

# COMMUNICATING DURING SOCIETAL CRISES: HOW ENTREPRENEURS' INTERACTIONS WITH BACKERS AFFECT FUNDRAISING VIA CROWDFUNDING

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## ABSTRACT

We investigate how entrepreneurs communicate with crowdfunding backers during the onset of a societal crisis via a content analysis of campaigns active during the COVID-19 pandemic and a vignette experiment. While effective communication with stakeholders is critical for acquiring resources during societal crises, little is known about what communication strategies entrepreneurs use during these crises or their influence on fundraising. **Notably, we find that entrepreneurs' crisis communication strategies differ along three key dimensions: timing (proactive vs. reactive), target (entrepreneur vs. other), and nature (utilitarian vs. personal), and that proactively addressing other stakeholders' personal concerns attracts more funding than alternative approaches.**

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## INTRODUCTION

The ability to communicate with stakeholders is an essential tool for entrepreneurs (Lounsbury & Glynn, 2001; Martens et al., 2007), many of whom depend on resources from external stakeholders to launch and grow their ventures (Clough et al., 2019). Mobilizing this support is challenging given new ventures' lower levels of legitimacy, short operating histories, and information asymmetries (Fisher et al., 2016; Gomulya et al., 2019; Li et al., 2017). However, entrepreneurs who communicate effectively with key stakeholders are often able to overcome these challenges, influencing stakeholders' evaluation of the venture's plausibility and legitimacy and, ultimately, the decision of whether to provide resources to the venture (Fisher et al., 2021; Lounsbury & Glynn, 2001).

Communication is crucial for entrepreneurs raising capital using reward-based crowdfunding (Allison et al., 2017; Chandler et al., 2024). Entrepreneurs' interactions with crowdfunding backers generally occur online, making these online interactions influential for backers' investment decision-making (e.g., Anglin et al., 2023; Manning & Bejarano, 2016; McSweeney et al., 2022; Moradi et al., 2024; Ren et al., 2021). However, the nature of crowdfunding and crowdfunders suggests that effective communication strategies in reward-based crowdfunding may differ from those in traditional entrepreneurial financing contexts. In reward-based crowdfunding, campaign rewards often include the product or service being developed, attracting investments from backers who resemble customers more than professional investors (e.g., Seigner et al., 2024; Stevenson et al., 2022). Unlike professional investors, reward-based crowdfunding backers often base their investment decisions less on the venture's financial viability and more on personal, social, or heuristic criteria, alongside the anticipated value of obtaining the product being developed (e.g., Bapna & Ganco, 2021; Fisher et al., 2017; Greenberg & Mollick, 2017).

Unexpected shocks, such as the onset of a crisis, significantly disrupt organizational activity and increase uncertainty (Klyver & Nielsen, 2021; Yu et al., 2024), requiring organizations to adapt

their communication strategies to maintain stakeholder support (Bundy et al., 2017). In traditional funding sources, such as venture capital or angel investment, investors generally have the experience and ability to monitor their investment and influence the venture's decisions. In contrast, reward-based crowdfunding backers lack this ability, meaning effective communication with reward-based crowdfunding backers is particularly important during a crisis.

Research on crisis communication suggests that entrepreneurs who are not at fault for the crisis should use defensive communication strategies such as denial or deflection (Bundy & Pfarrer, 2015; Cornelis et al., 2022). However, this literature typically examines crises that are narrow in scope and for which organizations might be fully or partially blamed (e.g., corporate scandals and workplace violence). A different communication approach is likely needed for *societal crises* (e.g., natural disasters and pandemics) with a broader scope and for which individual organizations are not responsible. For traditional investors with primarily financial interest in the venture, existing theory suggests that entrepreneurs present a positively framed view of how the venture will seize opportunities and avoid threats associated with the crisis (e.g., Alshorman & Shanahan, 2022; Dillingham, 2024). However, because reward-based crowdfunding backers are typically non-professional investors with both product-related and personal/social interests in the venture, established recipes for effective communication with stakeholders may differ in this context.

We, therefore, pose the following research question: *How do entrepreneurs raising funds through reward-based crowdfunding during the onset of a societal crisis communicate with backers about the crisis, and how does such communication influence backer support?* We examine our research questions using a multi-method approach that combines observational and manipulation-based methods to better understand the underlying phenomenon (i.e., Chatman & Flynn, 2005). First, we conduct a qualitative content analysis of 40 Kickstarter campaigns that were active during the onset of the COVID-19 crisis to observe entrepreneurs' communications with backers. Next, we manipulate

entrepreneurial communications with backers in a vignette experiment study **with 411 participants** to understand how they respond to these crisis communication strategies.

We offer two contributions. First, we add to the literature on external enablers of entrepreneurship, which differentiates enablers based on their scope and onset (Davidsson et al., 2021; Kimjeon & Davidsson, 2022; Wood et al., 2023). We identify a third characteristic of external enablers: controllability. Societal crises such as a pandemic lie far beyond individual entrepreneurs' control. Our findings suggest that effective communication with crowdfunding backers differs from what would be expected if an entrepreneur could have influenced the crisis.

Second, we contribute to the understanding of entrepreneurial communication in crowdfunding (e.g., Anglin et al., 2018a; Oo et al., 2023). We show that, in addition to the content of what an entrepreneur says (**i.e., whether the entrepreneur focuses on the utilitarian or personal impacts of the crisis**), the *timing* (whether the entrepreneur **proactively** initiated communication regarding the crisis or **reactively** waited to be prompted by a backer) and the *target* (whether the **message** emphasized the needs/concerns **of the entrepreneur** or of others) of these communications influence crowdfunding performance. While crowdfunding messages typically focus on the status of rewards, at the onset of a societal crisis it is better to proactively focus communications on the personal concerns of others (e.g., backers).

## THEORETICAL BACKGROUND

### Attracting Financial Capital

Entrepreneurial ventures often struggle to attract financial capital. Venture capital funds and angel investors are well-known sources of financial capital (e.g., Huang, 2018; Petkova et al., 2014; Wry et al., 2014), but they generally support high growth-potential ventures promising significant financial returns. Many entrepreneurs cannot raise funds from these traditional sources, prompting them to seek alternative funding sources.

The emergence of large, online platforms such as Kickstarter and Indiegogo has made reward-based crowdfunding an attractive alternative to traditional modes of funding (Mollick, 2014). In 2024, reward-based crowdfunding platforms are projected to help raise \$1.2 billion for entrepreneurs and innovators (Statista, 2024). In reward-based crowdfunding, entrepreneurs develop and post a campaign webpage for their venture to pitch their product/service to many potential backers more efficiently than in face-to-face settings. Additionally, by offering a product/service rather than equity or debt, entrepreneurs retain ownership of their venture and avoid debt while obtaining valuable market validation information (e.g., Stevenson et al., 2022).

The attributes that make reward-based crowdfunding attractive to entrepreneurs also influence the characteristics of the backer pool and their decision-making processes. The lack of financial compensation and the smaller investments typical in reward-based crowdfunding tend to attract backers with less professional investment experience (e.g., McKenny et al., 2017; Murray et al., 2020). Consequently, they often incorporate non-economic rationale in their funding decisions. For instance, some people crowdfund partly to join a community that collectively supports the development of an innovative new product (Fisher et al., 2017; Murray et al., 2020).

Decision-making in reward-based crowdfunding is also influenced by the platforms' online, asynchronous nature. Backers typically do not directly contact the entrepreneur before supporting a campaign. Indeed, backers on platforms such as Indiegogo and Kickstarter are unable to post comments or questions until they have already backed the campaign. Thus, effective communication by entrepreneurs on these platforms is critical for successful fundraising (e.g., Nielsen & Binder, 2021; Oo et al., 2023; Su et al., 2024).

### **Communication in Reward-Based Crowdfunding**

Backing a crowdfunded product involves more uncertainty than purchasing an existing product (Jiang et al., 2021). To entice backers to accept this greater uncertainty, entrepreneurs need to

effectively communicate the novelty of their proposed product (e.g., Kim et al., 2016; Tauscher et al., 2021), reflecting innovation (Seigner et al., 2022) and emphasizing the distinctiveness of their product (Kim et al., 2016) in their campaign materials.

The content presented in an entrepreneur's campaign materials also serves as a quality signal to potential backers regarding the entrepreneur, their venture, and their product (Kim et al., 2016; Scheaf et al., 2018; Steigenberger & Wilhelm, 2018). For instance, language that reflects positive psychological capital, such as expressions of confidence and resilience, can enhance crowdfunding performance by demonstrating the entrepreneur's readiness to overcome entrepreneurial challenges (e.g., Anglin et al., 2018a; Kaminski & Hopp, 2020). The language used in a campaign can also strengthen the influence of other, more costly signals by drawing attention to and complementing the information these signals provide (e.g., Steigenberger & Wilhelm, 2018).

When crafting campaign content, entrepreneurs also need to consider how the framing of this content will influence backers' evaluations. Using storytelling helps entrepreneurs communicate in a simple and engaging manner, highlighting the product's value and reducing the perceived salience of entrepreneurial risks (Anglin et al., 2023; Cappa et al., 2021). The uncertainty associated with developing a new product also sensitizes backers to whether the entrepreneur frames their campaign as raising funds because they are "needed" to be successful or merely "wanted" to support an already capable entrepreneur (Su et al., 2024). Similarly, carefully framing the campaign to resonate with potential backers' personal values can enhance their willingness to contribute (Nielsen & Binder, 2021).

Communication research suggests that attributes of both the sender and receiver affect the interpretation of a transmitted message. At the individual level, demographics of the entrepreneur, like gender and race, appear to influence the efficacy of their pitch (e.g., Anglin et al., 2018b; McSweeney et al., 2022; Seigner et al., 2022; Wesemann & Wincent, 2021). For example, female entrepreneurs

achieve greater success in reward-based crowdfunding when they eschew promotion-focused language (Wesemann & Wincent, 2021). At the venture level, backers respond differently to entrepreneurs' communications when the venture is positioned as social or sustainability-focused rather than commercially oriented (e.g., Chan et al., 2021; Parhankangas & Renko, 2017; Short & Anglin, 2019).

Two recent studies have explored the role of communication timing in reward-based crowdfunding. Murray and colleagues (2020) find that entrepreneurs engage in a series of time-sequenced activities—community building, engaging, and spanning—each involving communication with backers at different points in the campaign. Moradi and colleagues (2024) reveal that the influence of rhetorical signals on backer contributions evolves throughout a campaign. Emotional and cognitive language are more effective in the early stages, while linguistic style matches and communal language become more influential in the later stages.

### **Crises as External Enablers and Disablers of Entrepreneurship**

Effective communication with stakeholders is particularly critical during a crisis. Whether a crisis facilitates or inhibits entrepreneurial activity is influenced by the characteristics of the crisis and the venture, as well as actions taken by the entrepreneur (Davidsson et al., 2020; Klyver & Nielsen, 2021). The external enablers framework identifies that enabler-level characteristics such as scope and onset shape their impact on entrepreneurs. Scope concerns the range of spatial, temporal, sectoral, and socio-demographic contexts that are affected (Kimjeon & Davidsson, 2022). The COVID-19 crisis was global, affecting a broad range of sectors and socio-demographic groups, suggesting that the crisis may have also impacted a diverse range of entrepreneurs (Davidsson et al., 2021; Klyver & Nielsen, 2022). Onset concerns the gradualness and predictability of the enabler's emergence (Kimjeon & Davidsson, 2022). The COVID-19 crisis had a sudden onset, though it was not entirely unpredictable (Davidsson et al., 2021; Klyver & Nielsen, 2022). These characteristics explain why entrepreneurs worldwide and across sectors were impacted by and had little time to prepare for the crisis.

However, determining whether and how a crisis impacts individual ventures requires understanding both venture and entrepreneur-level characteristics. For instance, young ventures with strong inter-functional coordination and resilient top management teams tend to outperform other firms during crises due to their higher organizational resilience (Anwar et al., 2023). At the individual level, entrepreneurs exhibiting both opportunity and planning agility experience higher well-being during a crisis, an entrepreneurial resource linked to venture survival and success (Stephan et al., 2023). Entrepreneur characteristics also affect their ability to obtain resources during a crisis. For example, Yu and colleagues (2024) find that entrepreneur gender influences resource availability, with women entrepreneurs facing greater challenges in securing resources during the COVID-19 crisis.

If an entrepreneur is unable or unwilling to respond to an external change, they may miss possible benefits or be unnecessarily affected by adverse effects. Entrepreneurial inaction is most likely to occur when the enabler's potential effects are unclear or when the required actions are time, effort, or resource-intensive (Wood et al., 2023). Crises can also inhibit entrepreneurial action by affecting the anticipated outcomes of such actions. For instance, Bergenholtz and colleagues (2023) argue that the typically positive relationship between entrepreneurial self-efficacy and entrepreneurial intentions weakened during the COVID-19 crisis. However, even when entrepreneurs act, the choice of action taken may influence the impact of a crisis on their venture (Klyver & Nielsen, 2021; Wenzel et al., 2020). For instance, during the COVID-19 crisis, entrepreneurs who employed a broad perseverance strategy (e.g., reorganizing workspaces for hygiene requirements) or broad innovation strategy (e.g., changing sales channels or business models) tended to perform better than those who did not (Klyver & Nielsen, 2021).

### **Crisis Communication Strategies**

An entrepreneur's choice of communication strategy with stakeholders is a critical decision that can influence the impact of a crisis on their venture. When an organization is viewed as a potential



cause of a crisis, its possible responses range from defensive attempts to diminish its association with the crisis to accommodative responses that accept responsibility. Research suggests that organizations should select a crisis response strategy along this continuum based on the extent to which stakeholders perceive the firm as responsible. If stakeholders perceive the firm to be minimally responsible, a more defensive strategy, such as attacking the accuser, denying the crisis, or blaming someone else, is recommended (Bundy & Pfarrer, 2015; Coombs, 2007). If stakeholders perceive the firm as responsible for a preventable crisis, it is encouraged to adopt a more accommodative strategy, such as apologizing and offering compensation (Bundy & Pfarrer, 2015; Coombs & Holladay, 2002, 2008).

Studies support these recommendations in the context of crises for which an organization could plausibly be responsible, such as accusations of unfair labor practices (e.g., Lamin & Zaheer, 2012) and financial misconduct (e.g., Paruchuri & Misangyi, 2015). However, the effectiveness of these communication strategies during societal crises remains unclear.

Research suggests that during societal crises, managers should anticipate and acknowledge risks to shareholders while emphasizing external critical success factors (e.g., D'Aveni & MacMillan, 1990; Gonidakis et al., 2020). By anticipating potential negative outcomes, organizations can lessen the impact of stakeholder responses if these outcomes materialize. Managers also may use ethical language and maintain a sincere, optimistic, and positive tone to initiate an open dialogue with shareholders (Alshorman & Shanahan, 2022; Patelli & Pedrini, 2014).

Research on effective firm communication strategies during societal crises has generally focused on communications between large organizations and equity shareholders (e.g., Gonidakis et al., 2020; Josef & Helena, 2019; Patelli & Pedrini, 2014). However, research examining supervisor-supervisee communications (e.g., Croucher et al., 2022; Suortti & Sivunen, 2024) and governmental organization public relations (e.g., Marynissen & Lauder, 2020) during societal crises indicate variations in crisis communication preferences among different stakeholder groups. For instance,

Marynissen and Lauder (2020) highlight the process of rebuilding trust in the Belgian FCC after the Brussels terror attacks, which involved reducing stress by acknowledging stakeholders' emotional distress and providing guidance on addressing challenges faced by the public, such as public transport issues. Similarly, Anderson and Jones-Bodie (2023) illustrate how universities attempted to foster stakeholder resilience during the COVID-19 pandemic by articulating a shared relationship with stakeholders, outlining steps to regain normalcy, and identifying resilience as a salient outcome.

### **Crisis Communication and Reward-Based Crowdfunding**

Entrepreneurial ventures raising capital through reward-based crowdfunding encounter distinct challenges compared to large organizations. Large firms generally have more slack resources (Wan & Yiu, 2009) and greater legitimacy with customers and investors, which can be leveraged to obtain more resources (Kackovic & Wijnberg, 2022; Singh et al., 1986). Given the importance of resources for survival, this provides large firms with a buffer against the disruptive effects of crises. If a societal crisis reduces the pool of available external resources, large firms are less likely to lose access to these funds than entrepreneurial ventures, which are often perceived as less legitimate.

To maintain access to external funding, entrepreneurs can enhance their perceived legitimacy by tailoring their communications to align with stakeholder expectations (Lounsbury & Glynn, 2001; Martens et al., 2007). This approach is particularly important in reward-based crowdfunding, where entrepreneurs primarily interact with resource providers through online narratives (e.g., Anglin et al., 2018a; Chandler et al., 2024). However, using these communications to build legitimacy may limit the range of communication approaches available to entrepreneurs compared to larger, established firms. For instance, an established firm with a long operating history may not need to address product delivery concerns as promptly as entrepreneurs if customers take for granted their ability to deliver.

Reward-based crowdfunding presents additional challenges for entrepreneurs due to the community logic that focuses stakeholders' attention on shared values, unity, and the norms of the

community surrounding the entrepreneur and venture (Fisher et al., 2017; Wessel et al., 2022). This logic influences stakeholder expectations regarding how entrepreneurs engage with their community for resource acquisition (e.g., Murray et al., 2020). As a result, these backers have both an economic interest in the venture, driven by the promise of the product or service being developed, and a non-economic interest, driven by community norms and values.

While fundraising during stable times is challenging, this challenge is magnified by the heightened uncertainty and varied stakeholder demands accompanying crises. At the same time, there is a limited understanding of how entrepreneurs communicate with reward-based crowdfunding backers during crises to sustain these relationships. We explore this vexing question by investigating how entrepreneurs who raised funds using reward-based crowdfunding communicated with backers during the onset of the COVID-19 pandemic.

## **OVERVIEW OF STUDIES**

The COVID-19 crisis offers a valuable context for observing entrepreneurial communications with backers due to the widespread societal disruptions it caused. For entrepreneurs, the uncertainty created by COVID-19 compounded the challenges they faced due to liabilities of newness, wherein backers and other stakeholders perceive new ventures as likely to fail (Stinchcombe, 1965). To understand how entrepreneurs communicate with stakeholders during such societal crises, we use a two-study research approach that employs observational analysis of naturally occurring phenomena to identify patterns, which are then manipulated experimentally to isolate and understand their effects (e.g., Chatman & Flynn, 2005; Tunarosa & Glynn, 2017). This method provides a rich qualitative understanding of the phenomenon and allows for the assessment of important causal relationships (e.g., Cialdini, 2001).

In our first study, we conduct a qualitative content analysis of 40 Kickstarter crowdfunding campaigns active during the early stages of the COVID-19 crisis. This analysis helps identify how

entrepreneurs communicate with backers during societal crises, with coding schemes emerging from the characteristics of the communications. However, it is difficult to ascertain the extent to which these communication strategies enable or disable entrepreneurs using these data.

Crowdfunding communications are varied—entrepreneurs may use multiple communication strategies within and across interactions, making it difficult to isolate the effects of individual strategies on backers’ investment decisions. This challenge is exacerbated by the lack of transparency in individual backers’ decision-making processes in crowdfunding field data. While entrepreneurs’ communications are generally visible to prospective, current, and former backers, only current backers can post to the campaign’s Kickstarter page. Moreover, current backers may read campaign updates and take investment actions, such as canceling their pledges or contributing additional funds, without responding to entrepreneur messages.

To address these limitations, the second study involves a vignette experiment **of 411 MTurk participants who had previously backed crowdfunding campaigns. In this study, we** examine the consequences of resource expansion on the identified communication strategies. By manipulating communication strategies from the field data, we systematically test different configurations to isolate the effects on backers’ investment decisions.

## **STUDY 1: QUALITATIVE CONTENT ANALYSIS**

### **Data Collection**

Kickstarter is a leading reward-based crowdfunding platform and has helped over 262,000 campaigns raise \$8 billion in funding (Kickstarter, 2024). Kickstarter hosts various campaigns, ranging from artists raising money for performances to technology entrepreneurs securing financing to develop high-tech devices. To ensure we examined traditional entrepreneurs (as opposed to, for example, filmmakers), we focused on campaigns making tangible products in the Product Design category.

For our study, we selected campaigns that were active during the onset of the COVID-19 crisis, specifically between January 28, 2020, and June 2, 2020. Communication with crowdfunding backers is critical during the onset of a crisis, which is characterized by heightened uncertainty due to a lack of information (Klyver & Nielsen, 2021). By communicating with backers, entrepreneurs can influence backers' sensemaking regarding the crisis and its possible effects on their resourcing decisions. Later, when the effects of a crisis are better understood, entrepreneurs' communications may not be as varied or impactful.

According to webrobots.io data, there were a total of 804 Product Design campaigns active during our sampling frame. We used theoretical sampling to identify campaigns for our analysis. Theoretical sampling is a qualitative case identification approach in which cases are selected based on their potential to provide novel insights that inform the emergent theoretical framework (Glaser & Strauss, 1967). This method involves iterative data collection until theoretical saturation is achieved, meaning new cases no longer contribute significant theoretical insights. To understand the differences in how entrepreneurs communicate with backers during societal crises, we selected 40 diverse cases from our sampling frame. These cases were chosen to capture different dimensions and approaches in entrepreneurs' crisis communication.

First, we wanted to collect campaigns from different points during the onset of the crisis. The World Health Organization (WHO) first reported an unknown pneumonia in Wuhan City in January 2020 and declared the spread of the virus a pandemic on March 11, 2020. We selected campaigns launched after December 2019, encompassing both pre- and post-WHO pandemic announcement periods. Although the WHO announcement marked the official beginning of the pandemic, international news reporting and emergency procedures regarding COVID-19 began prior to this date. For instance, CNN Health published an article, "Coronavirus explained: What you need to know," on January 20, 2020 (Christensen & Senthilingam, 2020), and the WHO convened an emergency

committee that identified COVID-19 as a public health emergency of international concern on January 30, 2020 (World Health Organization, 2020). The inclusion of campaigns launched before the official pandemic announcement enabled us to examine how entrepreneurs communicated in the early stages of the crisis when information was scarce. This approach also increased variability in where the crisis communications took place. For instance, the earliest campaigns in our sample were unlikely to mention the crisis in the main campaign text, whereas later campaigns were more likely to do so.

Second, we aimed to include campaigns from both the United States and abroad, as communication norms and expectations vary both within and between countries (Hall, 1976; Tung, 1993). By including campaigns launched by entrepreneurs from around the world, we increased the diversity of communication preferences in our sample, reducing the likelihood of bias toward any specific cultural communication style. Finally, we sought to include campaigns with diverse fundraising goals<sup>1</sup> and varying levels of fundraising success (for closed campaigns).

We identified campaigns during the early months of the pandemic by visiting the Kickstarter page and using several filter and sort options to select a diverse group of campaigns. We collected our sample via an iterative, constant comparison process (Glaser & Strauss, 1967; Suddaby, 2006). This process involved concurrently collecting and analyzing texts and then identifying additional campaigns to uncover more nuanced themes emerging from the current sample (e.g., Gioia et al., 2010). After analyzing the communication texts of 36 campaigns, we reached a point of “theoretical saturation,” where the analysis of new campaigns did not result in substantive refinement (Glaser & Strauss, 1967; Mathias et al., 2018). As described below, four additional campaigns were added because of our

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<sup>1</sup> We included three crowdfunding campaigns (8, 19, 27) with funding goals below US\$1,000. While it is common in large samples to exclude such campaigns to eliminate perfunctory fundraising efforts (e.g., Huang et al., 2022; Li & Wang, 2019; McSweeney et al., 2022), these campaigns were chosen for their demonstrated effort and engagement. Campaigns 19 and 27 were selected for their extensive backer interaction and product development, and campaign 8 was selected for its active communication with backers, despite a simpler campaign page and unsuccessful funding.

procedure, which included checks on our second-order themes. Details on the campaigns selected are available on the manuscript OSF page (<https://osf.io/u8cr6/>).

The initial sample comprised 36 campaigns: 21 from the United States, five from the United Kingdom, two from Hong Kong, two from Australia, and six from other countries. Funding goals ranged from US\$258 to US\$136,000, with a median of US\$8,210. Total funds raised ranged from US\$21 to US\$1,925,728, with a median of US\$3,797. Of the four campaigns used as checks, two were from the United States, and the others were from the United Kingdom and Spain. Funding goals ranged from US\$2,000 to US\$35,000, with a median of US\$12,306. Total funds raised ranged from US\$4,808 to US\$52,434, with a median of US\$15,939.

To examine and analyze each campaign, we collected main text, videos, updates, frequently asked questions, and backer comments. Some campaigns also featured links to a venture website containing a blog or other content. Finally, many campaigns had social media accounts associated with the entrepreneur, venture, or product. We collected venture websites and social media posts where available. By analyzing diverse data sources, we minimized the threat of missing key communications that might influence backers' decisions.

Campaign updates, backer comment pages, and social media texts sometimes involve reciprocal interactions between entrepreneurs and stakeholders (e.g., Cornelis et al., 2022). Because our research questions focus on how entrepreneurs communicate crisis-related information to backers, our coding concentrated on the communications from the entrepreneur to the stakeholders. However, we coded all messages in each thread.

In sum, for our initial sample, we collected and coded 709 pages of text from the crowdfunding platform and 102 pages of text from linked websites. We also coded 56:50 minutes of campaign video from the 29 (81%) campaigns that featured a video and all social media posts for the 17 campaigns that linked to social media accounts. For the four campaigns used as checks, we coded 80 pages of text

from the crowdfunding platform and 79 pages of text from linked websites. We coded 10:54 minutes of video for the four campaigns and all social media posts for the three campaigns that linked to social media accounts. For social media, meaningful page counts are difficult to estimate due to the volume of threaded posts and the non-paginated format of various social media platforms.

### **Categorical Analysis**

Our analysis began by investigating the approaches entrepreneurs used to interact with stakeholders about the COVID-19 crisis in our initial sample of campaigns. These initial observations yielded a collection of first-order concepts (e.g., Gioia et al., 2013), reflecting the detailed communication approaches used in the interactions. These first-order concepts were recorded using the terminology of the entrepreneur or backer where possible to maintain fidelity with the source material (e.g., Hsieh & Shannon, 2005). We continued collecting and analyzing data until analyses no longer yielded additional first-order concepts (i.e., theoretical saturation; see Glaser & Strauss, 1967; Mathias & Fisher, 2022).

After 36 campaigns, the list of initial codes stabilized. We then used axial coding to link the first-order concepts from entrepreneur–backer communications to second-order themes grounded in an emergent theory of entrepreneurial communication during crises (e.g., Eury et al., 2018; Strauss & Corbin, 1998). To validate our second-order themes, we collected data from four additional campaigns, resulting in a final sample of 40 campaigns. We analyzed each of these additional campaigns to confirm that the researcher-generated themes and the linkages between first-order concepts and these themes accurately reflected how entrepreneurs communicated. The final step was identifying the aggregate dimensions to which our second-order themes belong (e.g., Corley & Gioia, 2004; Gioia et al., 2013). Representative quotes associated with the four second-order themes related to the contents of the entrepreneur’s communication strategy are presented in Table 1. The data structure diagram



showing the first-order codes, researcher-generated second-order themes, and aggregate dimensions linking the second-order themes is presented in **Figure 1**.

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## **STUDY 1: FINDINGS**

### **No Communication**

Ten of the 40 entrepreneurs in our sample did not communicate with stakeholders about COVID-19. Of these, eight campaigns were actively raising funds during or shortly after the WHO's March 11, 2020, announcement that COVID-19 had become a pandemic. None of these eight campaigns successfully reached their fundraising goals. On the other hand, both campaigns (7 and 15) that ended before the WHO announcement successfully met their fundraising goals. While neither campaign specifically interacted with backers regarding the pandemic, both continued to post updates and comments about the development and delivery of their rewards. The remaining 30 campaigns communicated with backers about the pandemic.

### **Timing of Interaction**

Consistent with previous research (e.g., Bundy et al., 2017; Claeys & Cauberghe, 2012), the timing of the communications between entrepreneurs and backers helped shape stakeholder interactions. However, global and pervasive traditional and social media coverage of the crisis meant that backers were already familiar with the situation before entrepreneurs could address it. This situation gave entrepreneurs two options regarding the timing of their communications with backers: proactive or reactive communication.

*Proactive* communication occurs when entrepreneurs initiate crisis-centric messages without being prompted by an inquiry or comment. For example, Campaign 13, which proposed manufacturing

a novel hygiene-oriented toilet bowl brush in China, anticipated backer concerns regarding supply chain disruptions and proactively addressed them, noting:

Situation in China – Now, unfortunately, is not the best time in history to be manufacturing in China. We are in close contact with our manufacturing partners who are currently open and operating. Most of our immediate work can be conducted online rather than in person, so we are hopeful not to be delayed by factory closures or travel disruption.

In non-crisis times, crowdfunding is fraught with information asymmetries arising from less regulated disclosure norms and requirements in crowdfunding compared to other funding contexts (Courtney et al., 2017). The addition of a crisis further heightens uncertainty regarding the entrepreneur’s ability to deliver the product or service promised by the campaign. Proactively communicating with backers about the crisis may signal the entrepreneur’s intention to reduce the uncertainty backers feel by addressing the heightened information asymmetries caused by the crisis.

*Reactive* communication occurs when crisis-centric messages are initiated by an external stakeholder’s inquiry or comment. As COVID-19 and mitigation efforts became more disruptive, uncertainty grew regarding entrepreneurs’ ability to deliver rewards promptly. If entrepreneurs did not proactively provide backers with information, backers often explicitly raised concerns seeking this information. Campaign 25 sought to raise money to develop and manufacture a compact wallet early in the pandemic but did not proactively address how the crisis might affect the campaign. One backer asked, “Will the coronavirus affect the production/shipment of the wallets? Might want to look into that and make an update or official post, just to set a proper expectation.” The entrepreneur responded by highlighting the steps they had taken to ensure on-time shipment:

We are keeping in touch with the factory and they promise us [they] will be good to finish the production within 30 days. That means we should finish all surveys as fast as we can and drop the orders earlier. Once the production is done, we will pack it after QC [quality control] and send the wallet to all backers.

Entrepreneurs risk goodwill with backers by waiting to be prompted to provide them with information. Unlike traditional investors, who can involve themselves in formal governance processes, crowdfunding backers have limited access to information about the venture beyond what the

entrepreneur shares. As a result, these individuals are often unaware of what questions they should ask to monitor the entrepreneurs' use of their contributions effectively. If backers sense that an entrepreneur is likely to share information only when prompted, they may perceive the venture as a poor candidate for funding.

### **Nature of Interaction**

Societal crises such as COVID-19 impact a broad group of stakeholders and may cause psychological, environmental, and sociocultural damage in addition to economic damage (e.g., James et al., 2011). The multifaceted impact of these crises creates challenges and opportunities for entrepreneurs to engage in various types of sense-giving with stakeholders (e.g., Sonenshein, 2006). In our context, the collective effort and engagement of non-professional resource providers (crowdfunding backers) add a non-economic, community-oriented aspect to the relationship (Fisher et al., 2017). The hybrid economic/non-economic nature of reward-based crowdfunding creates multiple approaches to engage with backers. Entrepreneurs can use a utilitarian approach that addresses the potential effects on the economic aspects of the relationship, such as the probability that backers will receive promised rewards in a timely manner. Alternatively, entrepreneurs can use a personal approach, emphasizing the broader human impacts of the crisis, such as the well-being and resilience of themselves and their stakeholders.

*Personal* communication occurs when entrepreneur interactions with backers emphasize the crisis' effects on non-economic concerns over the financial and product-related goals of the crowdfunding campaign. Crowdfunding backers are often motivated to contribute for non-economic reasons, such as wanting to feel part of the entrepreneurial process, or to satisfy social and affective needs, such as belongingness and identification (e.g., Fisher et al., 2017; Jiang et al., 2021). Being perceived as caring and compassionate during crises may positively influence stakeholders' emotional reactions toward the entrepreneur and the venture (Dutton et al., 2002).

Entrepreneurs addressed their and backers' personal concerns regarding the crises' impacts in several ways. Several entrepreneurs emphasized personal expressions of hope that backers were "safe" and "healthy" during the pandemic, discussed how the crisis was impacting them personally, or offered suggestions on how to cope with the stress of the pandemic. Others emphasized non-economic aspects of the campaign, such as noting that enforced public health restrictions would create opportunities for backers to enjoy valued personal activities. Another group sought ways to provide help to backers who were affected by the crisis. In one striking example, an entrepreneur offered help in response to a backer's frustration about toilet paper shortages early in the crisis. A Campaign 22 backer wrote:

I'm living in a small town that has no toilet paper for sale in the stores for about a month now. [...] Me and my family weren't super worried until last week, when we finally used up the last of our own winter emergency supply of TP!

The entrepreneur of Campaign 22 was developing a bidet and had purchased toilet paper as a prop for their pitch video. In response to this backer's comment, the entrepreneur offered to send them toilet paper: "We had a good amount of TP because of the Narsehole shoot, so I'd be happy to send you some :) just email me your address! [...] I'm for real on the TP offer!"

*Utilitarian* communication occurs when an entrepreneur interacts with backers by emphasizing the effect of the crisis on the campaign or the development/sale of the associated product/service. Even when influenced by non-economic criteria, backers place value on receiving their rewards promptly (e.g., Mollick, 2014). Entrepreneurs who engage with backers using a utilitarian approach reinforce the economic and transactional aspects of the relationship.

Many campaigns active during the onset of the COVID-19 crisis discussed crisis-related risks, such as uncertainty regarding the timing and cost of developing the product, on the main campaign page. However, campaigns that received funding before the WHO pandemic announcement also engaged with stakeholders about potential delays through campaign updates and comments. Some entrepreneurs leveraged the crisis as an opportunity to reinforce the utilitarian benefits of their product

(e.g., hygiene-oriented, suitable for use while social distancing). For instance, on Campaign 38's main page, the entrepreneurs highlighted perceived public health threats associated with COVID-19:

“Everyday objects such as light switches, door handles, trolleys and similar are constantly exposed not only to contact, but also to other influences such as coughs and sneezes that can easily transmit the virus to you.” On the same page, the entrepreneurs included pictures and videos demonstrating how their product would prevent individuals from having to touch these items and articulated several benefits of the antimicrobial plastics used in the product.

### **Target of Concern**

During a crisis, communication with traditional investors may focus on the impact on the venture because the entrepreneur–investor relationship is mainly transactional and economic (e.g., Fisher et al., 2017). Reward-based crowdfunding backers may shift their attention to other targets of concern. Establishing a connection with the broader community supporting the venture is vital in crowdfunding, and backers expect entrepreneurs to communicate how their venture will contribute to the community (Fauchart & Gruber, 2011; Fisher et al., 2017; Thornton et al., 2012). Whereas focusing narrowly on the concerns of the entrepreneur and their venture may be appropriate in traditional funding contexts, acknowledging the concerns of other stakeholders may resonate with reward-based crowdfunding backers, who expect entrepreneurs to communicate their contributions to the broader community supporting the launch of their venture (Fisher et al., 2017).

*Entrepreneur-focused* communications emphasize the concerns of, or how the crisis affects, the entrepreneur or their venture. This focus on the entrepreneur/venture was occasionally personal, highlighting the campaign's impact on the entrepreneur. Campaign 35 noted on a social media page that “We are taking this quarantine one day at a time and focusing on spending a few minutes every day on being positive and looking towards the future.” However, most instances were utilitarian, discussing how the pandemic affected the entrepreneur or their business. For instance, Campaign 33

highlighted that although COVID-19 was affecting the area, his business model was resilient to steps taken by the local government:

There is currently no disruption with our parts and supplies. We have not been asked to shut down operations as we are a manufacturing facility without public access or walk-in customers. We are a family-owned and operated business, so we are able to practice social distancing without risk to the public or ourselves.

*Other-focused* communications emphasize the concerns of individuals other than the entrepreneur. These communications were largely consistent with empathic crisis communications aimed at influencing perceptions of care and compassion (see König et al., 2020). Unlike entrepreneur-focused communications, other-focused communications more frequently addressed the personal concerns of backers. Many campaigns directed concern toward the well-being of the venture's backers. These interactions often conveyed wishes for backers' health, but several went deeper. In one case, Campaign 24 posted a campaign update asking backers to share their stories and connect with them:

We're likely entering a phase where human connection is scarce. We [...] would love to take this opportunity to connect with you more deeply. Tell us how you and your family are dealing with the crisis, just so you can tell someone. [...] We're all carrying so much extra around inside us right now, it's important to let it out.

## STUDY 2: VIGNETTE EXPERIMENT

Our qualitative content analysis reveals that reward-based crowdfunding entrepreneurs vary their communication with backers during societal crises across three dimensions: timing, target, and nature. Recent research in entrepreneurship and crisis communication suggests that these communication dimensions may influence reward-based crowdfunding backers' funding decisions. For instance, crisis communication research drawing on inoculation theory (e.g., Dillingham, 2024) suggests that proactive communication may mitigate backers' negative responses to campaign disruptions associated with the crisis. Similarly, the community logic underlying reward-based crowdfunding (see Fisher et al., 2017) suggests that backers may prefer entrepreneurs who address the concerns of the broader community involved in launching the new product rather than focusing solely on the entrepreneur and their venture. However, the context in which our field data were observed

makes it challenging to ascertain the crowdfunding performance implications of these communication strategies. To complement our qualitative content analysis, we conducted a vignette experiment in which we manipulated the communication strategy used by entrepreneurs to test our second research question: *How do the timing, nature, and target of entrepreneurs' crisis communication strategies influence backer support?*

### **Participants and Procedure**

Following previous crowdfunding work, we created our vignette by adapting a campaign drawn from our observational data in the Product Design category. Campaigns in this category provide an attractive option for examining entrepreneurial fundraising because they tend to develop innovative products spanning a range of industries (Chan et al., 2020; Rose et al., 2021).

We used several criteria to identify a campaign to adapt for the vignette. Initially, we focused on campaigns that achieved their fundraising targets but were not outliers in terms of total funds raised or the percentage of the fundraising goal achieved. We then narrowed our selection to campaigns that displayed product prototype photos but where the product was not yet ready to be shipped to all backers. These screening criteria were used to ensure a wider range of variability in our crowdfunding performance dependent variable. For example, campaigns presenting an overwhelmingly appealing product with guaranteed timely delivery are more likely to attract investment regardless of the entrepreneur's communication strategy. From the remaining campaigns, we prioritized those where the entrepreneur used multiple communication strategies with campaign backers, allowing us to incorporate the entrepreneur's actual words into the vignette.

Based on these criteria, we selected the Revolución II campaign, which successfully raised \$20,476 (4.1 times their fundraising goal) to develop handmade pen/pencil sets from Cuban mahogany with historical ties (i.e., Schumacher, 2020). We shortened the main campaign page for readability but retained the original campaign words and pictures to maintain realism. To manipulate the

entrepreneur's communication strategy, we created eight conditions for each combination of three aggregate dimensions: timing (proactive vs. reactive), target (entrepreneur vs. other), and nature (personal vs. utilitarian). Our ninth condition was a control in which no communication regarding the COVID-19 pandemic occurred.

Further, following previous crowdfunding research, we recruited participants using Amazon's Mechanical Turk (e.g., Allison et al., 2022; Chan et al., 2020; Cornelis et al., 2022; Oo et al., 2019; Rose et al., 2021). The Mechanical Turk platform comprises a diverse participant pool of individuals who are paid a nominal fee for completing tasks such as responding to surveys. Many participants have backed one or more reward-based crowdfunding campaigns, creating a large pool of potential participants to ensure adequate statistical power (e.g., Chan et al., 2020). Like reward-based crowdfunding backers, these individuals often do not have formal investment training or experience and are likely to make decisions more like consumers than professional investors (Johnson et al., 2018). Indeed, previous studies that compare M-Turk respondents on crowdfunding tasks with the demographics reported by leading crowdfunding platforms suggest similar demographic profiles between the two groups (Chan & Parhankangas, 2017; Younkin & Kuppaswamy, 2018).

Given our effect size expectations, we recruited 453 adults to be randomly assigned across the nine conditions. To ensure external validity, we verified that each had previously invested in at least one crowdfunding campaign. Data collection took place in November 2020 when COVID-related business impacts were prevalent and salient. Respondents were paid \$2.00 for completing the 10-minute survey. Attention checks and survey timers led to 34 responses being removed for inattentive and careless responses (Aguinis et al., 2021). Eight others were removed for not carefully reviewing materials (they spent an average of 8.82 seconds reviewing the campaign and communication pages compared to the average time spent of 164.40 seconds). In total, our sample numbers 411 participants.<sup>2</sup>

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<sup>2</sup> The demographic breakdown of the final sample is provided on the manuscript OSF page.



After completing several screening questions, participants viewed the vignette, which presents the crowdfunding campaign and is the same for all participants. Next, participants were randomly assigned to one of the nine conditions. This random assignment resulted in 41–54 participants being assigned to each condition. Participants then reviewed the communication excerpt associated with their condition and answered manipulation check questions to identify if they perceived the manipulations. To minimize potential bias from being asked about the manipulation, all participants received the same manipulation check questions regardless of their condition assignment. Participants then indicated how much they would contribute to the campaign, followed by control and demographic questions.

### **Manipulations**

To manipulate proactive vs. reactive *timing*, we presented the communication as occurring on a campaign update page. Campaign updates are initiated by entrepreneurs to present new information following the launch of a campaign and include comment sections where backers may engage in a dialogue with the entrepreneur. In the *proactive* conditions, the entrepreneur addressed the pandemic in the text of the update. In the *reactive* conditions, a backer was presented as asking the entrepreneur, “Can you provide an update regarding the COVID-19 situation?” in the comment section of an update page. The entrepreneur’s response followed that prompt. The content of the entrepreneur’s communication did not differ between proactive and reactive conditions.

In manipulating the *target* of the communication (entrepreneur vs. other), we focused the communications on the entrepreneur or the backers. All conditions began with language drawn from an update in the actual Kickstarter campaign: “Before the COVID-19 crisis hit, we were rockin' and rollin' on this project.” The following sentence was manipulated to reflect the target of emphasis. Participants in the *entrepreneur* conditions received, “However, the effects of the crisis have had a profound effect on the campaign.” Participants in the *other* conditions received, “However, I know the effects of the crisis must be having a profound effect on many of you as well.”

To manipulate the *nature* of the communication, the sentence manipulating the target of emphasis was followed by a utilitarian or personal statement. Because the target of emphasis in the previous sentence differed, this informs the language used in conveying nature. Considering this dynamic, we sought to maintain fidelity with how entrepreneurs in the observational data used language. For instance, in the *other-utilitarian* conditions, the entrepreneur said, “I know the effects of the crisis must be having a profound effect on many of you as well. This is all the more reason we are focused on getting you your rewards as soon as possible.” In the *entrepreneur-personal* conditions, the entrepreneur said, “However, the effects of the crisis have had a profound effect on me personally. The schools in my area are still completely online, so I have had to spend a lot of my time taking care of my kids.” All vignette text manipulations are presented in the online OSF repository.

### **Dependent Variable**

In crowdfunding, resource expansion—the increase in resources made available to the venture (Kimjeon & Davidsson, 2022)—occurs through the aggregation of many individual backers’ decisions to contribute to a campaign. To measure backers’ willingness to contribute, we asked, “If you had \$100 you were willing to devote to crowdfunding campaigns, how much would you contribute to this campaign?” (e.g., Greenberg & Mollick, 2017). This was presented as a constant sum where backers could allocate funds to either “this campaign” or “other campaigns.” We used the amount backers would contribute to the given campaign as our dependent variable; responses ranged from \$0 to \$100.

### **Covariates**

In addition to using random assignment, we also collected several variables that offer plausible alternative explanations for why an individual might contribute to a campaign. Situational crisis communication theory suggests that stakeholders’ behavioral intentions are influenced by their effects on attributions of responsibility and organizational reputation (Coombs & Holladay, 2002). To control for this, we measured *attributions of responsibility* for both COVID-19 and the product delivery delay

by adapting Lerner et al.'s (1998) measure to the crowdfunding context. The reliability coefficients were 0.87 and 0.92, respectively. *Reputation* was measured using Coombs and Holladay's (2002) measure and had a reliability coefficient of 0.92. Crisis communication research also highlights the importance of perceived empathy (e.g., König et al., 2020). To control for *perceived empathy*, we adapted Plank et al.'s (1996) measure of perceived empathy to a crowdfunding context. The reliability coefficient was 0.97.

We found high correlations between attributions of responsibility for the crisis and for the delay ( $r = 0.81$ ;  $p < 0.01$ ) and between reputation and perceived empathy ( $r = 0.81$ ;  $p < 0.01$ ). When included in our models, these variables caused multicollinearity, which is a threat to the validity of our findings. Thus, the model we present only includes the responsibility for the delay and reputation variables, and we replace these controls with the alternative controls in robustness checks posted to OSF.

Additionally, we asked participants to respond to four prompts regarding their *familiarity with crowdfunding* because familiarity with crowdfunding communication norms may affect how backers respond to entrepreneurs' communication strategies. Sample items included: "I have a good idea of what crowdfunding projects look and feel like" and "I have sufficient knowledge of crowdfunding to evaluate crowdfunding projects." Responses were on a five-point scale from "strongly disagree" to "strongly agree." The reliability coefficient was 0.79. Finally, we control for *social desirability* bias using Strahan and Gerbasi's (1972) 10-item measure. The reliability coefficient for the social desirability scale was 0.81.

## STUDY 2: RESULTS

### Manipulation and Assumption Checks

After viewing the campaign and communications with backers, we asked participants to respond to three items using a five-point Likert scale: "The entrepreneur initiated discussion of the crisis without being prompted to do so by a backer," "The entrepreneur's discussion of the crisis was

focused on the needs and concerns of the entrepreneur or campaign rather than the needs and concerns of backers,” and “The entrepreneur’s discussion of the crisis was more focused on personal issues than on campaign/product issues.” All manipulation checks were consistent with the conditions (proactive:  $F = 391.34; p < 0.01$ ; entrepreneur:  $F = 17.32; p < 0.01$ ; personal:  $F = 80.64; p < 0.01$ ).

### **Main Analysis**

Table 2 presents the summary statistics and correlation matrix for our experiment data. We used an ANCOVA model to identify the extent to which the communications strategy influenced potential backers’ willingness to invest. Table 3 presents the results of this analysis.

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Our ANCOVA analysis found a significant effect of entrepreneur-oriented language ( $F = 4.57; p < 0.01$ ) and a suggestive but insignificant effect of personal language ( $F = 3.46; p = 0.06$ ). Proactive communication was not significant ( $F = 0.50; p = 0.48$ ). The two-way interactions were also not significant (proactive  $\times$  personal:  $F = 0.86, p = 0.35$ ; proactive  $\times$  entrepreneur:  $F = 0.04, p = 0.83$ ; personal  $\times$  entrepreneur:  $F = 1.86; p = 0.17$ ). However, we found a significant relationship for configurations of the three dimensions (proactive  $\times$  personal  $\times$  entrepreneur:  $F = 6.07, p < 0.05$ ). We plotted the predictive margins for the three dimensions. As shown in Figure 2, the proactive  $\times$  personal  $\times$  other-oriented communications strategy—a strategy wherein the entrepreneur initiates discussion of the crisis with an emphasis on the non-financial concerns of individuals other than the entrepreneur—is the most effective at soliciting funds during a crisis. The participants in this condition stated they would contribute an average of \$42.54 to the campaign, \$20.84 more than those in the reactive condition wherein the entrepreneur emphasized their personal concerns and \$27.05 more than those in the condition where the entrepreneur did not communicate about the crisis at all.

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To probe the mechanism underlying the strong responses to the proactive × personal × other-oriented strategy, we examined participants' text responses to an open-ended prompt presented at the end of the survey: "In a few sentences, please briefly explain why [you chose to contribute this amount]." Perceived trustworthiness was a common theme. One participant noted, "I strongly believe this campaign will be successful and it's an honest campaign." Another backer lauded the "integrity that they've shown during the course of their project."

On the other hand, participants in other conditions often highlighted a lack of trust in the entrepreneur. One backer who received the same communication (personal × other) but in a reactive timing condition noted that "the founder gave no substantive update on what impact COVID is having and dodged the question" and suggested that the entrepreneur be "more transparent and [give] more concrete details on milestones." A backer in the reactive × utilitarian × entrepreneur condition offered a similar comment: "I don't trust their message. It sounds like they are making excuses."

Backers have limited visibility into and control over how their contributions are used in reward-based crowdfunding, making the perceived trustworthiness of the entrepreneur and their venture critical to funding outcomes (e.g., Johnson et al., 2018). Perceptions of trustworthiness are even more critical during crises when uncertainty is heightened and resources are more difficult to obtain. The proactive × personal × other-oriented communication strategy appears to encourage these perceptions in reward-based crowdfunding better than other configurations.

Perceptions of trustworthiness are influenced by three key factors: ability, benevolence, and integrity (Mayer et al., 1995). Existing research suggests that communicating care for the personal needs of others during a crisis shows the entrepreneur's empathy and could lead to perceptions of trustworthiness driven by benevolence (e.g., Kellett et al., 2006; König et al., 2020). However, this empathic path does not fully explain the superior performance of the proactive × personal × other-

oriented communication strategy. In our robustness tests, this communication strategy remained significant when controlling for empathy ( $F = 6.16; p = 0.01$ ).

### **Post Hoc Analyses**

Entrepreneurial finance research indicates that investors' demographics influence how they evaluate entrepreneurs' ventures. For instance, female backers are more likely to invest in female-led reward-based crowdfunding campaigns to help others who have experienced similar gender-related structural barriers (Greenberg & Mollick, 2017). Similarly, venture capitalists are more likely to fund entrepreneurial ventures when the founders have comparable educational and professional backgrounds (Franke et al., 2006). These demographic characteristics may also influence reward-based crowdfunding backers' preferences for entrepreneurs' communication during a crisis.<sup>3</sup>

We conducted a two-stage analysis to explore how the demographic characteristics of our experiment participants influenced their funding decisions. In the first stage, we used the *Scattertext* Python package (i.e., Kessler, 2017) to analyze the language used by participants to explain why they chose to contribute a certain amount of funds to the entrepreneur in the vignette. This tool performs a text analysis that discerns the words frequently used by researcher-identified groups within the dataset (e.g., male versus female participants). For most of the demographic characteristics examined, the analyses did not produce interpretable results. However, a discernible pattern emerged when comparing language use between participants who identified as male and those who identified as female. Several words emphasized by men concerned the reward being offered (e.g., “pens,” “pen,” “set,” “Cuban,” “wood,” “reward,” and “Cuban revolution”). Conversely, several words emphasized by women related to personal concerns (e.g., “help,” “support,” “story,” “people,” “gift”).

In the second stage, we added participant gender to our main analysis as an interaction term with our communication strategy variables. The results suggested that women respond particularly

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<sup>3</sup> We thank an anonymous reviewer for highlighting this possibility.

strongly to the top-performing communication strategy from our main analysis (i.e., proactive  $\times$  personal  $\times$  other-oriented; Partial SS = 3627.34;  $F = 5.04$ ;  $p < 0.05$ ). Together with the text analysis, these findings provide preliminary evidence that backer gender might influence their preference for the nature of the concerns (personal vs. utilitarian) entrepreneurs communicate during a crisis.

In our main analyses, we find that proactively addressing the personal concerns of others outperforms other communication strategies during a crisis. However, entrepreneurs may address personal and utilitarian concerns in one communication. Because crises can have multiple effects, balancing personal and utilitarian concerns in stakeholder communications may perform better than addressing them in isolation.

To explore this, we extended our factorial design from  $2 \times 2 \times 2$  to  $2 \times 2 \times 3$ , incorporating four additional conditions to represent combinations of personal and utilitarian messages. An additional 200 participants were recruited from Amazon's Mechanical Turk for these new conditions, and we applied the original analysis screening criteria to obtain 156 usable responses. We employed the same ANCOVA model used in the main analysis, with Tukey HSD tests to conduct pairwise comparisons between the combined and isolated personal and utilitarian conditions (e.g., Haider et al., 2021).

While addressing personal and utilitarian concerns was associated with larger crowdfunding contributions across all conditions, the pairwise comparisons were only statistically significant for three. When communicating proactively with backers, addressing both concerns led to more considerable crowdfunding contributions only when compared to addressing the utilitarian concerns of others (i.e., Contrast = 29.19; 95% CI = [7.06, 51.31]). For reactive communications relating to the entrepreneur, addressing both concerns outperformed both utilitarian (i.e., Contrast = 24.06; 95% CI = [3.25, 44.86]) and personal (i.e., Contrast = 23.27; 95% CI = [3.39, 43.15]) concerns in isolation.

## DISCUSSION

Communicating with backers is crucial **when** raising capital through reward-based crowdfunding (e.g., Anglin et al., 2018a; McSweeney et al., 2022). The onset of a societal crisis introduces significant uncertainty, and a failure to communicate risks the firm losing access to resources it might otherwise have secured. However, for entrepreneurs who communicate with **backers**, the characteristics of the crisis and the entrepreneur's communication strategy influence whether the crisis poses a threat or creates potential opportunities.

### Implications for Research

Our findings suggest that the controllability of the event should influence entrepreneurs' **communication approach**. During an uncontrollable societal crisis like COVID-19, entrepreneurs raising funds through reward-based crowdfunding benefit from a communication repertoire that has three dimensions: timing (proactive vs. reactive), target (entrepreneur vs. other), and nature (utilitarian vs. personal). How entrepreneurs crafted their crisis communications with respect to these three dimensions influenced the funding reward-based crowdfunding backers were willing to provide them.

**We found via** a vignette experiment that entrepreneurs obtained more funding from individual backers when they proactively engaged with **backers'** personal concerns. Participants in this condition stated they would contribute an average of \$42.54 to the campaign. This figure contrasts with the average \$21.10 per participant for those in the reactive condition wherein the entrepreneur emphasized their personal concerns. The reactive condition was the poorest performing (aside from no communication at all). Participants who were told the entrepreneur did not communicate about the crisis at all contributed only an average of \$15.49 per participant.

Participant feedback from the vignette experiment suggested that trustworthiness driven by the perceived integrity of the entrepreneur may explain the disparity in funding outcomes. Community-oriented values are particularly salient in crowdfunding (e.g., Fisher et al., 2017) **and** social support



beyond mere transactional reciprocity is a common characteristic of communities (Wellman & Wortley, 1990). In reward-based crowdfunding, this support often manifests in the collective contribution of funding, energy, and creativity toward the development of a novel product (e.g., Murray et al., 2020). However, the community logic often leads participants to share an emotional connection with each other and the campaign (Fisher et al., 2017; Li et al., 2017). Proactively expressing concern for the well-being of the community that brings the project to life aligns with the values associated with reward-based crowdfunding, which explains why our participants used the words “honest” and “integrity” when describing why they would support entrepreneurs using a proactive, personal, other-oriented crisis communications strategy.

In our *post hoc* analyses, we found that a combined utilitarian and personal communication strategy outperformed all reactive communication strategies and two of the four proactive strategies (i.e., personal × entrepreneur and utilitarian × other) that emphasized either utilitarian or personal concerns in isolation. Overall, our analyses suggest that when entrepreneurs are unable to communicate proactively with backers, they should address both utilitarian and personal concerns. When communicating proactively, entrepreneurs still benefit from this combined approach; however, they may be able to forego addressing either the utilitarian concerns of others or the personal concerns of the entrepreneur in individual communications without significantly risking fundraising outcomes. The finding that a combined utilitarian and personal communication strategy is generally advisable in reward-based crowdfunding aligns with the dual interests of backers, who have both an economic interest in the product being launched and a desire to feel part of the community bringing the product to life (e.g., Fisher et al., 2017). However, our *post hoc* analysis data were collected after the pandemic had ended, which may have influenced participant responses to the vignette. As a result, future research should attempt to replicate them during an ongoing societal crisis.

The external enablers framework identifies several mechanisms through which environmental changes can facilitate entrepreneurship (Kimjeon & Davidsson, 2022). Our vignette experiment and *post hoc* analyses focus on financial resource expansion, which is the primary enabling mechanism for ventures engaged in crowdfunding. However, in Study 1, we identified evidence of other enabling mechanisms that support entrepreneurs' fundraising goals. For instance, environmental changes can affect the risk and uncertainty associated with entrepreneurial activity (e.g., Chang et al., 2011). The onset of crises like the COVID-19 pandemic increases the uncertainty experienced by entrepreneurs globally and across industries.

Nevertheless, some ventures may face greater uncertainty than others, and how entrepreneurs communicate this uncertainty to backers can influence their investment decisions. For example, several entrepreneurs employed a utilitarian strategy to reduce backers' perceptions of the venture's uncertainty by explaining how the crisis would affect reward delivery timelines and supply availability. Additionally, environmental changes may increase the demand for some ventures' products while decreasing it for others (Kimjeon & Davidsson, 2022). Our field data include several campaigns for products closely associated with the COVID-19 crisis (e.g., devices used to avoid touching surfaces). Other campaigns acknowledged that lockdown protocols and social distancing necessitated pivoting away from their earlier products. Future research should investigate how entrepreneurial communications during crises affect these enabling or disabling mechanisms.

Our findings enhance an understanding of entrepreneurial communication in reward-based crowdfunding (e.g., Anglin et al., 2018a; Oo et al., 2023). This literature indicates that entrepreneurs' communications with backers play an essential role in their ability to mobilize support for the venture (Anglin et al., 2023; Seigner et al., 2022). However, as Table 4 highlights, we understand more about how the contents of entrepreneurial communication influence crowdfunding performance than we do about the timing or focus of these communications. Our experiment shows that timing is critical.

Entrepreneurs who waited for backers to ask for information regarding the pandemic (i.e., a reactive strategy) were ineffective at using narratives to raise capital. Only when entrepreneurs initiated communication did content related to the crisis matter.

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Research on crowdfunding also provides greater insight into how entrepreneurs talk about themselves than how entrepreneurs speak about their investors. Manning and Bejarano (2017) note that entrepreneurs manipulate the way they build a story surrounding their venture to solicit resources from investors. Similarly, Anglin and colleagues (2018a) examine how entrepreneurs articulate the positive psychological resources of the venture in entrepreneurial texts and observe investors' responses. Understanding self-presentation in entrepreneurial pitching is critical because a core concern of investors is learning about the entrepreneur and venture to inform their investment decision.

In our field study, entrepreneur-focused communications often emphasized two aspects: the entrepreneur as an individual and the entrepreneur as a spokesperson for the venture. When speaking as an individual, entrepreneurs' communications tended to emphasize personal concerns. For instance, the founder of Campaign 24 noted in an update, "As for me, I'm working from home and missing human interaction more than I thought I would." Conversely, when speaking on behalf of the venture, entrepreneurs tended to emphasize utilitarian concerns. For instance, the founder of Campaign 29 highlighted COVID-19 lockdown protocol as a potential risk on the campaign's main page: "Because we are in such testing times, lockdown restrictions could potentially affect our production."

Our findings also highlight the importance of other-focused communications. Whereas past work provided insights into how entrepreneurs should present themselves to solicit stakeholder support, our investigation reveals that equally important in reward-based crowdfunding is how entrepreneurs talk about resource providers. Several participants called for the entrepreneur to "seem a

little bit more concerned about backers' feelings and concerns" and to "behave as though the backers mattered, too, [because] everyone is going through the COVID-19 crisis and there are people worse off than the creators." While these calls focused on how the entrepreneur communicated during the COVID-19 crisis, how entrepreneurs address the needs of other stakeholders is relevant outside of crises. Future research could build on this insight to better understand how entrepreneurs weave references to external stakeholders into their communications to improve their fundraising.

### **Limitations and Future Research Directions**

**The timing of our manipulation check questions in the vignette experiment is a limitation of our research design.** We asked three manipulation check questions following participants' exposure to the manipulated communication text to determine whether participants perceived the communication as proactive or reactive, personal or utilitarian, and entrepreneur-oriented or other-oriented when the manipulation was most salient. However, Grégoire and colleagues (2019) advocate conducting *post hoc* manipulation checks after collecting the dependent variable. While this approach increases the time between the manipulation and its verification, it **eliminates** the risk of the manipulation check questions influencing participants' responses to the dependent variable.

**Consistent with extant reward-based crowdfunding research (e.g., Greenberg & Mollick, 2017; Seigner et al., 2022),** we asked participants to identify how they would split \$100 between a **focal campaign** and other campaigns, independent of their experiment participation incentive. **We did not assess** participants' willingness to contribute **their actual** incentive maximum of \$2 to **the campaign which would have** captured their desire to donate funds to the entrepreneur rather than purchase intent. Nevertheless, incentive-compatible experimental design makes participants more likely to reflect carefully on otherwise hypothetical decisions (Lusk & Schroeder, 2004). Future **crowdfunding** research should examine and provide guidance regarding the management of this internal validity trade-off.

Our study focused on the onset of the COVID-19 crisis because the early stages of a crisis are characterized by heightened uncertainty due to the lack of information about the crisis and its effects (e.g., Klyver & Nielsen, 2021). **But as a** crisis and its effects become better understood, backers may respond differently to entrepreneurs' communications. **Thus**, future research should examine how the communication strategies **used** by entrepreneurs change over the course of a crisis and how stakeholders respond to these strategies at different stages of the crisis.

Most entrepreneurs in our field data reacted to the onset of the crisis by communicating with backers to maintain their support and secure access to financial resources. However, seven ventures were further enabled by the crisis, launching products closely linked to the crisis itself. Unsurprisingly, all entrepreneurs launching crisis-related products communicated with backers about the crisis, typically including proactive × utilitarian messaging as part of their communication strategy. Our vignette experiment suggests that incorporating personal concerns can be an effective strategy for entrepreneurs; however, the vignette used a product unrelated to the crisis (i.e., a pen/pencil set). Future research should examine whether the most effective communication strategy differs for products with clear utilitarian benefits associated with the crisis.

Supply chain disruptions were widespread during the pandemic (Ketchen & Craighead, 2020, 2021). Several entrepreneurs in Study 1 acknowledged supply chain issues associated with the pandemic; however, most presented these issues in a way that did not acknowledge the threat to the campaign. Conveying optimism is valuable in crisis communication and is likely seen as an attractive option by entrepreneurs who perceive the uncertainty created by the crisis as threatening stakeholders support (e.g., Patelli & Pedrini, 2014). **This might be a short-term fix, but** providing clear disclosure of the potential threats posed by the crisis to the venture's supply chain may foster trust and lead to stronger stakeholder relationships in the long term (e.g., Schnackenberg & Tomlinson, 2016). We echo recent calls to deepen the linkages between entrepreneurship and supply chain management research

(e.g., Ketchen & Craighead, 2020) and encourage future research that examines how entrepreneurs communicate potential supply chain disruptions during a crisis.

Crises often lead to significant emotional distress, and how entrepreneurs manage this stress is crucial for entrepreneurial outcomes (Ahmed et al., 2022; Marynissen & Lauder, 2020). For instance, emotional support and engagement with one's community can foster entrepreneurial resilience (Muñoz et al., 2019). The pandemic disrupted entrepreneurs' physical social networks, causing them to turn to online social communities for social support (Meurer et al., 2021). Engaging with such communities using personal, other-oriented language can help entrepreneurs raise financial capital; however, such engagement may also benefit the entrepreneur and crowdfunding community. Future research might draw from the literature on coping and social support to examine how entrepreneurs' language in these online networks influences reciprocal interactions with backers and, ultimately, personal outcomes such as stress, burnout, and subjective well-being.

We demonstrate how entrepreneurs' crisis communication strategies in societal crises differ from those advocated for crises where the organization could plausibly be at fault, clarifying the importance of considering the controllability of external enablers/disablers (i.e., Kimjeon & Davidsson, 2021; Davidsson et al., 2021). Including a controllability dimension opens avenues for examining entrepreneurial responses to different non-crisis external changes. For instance, entrepreneurs might react differently to local regulations they perceive as more controllable, such as public hearings or leveraging political connections, compared to uncontrollable governmental mandates (e.g., Luo & Junkunc, 2008; Pinkse & Groot, 2015). Further research examining how entrepreneurs affect and are affected by external changes could enrich our understanding of how they leverage these changes to their advantage and expand the scope of the external enabler framework.

## CONCLUSION

Communicating with potential and current backers is critical for entrepreneurs raising financial capital using reward-based crowdfunding. The onset of a societal crisis creates uncertainty and complexity for entrepreneurs and key stakeholders, amplifying the importance of effective communication. However, what constitutes an effective communication strategy for entrepreneurs in rewards-based crowdfunding differs from that in other entrepreneurial fundraising contexts.

**Entrepreneurs during the COVID-19 crisis differed in the timing (proactive vs. reactive), target (entrepreneur vs. other), and nature (utilitarian vs personal) of their communications with reward-based crowdfunding backers.** Our study points to the value of proactively communicating with backers regarding the personal needs and concerns of others to maintain access to crowdfunded capital during societal crises.

We hope our examination of how entrepreneurs communicate with backers during crises catalyzes research in this area. The probability of future societal crises is all but guaranteed. Given the influence of entrepreneurship in economic development and the growing role of reward-based crowdfunding in supporting entrepreneurs, understanding how entrepreneurs can maintain access to financial capital during these crises is important to entrepreneurs and economies.

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**Table 1**  
*Representative Quotes Underlying Second-Order Themes*

<b>Nature: Personal</b>	
Discusses well-being/safety	“We’re focusing on journaling and its mental health benefits for a while. I’ve adopted a daily journaling practice in the last few months and will share some of the approach I’m using with all of you in the hopes that our products can help folks stay sane if we end up cooped up for a while.” (Campaign 24: Kickstarter campaign update)
Acknowledges personal impact of crisis	“Is it the best time to ask for money? Probably not. Many people may not know where their next meal is coming from and need to save every dollar. That’s ok.” (Campaign 8: Blog entry)
Emphasizes non-economic goals	“Last but not least, we feel especially fortunate to have been an entirely remote team since day one. We are still committed to helping people reduce their reliance on single-use plastic, even during these unprecedented times.” (Campaign 12: Instagram post)
Offers/accepts help/reassurance	“Hey Pamela!!! You’re the best! Love you’re letting all that poop TP talk detail out in the wind for everyone! We had a good amount of TP because of the [product] shoot, so I’d be happy to send you some :) just email me your address!” (Campaign 22: comments page)
<b>Nature: Utilitarian</b>	
Identifies time/cost risks	“There won’t be any problem manufacturing, but due to the severity of the virus around the world, we might face some delay in shipping. We will find this out and let all our backers know.” (Campaign 5: comments page)
Reinforces commitment to product/service	“We will keep backers updated with information as it becomes more clear what updates there are to our fulfillment timeline, but naturally our objective remains exactly the same: to get a high quality product to all backers as quickly as possible.” (Campaign 13: comments page)
Reassures communication expectations	“We understand that anything can happen in these crazy times and we promise to keep you updated if there are any anticipated changes in delivery times.” (Campaign 33: Kickstarter campaign update)
Articulates product benefits	“We have decided to use citric acid as the active ingredient. It is listed on the EPA’s ‘List N: Disinfectants for Use Against SARS-Cov-2’ as meeting their criteria for use against the virus that causes COVID-19.” (Campaign 12: comments page)
<b>Target: Entrepreneur</b>	
Addresses impact on campaign	“There is still a force majeure factor (natural disasters, strikes, etc.), which might affect production or delivery processes such as: deficiency of materials, a production slowdown or delivery difficulties.” (Campaign 6: Kickstarter campaign page)
Identifies impact on entrepreneur/firm	“The global shutdown has affected the supply chain and factories, which is slowing down production of the quilts. I have hesitated to post an update because there have been a lot of unknowns.” (Campaign 31: Kickstarter campaign update)
Emphasizes campaign/firm concerns and goals	“Though <business> is a rather small company (for now) our goals and aspirations are everything but that [...] Our #kickstarterstory will perpetuate <business> in a direction to provide outstanding products, innovations, and employment especially to many of those affected by this #greatrecession.” (Campaign 36: Kickstarter campaign update)
Deflects/obscures negative evaluations	“We are not trying to make light of the events. The situation is absolutely dire, and people need to change their behavior. That’s why we make products to make living more sustainably easier.” (Campaign 12: Instagram post)
<b>Target: Other</b>	
Emphasizes stakeholder concerns and goals	“Hope everyone’s staying safe and healthy. Slowly but surely, we will get through this Coronavirus.” (Campaign 5: Kickstarter campaign update)
Acknowledges societal/worldwide issues	“COVID-19 has taken its toll on more than just our family, friends, and businesses. For many, it ended jobs, careers, and left millions with questions and uncertainty.” (Campaign 36: Kickstarter campaign update)
Emphasizes community membership	“I took an idea and took action. I created artwork and messaging to remind people of communities, that we are more than fear.” (Campaign 8: Kickstarter campaign main page)

*Note:* Second-order themes: Proactive and Reactive reflect timing rather than content differences. Accordingly, they are not presented in this table.

**Table 2**  
*Correlations and Summary Statistics*

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Funding	25.56	30.97										
2. Proactive	0.43	0.50	.15									
3. Personal	0.43	0.50	.07	.15								
4. Entrepreneur	0.44	0.50	-.03	.06	.07							
5. No Communication	0.10	0.30	-.11	-.29	-.29	-.30						
6. Empathy	4.73	1.48	.51	.29	-.01	.07	-.38					
7. Responsible (Crisis)	1.39	0.71	.03	-.09	-.04	-.06	.26	-.25				
8. Responsible (Delay)	1.60	0.88	-.09	-.16	-.07	-.12	.35	-.41	.81			
9. Reputation	0.49	1.32	.39	.29	.05	.20	-.49	.81	-.46	-.58		
10. Familiarity with Crowdfunding	4.33	0.58	-.07	-.11	.02	-.05	.10	-.03	-.02	.04	.00	
11. Social Desirability	-0.06	0.28	.15	.03	.00	.04	.01	.15	.04	-.04	.13	.04

Note. Correlations greater than |0.10| are significant at  $p < 0.05$ . Correlations greater than |0.13| are significant at  $p < 0.01$

**Table 3**  
*Results of Analysis of Covariance*

Source	SS	df	MS	F	p	$\eta^2$
Model	95824.78	12	7985.40	10.68	<0.01**	0.24
Covariates						
Reputation	64530.69	1	64530.69	86.34	<0.01**	0.17
Responsible for the Delay	11762.91	1	11762.91	15.74	<0.01**	0.04
Familiarity with Crowdfunding	3168.91	1	3168.91	4.24	0.04*	0.01
Social Desirability	3291.41	1	3291.41	4.40	0.04*	0.01
Main Communication Effects						
Proactive	371.21	1	371.21	0.50	0.48	0.00
Personal	2587.32	1	2587.32	3.46	0.06 <sup>†</sup>	0.01
Entrepreneur	3416.31	1	3416.31	4.57	0.03*	0.01
No Communication	1394.86	1	1394.86	1.87	0.17	0.00
Interaction Effects						
Proactive × Personal	644.91	1	644.91	0.86	0.35	0.02
Proactive × Entrepreneur	32.96	1	32.96	0.04	0.83	0.01
Personal × Entrepreneur	1386.43	1	1386.43	1.86	0.17	0.03
Proactive × Personal × Entrepreneur	4538.96	1	4538.96	6.07	0.01*	0.05
Residual	297450.63	398	747.36			
Total	393275.41	410	959.21			

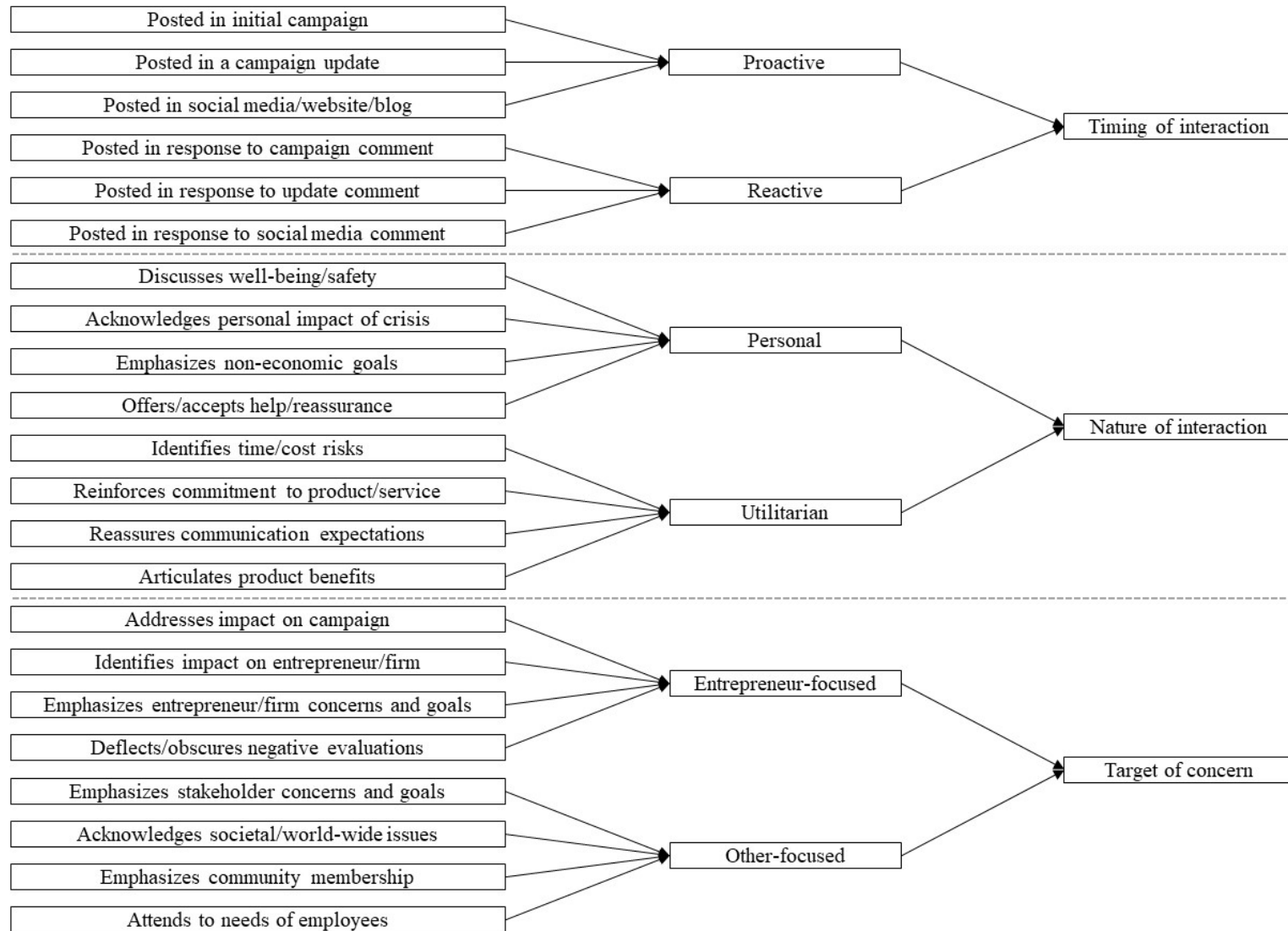
\*\*  $p < 0.01$ ; \*  $p < 0.05$ ; <sup>†</sup>  $p < 0.10$

**Table 4**  
*Reward-Based Crowdfunding Communication Research*

<b>Source</b>	<b>Representative Publications</b>	<b>Representative Features</b>
Communication content	Anglin et al. 2023; Manning & Bejarano, 2016; McSweeney et al., 2022; Moradi et al., 2024; Ren et al., 2021; <i>This study</i>	Emotional language (e.g., Ren et al., 2021) Cognitive language (e.g., Moradi et al., 2024) Narrative framing (e.g., Anglin et al., 2023) <i>Crisis (This study)</i> <i>Personal vs. utilitarian (This study)</i>
Communication timing	Moradi et al., 2024; Murray et al., 2020; <i>This study</i>	Project phase (e.g., Murray et al., 2020) <i>Proactive vs. reactive (This study)</i>
Communication target	<i>This study</i>	<i>Entrepreneur vs. other-focused (This study)</i>
Campaign/venture characteristics	Chandler et al., 2024; Parhankangas & Renko, 2017; Seigner et al., 2022; Steigenberger & Wilhelm, 2018; Wesemann & Wincent, 2021	Category/industry (e.g., Seigner et al., 2022) Social/sustainability vs. commercial focus (e.g., Chan et al., 2021)
Entrepreneur characteristics	Anglin et al., 2018a; Cappa et al., 2021; Chandler et al., 2024; McSweeney et al., 2022; Wesemann & Wincent, 2021	Sex/gender (e.g., McSweeney et al., 2022) Experience (e.g., Anglin et al., 2018a)
Backer characteristics	Du et al., 2021; Nielsen & Binder, 2021; Ren et al., 2021	Pledge history (e.g., Du et al., 2021) Values (e.g., Nielsen & Binder, 2021)



Figure 1

*Data Structure Diagram*

**Figure 2**  
*Linear Prediction Plots*

