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ABSTRACT

Charitable crowdfunding has become an increasingly popular way for people to seek help from the public. Yet, many charitable crowdfunding campaigns suffer from underfunding. Given that project description is the primary source of information for fundraisers to present their cause to prospective donors, the platform may preemptively assess the success rate of charitable crowdfunding campaigns based on the narrative elements embedded with such description. Furthermore, though prior research about narrative persuasion (i.e., storytelling) has alluded to generic mechanisms (i.e. identifiable character, imaginable plot, and verisimilitude) in eliciting empathic feeling, limited attention has been paid to scrutinizing the effects of narrative elements in driving donation behaviors in charitable crowdfunding. To this end, this study attempts to elucidate how linguistic cues embedded in the project narratives is associated with donation performance in charitable crowdfunding.

KEYWORDS

Linguistic cues, charitable crowdfunding, donation behavior, narrative persuasion

INTRODUCTION

With the proliferation of digital platforms, one can initiate a crowdfunding campaign to call for donation online and the link can then be shared across the digital space. Termed as charitable crowdfunding, it represents a means for micro-donors to make collective financial contributions in support of people with urgent need (Liu et al., 2017). In China, charitable crowdfunding has become an increasingly popular way for individuals and non-profit organizations to solicit donations (Gou & Tian, 2016), giving rise to numerous charitable crowdfunding platforms in the likes of Shuidichou.com. The growth of charitable crowdfunding encourages civic participation since it is convenient for ordinary people to contribute to the common good by supporting meaningful individual and/or societal causes through micro-donations (Gou & Tian, 2016). But at the same time, many campaigns suffer from underfunding, especially those for individual donatees who are in urgent need of financial support for medical treatment (Nanjing Daily, 2015).

Storytelling in project description plays an instrumental role in dictating the success of charitable crowdfunding campaigns. Unlike offline charity where fundraisers may engage in face-to-face communication with prospective donors, charitable crowdfunding campaigns are mostly dependent on project description to accentuate the plight of the donatee. The story embodied in a campaign serves as the primary source of information for prospective donors to get acquainted with a donatee's situation. Given the instrumental role of storytelling in charitable crowdfunding, an in-depth appreciation of how linguistic cues within project descriptions facilitate storytelling in charitable crowdfunding can allow platform developers to preemptively assess the appeal of a campaign before mass dissemination and in turn, offer advice to fundraises on how to structure their stories accordingly.

To this end, we focus on charitable crowdfunding for medical treatment by investigating the association between storytelling attributes and prospective donors' donation

behaviors. Particularly, we subscribe to the Narrative Persuasion Theory (NPT), a dominant storytelling framework, as our theoretical lens for identifying constituent dimensions of storytelling that can be further adapted to the context of charitable crowdfunding. In so doing, we aim to unravel the effects of select linguistic cues of project description on donation behavior in charitable crowdfunding. Although prior research on storytelling has articulated the generic mechanisms underlying how empathy can be evoked through storytelling, limited attention has been paid to the effects of linguistic cues as narrative elements affecting the response of receivers (van Krieken et al., 2017).

THEORETICAL BACKGROUND

Charitable Crowdfunding

Charitable crowdfunding bolsters fundraisers' accessibility to financial support from the masses by streamlining the transactional process underpinning online micro-donations (Li et al., 2018). Given the exponential growth of crowdfunding, researchers have begun to pay attention to donation behavior in charitable crowdfunding. To-date, scholars have already uncovered a number of factors affecting one's motivation to donate to charitable crowdfunding campaigns, which range from fundraisers' reputation to facilitating conditions afforded by digital platforms (Liu et al., 2017).

However, despite the extensive research conducted on charitable crowdfunding, the importance of project narrative has largely been overlooked. Because project description exists as the primary source of information for fundraisers to present themselves to prospective donors in crowdfunding, it is undeniable that project narrative is pivotal to the success of crowdfunding campaigns, be it commercial or charitable (Li et al., 2018). Even though recent studies on charitable crowdfunding have discovered that campaign imagery and factual details in project descriptions can boost donations (Xu, 2018), little is known about whether, or how, narrative elements embedded within such descriptions shape the donation behavior of prospective donors.

Narrative Persuasion Theory

Narrative Persuasion Theory explicates how a story persuades receivers to accept the story-implied beliefs (Bilandzic & Busselle, 2013). In NPT, a story can be conceived as a narrative depicting a sequence of events experienced by story characters (Moyer-gusé & Dale, 2017).

Prior research has alluded to two primary mechanisms elaborating how a narrative persuades people to change real-life beliefs or behaviors, namely transportation into narrative world and identification with story characters. Transportation into the narrative world refers to the mental process when the story receiver creates a mental imagery and melds her/his attention into the story world

(Kinnebrock & Bilandzic, 2006). If the mental image is more vivid in the story receiver's mind, she/he tends to get 'transported' into the story world and develops empathic feeling by 'experiencing' the same events experienced by story characters. Identification with story characters refers to the mechanism of perspective taking (van Krieken et al., 2017). It holds that story receivers view the story world from the perspective of story characters. Under such circumstances, the story receiver would create a mental representation of the story characters and develop vicarious experience with the identified characters (Green et al., 2004). In both mechanisms, the mental simulation of the events and empathic feeling with characters increase story receivers' propensity to accept the story world and beliefs implied by the story.

According to van Laer *et al* (2014), there are three essential dimensions influencing the narrative persuasiveness from a storyteller's perspective, namely identifiable character, imaginable plot, and verisimilitude. **Identifiable character** refers to story characters whom the story receiver can identify with. **Imaginable plot** refers to the extent to which the sequence of story events can be imagined. **Verisimilitude** denotes the lifelikeness of the story: a story does not need to be factual to be persuasive (Cho et al., 2014). Though past studies have alluded to the three generic dimensions associated with persuasion effects of the story (van Laer et al., 2014), limited attention has been paid to identify and investigate the effects of linguistic cues of the three dimensions reflected in the story on story receivers' behaviors (van Krieken et al., 2017). In the next section, we will elaborate on how linguistic cues constituting the three generic dimensions are associated with story receivers' behavior (i.e. donation performance) as extrapolated to the context of charitable crowdfunding.

HYPOTHESIS FORMULATION

Identifiable Character

An identifiable character usually provides the story receiver a concrete image of the story character (Kaufman & Libby, 2012). In the context of charitable crowdfunding, concrete descriptions on the donatee, the central character of the project story, are expected to enrich the donatee's character model, enabling prospective donors to develop an intricate understanding of the donatee's experience.

Based on the aspects highlighted in past studies of narrative persuasion, four linguistic cues are introduced in this study as important constituent dimensions of identifiable character in charitable crowdfunding: *character appearance*, *character personality*, *character action*, and *character relationship* (Huang et al., 2017; Kaufman & Libby, 2012; Kinnebrock & Bilandzic, 2006). The expression of character appearance in the project description can aid prospective donors to project the donatees in their minds. The expression of character personality helps prospective donors to effectively anchor the characters' perspective about how the donatee views

the story world. Furthermore, the positive framing of character's appearance and personality may make a difference on prospective donors' donation propensity (Kaufman & Libby, 2012; Pavey et al., 2012). The positive figure tends to elicit the liking of prospective donors, thereby culminating in donation behaviors. A donatee with a positive mental projection in prospective donors' minds is expected to attract more donation as it may create emotional distress for prospective donors to not help a good person in need (Pavey et al., 2012). In terms of the description of character's actions and inter-character relationships, both reveal donatee's connection with the story world and help prospective donors to construct a figural image in their minds, (Kinnebrock & Bilandzic, 2006). We therefore hypothesize that:

H1: Positive framing in the expression of character's (a) appearance and (b) personality, as well as in the description of character's (c) actions and (d) relationships are positively associated with donation in charitable crowdfunding.

Imaginable Plot

A story plot illustrates how events evolve as the story unfolds by showing connections among these events (van Laer et al., 2014). If the story receivers can clearly map out how the story develops in receivers' minds; they tend to accept and embrace the story implied behavior. This attests to the critical role of how information is illustrated in the narrative message. Though prior research has acknowledged the importance of imaginable plot, scholars seldom scrutinize specific linguistic cues related to imaginable plot. We therefore proposed five relevant narrative elements associated with story plots. The first two are *temporal* and *causal sequence*. By definition, the story plot reveals the causality of narrated events (Green & Sestir, 2017). The explicit expression of chronological and causal sequence helps prospective donors to mentally visualize the process of how a donatee's life was affected from the past to the current status and what might be the donatee's fate in the future. This can bolster the acceptability of prospective donors toward the story implied behavior (i.e. make donations). The next element is the *discourse structure* which refers to the structure of how the information is stressed in the story. Given the relevance of the charitable crowdfunding context, suspense is introduced as the discourse structure affecting prospective donors' behavioral intention (Kinnebrock & Bilandzic, 2006). Suspense refers to the situation when important information is revealed at the very beginning of the story in order to make the story receivers feel concerned about the story outcome. In the context of charitable crowdfunding, important information such as the devasting consequence induced by delayed medical treatment, can be displayed at the very beginning to raise prospective donors' concern, which strengthens their behavioral propensity to provide financial support. The fourth narrative element would be *story contrast* which can also be noted as the 'conflict' in the story (Wodak, 1996). It has been suggested

that story plot with tension or contrasting episode can be catchy and recognizable. In charitable crowdfunding, such contrast can be a donatee's life before and after the unfortunate event occured. Thus, it is argued that when there is more story contrast, the mental image of the donatee's experience would become more impressive for prospective donors, making them susceptible to the story's influence. Hence, it can be expected that expression contrast would encourage the donation in charitable crowdfunding. The last narrative element would be *content richness*. Informational details provided by the description can help story receivers to construct precise mental representation of the story world (Green et al., 2004). In charitable crowdfunding, the detailed description facilitates prospective donors to establish the story environment (e.g. what the sickroom looks like). It can be expected that more detail in general means a more concrete mental image of the donatee's situation, which increases the chance for prospective doners are susceptible to the story and embrace implied behaviors. We hypothesize that:

H2: Expression of (a) temporal sequence, (b) causal sequence, (c) suspense discourse structure, (d) expression of story contrast, and (e) content richness are positively associated with donation in charitable crowdfunding.

Verisimilitude

Verisimilitude refers to the extent to which a story is likely to happen in real life (van Laer et al., 2014). It stands out as an essential dimension to enhance narrative persuasiveness (Busselle & Bilandzic, 2008). Scholars have pointed out that verisimilitude can be understood as *the commonality between the story world and real-world genre* (Larrimore et al., 2011). When people comprehend the narrative message, they attempt to make sense of the story, recalling similar settings in real life. If a described story setting is comparable to its real-world counterparts, story receivers can easily construct a mental representation of the story, thereby rendering the story to be much more acceptable. In the context of charitable crowdfunding, when the way of expression shares commonality with charity projects in general; or, it reads like a real charity project, the story is likely to be accepted by the prospective donors, which increases the chance to make donation in charitable crowdfunding. We therefore hypothesize that:

H3: Commonality with the real-world genre is positively associated with donation in charitable crowdfunding.

PROPOSED METHODOLOGY

To validate our research model, we plan to operationalize the storytelling attributes in our research model as linguistic cues elicited through computerized text analysis whereas regression analysis will be conducted to test the hypothesized relationships.

Data Sampling and Collection

Our sample of charitable crowdfunding campaigns was extracted from Shuidigongyi.com, one of the most reputable charitable crowdfunding platforms in China and is primarily dominated by campaigns seeking financial support for urgent medical treatment. Information on 2,191 completed campaigns—comprising the amount of funds which have been raised, the number of donations, the number of shares, targeted fundraising goal, completion rate, and project description—were extracted from the charitable crowdfunding platform for further analysis.
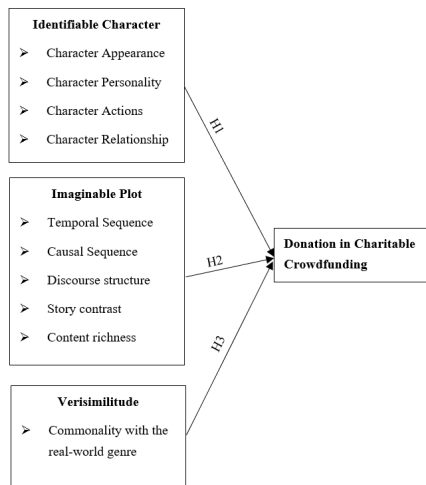

Figure 1. Proposed Research Model

Proposed Operationalization of Focal Constructs

Donation in charitable crowdfunding will be measured with the completion rate for a given campaign. As for the linguistic cues, we plan to operationalize them based on keywords from customized dictionaries generated exclusively for this study (van Krieken et al., 2017).

Character appearance and personality will be measured with a framing score calculated from appearance- and personality-related words in the project description, respectively. To accomplish this, a customized dictionary of appearance and personality words will be created.

Character actions will be captured by the word count of action words, cognitive verbs, and metaphorical expressions. Character relationships will be measured with three dimensions: namely the types of relationships as well as the intensity and favorability of each relationship.

Temporal sequence will be measured based on chronological words and tenses employed in telling the story. Because the word count of chronological words denotes the extent to which the temporal flow is explicitly expressed, the order of chronological words and tenses indicate the consistency between the real tense and the display structure (e.g., whether past tense is displayed before future tense). Causal sequence will be measured with the word count of causality-related words.

Discourse structure will be measured with the location and word count of severity- and urgency-inducing words. Severity- and urgency-inducing words refer to words that trigger a sense of severity and urgency, respectively. If the severity and urgency were to be stressed at the beginning of the story, then the suspense effect of discourse structure is stronger. To accomplish this, a customized dictionary for severity- and urgency inducing words will be generated.

Story contrast will be captured based on the ratio between healthiness and sickness words as well as the ratio between positive and negative sentiments. When the two sides are equally distributed, the level of story contrast is relatively high. The dictionary for healthiness and sickness words will be generated accordingly.

Content richness is captured by the total word count of each narrative message and the photo amount.

Commonality with real-life genre will be computed from the word count of empathy-evoking words and medical terminology. It is expected that charity project tends to employ medical terms and evoke empathy feeling of prospective donors. If the expression is more empathy-evoking and medical term inclusive, it reads like a realistic charity project. The customized dictionary for empathy-evoking words and medical terms will be generated respectively.

Construct	Measurement
Donation	Completion rate of the project
Character Appearance	Framing score of appearance related words
Character Personality	Framing score of personality
Character Actions	Word count of action words/ verbs of cognition/ metaphoric expressions of mental state
Character Relationships	Relational types/intensity/favorability
Temporal Sequence	Word count & order of chronological words/order of tense words
Causal Sequence	Word count of causality words
Discourse Structure (Suspense)	Location and word count of urgency-building and severity-building words in the text
Story Contrast	Ratio of healthiness words to sickness words)/ positive to negative sentiments
Content Richness	Total word count/photo amount
Commonality with the real-world genre	Word count of empathy-evoking words/medical terminology

Table 1. Proposed Operationalization of Focal Constructs

INTENDED CONTRIBUTION

The intended theoretical contribution of our work is threefold. First, this study extends the NPT by decomposing and adapting its three generic dimensions into constituent narrative elements to scrutinize the effects of storytelling on donation behaviors in charitable crowdfunding. Second, grounded in the NPT, this study introduces a novel theoretical lens for deciphering constituents of message persuasiveness in charitable crowdfunding. Third, this study is among the first to employ objective data to examine the relationship between narrative elements and donation behavior. In terms of practical implication, insights gleaned from this study may inspire crowdfunding platforms to preemptively assess the appeal of project descriptions by taking their linguistic cues into consideration and in turn, advise fundraisers on how to structure their stories accordingly.

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