.071	**	(0.03)	−0.063	*	(0.03)
Emo. speech × Z									−0.136	***	(0.03)	−0.151	***	(0.03)	−0.080	***	(0.02)	−0.129	***	(0.03)	0.184	***	(0.04)
Emo. speech [2] × Z									0.067	***	(0.01)	0.060	***	(0.01)	0.043	***	(0.01)	0.069	***	(0.01)	−0.049	**	(0.02)
Adjusted R^2	0.528			0.551					0.564			0.566			0.560			0.556			0.556		

Notes: ∘ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; n = 16,967; [a] inverse hyperbolic sine transformation (ihs); robust standard error in parentheses.

Appendix C:. Post-hoc analysis

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Table C1
Post-hoc analysis | Category (tangible vs. intangible) as moderator.

	(1) Funding raised [a]			(2) Funding raised [a]			*U* test		(3) Funding raised [a] Z = Category		
Control variables											
No. words	0.108	***	(0.02)	0.177	***	(0.05)			0.176	***	(0.05)
No. pictures	0.468	***	(0.03)	0.364	***	(0.03)			0.344	***	(0.03)
Video duration	0.216	***	(0.03)	0.146	***	(0.03)			0.139	***	(0.03)
No. spoken words	0.385	***	(0.03)	0.026		(0.06)			0.030		(0.06)
Duration	−0.127	***	(0.02)	−0.109	***	(0.02)			−0.115	***	(0.02)
Moderator variables											
Category	−0.266		(0.04)	−0.010		(0.04)			0.321	***	(0.08)
Pledge goal [a]	0.163	***	(0.02)	0.089	***	(0.02)			0.092	***	(0.02)
No. backed [a]	0.377	***	(0.02)	0.313	***	(0.02)			0.322	***	(0.02)
No. created [a]	−0.056	**	(0.02)	−0.018		(0.02)			−0.013		(0.02)
No. updates [a]	1.340	***	(0.02)	1.211	***	(0.02)			1.216	***	(0.02)
No. comments [a]	0.383	***	(0.03)	0.471	***	(0.02)			0.462	***	(0.02)
Main effects											
Emo. words				0.234	***	(0.05)	t = 8.91	***	0.167	**	(0.05)
Emo. words [2]				−0.169	***	(0.01)			−0.149	***	(0.01)
Emo. pictures [a]				0.329	***	(0.04)	t = 2.06	*	0.268	***	(0.05)
Emo. pictures [a 2]				−0.076	***	(0.02)			−0.059	*	(0.02)
Emo. video [a]				0.419	***	(0.03)	−/−		0.514	***	(0.04)
Emo. video [a 2]				−0.084	**	(0.03)			−0.067	*	(0.03)
Emo. speech				0.385	***	(0.06)	t = 8.53	***	0.269	***	(0.07)
Emo. speech [2]				−0.175	***	(0.02)			−0.135	***	(0.02)
Moderation effects | Z = moderator											
Emo. words × Z									0.240	***	(0.06)
Emo. words [2] × Z									−0.051	○	(0.03)
Emo. pictures [a] × Z									0.207	*	(0.09)
Emo. pictures [a 2] × Z									−0.064	○	(0.04)
Emo. video [a] × Z									−0.279	***	(0.07)
Emo. video [a 2] × Z									−0.108	○	(0.06)
Emo. speech × Z									0.307	***	(0.08)
Emo. speech [2] × Z									−0.123	***	(0.04)
Adjusted R2	0.510			0.537					0.539		

Notes: ○ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; n = 16,967; [a] inverse hyperbolic sine transformation (ihs); standard error in parentheses; 'category' is a binary variable differentiating between tangible and intangible projects.

Table C2
Post-hoc analysis | Subset tangible projects.

	(1) Funding raised [a]			(2) Funding raised [a]			*U* test		(3) Funding raised [a] Z = No. backed [a]			(4) Funding raised [a] Z = No. updates [a]			(5) Funding raised [a] Z = No. comments [a]			(6) Funding raised [a] Z = No. created [a]			(7) Funding raised [a] Z = Pledge goal [a]		
Control variables																							
Category dummy	included			included					included			included			included			included			included		
No. words	0.192	***	(0.04)	0.225	**	(0.07)			0.241	***	(0.07)	0.216	**	(0.07)	0.228	**	(0.07)	0.239	***	(0.07)	0.212	**	(0.07)
No. pictures	0.492	***	(0.04)	0.391	***	(0.04)			0.381	***	(0.04)	0.385	***	(0.04)	0.403	***	(0.04)	0.375	***	(0.04)	0.378	***	(0.04)
Video duration	0.280	***	(0.06)	0.264	***	(0.06)			0.213	***	(0.06)	0.165	**	(0.06)	0.174	**	(0.06)	0.249	***	(0.06)	0.291	***	(0.06)
No. spoken words	0.266	***	(0.06)	−0.133		(0.10)			−0.129		(0.10)	−0.082		(0.10)	−0.071		(0.10)	−0.133		(0.10)	−0.161		(0.10)
Duration	−0.065	*	(0.03)	−0.058	○	(0.03)			−0.051	○	(0.03)	−0.062	*	(0.03)	−0.055	○	(0.03)	−0.048		(0.03)	−0.057	○	(0.03)
Moderator variables																							
Pledge goal [a]	0.255	***	(0.04)	0.181	***	(0.04)			0.200	***	(0.03)	0.212	***	(0.03)	0.185	***	(0.03)	0.189	***	(0.03)	0.429	***	(0.07)
No. backed [a]	0.441	***	(0.04)	0.392	***	(0.04)			0.140	*	(0.07)	0.377	***	(0.04)	0.369	***	(0.04)	0.404	***	(0.04)	0.394	***	(0.04)
No. created [a]	0.051		(0.04)	0.084	*	(0.04)			0.032		(0.04)	0.036		(0.04)	0.060		(0.04)	−0.143	○	(0.08)	0.096	**	(0.04)
No. updates [a]	1.328	***	(0.04)	1.242	***	(0.04)			1.209	***	(0.04)	0.870	***	(0.07)	1.196	***	(0.04)	1.216	***	(0.04)	1.246	***	(0.04)
No. comments [a]	0.602	***	(0.04)	0.618	***	(0.04)			0.642	***	(0.04)	0.706	***	(0.04)	0.523	***	(0.05)	0.650	***	(0.04)	0.598	***	(0.04)
Main effects																							
Emo. words				0.189	*	(0.08)	t =	***	0.130		(0.08)	0.154	○	(0.08)	0.214	*	(0.08)	0.161	○	(0.08)	0.180	*	(0.09)
Emo. words [2]				−0.166	***	(0.02)	4.71		−0.139	***	(0.02)	−0.133	***	(0.03)	−0.154	***	(0.03)	−0.159	***	(0.02)	−0.163	***	(0.03)
Emo. pictures [a]				0.327	***	(0.07)	t =	*	0.330	***	(0.07)	0.409	***	(0.07)	0.421	***	(0.07)	0.290	***	(0.07)	0.266	***	(0.08)
Emo. pictures [a 2]				−0.087	**	(0.03)	1.85		−0.085	**	(0.03)	−0.093	**	(0.03)	−0.107	**	(0.03)	−0.076	*	(0.03)	−0.082	*	(0.04)
Emo. video [a]				0.210	***	(0.05)	t =		0.210	***	(0.05)	0.190	***	(0.05)	0.240	***	(0.05)	0.207	***	(0.05)	0.194	***	(0.06)
Emo. video [a 2]				−0.085		(0.05)	0.73		−0.098	○	(0.05)	−0.077		(0.05)	−0.114	*	(0.05)	−0.111	*	(0.05)	−0.045		(0.06)
Emo. speech				0.578	***	(0.10)	t =	***	0.576	***	(0.10)	0.555	***	(0.10)	0.548	***	(0.10)	0.559	***	(0.10)	0.558	***	(0.11)
Emo. speech [2]				−0.233	***	(0.03)	5.95		−0.214	***	(0.03)	−0.216	***	(0.03)	−0.219	***	(0.03)	−0.222	***	(0.03)	−0.238	***	(0.03)
Moderation effects | *Z = moderator*																							
Emo. words × Z									−0.349	***	(0.05)	−0.398	***	(0.05)	−0.320	***	(0.04)	−0.197	***	(0.05)	0.101		(0.05)
Emo. words [2] × Z									0.089	***	(0.02)	0.117	***	(0.02)	0.085	***	(0.02)	0.057	*	(0.03)	−0.031		(0.03)
Emo. pictures [a] × Z									−0.358	***	(0.07)	−0.418	***	(0.07)	−0.274	***	(0.05)	−0.217	**	(0.08)	0.159	*	(0.08)
Emo. pictures [a 2] × Z									0.093	**	(0.03)	0.121	***	(0.03)	0.087	***	(0.02)	0.078	*	(0.04)	−0.039		(0.04)
Emo. video [a] × Z									−0.098	○	(0.06)	−0.100	○	(0.05)	−0.135	**	(0.04)	−0.120	*	(0.06)	0.088		(0.06)
Emo. video [a 2] × Z									0.108	○	(0.06)	0.098	○	(0.05)	0.103	*	(0.05)	−0.010		(0.06)	−0.127	*	(0.06)
Emo. speech × Z									−0.098		(0.06)	−0.203	***	(0.06)	−0.095	*	(0.05)	−0.116	○	(0.06)	0.049		(0.07)
Emo. speech [2] × Z									0.091	**	(0.03)	0.097	**	(0.03)	0.058	*	(0.02)	0.051		(0.04)	0.001		(0.04)
Adjusted R^2	0.615			0.630					0.640			0.644			0.640			0.634			0.631		

Notes: ○ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; n = 5,657; [a] inverse hyperbolic sine transformation (ihs); standard error in parentheses.

Table C3
Post-hoc analysis | Subset intangible projects.

	(1) Funding raised [a]			(2) Funding raised [a]			*U* test		(3) Funding raised [a] Z = No. backed [a]			(4) Funding raised [a] Z = No. updates [a]			(5) Funding raised [a] Z = No. comments [a]			(6) Funding raised [a] Z = No. created [a]			(7) Funding raised [a] Z = Pledge goal [a]		
Control variables																							
Category dummy	included			included					included			included			included			included			included		
No. words	0.178	***	(0.03)	0.213	***	(0.06)			0.189	***	(0.06)	0.209	***	(0.06)	0.204	***	(0.06)	0.213	***	(0.06)	0.195	***	(0.06)
No. pictures	0.415	***	(0.04)	0.316	***	(0.04)			0.316	***	(0.04)	0.322	***	(0.04)	0.319	***	(0.04)	0.301	***	(0.04)	0.280	***	(0.04)
Video duration	0.080	*	(0.04)	0.008		(0.04)			−0.036		(0.04)	−0.047		(0.04)	−0.018		(0.04)	−0.007		(0.04)	0.013		(0.04)
No. spoken words	0.441	***	(0.04)	0.153	*	(0.07)			0.140	*	(0.07)	0.174	*	(0.07)	0.139	*	(0.07)	0.149	*	(0.07)	0.125	○	(0.07)
Duration	−0.198	***	(0.02)	−0.172	***	(0.02)			−0.157	***	(0.02)	−0.172	***	(0.02)	−0.163	***	(0.02)	−0.162	***	(0.02)	−0.169	***	(0.02)
Moderator variables																							
Pledge goal [a]	0.135	***	(0.03)	0.071	**	(0.02)			0.095	***	(0.02)	0.110	***	(0.02)	0.079	**	(0.02)	0.083	***	(0.02)	0.311	***	(0.05)
No. backed [a]	0.423	***	(0.03)	0.347	***	(0.03)			0.129	**	(0.05)	0.356	***	(0.03)	0.344	***	(0.03)	0.361	***	(0.03)	0.357	***	(0.03)
No. created [a]	−0.042	○	(0.03)	−0.019		(0.03)			−0.053	*	(0.02)	−0.051	*	(0.02)	−0.041		(0.03)	−0.276	***	(0.05)	−0.014		(0.02)
No. updates [a]	1.336	***	(0.03)	1.209	***	(0.03)			1.177	***	(0.03)	0.927	***	(0.05)	1.173	***	(0.03)	1.187	***	(0.03)	1.188	***	(0.03)
No. comments [a]	0.279	***	(0.04)	0.373	***	(0.03)			0.421	***	(0.03)	0.423	***	(0.04)	0.312	***	(0.05)	0.405	***	(0.04)	0.364	***	(0.03)
Main effects																							
Emo. words				0.268	***	(0.06)	t =	***	0.281	***	(0.06)	0.257	***	(0.06)	0.233	***	(0.06)	0.270	***	(0.06)	0.297	***	(0.06)
Emo. words [2]				−0.157	***	(0.01)	7.47		−0.153	***	(0.01)	−0.159	***	(0.02)	−0.152	***	(0.01)	−0.159	***	(0.01)	−0.170	***	(0.01)
Emo. pictures [a]				0.329	***	(0.05)	t =	*	0.400	***	(0.05)	0.446	***	(0.06)	0.349	***	(0.05)	0.340	***	(0.05)	0.304	***	(0.05)
Emo. pictures [a 2]				−0.078	***	(0.02)	1.75		−0.092	***	(0.02)	−0.102	***	(0.03)	−0.081	***	(0.02)	−0.078	***	(0.02)	−0.078	***	(0.02)
Emo. video [a]				0.459	***	(0.04)	−/−		0.466	***	(0.04)	0.440	***	(0.04)	0.447	***	(0.04)	0.478	***	(0.04)	0.496	***	(0.04)
Emo. video [a 2]				−0.107	**	(0.03)			−0.124	***	(0.03)	−0.109	**	(0.03)	−0.120	***	(0.03)	−0.127	***	(0.03)	−0.131	***	(0.03)
Emo. speech				0.262	***	(0.07)	t =	***	0.308	***	(0.07)	0.280	***	(0.07)	0.282	***	(0.07)	0.261	***	(0.07)	0.277	***	(0.07)
Emo. speech [2]				−0.128	***	(0.02)	4.98		−0.135	***	(0.02)	−0.129	***	(0.02)	−0.121	***	(0.02)	−0.123	***	(0.02)	−0.135	***	(0.02)
Moderation effects | *Z = moderator*																							
Emo. words × Z									−0.303	***	(0.03)	−0.314	***	(0.04)	−0.261	***	(0.04)	−0.115	***	(0.03)	0.199	***	(0.04)
Emo. words [2] × Z									0.082	***	(0.01)	0.094	***	(0.01)	0.074	***	(0.01)	0.038	***	(0.01)	−0.032	*	(0.01)
Emo. pictures [a] × Z									−0.260	***	(0.04)	−0.343	***	(0.05)	−0.220	***	(0.05)	−0.127	**	(0.05)	0.115	*	(0.05)
Emo. pictures [a 2] × Z									0.066	***	(0.02)	0.103	***	(0.02)	0.067	**	(0.02)	0.033		(0.02)	−0.041	○	(0.03)
Emo. video [a] × Z									−0.169	***	(0.04)	−0.167	***	(0.04)	−0.179	***	(0.04)	−0.144	***	(0.04)	0.111	**	(0.04)
Emo. video [a 2] × Z									0.120	***	(0.03)	0.094	**	(0.03)	0.066	○	(0.04)	0.103	**	(0.04)	−0.049		(0.04)
Emo. speech × Z									−0.139	***	(0.04)	−0.124	**	(0.04)	−0.099	*	(0.04)	−0.130	**	(0.04)	0.212	***	(0.05)
Emo. speech [2] × Z									0.060	***	(0.02)	0.047	**	(0.02)	0.051	**	(0.02)	0.071	***	(0.02)	−0.057	**	(0.02)
Adjusted R^2	0.481			0.508					0.523			0.523			0.516			0.513			0.516		

Notes: ○ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; n = 11,310; [a] inverse hyperbolic sine transformation (ihs); standard error in parentheses.

Data availability

Data will be made available on request.

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